FINAL
Operable Unit 1
Groundwater Monitoring Report for 2024

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700 South 1600 East PCE Plume Site
Salt Lake City, Utah

U.S. Army Corps of Engineers
Kansas City District

Department of Veterans Affairs
Veterans Health Administration Salt Lake City Health Care System

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CDM Smith

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Acronyms and Abbreviations

%	percent
µg/L	micrograms per liter
bgs	below ground surface
BVC	BAV1 vinyl chloride reductase
$CaCO_3$	calcium carbonate
CDM Smith	CDM Federal Programs Corporation
cell/mL	cells per milliliter
CER	cerA reductase
DCE	dichloroethene
DHBt	*Dehalobacter*
DHC	*Dehalococcoides*
DHG	*Dehalogenimonas*
DO	dissolved oxygen
DSB	*Desulfitobacterium*
DSM	*Desulfuromonas*
EPA	U.S. Environmental Protection Agency
feet/foot	feet per foot
IDW	investigation-derived waste
J	estimated value
MCL	maximum contaminant level
mg/L	milligrams per liter
mL/min	milliliters per minute
MS/MSDs	matrix/matrix spike duplicates
ORP	oxidation-reduction potential
OU	operable unit
PCE	tetrachloroethene
PHE	phenol hydroxylase
QAPP	quality assurance project plan
QC	quality control
QCSR	quality control summary report
RDEG	toluene monooxygenase 2
RI	remedial investigation
RMO	toluene monooxygenase
RSL	regional screening level
site	700 South 1600 East PCE Plume Superfund Site
sMMO	soluble methane monooxygenase
SOP	standard operating procedure
TCE	trichloroethene
TCEA	tceA reductase
TOD	toluene dioxygenase
TDR	trans-1,2-DCE Reductase
TOC	total organic carbon
VAMC	Veterans Affairs Medical Center

VC	vinyl chloride
VCR	vinyl chloride reductase
VOC	volatile organic compound
ZIST	Zone Isolation Sampling Technology

Section 1
Introduction

Under the U.S. Army Corps of Engineers, Kansas City District Contract No. W912DQ-21-D-3004, Task Order No. W912DQ22F3063, CDM Federal Programs Corporation (CDM Smith) was directed to perform groundwater monitoring for Operable Unit (OU) 1 of the 700 South 1600 East Tetrachloroethene (PCE) Plume Superfund Site (site) in Salt Lake City, Utah. Thirteen new monitoring wells, one new injection well, and one new extraction well were installed in June/July 2024 as part of the treatability study (CDM Smith 2023a). CDM Smith prepared this groundwater monitoring report to present the results of the sitewide groundwater sampling event completed in September and October 2024.

1.1 Background

The Salt Lake City Healthcare System George E. Wahlen Veterans Affairs Medical Center (VAMC) is located in Salt Lake City, Utah (**Figure 1**). PCE contamination was first identified in groundwater in 1990 at the nearby Mt. Olivet Cemetery irrigation well during routine monitoring by the Salt Lake City Department of Public Utilities. This led to the involvement of the U.S. Environmental Protection Agency (EPA) and Utah Department of Environmental Quality at the site. The preliminary determination was that the source of PCE in groundwater was the historical dry-cleaning facility located at VAMC. The Veterans Health Administration operated a part-time dry-cleaning operation that used PCE over a 6-year period from approximately 1976 to 1982. During this period, dry-cleaning residuals were disposed of in the sanitary sewer. A PCE groundwater plume is present beneath the VAMC property and in areas hydraulically downgradient. The remedial investigation at the site was completed in 2022 (CDM Smith 2022).

1.2 Purpose and Scope

The purpose and scope of this monitoring report is to describe the work conducted and present the analytical and field data collected during the groundwater sampling field event.

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Section 2
Field Sampling Activities

The following sections outline field sampling activities completed in September and October 2024. Field work was completed in two mobilizations. The first mobilization occurred between September 4-13, 2025, and the second between September 30 and October 3, 2025.

2.1 Groundwater Sampling

The September/October 2024 groundwater monitoring event included the collection of groundwater samples from 88 of the 92 total wells including the 15 newly-installed wells (MW-39S, MW-39D, MW-40S, MW-40D, MW-41S, MW-41D, MW-42S, MW-42D, MW-43S, MW-43D, MW-44S, MW-44D, MW-45, EW-01, and IW-01). **Figure 1** shows all monitoring wells**,** and **Table 1** presents the location data and well construction details. **Table 2** shows the sampling locations and analyses and only includes wells that were successfully sampled. CDM Smith conducted the sampling activities in accordance with the Phase 2 OU1 Quality Assurance Project Plan (QAPP) (CDM Smith 2020a), the Phase 2 OU1 Remedial Investigation (RI) Work Plan (CDM Smith 2020b), the Final Treatability Study Work Plan (CDM Smith 2023a), and the Final OU1 Feasibility Study QAPP (CDM Smith 2024). Deviations from the QAPP are discussed in Section 2.4.

Appendix A contains field forms associated with the event, including the field logbook pages, water level measurement recordings, and sample purge forms.

2.1.1 Synoptic Water Level Measurements

Before sampling activities, CDM Smith and Wasatch Environmental collected synoptic water levels from 91 groundwater wells on September 4 to 8, 2024. CDM Smith and Wasatch Environmental conducted these measurements following procedures outlined in Standard Operating Procedure (SOP) 1-6, *Groundwater Level Measurement*. CDM Smith and Wasatch Environmental recorded manual water level measurements from the northern edge of the casing using electronic water level meters. At artesian well MW-14D, the pressure reading on the gauge was recorded and converted to feet above the top of the casing. **Table 3** presents water levels for September 2024.

The collection of water level measurements in monitoring wells with dedicated Zone Isolation Sampling Technology (ZIST) pumps requires pulling the pump and allowing the water to equilibrate in the well casing. ZIST pumps provide isolation of the screen by creating a seal in the well casing when the pump is properly seated in the well screen receiver. To collect water level measurements, the pumps were pulled at least one foot out of the receiver to allow the water level to equilibrate following pump removal. After verifying that water levels had stabilized, the water level measurements were recorded manually, and the pump was reseated.

The following wells have dedicated ZIST pumps:

- MW-03RA/B/C/D

- MW-08C
- MW-23A/B/C
- MW-25A/B/C
- MW-26A/B/C/D
- MW-29A[1]/B/C
- MW-30C
- MW-31A[1]/B/C
- MW-32B[1]
- MW-34A[1]/B[1]/C[1]/D[1]

2.1.2 Groundwater Sampling Procedures

2.1.2.1 Monitoring Wells

All groundwater monitoring wells were sampled using dedicated pumps following project-specific SOP 6-2, Low-Stress (Low-Flow) Groundwater Sampling (CDM Smith 2020a), procedures with the exception of EW-01, IW-01, MW-42S and MW-45. EW-01 and IW-01 do not have dedicated pump assemblies and were sampled with a non-dedicated rental bladder pump. Due to shipping delays the dedicated pump assemblies for the newly installed monitoring wells (MW-39S/D, MW-40, MW-41S/D, MW-42S/D, MW-43S/D, MW-44S/D, and MW-45) had not arrived during the first sampling mobilization. MW-42S and MW-45 were able to be sampled with a non-dedicated rental bladder pump with a drop-tube assembly. Dedicated bladder pumps were installed in all new monitoring wells during the second mobilization, when the remainder of the new wells were sampled.

Before groundwater sample collection, each well was purged to remove a minimum volume that was calculated before the event. The minimum purge volume is three times the total amount of stagnant water in the pump and tubing. Low-flow groundwater sampling includes purging the well at a rate typically less than 500 milliliters per minute (mL/min) and with minimal drawdown (less than 0.3 feet). This ensures that the water sampled is representative of the formation surrounding the screened interval and not of the stagnant water column. If the drawdown exceeds 0.3 feet, the stagnant water column is contributing to the purge water, and the minimum purge volume must be recalculated. Once the minimum purge volume was removed and water quality parameters stabilized as described in SOP 6-2, samples were collected.

At MW-14D, a permanent valve and gauge were previously installed to assist in controlling the artesian flow at the well. During sampling, the team opened the valve to maximum capacity, noted

[1] ZIST wells constructed without a pump receiver.

the flow rate, and collected grab samples for field parameter analysis. The flow rate was steady at 400 mL/min for the September 2024 event.

MW-17D has been observed to be seasonally artesian; therefore, a permanent threaded connection was previously attached to the wellhead to plug the well. As a result, its dedicated bladder pump is not permanently deployed in the well and is only used to sample the well when conditions are not artesian. During the September 2024 sampling event, water was not free flowing from MW-17D, and the well was sampled using its bladder pump.

All groundwater sampling was completed according to project-specific SOP 6-2, Low-Stress (Low-Flow) Groundwater Sampling (CDM Smith 2020a), except for deviations outlined in Section 2.4. **Appendix A** provides field documentation of sampling procedures.

2.1.2.2 Residential Groundwater Monitoring Wells

All residential groundwater monitoring wells were sampled with HydraSleeves using the manufacturer's SOP, Sampling Groundwater with a Hydrasleeve (GeoInsight 2019) and the manufacturer's field manual (GeoInsight 2016).

Before collecting residential groundwater samples, HydraSleeves were deployed for a minimum of 24 hours. If the water level was below the top of screen, the top of the sleeve was deployed mid-water column. If the water level was above the top of screen, the top of the sleeve was deployed midscreen.

2.1.3 Sample Analysis

For low-flow sampling locations, water quality parameters were measured continuously while purging with a flow-through cell. The following parameters were recorded for each well:

- Dissolved oxygen (DO)
- Oxidation-reduction potential (ORP)
- pH
- Temperature
- Conductivity
- Turbidity

Samples collected from monitoring and residential groundwater locations were analyzed for volatile organic compounds (VOCs) by EPA Method SW8260C (**Table 2**).

To establish baseline conditions for the bioremediation treatability study, samples were collected from select monitoring wells in September/October 2024 for the following analyses (**Table 2**):

- Alkalinity by Standard Method SM2320B
- Anions (sulfate, chloride) by EPA Method E300.0
- Total organic carbon (TOC) by EPA Method SW-846 9060A
- Nitrate and nitrite as total nitrogen by Standard Method SM4500-NO3E

- Total dissolved solids by Standard Method SM2540C
- Ferrous iron by HACH Method 8146
- Microbial population by QuantArray-Chlor

All samples except microbial samples were submitted to EMAX Laboratories Inc., a National Environmental Laboratory Accreditation Program-certified laboratory in Torrance, California. Microbial samples were submitted to Microbial Insights in Knoxville, Tennessee. Section 3 discusses the analytical results. **Appendix B** includes laboratory data. Field quality control samples were collected, including field duplicates, matrix/matrix spike duplicates (MS/MSDs), trip blanks, and field blanks. The Quality Control Summary Report (QCSR) in **Appendix B** discusses quality control (QC) samples**.**

The team collected 88 of 92 planned normal samples (not including QC samples). The completeness for the number of samples planned versus the number of samples collected was 95.6 percent (%), exceeding the 90% project data goal. The achievement of the completeness goals provides sufficient data for project decisions. Sample results meet the data quality objectives presented in the RI Work Plan (CDM Smith 2020b). Section 2.4 discusses deviations from the work plan.

2.2 Transducer Data Collection

Transducer data were downloaded from November 2022 to September 2024. Data were collected from 11 groundwater wells during the September/October 2024 groundwater monitoring event. Transducer data trends are discussed in Section 3.1.1. Data from five transducers could not be collected. The transducer in MW-01S was tangled in the tubing and pump that got stuck in the well and could not be retrieved as discussed in Section 2.4. The transducer data from MW-15D and MW-32A could not be read due to a transducer malfunction. The transducer at MW-15D was missing the endcap protecting the sensor when it was pulled. The manufacturer has been contacted, and the transducers were not redeployed. Data from MW-04 and MW-14S were downloaded but were unable to be saved. The transducers automatically restart logging after being read and do not save prior data; therefore, attempts to download older data from these transducers in March and June 2025 were unsuccessful. The lack of data from these locations is not expected to affect overall evaluation of seasonal water levels at the site because other nearby wells have transducer data during this period. **Table 3** shows the dates, times, locations of transducer data downloads, and reasons why some transducer data was not collected. **Appendix D** presents hydrographs prepared from the transducer downloads. Outliers were omitted from the hydrographs because of inaccurate readings from removing and deploying transducers.

2.3 Decontamination and Investigation-Derived Waste

All nondedicated equipment used during the groundwater sampling event was decontaminated following the procedures outlined in SOP 4-5, Field Equipment Decontamination at Nonradioactive Sites (CDM Smith 2020a). Nondedicated equipment used during this event included electronic water-level meters and nondedicated pumps in the case of IW-01, EW-01, and a few wells that had pump issues. Equipment blanks were collected in accordance with the approved treatability work plan at a rate of one per day when nondedicated pumps were being

used. Investigation-derived waste (IDW) was handled per SOP 2-2, Guide to Handling Investigation-Derived Waste (CDM Smith 2020a). All decontamination water and purge water were containerized at their source and transferred to the 2,000 gallon holding tank at VAMC. Since work is ongoing at the site, the tank will be sampled and emptied by a certified IDW disposal company once full.

2.4 Deviations from the Quality Assurance Project Plan

The following QAPP deviations occurred during the sampling events:

- The synoptic water level event was not completed within 24 hours. This was caused by several delays, including difficulty getting the water level meter to pass the ZIST pumps, vehicles parked over wells, frozen bolts, and difficulties opening rusted locks and otherwise obstructed well covers. The water levels were all measured within 128 hours. However, the data are usable as intended.
    - MW-01S was not sampled during this event. The drive line disconnected during purging and fell down the well. It was not able to be retrieved. As this location has been successfully sampled in the past, there is no significant impact on the groundwater plume delineation data quality objective. The pump and tubing will be retrieved at a later date.
    - MW-12S was not sampled during this event. During the synoptic water level event, the well was measured to be dry. This location has been successfully sampled in the past, there is no significant impact on the groundwater plume delineation data quality objective.
    - MW-30C was not sampled during this event. The pump was pulled, and the O-rings, check valves, and filter were replaced and redeployed. The team was unable to successfully rebuild the water column and collect a sample. As this location has been successfully sampled in the past, there is no significant impact on the groundwater plume delineation data quality objective.
    - MW-32C was not sampled during this event. The pump had been pulled during a previous event and could not be redeployed because of the pump catching in the well. As this location has been successfully sampled in the past, there is no significant impact on groundwater plume delineation data quality objective.
    - The equipment blank collected for using the nondedicated pump for MW-42S (Sample ID EB03-GW091324) was not collected during the same day. The pump was decontaminated and not used for another well location that day. The equipment blank was collected the following morning before any other work. This does not impact the data quality, and the data can be used as intended.
    - Eight total field duplicates were collected over 88 normal samples. The final field duplicate was supposed to be collected from MW-30C, however pump issues prevented collection of a sample from this well on the last day of the first sampling mobilization. An alternate location was not communicated to the second mobilization team in

October. This represents a 9.1% collection rate instead of 10% in accordance with the QAPP. This does not impact the data quality, and the data can be used as intended.

- The wells identified for collection of additional parameters (TOC, dissolved gases, anions [sulfate and chloride], alkalinity, nitrate/nitrite, ferrous iron, and Quant Array) differed from those listed in the Treatability Study Work Plan (CDM Smith 2023a) because land access issues caused the relocation of the treatability study wells as documented in the Draft Supplemental Remedial Investigation Report (CDM Smith 2025). Instead of IW-01, MW-01S, MW-01D, MW-02, MW-42S, and MW-42D, samples for these analyses were collected at EW-01, IW-01, MW-03RA, MW-03RB, MW-42S and MW-42D. This does not impact the data quality, and it can be used as intended.

2.5 Data Quality Review

Groundwater samples were collected from September 5 to 13, 2024, and October 1 to 3, 2024. All samples collected from this sampling event were validated following the appropriate procedures as identified in the QAPP (CDM Smith 2020a). Of the data reported and validated, 100% are suitable for their intended use. Sample results that were qualified as estimated are usable for project decisions. No sample results were rejected. **Appendix B** includes the groundwater QCSRs.

Section 3
Groundwater Monitoring Results

Groundwater monitoring results appear below.

3.1 Groundwater Elevations

Table 3 presents groundwater elevations measured between September 4 and 11, 2024**.** Potentiometric groundwater surface maps were developed for the shallow and deep aquifers from manual groundwater elevation measurements for September 2024. **Figures 2a** and **2b** present these maps. Vertical gradients were calculated using the approach described by EPA (2016). The following text discusses the groundwater elevation evaluations.

Based on the observed piezometric heads, the subsurface was divided into the following hydraulic zones:

- Perched Zone: This zone is situated above the water table; it exhibits significantly higher piezometric heads than what is observed at other wells. The only wells that exhibit this feature are MW-06 (screened 100 to 130 feet below ground surface [bgs]) and MW-29A (screened 120 to 130 feet bgs). Perched head data have not been contoured.
- Shallow Aquifer Zone: This zone extends to approximately 220 feet bgs at VAMC Building 7 and gets shallower to the west as the ground surface dips. The shallow aquifer zone is contoured (using a 10-foot contour interval) in **Figure 2a**.
    - Flow directions are generally east to west, with horizontal gradients approximately 0.013 feet per foot (feet/foot) over 2,500 feet between MW-24 and MW-34A/B. Over the next 1,000 feet between MW-34A/B and MW-18, the horizontal gradients are approximately 0.015 feet/foot. Between MW-13S and MW-14S (approximately 500 feet), horizontal gradients are an order of magnitude higher, at approximately 0.12 feet/foot.
- Deep Aquifer Zone: This zone sits below approximately 260 feet bgs at VAMC Building 7 and gets shallower to the west as the ground surface dips. The deep aquifer zone is contoured (using a 10-foot contour interval) in **Figure 2b.**
    - Flow directions are generally east to west. In September 2024, horizontal gradients were approximately 0.0009 feet/foot between MW-23C and MW-34C (approximately 2,500 feet), and 0.011 feet/foot between MW-34C and MW-13L (approximately 2,350 feet).
    - Piezometric heads at MW-03RB/C/D are approximately 17 feet lower than in the shallow aquifer zone situated approximately 40 feet above. These steep vertical gradients are indicative of hydraulic separation between the shallow and deep aquifer zones, likely because of the presence of a semiconfining unit between 220 and 260 feet bgs.

  - Heads at MW-03RC/D are nearly identical despite spanning nearly 35 vertical feet of the aquifer. This likely indicates the lack of significant aquitard units within the deep aquifer zone.

- Intermediate Zone: This zone sits between the shallow and deep aquifer zones (approximately 220 to 260 feet bgs) at wells near VAMC Building 7 including MW-23B, MW-25B, MW-26B, MW-29C, and MW-30A. The zone is characterized by heads that are slightly lower than those in the shallow aquifer zone. It is unclear how laterally extensive this zone is and whether it is bounded by lower permeability units. Head data from this unit have not been contoured.

Vertical gradients, which are typically strongly downward on-site, dissipate along the east to the west groundwater flow path. MW-34C/D and MW-32C are estimated to be screened in the deep aquifer zone; however, there is little distinction in heads between these wells and the shallow aquifer zone at MW-34B and MW-32A/B. West of MW-34, vertical head gradients shift upward, with artesian conditions present in the deeper portions of the shallow aquifer zone at well MW-14D, just east of the fault. West of the fault, the vertical head differences and the hydraulic distinction between the shallow and deep aquifer zones was not observed.

3.1.1 Groundwater Level Transducer Trend Evaluation

Appendix D presents transducer data for selected monitoring wells. Wells MW-01D, MW-03RB, MW-30RA, MW-30C, and MW-32C exhibited stable hydrographs with minimal variability between November 2022 and September 2024, indicating no significant seasonal fluctuations or effects from well pumping. In contrast, wells MW-34A, MW-34B, MW-34C, and MW-34D—located adjacent to the Mt. Olivet Cemetery irrigation well showed distinct daily decreases in groundwater levels between April and October, consistent with irrigation-related pumping. Wells MW-13D, MW-16D, MW-34A, MW-34B, MW-34C, and MW-34D also exhibited variations in response to regional precipitation, with overall increasing elevations during the winter and spring seasons and decreasing elevations in summer.

3.2 Groundwater Volatile Organic Compounds Results

VOC analytical results from the September/October 2024 groundwater monitoring event are discussed below. **Table 4** presents the concentrations of detected VOCs compared to the EPA maximum contaminant levels (MCLs) or regional screening levels (RSLs) for tap water (for compounds without an established MCL) sampled during the September/October 2024 event. Detections are presented as bolded values and exceedances of the MCL or RSL are presented as highlighted values. **Figure 3** shows the approximate extent of PCE in groundwater and PCE results. This figure also presents the projected fault traces (Davis 1983; Personius 2009) and the monitoring well transect lines. **Appendix C** presents historical sample results.

VOC concentration data were analyzed for statistical trends using the Mann–Kendall trend test with a Theil–Sen trend line for all wells with datasets with more than 50% detected results and at least six results. If these criteria were not met, parameters were not calculated, indicated by “NC” in the statistical summary table. Originally included as contaminant persistence supporting information for the RI report (CDM Smith 2022), **Appendix E** includes the updated charts.

3.2.1 September/October 2024 Volatile Organic Compound Sampling Results

During the September/October 2024 groundwater monitoring event, a total of 88 samples were collected for VOC analysis. Additional QC samples included eight field duplicates, five MS/MSDs, three equipment blanks, one field blank, and seven trip blanks. In the parent samples, PCE concentrations ranged from 0.16 estimated (J) (MW-30RB) to 210 micrograms per liter (µg/L) (MW-02) (**Table 4**). PCE exceeded the MCL (5 µg/L) in 39 samples. The highest concentrations of PCE were detected at MW-02 (210 µg/L), MW-03RB (170 µg/L), and MW-43D (130 µg/L). PCE was detected at concentrations less than 5 µg/L in 20 samples and was not detected in 29 samples.

PCE was non-detect or below the MCL in MW-06, MW-23A/C, MW-24, MW-25A/B/C, MW-26A/B/C/D, MW-27, and MW-28, bounding the plume to the east. PCE was non-detect or below the MCL in MW-21, MW-22, MW-17S/D, MW-31A/B/C, and MW-36, defining the southern plume boundary. PCE was non-detect or below the MCL in MW-15S/D, MW-12D, and MW-37S/D, bounding the plume to the west. PCE was non-detect or below the MCL at MW-30RA/RB, MW-32A/B, and MW-38S/D, partially bounding the plume to the north. The newly installed well MW-39S had a PCE concentration of 21 µg/L, indicating the plume likely extends further north in this area of the site.

Trichloroethene (TCE) was detected at concentrations below the MCL (5 µg/L) in 32 of the 88 samples collected, with the highest detection in MW-14S at 3.6 µg/L. Low-level detections of cis-1,2-dichloroethene were observed in 19 samples, with the highest concentration in the duplicate sample for RG-06 (6 µg/L), followed by MW-14S (2.3 µg/L), and RG-03 (2 µg/L). There were no detections of vinyl chloride.

3.3 Microbial Results

Microbial samples were collected at EW-01, IW-01, MW-03RA, MW-03RB, MW-42S, and MW-42D and analyzed by QuantArray-Chlor. **Table 5** presents the microbial results from the QuantArray-Chlor analysis. Groundwater samples were analyzed for various microorganisms and functional genes to evaluate the presence and relative levels of anaerobic chlorinated ethene biodegrading microbes, aerobic chlorinated ethene biodegrading microbes, and other microbes during baseline sampling for the in situ bioremediation treatability study.

Anerobic Reductive Dechlorination Microbes

Chlorinated Ethenes (PCE, TCE, dichloroethene [DCE], vinyl chloride [VC])

- The bacterium *Dehalococcoides* (DHC) and its functional genes tceA Reductase (TCEA), BAV1 Vinyl Chloride Reductase (BVC), and Vinyl Chloride Reductase (VCR) are known to completely degrade cis-1,2-DCE and VC to ethene.
    - DHC, TCEA, BVC, and VCR were not detected above the reporting limit for any well. Typically, DHC concentrations greater than 10^3 to 10^4 cells per milliliter (cells/mL) are necessary for efficient dechlorination of DCE and VC to occur (Lu et al. 2006).

Chlorinated Ethenes (PCE, TCE)

- Anaerobic chlorinated ethene-degrading bacteria that reduce PCE and TCE to cis-1,2-DCE include *Dehalobacter* (DHBt), *Desulfitobacterium* (DSB), and *Desulfuromonas* (DSM) and its functional genes PCE-1 and PCE-2.
    - Low concentrations of DHBt were detected in MW-03RA and MW-03RB at concentrations of 9.30E+02 cells/mL and 1.70E+03 cells/mL, respectively.
    - DSB was also detected in MW-03RA and MW-03RB at low concentrations of 6.30E+02 cells/mL and 1.30E+03 cells/mL, respectively.
    - Low concentrations of DSM were detected at MW-03RA and EW-01 at 5.10E+00 cells/mL and 1.2E+00 cells/mL, respectively.
    - Functional genes PCE-1 and PCE-2 were not detected in any sample above the reporting limit.

Chlorinated Ethenes (trans-1,2-DCE, VC)

- The bacterium *Dehalogenimonas* (DHG) and its reductive dehalogenase genes (trans-1,2-DCE Reductase [TDR] and cerA Reductase [CER]) are capable of cis-1,2-DCE and VC reduction.
    - DHG, TDR, and CER were not detected in any sample above their reporting limits.

Aerobic (Co)metabolism Microbes

Chlorinated Ethenes (TCE, DCE, VC)

- Under aerobic conditions, methane- and benzene, toluene, ethylbenzene, and xylene-oxidizing bacteria can cometabolize TCE, cis-1,2-DCE, and VC. The functional genes capable of co-oxidation of chlorinated ethenes include soluble methane monooxygenase (sMMO), toluene monooxygenase (RMO), toluene monooxygenase 2 (RDEG), toluene dioxygenase (TOD), and phenol hydroxylase (PHE).
    - Low concentrations of sMMO and TOD were detected in MW-03RA and MW-03RB, respectively.
    - Low concentrations of PHE were detected in EW-01, IW-01, MW-03RA, MW-03RB, and MW-42D.
    - Low concentrations of RDEG and RMO were detected in EW-01, IW-01, MW-03RA, and MW-03RB.

3.4 Groundwater General Chemistry

DO, ORP, sulfate, nitrate, ferrous iron, and methane are geochemical parameters that can be used to evaluate redox conditions. Reductive dechlorination of PCE to TCE and cis-1,2-dichloroethene generally occurs under iron-reducing to sulfate-reducing conditions, while complete dechlorination to ethene and ethane generally occurs under sulfate-reducing to methanogenic conditions (EPA 2006). Conditions are considered aerobic when DO is greater than 0.5 milligrams

per liter (mg/L), iron-reducing when ferrous iron is greater than 0.5 mg/L, and methanogenic when methane is greater than 1 mg/L (EPA 2006). Microaerobic conditions can occur when DO is typically between 0.5 mg/L and 1 mg/L, where both aerobic and anaerobic processes can occur. As presented in **Table 6,** high DO (0.73 to 10.2 mg/L) at all well locations suggests that groundwater conditions at the site are generally aerobic. Low ferrous iron (less than 0.5 mg/L) and high sulfate (analyzed in select wells from 91.4 J to 215 mg/L) analyzed in all wells further support the observation that conditions are generally aerobic (**Table 6**). Methane was detected at low concentrations (below 0.0021 mg/L) in all analyzed wells except MW-03RB, where methane was not detected above the reporting limit.

Chloride, alkalinity, and TOC provide information on general water quality (i.e., salinity) and were analyzed in select wells during the September/October 2024 sampling event (**Table 2**). Chloride concentrations ranged from 172 J mg/L (IW-01) to 443 J mg/L (MW-03RA). Alkalinity ranged from 228 mg/L as calcium carbonate ($CaCO_3$) (MW-42D) to 280 mg/L as $CaCO_3$ (MW-03RA). TOC was less than 1 mg/L for all the samples, except for MW-03RA/B at concentrations of 7.95 mg/L and 8.08 mg/L, respectively.

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Section 4
Summary

This report presents the results from the groundwater sampling event conducted in September/October 2024.

4.1 Groundwater

The data presented in this report confirm the existing understanding of hydrogeology and contaminant trends at the site as presented in the final RI report (CDM Smith 2022).

Groundwater flow directions are generally east to west. There are four distinct hydraulic zones in the subsurface: perched, shallow aquifer zone, deep aquifer zone, and intermediate zone. There is a hydraulic separation between the shallow and deep aquifer zones, likely caused by the presence of a semiconfining silt/clay unit. The lateral extent of the perched and intermediate zones is unclear. Vertical gradients, which are typically strongly downward on campus, dissipate along the east to west groundwater flow path toward MW-34. West of MW-34, vertical head gradients generally shift upward in the deeper portions of the shallow zone aquifer, with artesian conditions present in well MW-14D, just east of the fault. West of the fault, vertical head differences and the distinction between the shallow and deep aquifer zones are not observed.

Non-detect wells define the vertical and horizontal extent of the PCE plume except in the area north of the VA campus, where the installation of MW-39S indicated the plume boundary is further north than anticipated (**Figure 3**). The highest concentrations of PCE were detected in MW-02 (210 µg/L), MW-03RB (170 µg/L), and MW-43D (130 µg/L).

Between November 2022 (CDM Smith 2023b) and September/October 2024 (**Figure 3**), the PCE plume appears generally stable, with the only contour adjustments occurring at MW-20D and MW-39S. PCE in MW-20D was not sampled in November 2022 but was detected at 9.2 µg/L during September/October 2024. PCE in MW-39S, which was installed in July 2024, was detected at 21 µg/L, extending the plume boundary to the north. The inclusion of the residential groundwater monitoring wells helped to further refine the plume contours in the western part of the site. Otherwise, the plume extent did not change between the November 2022 results discussed in the 2022 groundwater monitoring report and the most recent sampling results from September/October 2024.

Along with VOCs, samples were collected for the determination of general chemistry to establish baseline conditions near the in situ bioremediation treatability study. Select wells in this area were also sampled for sulfate, nitrate/nitrite, chloride, alkalinity, TOC, ferrous iron, dissolved gases, and microbial communities. These data were used to determine that the redox conditions at the site are generally aerobic with very low concentrations of bacteria. The observation of aerobic conditions and low concentrations of biodegradation daughter products suggest that biodegradation of PCE at the site is limited.

The Mann-Kendall analysis originally submitted with the RI (CDM Smith 2022) and Groundwater and Soil Gas Monitoring Report for 2021-2022 (CDM Smith 2023) was updated with the September/October 2024 analytical results (**Appendix E**). Overall, the trend analysis results remained similar, with most site wells having "stable" or "decreasing" trends, or "no trend" observed. Changes between the 2022 and 2024 trend analysis can be compared in the Contaminant Persistence Table in **Appendix E**. Note that the wells with increasing trends for TCE and cis-1,2-DCE have maximum concentrations of 1.3 µg/L and 0.57 µg/L, respectively, which are below their respective MCLs. Five wells exhibit increasing trend for PCE. MW-13L, MW-13S, and MW-34B have PCE concentrations above the MCL, while wells MW-17S and MW-17D have concentrations below the MCL.

4.2 Recommendations

The sampling pump and tubing are dislodged within well MW-01S, making it unable to be sampled or gauged. Efforts to retrieve the pump using hand tools have been unsuccessful, and additional effort using a winch and retrieval tools by a drilling subcontractor is necessary to retrieve the pump.

Because of construction in the area, the well vault at MW-34 was removed in May of 2025 and the well casings were lowered to below the final grade. After construction is completed in 2026, the well vault at MW-34 will need to be re-set at final grade and the top of casing elevations resurveyed.

Section 5
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Figures

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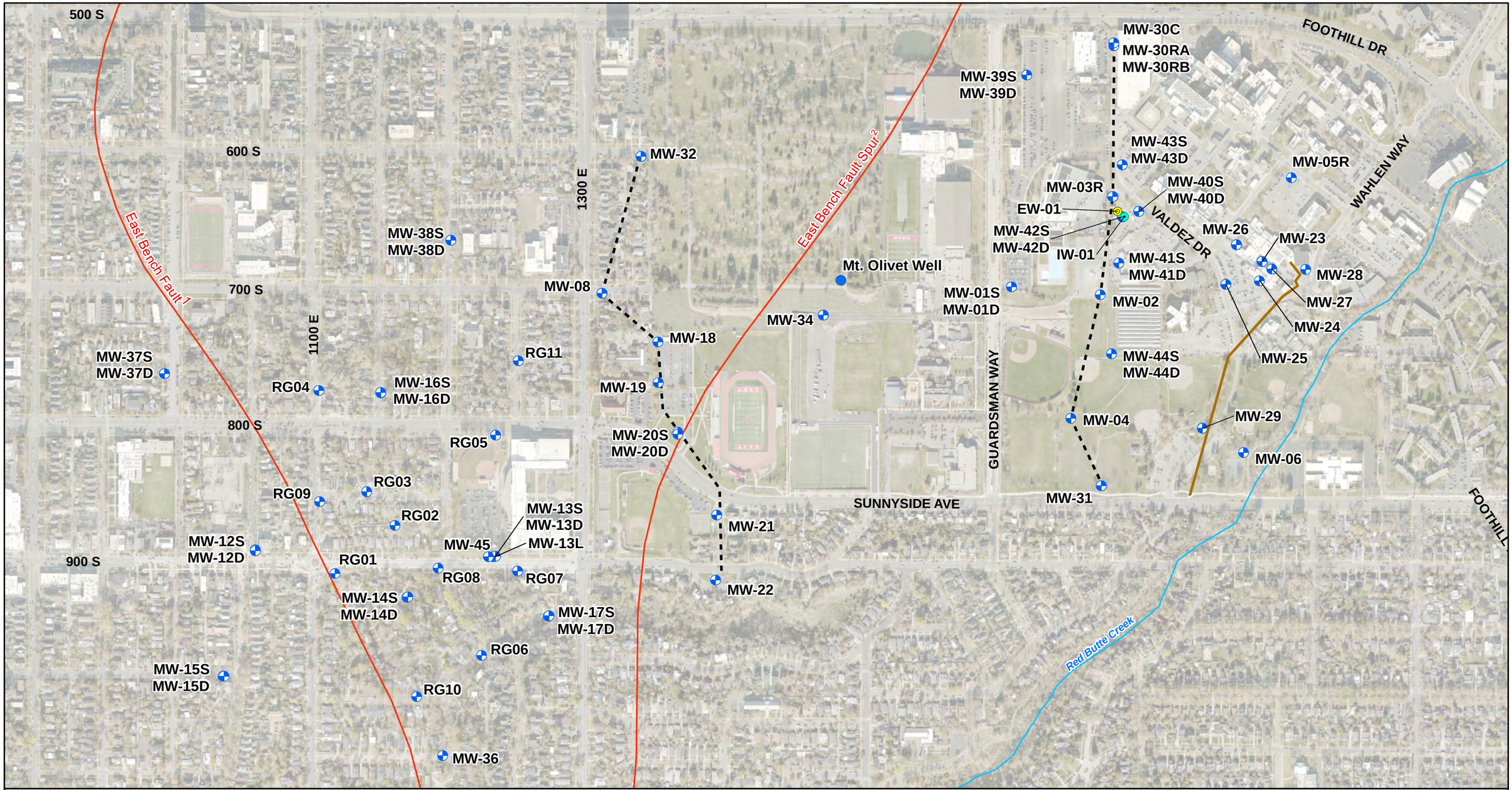


Legend

- Monitoring Well
- Extraction Well
- Injection Well
- Irrigation Well
- Monitoring Well Transect Line
- Red Butte Creek
- Fault Line
- Sewer Line

Notes

1. Location IDs MW-07, MW-09, MW-10, MW-11, MW-33, and MW-35 were not used.

PCE = tetrachloroethene
MW = monitoring well

[1] Davis, F.D. 1983. Geologic Map of the Central Wasatch Front, Utah. Utah Geological and Mineral Survey. Map 54-A – Wasatch Front Series. May.
[2] Personius, S.F. and Scott, W.E. 2009. Surficial Geologic Map of the Salt Lake City Segment and Parts of Adjacent Segments of the Wasatch Fault Zone, Davis, Salt Lake, and Utah Counties, Utah

N W E S

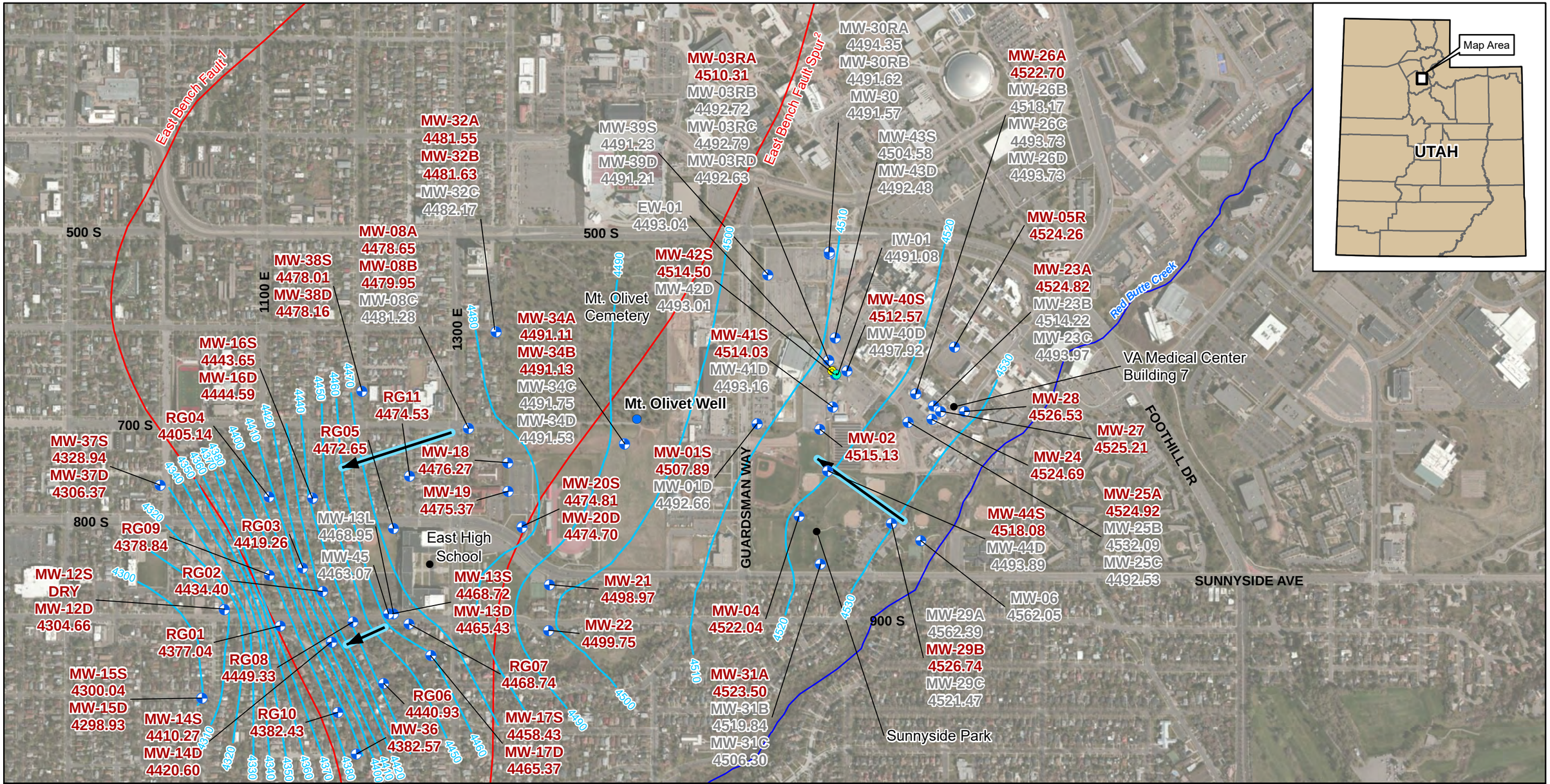
0 250 500 Feet

CDM Smith

Figure 1
Monitoring Well Network

Groundwater Monitoring
Report for 2024
700 South 1600 East PCE Plume
Salt Lake City, Utah

File Path: J:\238824_VA_Medical_Salt_Lake\MXD\Sampling_2024\DSR_2024Q3\Fig1_Monitoring_Well_Network.mxd WAGNERA 2/17/2025



Legend

- Monitoring Well
- Extraction Well
- Injection Well
- Irrigation Well
- Landmark
- Red Butte Creek
- Fault Line
- Groundwater Contour
- Dashed Line - Inferred Extent
- Groundwater Flow Direction

Notes:
1. All ground surface elevations in feet amsl
2. Measurements taken September 4th through 11th 2024.
3. Water levels shown in grey were not used for the generation of the potentiometric contours and are shown for information only
4. Water level values for MW-14S/D and MW-17S/D were averaged during contouring.

[1] Davis, F.D. 1983. Geologic Map of the Central Wasatch Front, Utah. Utah Geological and Mineral Survey. Map 54-A – Wasatch Front Series. May.
[2] Personius, S.F. and Scott, W.E. 2009. Surficial Geologic Map of the Salt Lake City Segment and Parts of Adjacent Segments of the Wasatch Fault Zone, Davis, Salt Lake, and Utah Counties, Utah

amsl = above mean sea level
PCE = tetrachloroethene
MW = monitoring well
EW = extraction well

IW = injection well
RG = residential groundwater sample
NM = Not measured

N W E S

0 500 1,000 Feet

Figure 2a
Potentiometric Groundwater Surface Map - Shallow Aquifer
September 2024

Groundwater Monitoring Report for 2024
700 South 1600 East PCE Plume
Salt Lake City, Utah

CDM Smith

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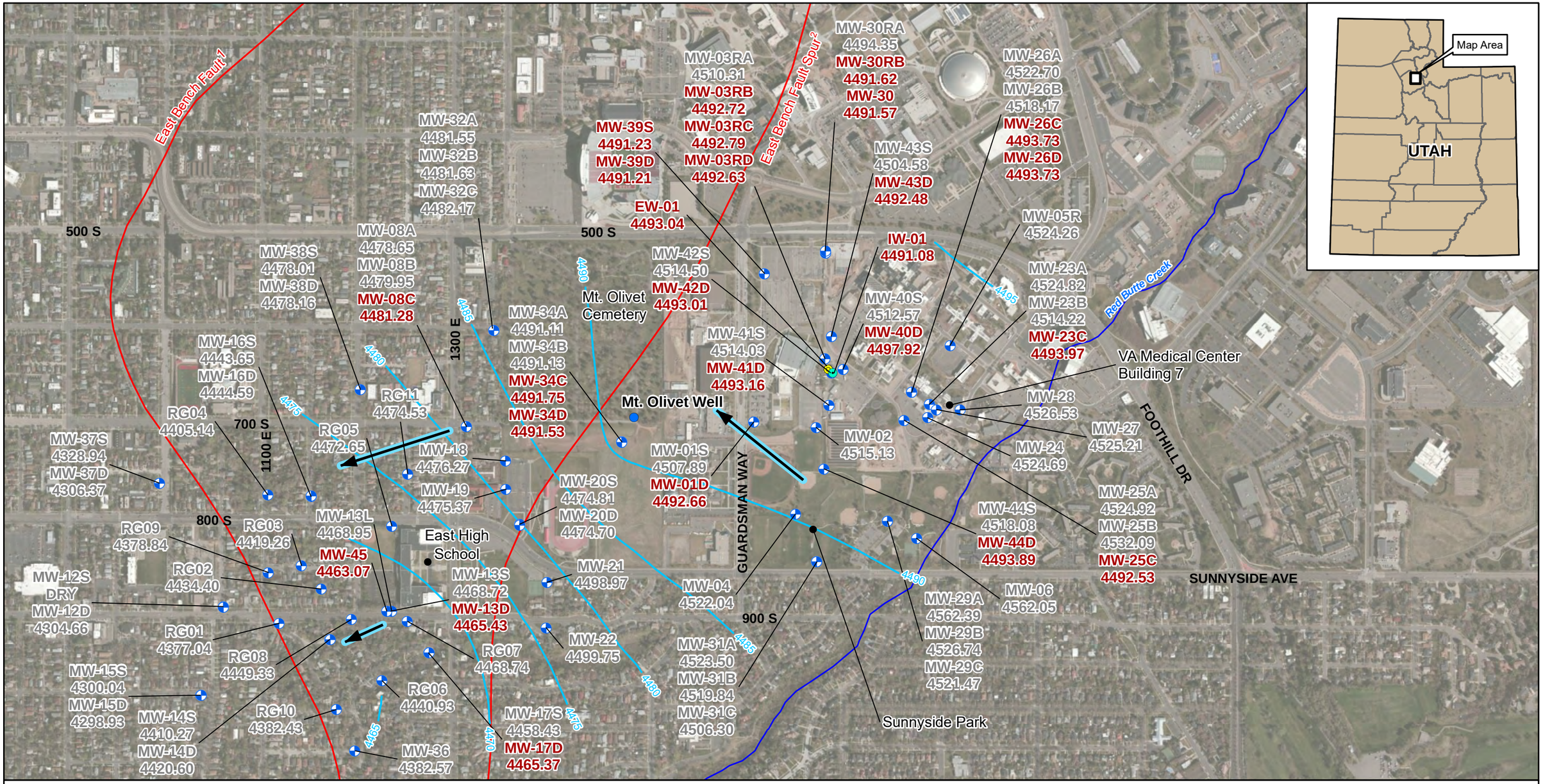

Legend

- Monitoring Well
- Extraction Well
- Injection Well
- Irrigation Well
- Landmark
- Red Butte Creek
- Fault Line
- Groundwater Contour
- Dashed Line - Inferred Extent
- Groundwater Flow Direction

Notes:
1. All ground surface elevations in feet amsl
2. Measurements taken September 4th through 11th 2024.
3. Water levels shown in grey were not used for the generation of the potentiometric contours and are shown for information only
4. Water level values for MW-14S/D and MW-17S/D were averaged during contouring.

[1] Davis, F.D. 1983. Geologic Map of the Central Wasatch Front, Utah. Utah Geological and Mineral Survey. Map 54-A – Wasatch Front Series. May.
[2] Personius, S.F. and Scott, W.E. 2009. Surficial Geologic Map of the Salt Lake City Segment and Parts of Adjacent Segments of the Wasatch Fault Zone, Davis, Salt Lake, and Utah Counties, Utah

amsl = above mean sea level
PCE = tetrachloroethene
MW = monitoring well
EW = extraction well
IW = injection well
RG = residential groundwater sample
NM = Not measured

N W E S

0 500 1,000 Feet

CDM Smith

Figure 2b
Potentiometric Groundwater Surface Map - Deep Aquifer
September 2024

Groundwater Monitoring Report for 2024
700 South 1600 East PCE Plume
Salt Lake City, Utah

File Path: J:\238824_VA_Medical_Salt_Lake\MXD\Sampling_2024\DSR_2024Q3\Fig2b_GW_Deep_Aquifer_Sept2024.mxd WAGNERA 5/12/2025 11:17:21 AM

MW-38S (27-37 ft bgs): 0.15 U Shallow
MW-38D (60-70 ft bgs): 0.15 U Shallow
MW-32A (114-124 ft bgs): 0.43 J Shallow
MW-32B (170-180 ft bgs): 0.58 J Shallow
MW-34A (140-150 ft bgs): 25 Shallow
MW-34B (175-185 ft bgs): 20 Shallow
MW-34C (250-260 ft bgs): 0.15 U Deep
MW-34D (315-325 ft bgs): 0.15 U Deep
MW-03RA (215-220 ft bgs): 32 Shallow
MW-03RB (267-272 ft bgs): 170 Deep
MW-03RC (307-312 ft bgs): 6.2 Deep
MW-03RD (359-364 ft bgs): 0.15 U Deep
MW-39S (269-289 ft bgs): 21 Deep
MW-39D (328-358 ft bgs): 0.15 U Deep
MW-30RA (240-250 ft bgs): 0.15 U Deep
MW-30RB (282-292 ft bgs): 0.16 J Deep
MW-43S (225-235 ft bgs): 0.52 J Shallow
MW-43D (274-284 ft bgs): 130 Deep
IW-01 (250-270 ft bgs): 60 Deep
MW-05R (198-228 ft bgs): 0.15 U Shallow
MW-26A (205-215 ft bgs): 0.15 U Shallow
MW-26B (235-245 ft bgs): 0.15 U Intermediate
MW-26C (315-325 ft bgs): 0.15 U Deep
MW-26D (347.75-357.75 ft bgs): 0.15 U Deep
MW-13S (15.5-20.5 ft bgs): 25 Shallow
MW-13D (150-160 ft bgs): 50 Shallow
MW-13L (79-84 ft bgs): 63 Deep
MW-08A (91-106 ft bgs): 51 Shallow
MW-08B (180-200 ft bgs): 6.2 Shallow
MW-08C (304-309 ft bgs): 0.15 U Deep
EW-01 (260-300 ft bgs): 67 Deep
MW-16S (9-19 ft bgs): 21 Shallow
MW-16D (62-72 ft bgs): 0.15 U Shallow
MW-42S (246-256 ft bgs): 12 Shallow
MW-42D (266-276 ft bgs): 87 Deep
MW-45 (200-210 ft bgs): 10 Deep
RG-11 (30-40 ft bgs): 12 --
RG-04 (10-20 ft bgs): 11 --
RG-05 (20-30 ft bgs): 8.9 --
MW-23A (210-220 ft bgs): 0.15 U Shallow
MW-23B (250-260 ft bgs): 0.15 U Intermediate
MW-23C (348-358 ft bgs): 0.15 U Deep
MW-37S (25-35 ft bgs): 0.15 U --
MW-37D (60-70 ft bgs): 0.15 U --
MW-18 (80-90 ft bgs): 56 Shallow
MW-28 (190-210 ft bgs): 0.15 U Shallow
MW-27 (200-220 ft bgs): 0.15 U Shallow
MW-01D (364-404 ft bgs): 0.15 U Deep
MW-24 (209.5-239.5 ft bgs): 0.23 J Shallow
RG-03 (3-8 ft bgs): 51 --
RG-09 (5-15 ft bgs): 14 --
RG-02 (5-15 ft bgs): 14 --
MW-19 (84-94 ft bgs): 46 Shallow
MW-25A (201-211 ft bgs): 1.9 Shallow
MW-25B (231-241 ft bgs): 0.15 U Intermediate
MW-25C (307.5-317.5 ft bgs): 0.86 J Deep
MW-02 (175.5-202.5 ft bgs): 210 Shallow
MW-12D (88.5-93.5 ft bgs): 1.1 --
MW-20S (79.5-89.5 ft bgs): 3.6 Shallow
MW-20D (119-129 ft bgs): 9.2 Shallow
MW-41S (216-226 ft bgs): 72 Shallow
MW-41D (272-282 ft bgs): 33 Deep
MW-40S (230-240 ft bgs): 1.3 Shallow
MW-40D (295-305 ft bgs): 14 Deep
RG-01 (9-19 ft bgs): 7.5 --
MW-15S (52.5-55 ft bgs): 0.41 J --
MW-15D (69-74 ft bgs): 0.23 J --
MW-04 (143-173 ft bgs): 65 Shallow
MW-17S (6-21 ft bgs): 1.5 Shallow
MW-17D (44-54 ft bgs): 3.2 Shallow
MW-21 (62-72 ft bgs): 1.2 Shallow
MW29A (120-130 ft bgs): 9/10/2024: 8.3 --
MW29B (190-200 ft bgs): 9/10/2024: 0.15 Shallow
MW29C (230-240 ft bgs): 9/10/2024: 0.15 --
MW-06 (100-130 ft bgs): 0.34 J Perched
RG-08 (8-18 ft bgs): 50 --
MW-31A (138-148 ft bgs): 0.57 J Shallow
MW-31B (190-200 ft bgs): 0.15 U Shallow
MW-31C (228-238 ft bgs): 0.15 U Deep
MW-44S (195-205 ft bgs): 58 Shallow
MW-44D (280-290 ft bgs): 0.32 J Deep
RG-10 (20-30 ft bgs): 0.3 J --
MW-14S (4.5-14.5 ft bgs): 7.8 Shallow
MW-14D (49-54 ft bgs): 36 Shallow
MW-36 (47-52 ft bgs): 0.15 U --
RG-06 (4-9 ft bgs): 0.15 U --
RG-07 (20-30 ft bgs): 38 --
MW-22 (64-74 ft bgs): 1.7 Shallow

500 S
700 S
800 S
900 S
1100 E
1300 E
FOOTHILL DR
WAHLEN WAY
GUARDSMAN WAY
VALDEZ DR
SUNNYSIDE AVE
Building 6
Building 7
Red Butte Creek

Legend
- Monitoring Well Screened
- Extraction Well
- Injection Well
- Monitoring Well Transect Line
- Red Butte Creek
- Fault Line

PCE Concentrations (µg/L)
- = < 5 µg/L
- = 5 - 10 µg/L
- = 10 - 50 µg/L
- = 50 - 100 µg/L
- = > 100 µg/L

PCE Contours
- 5 µg/L
- 10 µg/L
- 50 µg/L
- 100 µg/L
- Dashed Line - Inferred Extent

Notes
1. Proposed monitoring wells MW-07, MW-09, MW-10, MW-11, MW-33, and MW-35 were not installed.
2. Plume contours were developed using Leapfrog 3-dimensional visualization software to interpolate data from SeptemberOctober 2024 groundwater sampling event. The contours represent a top-down view of the 3-dimensional extent of the plume as interpreted in the Leapfrog software.

OU = operable unit
PCE = tetrachloroethene
µg/L = micrograms per liter
ft bgs = feet below ground surface
J = Result is estimated
U = Analyte was not detected at the associated value

N W E S
0 250 500 Feet

CDM Smith

Figure 3
Tetrachloroethene in the Shallow and Deep Aquifers September 2024

Groundwater Monitoring Report for 2024
700 South 1600 East PCE Plume
Salt Lake City, Utah

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Tables

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Table 1
Monitoring Well Survey Data and Construction Details

Location	Sample Interval	Y Coordinate (Utah State Plane, ft)[1]	X Coordinate (Utah State Plane, ft)[1]	Surface Elevation (ft amsl)[2]	Top of casing elevation (ft amsl)[2]	Total Well Depth (ft bgs)	Screen Start (ft bgs)	Screen End (ft bgs)	Pump Depth (ft bgs)	Pump Type
MW-01S	-	7443664.01	1544833.01	4665.50	4664.80	224	184	224	204	Solinst bladder pump
MW-01D	-	7443663.8	1544832.74		4664.80	404	364	404	384	Solinst bladder pump
MW-02	-	7443618.28	1545346.71	4685.76	4685.24	205.5	175.5	202.5	195	Solinst bladder pump
MW-03R	A	7444184.95	1545418.14	4698.74	4698.12	223	215	220	215	ZIST/Gas - with reciever
	B	7444185.07	1545418.33		4697.90	275	267	272	267	ZIST/Gas - with reciever
	C	7444185.19	1545418.23		4697.92	315	307	312	307	ZIST/Gas - with reciever
	D	7444184.80	1545418.35		4697.93	367	359	364	359	ZIST/Gas - with reciever
MW-04	-	7442903.12	1545176.19	4657.20	4656.85	173	143	173	160	Solinst bladder pump
MW-05R	-	7444293.35	1546450.34	4738.25	4737.99	230	198	228	222	Solinst bladder pump
MW-06	-	7442705.14	1546174.50	4679.13	4678.66	134	100	130	128	Solinst bladder pump
MW-08	A	7443625.56	1542467.38	4540.36	4539.81	106	91	106	99	Solinst bladder pump
	B	7443625.49	1542467.11		4539.77	200	180	200	190	Solinst bladder pump
	C	7443625.72	1542467.20		4539.68	312	304	309	304	ZIST/Gas - with reciever
MW-12S	-	7442144.49	1540464.22	4360.35	4360.03	65	50	60	60	Solinst bladder pump
MW-12D	-	7442139.3	1540464.08	4360.40	4360.07	95	88.5	93.5	90	Solinst bladder pump
MW-13S	-	7442105.03	1541845.01	4483.26	4482.93	22	15.5	20.5	19	Solinst bladder pump
MW-13D	-	7442104.79	1541840.30	4482.93	4482.62	90	79	84	82	Solinst bladder pump
MW-13L	-	7442106.396	1541851.05	4483.67	4483.23	160	150	160	155	Solinst bladder pump
MW-14S	-	7441871.6	1541340.10	4415.96	4415.69	15	4.5	14.5	12	Solinst bladder pump
MW-14D	-	7441874.21	1541345.30	4416.45	4415.93	65	49	54	NA	Artesian
MW-15S	-	7441412.97	1540276.53	4347.65	4347.35	65	52.5	55	54	Solinst bladder pump
MW-15D	-	7441412.68	1540283.41	4347.99	4347.72	95	69	74	72	Solinst bladder pump
MW-16S	-	7443049.27	1541188.64	4455.19	4454.83	20	9	19	16.0	Solinst bladder pump
MW-16D	-	7443053.06	1541188.67	4455.32	4454.84	73	62	72	67	Solinst bladder pump
MW-17S	-	7441761.31	1542156.28	4465.51	4465.18	22	6	21	20	Solinst bladder pump
MW-17D	-	7441762.18	1542159.89	4465.86	4465.69	70	44	54	NA	Artesian/Solinst bladder pump
MW-18	-	7443344.6	1542789.79	4559.06	4558.76	110	80	90	88	Solinst bladder pump
MW-19	-	7443109.94	1542791.53	4557.51	4557.16	110	84	94	89	Solinst bladder pump
MW-20S	-	7442822.83	1542905.94	4558.92	4558.61	90.8	79.5	89.5	88	Solinst bladder pump
MW-20D	-	7442813.27	1542905.41	4558.46	4558.19	150	119	129	124	Solinst bladder pump
MW-21	-	7442343.33	1543130.28	4563.57	4563.32	80	62	72	70	Solinst bladder pump
MW-22	-	7441969.26	1543122.55	4563.06	4562.72	120	64	74	72	Solinst bladder pump
MW-23	A	7443809.23	1546280.52	4712.47	4711.80	222	210	220	210	ZIST/Gas - with reciever
	B	7443809.39	1546280.45		4711.77	262	250	260	250	ZIST/Gas - with reciever
	C	7443809.44	1546280.57		4711.69	360	348	358	348	ZIST/Gas - with reciever
MW-24	-	7443698.8	1546266.33	4709.77	4709.19	250	209.5	239.5	211	Solinst bladder pump
MW-25	A	7443676.93	1546072.04	4703.04	4702.02	213	201	211	201	ZIST/Gas - with reciever
	B	7443676.99	1546071.93		4702.09	243	231	241	231	ZIST/Gas - with reciever
	C	7443676.79	1546071.96		4702.07	320	307.5	317.5	308	ZIST/Gas - with reciever
MW-26	A	7443907.29	1546132.89	4713.25	4712.29	217	205	215	205	ZIST/Gas - with reciever
	B	7443907.24	1546132.98		4712.55	247	235	245	235	ZIST/Gas - with reciever
	C	7443907.12	1546133.02		4712.51	327	315	325	315	ZIST/Gas - with reciever
	D	7443907.17	1546132.88		4712.50	360	347.75	357.75	348	ZIST/Gas - with reciever
MW-27	-	7443766.76	1546337.14	4712.61	4712.34	220	200	220	210	Solinst bladder pump
MW-28	-	7443764.76	1546532.92	4712.80	4712.54	210	190	210	204	Solinst bladder pump
MW-29	A	7442846.05	1545935.56	4679.35	4678.46	132	120	130	128	ZIST/Gas - w/o reciever
	B	7442845.99	1545935.56		4678.45	202	190	200	190	ZIST/Gas - with reciever
	C	7442845.97	1545935.69		4678.68	242	230	240	230	ZIST/Gas - with reciever
MW-30R	RA	7445055.90	1545425.16	4722.89	4722.60	252	240	250	245	Solinst bladder pump
	RB	7445055.64	1545425.20		4722.36	294	282	292	285	Solinst bladder pump
MW-30	C	7445073.42	1545425.05	4723.07	4721.92	329	317	327	317	ZIST/Gas - with reciever
MW-31	A	7442512.66	1545351.42	4655.22	4654.27	150	138	148	138	ZIST/Gas - w/o reciever
	B	7442512.69	1545351.52		4654.39	202	190	200	190	ZIST/Gas - with reciever
	C	7442512.61	1545351.65		4654.35	230	228	238	228	ZIST/Gas - with reciever
MW-32	A	7444416.50	1542692.74	4566.22	4565.67	126	114	124	119	Solinst bladder pump
	B	7444416.64	1542692.56		4565.63	182	170	180	170	ZIST/Gas - w/o reciever
	C[3]	7444416.36	1542692.54		4565.59	272	260	270	260	ZIST/Gas - w/o reciever
MW-34	A	7443498.97	1543745.67	4623.61	4623.09	152	140	150	148	ZIST/Gas - w/o reciever
	B	7443499.00	1543745.52		4622.71	187	175	185	175	ZIST/Gas - w/o reciever
	C	7443498.86	1543745.46		4622.63	262	250	260	250	ZIST/Gas - w/o reciever
	D	7443498.76	1543745.65		4622.58	327	315	325	315	ZIST/Gas - w/o reciever
MW-36	-	7440955.13	1541547.30	4429.01	4428.49	52	47	52	50	Solinst bladder pump
MW-37S	-	7443160.41	1539938.84	4348.36	4348.00	35	25	35	30	Solinst bladder pump
MW-37D	-	7443160.68	1539938.71		4347.97	70	60	70	65	Solinst bladder pump

Table 1
Monitoring Well Survey Data and Construction Details

Location	Sample Interval	Y Coordinate (Utah State Plane, ft)[1]	X Coordinate (Utah State Plane, ft)[1]	Surface Elevation (ft amsl)[2]	Top of casing elevation (ft amsl)[2]	Total Well Depth (ft bgs)	Screen Start (ft bgs)	Screen End (ft bgs)	Pump Depth (ft bgs)	Pump Type
MW-38S	-	7443931.72	1541593.35	4498.56	4497.64	37	27	37	32	Solinst bladder pump
MW-38D	-	7443931.93	1541593.53		4497.80	70	60	70	65	Solinst bladder pump
MW-39S	-	7444885.96	1544921.12	4698.78	4698.34	289	269	289	279	QED bladder pump
MW-39D	-	7444885.82	1544921.30		4698.35	358	328	358	343	QED bladder pump
MW-40S	-	7444096.78	1545568.83	4702.21	4701.87	240	230	240	235	QED bladder pump
MW-40D	-	7444097.12	1545568.43		4701.86	305	295	305	300	QED bladder pump
MW-41S	-	7443799.86	1545453.35	4690.50	4689.83	226	216	226	221	QED bladder pump
MW-41D	-	7443800.17	1545453.34		4689.84	282	272	282	277	QED bladder pump
MW-42S	-	7444066.68	1545474.59	4697.59	4697.12	256	246	256	222	QED bladder pump
MW-42D	-	7444066.49	1545474.39		4697.16	276	266	276	277	QED bladder pump
MW-43S	-	7444367.04	1545472.72	4707.81	4707.17	235	225	235	230	QED bladder pump
MW-43D	-	7444367.36	1545472.54		4707.21	284	274	284	279	QED bladder pump
MW-44S	-	7443277.73	1545410.29	4674.13	4673.43	205	195	205	200	QED bladder pump
MW-44D	-	7443277.99	1545410.38		4673.44	290	280	290	285	QED bladder pump
MW-45	-	7442104.40	1541810.52	4481.37	4480.77	210	200	210	205	QED bladder pump
EW-01	-	7444098.4	1545446.41	4697.3	4696.9	305	260	300	280	Non-dedicated bladder pump
IW-01	-	7444068.90	1545485.70	4698.16	4697.74	270	250	270	260	Non-dedicated bladder pump
RG-01	-	7442006.70	1540924.03	4383.92	4383.49	20	9	19	-	-
RG-02	-	7442286.89	1541270.19	4437.32	4436.95	15	5	15	-	-
RG-03	-	7442479.61	1541107.48	4422.98	4422.53	8	3	8	-	-
RG-04	-	7443062.83	1540830.39	4415.83	4415.47	20	10	20	-	-
RG-05	-	7442805.72	1541851.88	4497.38	4496.96	30	20	30	-	-
RG-06	-	7441534.16	1541771.71	4443.66	4443.23	10	4	9	-	-
RG-07	-	7442021.00	1541979.13	4490.30	4490.05	30	20	30	-	-
RG-08	-	7442038.61	1541519.86	4455.17	4454.74	20	8	18	-	-
RG-09	-	7442423.54	1540835.33	4385.39	4384.93	15	5	15	-	-
RG-10	-	7441296.08	1541395.71	4410.37	4409.82	30	20	30	-	-
RG-11	-	7443236.76	1541982.64	4504.70	4504.39	40	30	40	-	-

Notes:
[1] X/Y Coordinates measured using NAD 83 State Plane Coordinate System
[2] Elevations measured using NAVD 88 vertical datum
[3] The pump in MW-32C was removed during a previous event and could not be redeployed.

Acronyms:
amsl = above mean sea level
bgs = below ground surface
ft = feet
PCE = tetrachloroethene
w/o = without
ZIST = Zone Isolation Sampling Technology

Table 2
Groundwater Sampling Locations

Location	Sample Interval	Volatile Organic Compounds (VOCs)[1]	Alkalinity[3]	Anions[4]	Total Organic Carbon (TOC)[5]	Nitrate and Nitrite as Total Nitrogen[6]	Dissolved Gases (MEE)[7]	Ferrous Iron (Fe2+)[8]	QuantArray-Chlor
EW01	-	x	x	x	x	x	x	x	x
IW01	-	x	x	x	x	x	x	x	x
MW-01S	-	NS[9]							
MW-01D	-	x							
MW-02	-	x							
MW-03R	A	x	x	x	x	x	x	x	x
	B	x	x	x	x	x	x	x	x
	C	x							
	D	x							
MW-04	-	x							
MW-05R	-	x							
MW-06	-	x							
MW-08	A	x							
	B	x							
	C	x							
MW-12S	-	NS[10]							
MW-12D	-	x							
MW-13S	-	x							
MW-13D	-	x							
MW-13L	-	x							
MW-14S	-	x							
MW-14D	-	x							
MW-15S	-	x							
MW-15D	-	x							
MW-16S	-	x							
MW-16D	-	x							
MW-17S	-	x							
MW-17D	-	x							
MW-18	-	x							
MW-19	-	x							
MW-20S	-	x							
MW-20D	-	x							
MW-21	-	x							
MW-22	-	x							
MW-23	A	x							
	B	x							
	C	x							
MW-24	-	x							
MW-25	A	x							
	B	x							
	C	x							
MW-26	A	x							
	B	x							
	C	x							
	D	x							
MW-27	-	x							
MW-28	-	x							
MW-29	A	x							
	B	x							
	C	x							
MW-30R	RA	x							
	RB	x							
MW-30	C	NS[11]							
MW-31	A	x							
	B	x							
	C	x							

Table 2
Groundwater Sampling Locations

Location	Sample Interval	Volatile Organic Compounds (VOCs)[1]	Alkalinity[3]	Anions[4]	Total Organic Carbon (TOC)[5]	Nitrate and Nitrite as Total Nitrogen[6]	Dissolved Gases (MEE)[7]	Ferrous Iron (Fe2+)[8]	QuantArray-Chlor
MW-32	A	x							
	B	x							
	C	NS[12]							
MW-34	A	x							
	B	x							
	C	x							
	D	x							
MW-36	-	x							
MW-37S	-	x							
MW-37D	-	x							
MW-38S	-	x							
MW-38D	-	x							
MW-39S	-	x							
MW-39D	-	x							
MW-40S	-	x							
MW-40D	-	x							
MW-41S	-	x							
MW-41D	-	x							
MW-42S	-	x	x	x	x	x	x	x	x
MW-42D	-	x	x	x	x	x	x	x	x
MW-43S	-	x							
MW-43D	-	x							
MW-44S	-	x							
MW-44D	-	x							
MW-45	-	x							
RG-01	-	x							
RG-02	-	x							
RG-03	-	x							
RG-04	-	x							
RG-05	-	x							
RG-06	-	x							
RG-07	-	x							
RG-08	-	x							
RG-09	-	x							
RG-10	-	x							
RG-11	-	x							

Notes:

[1]Analyzed by EPA Method SW8260C

[2]Analyzed by EPA Method SW8270DSIM

[3]Analyzed by Standard Method SM2320B

[4]Analyzed by EPA Method E300.0

[5]Analyzed by EPA Method SW9060A

[6]Analyzed by Standard Method SM4500-NO3E

[7]Analyzed by EPA Method RSK-175

[8]Analyzed in the field by measured using HACH Method 8146

[9] MW-01S was not sampled because the drive line disconnected during purging and pump could not be removed from the well

[10] MW-12S was dry during the synoptic water level event and was not sampled

[11] MW-30C pump would not yield water despite attempts to repair the pump

[12] MW-32C pump could not be redeployed for sampling due to the pump catching in the well

Acronyms:

MEE = Methane, Ethane, Ethene

NS = Not Sampled

PCE = tetrachloroethene

TOC = total organic carbon

VOC = volatile organic compound

Table 3
Groundwater Elevations, Transducer Locations, and Download Dates

Location	Sample Interval	Screen Start (ft bgs)	Screen End (ft bgs)	Top of Casing Elevation (ft amsl)[1]	Aquifer Zone	Water Level Measurement Date and Time	Water Level Depth (ft btoc)	Water Level Elevation (ft amsl)[1]	Direction of Gradient[2]	Vertical Gradient[2]	Transducer Download Date and Time
MW-01S	-	184	224	4664.80	Shallow	9/4/24 13:39	156.91	4507.89	down	0.08	NA[4]
MW-01D	-	364	404	4664.80	Deep	9/4/24 13:44	172.14	4492.66			9/8/2024 9:46[5]
MW-02	-	175.5	202.5	4685.24	Shallow	9/4/24 14:19	170.11	4515.13	-	-	-
MW-03R	A	215	220	4698.12	Shallow	9/4/24 8:30	187.81	4510.31	down	0.31	-
	B	267	272	4697.90	Deep	9/4/24 8:30	205.18	4492.72			9/4/24 8:30
	C	307	312	4697.92	Deep	9/11/24 18:20	205.13	4492.79			-
	D	359	364	4697.93	Deep	9/11/24 18:30	205.30	4492.63			-
MW-04	-	143	173	4656.85	Shallow	9/4/24 11:20	134.81	4522.04	-	-	9/13/24 16:00[6]
MW-05R	-	198	228	4737.99	Shallow	9/4/24 10:36	213.73	4524.26	-	-	-
MW-06	-	100	130	4678.66	Perched	9/4/24 11:04	116.61	4562.05	-	-	9/8/24 10:20[7]
MW-08	A	91	106	4539.81	Shallow	9/4/24 14:32	61.16	4478.65	up	0.01	-
	B	180	200	4539.77	Shallow	9/4/24 14:35	59.82	4479.95			-
	C	304	309	4539.68	Deep	9/4/24 14:29	58.40	4481.28			-
MW-12S	-	50	60	4360.03	-	9/6/24 10:00	DRY	DRY	--	--	-
MW-12D	-	88.5	93.5	4360.07	-	9/4/24 9:15	55.41	4304.66			-
MW-13S	-	15.5	20.5	4482.93	Shallow	9/4/24 11:33	14.21	4468.72	down	0.02	-
MW-13D	-	79	84	4482.62	Shallow	9/4/24 11:25	13.67	4468.95			9/7/24 9:38
MW-13L		150	160	4483.23	Deep	9/4/24 11:40	17.80	4465.43			-
MW-14S	-	4.5	14.5	4415.69	Shallow	9/4/24 10:42	5.42	4410.27	--	--	9/10/24 [6]
MW-14D[3]	-	49	54	4415.93	Shallow	9/4/24 15:20	-4.67	4420.60			-
MW-15S	-	52.5	55	4347.35	-	9/8/24 8:17	47.31	4300.04	down	0.06	-
MW-15D	-	69	74	4347.72	-	9/8/24 8:40	48.79	4298.93			NA[8]
MW-16S	-	9	19	4454.83	Shallow	9/6/24 14:08	11.18	4443.65	up	0.02	-
MW-16D	-	62	72	4454.84	Shallow	9/6/24 10:10	10.25	4444.59			9/7/24 11:39
MW-17S	-	6	21	4465.18	Shallow	9/4/24 15:44	6.75	4458.43	up	0.18	-
MW-17D	-	44	54	4465.69	Shallow	9/4/24 15:35	0.32	4465.37			-
MW-18	-	80	90	4558.76	Shallow	9/4/24 14:21	82.49	4476.27	-	-	-
MW-19	-	84	94	4557.16	Shallow	9/4/24 14:33	81.79	4475.37	-	-	-
MW-20S	-	79.5	89.5	4558.61	Shallow	9/4/24 14:54	83.80	4474.81	down	0.00	-
MW-20D	-	119	129	4558.19	Shallow	9/4/24 15:10	83.49	4474.70			-
MW-21	-	62	72	4563.32	Shallow	9/4/24 15:40	64.35	4498.97	-	-	-
MW-22	-	64	74	4562.72	Shallow	9/6/24 10:22	62.97	4499.75	-	-	-
MW-23	A	210	220	4711.80	Shallow	9/4/24 12:25	186.98	4524.82	down	0.23	-
	B	250	260	4711.77	Intermediate	9/4/24 12:47	197.55	4514.22			-
	C	348	358	4711.69	Deep	9/4/24 12:40	217.72	4493.97			-
MW-24	-	209.5	239.5	4709.19	Shallow	9/4/24 13:01	184.50	4524.69	-	-	-
MW-25	A	201	211	4702.02	Shallow	9/4/24 10:26	177.10	4524.92	down	0.32	-
	B	231	241	4702.09	Intermediate	9/4/24 10:43	170.00	4532.09			-
	C	307.5	317.5	4702.07	Deep	9/4/24 11:05	209.54	4492.53			-
MW-26	A	205	215	4712.29	Shallow	9/4/24 11:35	189.59	4522.70	down	0.28	-
	B	235	245	4712.55	Intermediate	9/4/24 12:07	194.38	4518.17			-
	C	315	325	4712.51	Deep	9/4/24 11:49	218.78	4493.73			-
	D	347.75	357.75	4712.50	Deep	9/4/24 11:59	218.77	4493.73			-
MW-27	-	200	220	4712.34	Shallow	9/4/24 12:52	187.13	4525.21	-	-	-
MW-28	-	190	210	4712.54	Shallow	9/5/24 8:56	186.01	4526.53	-	-	-
MW-29	A	120	130	4678.46	Perched	9/4/24 16:48	116.07	4562.39	down	0.09	-
	B	190	200	4678.45	Shallow	9/4/24 17:01	151.71	4526.74			-
	C	230	240	4678.68	Intermediate	9/4/24 17:13	157.21	4521.47			-
MW-30R	A	240	250	4722.60	Deep	9/4/24 10:19	228.25	4494.35	down	0.00	9/8/24 11:07
	B	282	292	4722.36	Deep	9/4/24 10:23	230.74	4491.62			-
MW-30	C	317	327	4721.92	Deep	9/4/24 13:23	230.35	4491.57			9/4/24 13:23
MW-31	A	138	148	4654.27	Shallow	9/4/24 15:58	130.77	4523.50	--	--	-
	B	190	200	4654.39	Shallow	9/4/24 16:08	134.55	4519.84			-
	C	228	238	4654.35	Deep	9/4/24 16:14	148.05	4506.30			-
MW-32	A	114	124	4565.67	Shallow	9/4/24 14:55	84.12	4481.55	NA	0.00	NA[8]
	B	170	180	4565.63	Shallow	9/4/24 15:03	84.00	4481.63			-
	C	260	270	4565.59	Deep	9/4/24 15:20	83.42	4482.17			9/4/24 15:20
MW-34	A	140	150	4623.09	Shallow	9/5/24 10:44	131.98	4491.11	NA	0.01	-
	B	175	185	4622.71	Shallow	9/5/24 10:35	131.58	4491.13			9/6/24 10:53
	C	250	260	4622.63	Deep	9/5/24 10:28	130.88	4491.75			9/6/24 11:11
	D	315	325	4622.58	Deep	9/5/24 10:22	131.05	4491.53			9/6/24 11:30
MW-36	-	47	52	4428.49	-	9/4/24 12:05	45.92	4382.57	-	-	-
MW-37S	-	25	35	4348.00	-	9/4/24 8:25	19.06	4328.94	down	0.85	-
MW-37D	-	60	70	4347.97	-	9/4/24 8:24	41.60	4306.37			-
MW-38S	-	27	37	4497.64	Shallow	9/4/24 16:12	19.63	4478.01	up	0.00	-
MW-38D	-	60	70	4497.80	Shallow	9/4/24 16:10	19.64	4478.16			-
MW-39S	-	269	289	4698.34	Deep	9/4/24 9:55	207.11	4491.23	down	0.00	-
MW-39D	-	328	358	4698.35	Deep	9/4/24 10:00	207.14	4491.21			-

Table 3
Groundwater Elevations, Transducer Locations, and Download Dates

Location	Sample Interval	Screen Start (ft bgs)	Screen End (ft bgs)	Top of Casing Elevation (ft amsl)[1]	Aquifer Zone	Water Level Measurement Date and Time	Water Level Depth (ft btoc)	Water Level Elevation (ft amsl)[1]	Direction of Gradient[2]	Vertical Gradient[2]	Transducer Download Date and Time
MW-40S	-	230	240	4701.87	Shallow	9/4/24 8:50	189.30	4512.57	down	0.19	-
MW-40D	-	295	305	4701.86	Deep	9/4/24 8:55	203.94	4497.92			-
MW-41S	-	216	226	4689.83	Shallow	9/4/24 9:05	175.80	4514.03	down	0.32	-
MW-41D	-	272	282	4689.84	Deep	9/4/24 9:11	196.68	4493.16			-
MW-42S	-	246	256	4697.12	Shallow	9/4/24 9:20	182.62	4514.50	down	0.53	-
MW-42D	-	266	276	4697.12	Deep	9/4/24 9:25	204.11	4493.01			-
MW-43S	-	225	235	4707.17	Shallow	9/4/24 9:39	202.59	4504.58	down	0.22	-
MW-43D	-	274	284	4707.21	Deep	9/4/24 9:44	214.73	4492.48			-
MW-44S	-	195	205	4673.43	Shallow	9/4/24 8:40	155.35	4518.08	down	0.26	-
MW-44D	-	280	290	4673.44	Deep	9/4/24 8:45	179.55	4493.89			-
MW-45	-	200	210	4480.77	Deep	9/4/24 12:02	17.70	4463.07	-	-	-
EW-01	-	260	300	4696.9	Deep	9/4/24 16:18	203.85	4493.04	-	-	-
IW-01	-	250	270	4697.74	Deep	9/4/24 16:23	206.66	4491.08	-	-	-
RG-01	-	9	19	4383.49	-	9/4/24 9:43	6.45	4377.04	-	-	-
RG-02	-	5	15	4436.95	-	9/4/24 12:57	2.55	4434.40	-	-	-
RG-03	-	3	8	4422.53	-	9/4/24 12:16	3.27	4419.26	-	-	-
RG-04	-	10	20	4415.47	-	9/4/24 8:58	10.33	4405.14	-	-	-
RG-05	-	20	30	4496.96	-	9/4/24 13:06	24.31	4472.65	-	-	-
RG-06	-	4	9	4443.23	-	9/4/24 10:53	2.30	4440.93	-	-	-
RG-07	-	20	30	4490.05	-	9/4/24 11:17	21.31	4468.74	-	-	-
RG-08	-	8	18	4454.74	-	9/4/24 11:50	5.41	4449.33	-	-	-
RG-09	-	5	15	4384.93	-	9/4/24 9:28	6.09	4378.84	-	-	-
RG-10	-	20	30	4409.82	-	9/4/24 11:02	27.39	4382.43	-	-	-
RG-11	-	30	40	4504.39	-	9/4/24 13:17	29.86	4474.53	-	-	-

Notes:
[1] Elevations measured using NAVD 88 vertical datum
[2] Direction and magnitude of vertical gradient is calculated between shallow and deep aquifers in paired/nested wells
[3] Water level measured using pressure gauge, converted to height above top of casing (head [ft] = pressure [psi] x 2.31)
[4] Transducer was tangled with pump and tubing that could not be removed
[5] Transducer and barometer data downloaded
[6] Transducer data was downloaded, but were unable to be saved
[7] Barometer only location data downloaded
[8] Transducer broken. Pulled in Sept 2024 and not redeployed.

Acronyms:
amsl = above mean sea level
bgs = below ground surface
btoc = below top of casing
ft = feet
NA = not applicable
NAVD = North American Vertical Datum
NM = not measured
PCE = tetrachloroethene
psi = pounds per square inch

Table 4
Detected VOC Analytical Results – September / October 2024 Groundwater

	Location		EW-01		IW-01		MW-01D		MW-02		MW-02		MW-03RA		MW-03RB		MW-03RC		MW-03RD		MW-04	
	Sample Name		EW01-GW091124		IW01-GW091124		MW01D-GW090624		MW02-GW090524		FD02-GW090524		MW03RA-GW091124		MW03RB-GW091124		MW03RC-GW091124		MW03RD-GW091124		MW04-GW090524	
	Parent Sample										MW02-GW090524											
	Sample Type		N		N		N		N		FD		N		N		N		N		N	
	Sample Date		9/11/2024		9/11/2024		9/6/2024		9/5/2024		9/5/2024		9/11/2024		9/11/2024		9/11/2024		9/11/2024		9/5/2024	
Analyte	Screening Level	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	200[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,1-Dichloroethene	7[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,2,3-Trichlorobenzene	7[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.36**	**J**	*1*	U
1,2,4-Trichlorobenzene	70[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.19**	**J**	*1*	U
Acetone	18,000[b]	ug/L	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Bromodichloromethane	80[a]	ug/l	**0.44**	**J**	**0.53**	**J**	*1*	U	**0.3**	**J**	**0.29**	**J**	**0.42**	**J**	**0.47**	**J**	**0.19**	**J**	*1*	U	**0.2**	**J**
Carbon Disulfide	810[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Chloroform	80[a]	ug/l	**4.4**		**4.5**		**0.2**	**J**	**3.4**		**3.4**		**5.9**		**4.4**		**2**		*1*	U	**2.8**	
cis-1,2-Dichloroethene	70[a]	ug/l	**0.93**	**J**	**0.32**	**J**	*1*	U	**1**		**0.45**	**J**	*1*	U	1.1		*1*	U	*1*	U	*1*	U
Ethylbenzene	700[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.2**	**J**	**0.16**	**J**	**0.21**	**J**	*1*	U
m,p-Xylene	190[b]	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	**0.87**	**J**	**0.9**	**J**	**1.2**	**J**	2	U
o-Xylene	190[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	1.1		**1**		**1.2**		*1*	U
Tetrachloroethene (PCE)	5[a]	ug/l	**67**		**60**		*1*	U	**210**		**200**		**32**		**170**		**6.2**		*1*	U	**65**	
Toluene	1000[a]	ug/l	**0.17**	**J**	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
trans-1,2-Dichloroethene	100[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichloroethene (TCE)	5[a]	ug/l	**1**		**0.43**	**J**	*1*	U	**0.55**	**J**	**0.58**	**J**	**0.16**	**J**	**1.7**		*1*	U	*1*	U	**0.22**	**J**
Trichlorofluoromethane (Freon 11)	5,200[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ

Notes:

[a] Screening level is EPA MCL

[b] Screening level is EPA Tap Water RSL (target cancer risk 1 x 10-6, hazard quotient = 1) (U.S. EPA November 2024)

Highlight indicates values greater than screening level

Bold indicates detected values

Italics indicates nondetected values

Acronyms:

µg/L = microgram per liter
EPA = U.S. Environmental Protection Agency
FD = field duplicate
J = Result is estimated
MCL = maximum contaminant level
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Table 4
Detected VOC Analytical Results – September / October 2024 Groundwater

	Location	MW-05R		MW-06		MW-08A		MW-08B		MW-08C		MW-12D		MW-13D		MW-13L		MW-13L		MW-13S	
	Sample Name	MW05R-GW090824		MW06-GW090524		MW08A-GW091024		MW08B-GW090624		MW08C-GW091324		MW12D-GW090524		MW13D-GW090724		MW13L-GW090724		FD03-GW090724		MW13S-GW090724	
	Parent Sample																	MW13L-GW090724			
	Sample Type	N		N		N		N		N		N		N		N		FD		N	
	Sample Date	9/8/2024		9/5/2024		9/10/2024		9/6/2024		9/13/2024		9/5/2024		9/7/2024		9/7/2024		9/7/2024		9/7/2024	
Analyte	Screening Level	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	200[a]	ug/L	*1*	U	*1*	U	**0.4**	J	*1*	U	*1*	U	*1*	U	**0.29**	J	**0.39**	J	**0.35**	J	**0.1**	J
1,1-Dichloroethene	7[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.12**	J	**0.19**	J	**0.15**	J	*1*	U
1,2,3-Trichlorobenzene	7[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.28**	J	*1*	U	*1*	U	*1*	U
1,2,4-Trichlorobenzene	70[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.2**	J	*1*	U	*1*	U	*1*	U
Acetone	18,000[b]	ug/L	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Bromodichloromethane	80[a]	ug/l	0.27	J	**0.22**	J	**0.38**	J	**0.14**	J	*1*	U	**0.24**	J	**0.17**	J	**0.19**	J	**0.17**	J	*1*	UJ
Carbon Disulfide	810[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.25**	J	*1*	U	*1*	U
Chloroform	80[a]	ug/l	**3.9**		**2.1**		**5.8**		**2.1**		*1*	U	**3.1**		**1.8**		**1.9**		**1.8**		**0.49**	J
cis-1,2-Dichloroethene	70[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.11**	J	*1*	U	*1*	U	*1*	U	*1*	U
Ethylbenzene	700[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
m,p-Xylene	190[b]	ug/L	2	U	2	U	2	U	2	U	**0.4**	J	2	U	2	U	2	U	2	U	2	U
o-Xylene	190[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	**0.33**	J	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Tetrachloroethene (PCE)	5[a]	ug/l	*1*	U	**0.34**	J	**51**		**6.2**		*1*	U	**1.1**		**50**	J	**63**		**59**		**25**	
Toluene	1000[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
trans-1,2-Dichloroethene	100[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichloroethene (TCE)	5[a]	ug/l	*1*	U	*1*	U	**0.36**	J	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichlorofluoromethane (Freon 11)	5,200[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	UJ	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U

Notes:

[a] Screening level is EPA MCL

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Table 4
Detected VOC Analytical Results – September / October 2024 Groundwater

	Location	MW-14D		MW-14S		MW-15D		MW-15S		MW-16D		MW-16S		MW-16S		MW-17D		MW-17S		MW-18	
	Sample Name	MW14D-GW091024		MW14S-GW091024		MW15D-GW090824		MW15S-GW090824		MW16D-GW090824		MW16S-GW090824		FD04-GW090824		MW17D-GW090524		MW17S-GW090524		MW18-GW090724	
	Parent Sample													MW16S-GW090824							
	Sample Type	N		N		N		N		N		N		FD		N		N		N	
	Sample Date	9/10/2024		9/10/2024		9/8/2024		9/8/2024		9/8/2024		9/8/2024		9/8/2024		9/5/2024		9/5/2024		9/7/2024	
Analyte	Screening Level	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	200[a]	ug/L	**0.32**	J	*1*	U	*1*	U	*1*	U	*1*	U	**0.16**	J	**0.14**	J	*1*	U	*1*	U	**0.38**	J
1,1-Dichloroethene	7[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	0.1	J
1,2,3-Trichlorobenzene	7[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,2,4-Trichlorobenzene	70[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Acetone	18,000[b]	ug/L	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Bromodichloromethane	80[a]	ug/l	**0.23**	J	*1*	U	**0.15**	J	1	U	*1*	U	*1*	U	*1*	U	**0.16**	J	*1*	U	**0.18**	J
Carbon Disulfide	810[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Chloroform	80[a]	ug/l	**2.4**		**0.26**	J	**4.5**		**5.1**		**1.6**		**3.1**		**3.2**		**2.2**		**1.5**		**2.8**	
cis-1,2-Dichloroethene	70[a]	ug/l	**0.12**	J	**2.3**		*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Ethylbenzene	700[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
m,p-Xylene	190[b]	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
o-Xylene	190[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Tetrachloroethene (PCE)	5[a]	ug/l	**36**		**7.8**		**0.23**	J	**0.41**	J	*1*	U	**21**		**21**		**3.2**		**1.5**		**56**	
Toluene	1000[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
trans-1,2-Dichloroethene	100[a]	ug/L	*1*	U	**0.13**	J	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichloroethene (TCE)	5[a]	ug/l	**0.27**	J	**3.6**		*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.15**	J	*1*	U	*1*	U
Trichlorofluoromethane (Freon 11)	5,200[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U

Notes:

[a] Screening level is EPA MCL

[b] Screening level is EPA Tap Water RSL (target cancer risk 1 x 10-6, hazard quotient = 1) (U.S. EPA November 2024)

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Table 4
Detected VOC Analytical Results – September / October 2024 Groundwater

	Location		MW-18		MW-19		MW-19		MW-20D		MW-20S		MW-21		MW-22		MW-23A		MW-23B		MW-23C	
	Sample Name		FD05-GW090724		MW19-GW090724		FD06-GW090724		MW20D-GW090724		MW20S-GW090724		MW21-GW090824		MW22-GW090824		MW23A-GW091224		MW23B-GW091224		MW23C-GW091224	
	Parent Sample		MW18-GW090724				MW19-GW090724															
	Sample Type		FD		N		FD		N		N		N		N		N		N		N	
	Sample Date		9/7/2024		9/7/2024		9/7/2024		9/7/2024		9/7/2024		9/8/2024		9/8/2024		9/12/2024		9/12/2024		9/12/2024	
Analyte	Screening Level	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	200[a]	ug/L	**0.4**	J	**0.31**	J	***0.31***	J	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,1-Dichloroethene	7[a]	ug/L	*1*	U	**0.13**	J	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,2,3-Trichlorobenzene	7[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,2,4-Trichlorobenzene	70[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Acetone	18,000[b]	ug/L	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Bromodichloromethane	80[a]	ug/l	**0.23**	J	**0.15**	J	**0.15**	J	**0.13**	J	*1*	UJ	*1*	U	**0.28**	J	**0.51**	J	**0.59**	J	*1*	UJ
Carbon Disulfide	810[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ
Chloroform	80[a]	ug/l	**2.9**		**2.1**		**2**		**1.5**		**1.4**		**2.7**		**2.2**		**6**		**9.2**		*1*	UJ
cis-1,2-Dichloroethene	70[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ
Ethylbenzene	700[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.28**	J	*1*	U
m,p-Xylene	190[b]	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	**1.7**	J	2	U
o-Xylene	190[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**1.7**	J	*1*	UJ
Tetrachloroethene (PCE)	5[a]	ug/l	**59**		**46**		**44**		**9.2**		**3.6**		**1.2**		**1.7**		*1*	U	*1*	U	*1*	U
Toluene	1000[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ
trans-1,2-Dichloroethene	100[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichloroethene (TCE)	5[a]	ug/l	*1*	U	*1*	U	*1*	U	**0.2**	J	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichlorofluoromethane (Freon 11)	5,200[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U

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Location			MW-24		MW-25A		MW-25B		MW-25C		MW-26A		MW-26B		MW-26C		MW-26D		MW-27		MW-28	
Sample Name			MW24-GW090824		MW25A-GW090724		MW25B-GW090724		MW25C-GW090724		MW26A-GW090824		MW26B-GW091324		MW26C-GW090724		MW26D-GW090824		MW27-GW091024		MW28-GW090724	
Parent Sample																						
Sample Type			N		N		N		N		N		N		N		N		N		N	
Sample Date			9/8/2024		9/7/2024		9/7/2024		9/7/2024		9/8/2024		9/13/2024		9/7/2024		9/8/2024		9/10/2024		9/7/2024	
Analyte	Screening Level	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	200[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,1-Dichloroethene	7[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,2,3-Trichlorobenzene	7[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.23**	**J**	*1*	U	*1*	U	*1*	U
1,2,4-Trichlorobenzene	70[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.18**	**J**	*1*	U	*1*	U	*1*	U
Acetone	18,000[b]	ug/L	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Bromodichloromethane	80[a]	ug/l	**0.43**	**J**	**0.34**	**J**	**0.37**	**J**	**0.32**	**J**	**0.35**	**J**	**0.6**	**J**	**0.36**	**J**	*1*	U	**0.43**	**J**	**0.24**	**J**
Carbon Disulfide	810[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Chloroform	80[a]	ug/l	**5.3**		**4.8**		**6.2**		**2.7**		**3.3**		**10**		**3.1**		*1*	U	**4.7**		**2.3**	
cis-1,2-Dichloroethene	70[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Ethylbenzene	700[a]	ug/L	*1*	U	*1*	U	**0.85**	**J**	**0.19**	**J**	*1*	U	*1*	U	0.35	J	*1*	U	*1*	U	*1*	U
m,p-Xylene	190[b]	ug/L	2	U	**0.21**	**J**	**6**		**1.2**	**J**	2	U	**0.63**	**J**	**2.6**		2	U	2	U	2	U
o-Xylene	190[b]	ug/L	*1*	U	**0.17**	**J**	**4.7**		**0.96**	**J**	*1*	U	**0.62**	**J**	**2.1**		*1*	U	*1*	U	*1*	U
Tetrachloroethene (PCE)	5[a]	ug/l	**0.23**	**J**	**1.9**		*1*	U	**0.86**	**J**	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Toluene	1000[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
trans-1,2-Dichloroethene	100[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichloroethene (TCE)	5[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichlorofluoromethane (Freon 11)	5,200[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U

Notes:

[a] Screening level is EPA MCL

[b] Screening level is EPA Tap Water RSL (target cancer risk 1 x 10-6, hazard quotient = 1) (U.S. EPA November 2024)

Highlight indicates values greater than screening level

Bold indicates detected values

Italics indicates nondetected values

Acronyms:

µg/L = microgram per liter
EPA = U.S. Environmental Protection Agency
FD = field duplicate
J = Result is estimated
MCL = maximum contaminant level
N = parent sample
NS = not sampled
PCE = tetrachloroethene
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VOC = volatile organic compound

Table 4
Detected VOC Analytical Results – September / October 2024 Groundwater

	Location	MW-29A		MW-29A		MW-29B		MW-29C		MW-30RA		MW-30RB		MW-31A		MW-31B		MW-31C		MW-32A	
	Sample Name	MW29A-GW091024		FD07-GW091024		MW29B-GW091024		MW29C-GW091024		MW30RA-GW090824		MW30RB-GW090824		MW31A-GW091024		MW31B-GW091024		MW31C-GW091024		MW32A-GW090824	
	Parent Sample			MW29A-GW091024																	
	Sample Type	N		FD		N		N		N		N		N		N		N		N	
	Sample Date	9/10/2024		9/10/2024		9/10/2024		9/10/2024		9/8/2024		9/8/2024		9/10/2024		9/10/2024		9/10/2024		9/8/2024	
Analyte	Screening Level	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	200[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,1-Dichloroethene	7[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,2,3-Trichlorobenzene	7[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,2,4-Trichlorobenzene	70[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Acetone	18,000[b]	ug/L	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Bromodichloromethane	80[a]	ug/l	**0.27**	**J**	**0.29**	**J**	**0.35**	**J**	**0.41**	**J**	**0.47**	**J**	**0.6**	**J**	**0.19**	**J**	**0.41**	**J**	**0.13**	**J**	*1*	U
Carbon Disulfide	810[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Chloroform	80[a]	ug/l	**5.3**		**5.5**		**6**		**4.9**		**5.7**		**6.3**		**1.9**		**4.5**		**1.5**		**4.3**	
cis-1,2-Dichloroethene	70[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Ethylbenzene	700[a]	ug/L	*1*	U	*1*	U	**0.17**	**J**	**0.24**	**J**	*1*	U	*1*	U	**0.19**	**J**	**0.38**	**J**	**0.14**	**J**	*1*	U
m,p-Xylene	190[b]	ug/L	2	U	2	U	**0.98**	**J**	**1.4**	**J**	2	U	2	U	**0.98**	**J**	**2.5**		**0.84**	**J**	2	U
o-Xylene	190[b]	ug/L	*1*	U	*1*	U	**0.94**	**J**	**1**		*1*	U	*1*	U	**1.1**		**2.3**		**0.79**	**J**	*1*	U
Tetrachloroethene (PCE)	5[a]	ug/l	**8.3**		**8.5**		*1*	U	*1*	U	*1*	U	**0.16**	**J**	**0.57**	**J**	*1*	U	*1*	U	**0.43**	**J**
Toluene	1000[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
trans-1,2-Dichloroethene	100[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichloroethene (TCE)	5[a]	ug/l	**0.17**	**J**	**0.15**	**J**	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichlorofluoromethane (Freon 11)	5,200[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.19**	**J**	*1*	U	*1*	U	*1*	U	*1*	U

Notes:

[a] Screening level is EPA MCL

[b] Screening level is EPA Tap Water RSL (target cancer risk 1 x 10-6, hazard quotient = 1) (U.S. EPA November 2024)

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MCL = maximum contaminant level
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Table 4
Detected VOC Analytical Results – September / October 2024 Groundwater

Location			MW-32B		MW-34A		MW-34B		MW-34C		MW-34D		MW-36		MW-37D		MW-37S		MW-38D		MW-38S	
Sample Name			MW32B-GW091224		MW34A-GW090624		MW34B-GW090524		MW34C-GW090524		MW34D-GW090624		MW36-GW090624		MW37D-GW090624		MW37S-GW090624		MW38D-GW090624		MW38S-GW090624	
Parent Sample																						
Sample Type			N		N		N		N		N		N		N		N		N		N	
Sample Date			9/12/2024		9/6/2024		9/5/2024		9/5/2024		9/6/2024		9/6/2024		9/6/2024		9/6/2024		9/6/2024		9/6/2024	
Analyte	Screening Level	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	200[a]	ug/L	*1*	UJ	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,1-Dichloroethene	7[a]	ug/L	*1*	UJ	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,2,3-Trichlorobenzene	7[b]	ug/L	*1*	UJ	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,2,4-Trichlorobenzene	70[a]	ug/L	*1*	UJ	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Acetone	18,000[b]	ug/L	20	UJ	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Bromodichloromethane	80[a]	ug/l	**0.12**	**J**	**0.2**	**J**	**0.25**	**J**	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	**0.12**	**J**	*1*	U
Carbon Disulfide	810[b]	ug/L	*1*	UJ	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Chloroform	80[a]	ug/l	**2.2**	**J**	**2.2**		**2.1**		*1*	U	*1*	U	**0.28**	**J**	**0.8**	**J**	**2.5**		**4.1**		**5**	
cis-1,2-Dichloroethene	70[a]	ug/l	*1*	UJ	*1*	U	**0.51**	**J**	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Ethylbenzene	700[a]	ug/L	*1*	UJ	**0.41**	**J**	**0.45**	**J**	**0.32**	**J**	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
m,p-Xylene	190[b]	ug/L	2	UJ	**2.4**		**2.4**		**1.8**	**J**	**0.23**	**J**	2	U	2	U	2	U	2	U	2	U
o-Xylene	190[b]	ug/L	*1*	UJ	**1.8**		**1.8**		**1.4**		**0.17**	**J**	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Tetrachloroethene (PCE)	5[a]	ug/l	**0.58**	**J**	**25**		**20**		*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Toluene	1000[a]	ug/l	*1*	UJ	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
trans-1,2-Dichloroethene	100[a]	ug/L	*1*	UJ	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichloroethene (TCE)	5[a]	ug/l	*1*	UJ	**0.43**	**J**	**0.55**	**J**	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichlorofluoromethane (Freon 11)	5,200[b]	ug/L	*1*	UJ	*1*	UJ	*1*	U	*1*	U	*1*	UJ	*1*	U	*1*	U	*1*	U	*1*	UJ	*1*	UJ

Notes:

[a] Screening level is EPA MCL

[b] Screening level is EPA Tap Water RSL (target cancer risk 1 x 10-6, hazard quotient = 1) (U.S. EPA November 2024)

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Table 4
Detected VOC Analytical Results – September / October 2024 Groundwater

Location			MW-39D		MW-39S		MW-40D		MW-40S		MW-41D		MW-41S		MW-42D		MW-42D		MW-42S		MW-43D	
Sample Name			MW39D-GW100324		MW39S-GW100324		MW40D-GW093024		MW40S-GW093024		MW41D-GW100224		MW41S-GW100224		MW42D-GW100224		FD10-GW100224		MW42S-GW091224		MW43D-GW100124	
Parent Sample																	MW42D-GW100224					
Sample Type			N		N		N		N		N		N		N		FD		N		N	
Sample Date			10/3/2024		10/3/2024		9/30/2024		9/30/2024		10/2/2024		10/2/2024		10/2/2024		10/2/2024		9/12/2024		10/1/2024	
Analyte	Screening Level	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	200[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ	*1*	U
1,1-Dichloroethene	7[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ	*1*	U
1,2,3-Trichlorobenzene	7[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ	*1*	U
1,2,4-Trichlorobenzene	70[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ	*1*	U
Acetone	18,000[b]	ug/L	20	U	20	U	20	U	20	U	20	U	20	U	5.6	J	20	U	20	UJ	**6.1**	**J**
Bromodichloromethane	80[a]	ug/l	*1*	U	**0.54**	**J**	**0.24**	**J**	**0.47**	**J**	**0.15**	**J**	**0.44**	**J**	**0.42**	**J**	**0.41**	**J**	**0.28**	**J**	**0.2**	**J**
Carbon Disulfide	810[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ	*1*	U
Chloroform	80[a]	ug/l	**0.96**	**J**	**4.8**		**2.4**		**7**		**1.7**		**6.7**		**3.8**		**3.9**		**1.8**	**J**	**3.5**	
cis-1,2-Dichloroethene	70[a]	ug/l	*1*	U	**0.24**	**J**	**0.17**	**J**	*1*	U	**0.22**	**J**	**0.13**	**J**	**0.59**	**J**	**0.62**	**J**	***0.1***	**J**	**1.3**	
Ethylbenzene	700[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ	*1*	U
m,p-Xylene	190[b]	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
o-Xylene	190[b]	ug/L	*1*	U	*1*	U	*1*	UJ	*1*	UJ	*1*	U	*1*	U	*1*	UJ	*1*	UJ	*1*	UJ	*1*	UJ
Tetrachloroethene (PCE)	5[a]	ug/l	*1*	U	**21**		**14**		**1.3**		**33**		**72**		**87**		**93**		**12**	**J**	**130**	
Toluene	1000[a]	ug/l	*1*	U	*1*	U	*1*	UJ	*1*	UJ	*1*	U	*1*	U	*1*	UJ	*1*	UJ	*1*	UJ	**0.15**	**J**
trans-1,2-Dichloroethene	100[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ	*1*	U
Trichloroethene (TCE)	5[a]	ug/l	*1*	U	**0.34**	**J**	*1*	U	**0.11**	**J**	**0.21**	**J**	**0.29**	**J**	**0.67**	**J**	**0.67**	**J**	**0.1**	**J**	**1.4**	
Trichlorofluoromethane (Freon 11)	5,200[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	UJ	*1*	U

Notes:

[a] Screening level is EPA MCL

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Table 4
Detected VOC Analytical Results – September / October 2024 Groundwater

Location			MW-43S		MW-44D		MW-44S		MW-45		RG-01		RG-02		RG-03		RG-04		RG-05		RG-05	
Sample Name			MW43S-GW100124		MW44D-GW100124		MW44S-GW100124		MW45-GW090724		RG01-GW100324		RG02-GW100324		RG03-GW100324		RG04-GW100324		RG05-GW100324		FD09-GW100324	
Parent Sample																					RG05-GW100324	
Sample Type			N		N		N		N		N		N		N		N		N		FD	
Sample Date			10/1/2024		10/1/2024		10/1/2024		9/7/2024		10/3/2024		10/3/2024		10/3/2024		10/3/2024		10/3/2024		10/3/2024	
Analyte	Screening Level	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	200[a]	ug/L	*1*	U	*1*	U	*1*	U	**0.1**	J	*1*	U	*1*	U	**0.37**	J	*1*	U	*1*	U	**0.18**	J
1,1-Dichloroethene	7[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,2,3-Trichlorobenzene	7[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
1,2,4-Trichlorobenzene	70[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Acetone	18,000[b]	ug/L	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Bromodichloromethane	80[a]	ug/l	**0.5**	J	**0.25**	J	**0.48**	J	**0.17**	J	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Carbon Disulfide	810[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Chloroform	80[a]	ug/l	**7.6**		**2.7**		**7.6**		**1.9**		**0.19**	J	**2.2**		**2.6**		**1.6**		**3.1**		**3.1**	
cis-1,2-Dichloroethene	70[a]	ug/l	*1*	U	*1*	U	**0.14**	J	*1*	U	*1*	U	**0.85**	J	**2**		*1*	U	*1*	U	*1*	U
Ethylbenzene	700[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
m,p-Xylene	190[b]	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
o-Xylene	190[b]	ug/L	*1*	UJ	*1*	UJ	*1*	UJ	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Tetrachloroethene (PCE)	5[a]	ug/l	**0.52**	J	**0.32**	J	**58**		**10**		**7.5**		**14**		**51**		**11**		**8.9**		**9**	
Toluene	1000[a]	ug/l	*1*	UJ	*1*	UJ	*1*	UJ	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
trans-1,2-Dichloroethene	100[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U
Trichloroethene (TCE)	5[a]	ug/l	**0.2**	J	***1***	U	**0.36**	J	*1*	U	**0.5**	J	**0.61**	J	**1.6**		**0.46**	J	**0.14**	J	**0.15**	J
Trichlorofluoromethane (Freon 11)	5,200[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U

Notes:

[a] Screening level is EPA MCL

[b] Screening level is EPA Tap Water RSL (target cancer risk 1 x 10-6, hazard quotient = 1) (U.S. EPA November 2024)

Highlight indicates values greater than screening level

Bold indicates detected values

Italics indicates nondetected values

Acronyms:

µg/L = microgram per liter
EPA = U.S. Environmental Protection Agency
FD = field duplicate
J = Result is estimated
MCL = maximum contaminant level
N = parent sample
NS = not sampled
PCE = tetrachloroethene
Q = qualifier
RSL = regional screening level
U = Analyte was not detected at the associated value, which is the reporting limit.
UJ = Analyte was not detected above the reporting limitand is estimated.
VOC = volatile organic compound

Table 4
Detected VOC Analytical Results – September / October 2024 Groundwater

			Location	RG-06		RG-07		RG-08		RG-09		RG-10		RG-11			
			Sample Name	RG06-GW100324		RG07-GW100324		RG08-GW100324		RG09-GW100324		RG10-GW100324		RG11-GW100324			
			Parent Sample														
			Sample Type	N		N		N		N		N		N			
			Sample Date	10/3/2024		10/3/2024		10/3/2024		10/3/2024		10/3/2024		10/3/2024			
Analyte	Screening Level	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q		
1,1,1-Trichloroethane	200[a]	ug/L	*1*	U	**0.23**	**J**	**0.27**	**J**	1	U	1	U	**0.16**	**J**		
1,1-Dichloroethene	7[a]	ug/L	*1*	U	*1*	U	1	U	1	U	1	U	1	U		
1,2,3-Trichlorobenzene	7[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U		
1,2,4-Trichlorobenzene	70[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U		
Acetone	18,000[b]	ug/L	20	U	20	U	20	U	20	U	**4.1**	**J**	20	U		
Bromodichloromethane	80[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U		
Carbon Disulfide	810[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U		
Chloroform	80[a]	ug/l	*1*	U	**2.4**		**3.3**		**0.57**	**J**	*1*	U	**4.3**			
cis-1,2-Dichloroethene	70[a]	ug/l	6		*1*	U	*1*	U	*1*	U	*1*	U	*1*	U		
Ethylbenzene	700[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U		
m,p-Xylene	190[b]	ug/L	2	U	2	U	2	U	2	U	2	U	2	U		
o-Xylene	190[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U		
Tetrachloroethene (PCE)	5[a]	ug/l	*1*	U	**38**		**50**		**14**		**0.3**	**J**	**12**			
Toluene	1000[a]	ug/l	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U		
trans-1,2-Dichloroethene	100[a]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U		
Trichloroethene (TCE)	5[a]	ug/l	**0.26**	**J**	**0.27**	**J**	**0.46**	**J**	**0.25**	**J**	*1*	U	**0.11**	**J**	3.6	0.1
Trichlorofluoromethane (Freon 11)	5,200[b]	ug/L	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U	*1*	U		

Notes:

[a] Screening level is EPA MCL

[b] Screening level is EPA Tap Water RSL (target cancer risk 1 x 10-6, hazard quotient = 1) (U.S. EPA November 2024)

Highlight indicates values greater than screening level

Bold indicates detected values

Italics indicates nondetected values

Acronyms:

µg/L = microgram per liter
EPA = U.S. Environmental Protection Agency
FD = field duplicate
J = Result is estimated
MCL = maximum contaminant level
N = parent sample
NS = not sampled
PCE = tetrachloroethene
Q = qualifier
RSL = regional screening level
U = Analyte was not detected at the associated value, which is the reporting limit.
UJ = Analyte was not detected above the reporting limitand is estimated.
VOC = volatile organic compound

Table 5
QuantArray Microbial Analytical Results

		Location	EW-01		IW-01		MW-03RA		MW-03RB		MW-42D		MW-42S	
		Sample Name	EW01-GW091124		IW01-GW091124		MW03RA-GW091124		MW03RB-GW091124		MW42D-GW100224		MW42S-GW091224	
		Sample Date	9/11/2024		9/11/2024		9/11/2024		9/11/2024		10/2/2024		9/12/2024	
		Sample Type	N		N		N		N		N		N	
Parameter Group	Parameter	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Reductive Dechlorination	Dehalococcoides (DHC)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	tceA Reductase (TCE)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	BAV1 Vinyl Chloride Reductase (BVC)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	Vinyl Chloride Reductase (VCR)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	Dehalobacter spp. (DHBt)	cells/mL	*0.25*	*U*	*0.25*	*U*	**930**		**1700**		0.24	U	0.25	U
Reductive Dechlorination	Dehalobacter DCM (DCM)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	Dehalogenimonas spp. (DHG)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	cerA Reductase (CER)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	trans-1,2-DCE Reductase (TDR)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	Desulfitobacterium spp. (DSB)	cells/mL	*0.25*	*U*	*0.25*	*U*	**630**		**1300**		*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	Dehalobium chlorocoercia (DECO)	cells/mL	*0.25*	*U*	*0.25*	*U*	**15**		*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	Desulfuromonas spp. (DSM)	cells/mL	**5.1**		*0.25*	*U*	**1.2**		*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	PCE Reductase (PCE-1)	cells/mL	*0.25*	*U*	*0.25*	*U*	0.25	U	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	PCE Reductase (PCE-2)	cells/mL	*0.25*	*U*	*0.25*	*U*	0.25	U	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	Chloroform Reductase (CFR)	cells/mL	*0.25*	*U*	*0.25*	*U*	0.25	U	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	1,1 DCA Reductase (DCA)	cells/mL	*0.25*	*U*	*0.25*	*U*	0.25	U	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Reductive Dechlorination	1,2 DCA Reductase (DCAR)	cells/mL	*0.25*	*U*	*0.25*	*U*	0.25	U	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Aerobic (Co)Metabolic	Soluble Methane Monooxygenase (SMMO)	cells/mL	*0.25*	*U*	*0.25*	*U*	**2.9**		*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Aerobic (Co)Metabolic	Toluene Dioxygenase (TOD)	cells/mL	*0.25*	*U*	0.25	U	0.25	U	**220**		0.24	U	0.25	U
Aerobic (Co)Metabolic	Phenol Hydroxylase (PHE)	cells/mL	**530**		**150**		**250**		**230**		**9.4**		0.25	U
Aerobic (Co)Metabolic	Trichlorobenzene Dioxygenase (TCBO)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	*0.24*	*U*	*0.25*	*U*
Aerobic (Co)Metabolic	Toluene Monooxygenase 2 (RDEG)	cells/mL	**100**		**320**		**480**		**1400**		*0.24*	*U*	*0.25*	*U*
Aerobic (Co)Metabolic	Toluene Monooxygenase (RMO)	cells/mL	**500**		**23**		**170**		**100**		*0.24*	*U*	*0.25*	*U*
Aerobic (Co)Metabolic	Ethene Monooxygenase (EtnC)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	**380**		*0.24*	*U*	*0.25*	*U*
Aerobic (Co)Metabolic	Epoxyalkane Transferase (EtnE)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	**1800**		*0.24*	*U*	*0.25*	*U*
Aerobic (Co)Metabolic	Dichloromethane Dehalogenase (DCMA)	cells/mL	*0.25*	*U*	*0.25*	*U*	*0.25*	*U*	0.25	U	*0.24*	*U*	*0.25*	*U*
Other	Total Eubacteria (EBAC)	cells/mL	**150000**		**30000**		**220000**		**520000**		**810**		**1600**	
Other	Sulfate Reducing Bacteria (APS)	cells/mL	**160**		*0.25*	*U*	**180**		**620**		*0.24*	*U*	*0.25*	*U*
Other	Methanogens (MGN)	cells/mL	**0.16**	**J**	*0.25*	*U*	*0.25*	*U*	**0.11**	**J**	*0.24*	*U*	*0.25*	*U*

Notes:
Bold indicates detected values
Italics indicates nondetected values

Acronyms:
cells/mL = cells per milliliter
J = Result is estimated
N = parent sample
Q = qualifier
U = Analyte was not detected at the associated value, which is the reporting limit.

Table 6
General Chemistry Parameters – September/October 2024 Groundwater

	Location	EW-01		IW-01		MW-01D		MW-02		MW-03RA		MW-03RB		MW-03RC		MW-03RD	
	Sample Name	EW01-GW091124		IW01-GW091124		MW01D-GW090624		MW02-GW090524		MW03RA-GW091124		MW03RB-GW091124		MW03RC-GW091124		MW03RD-GW091124	
	Sample Date	9/11/2024		9/11/2024		9/6/2024		9/5/2024		9/11/2024		9/11/2024		9/11/2024		9/11/2024	
	Sample Type	N		N		N		N		N		N		N		N	
Chemical Name	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Dissolved Oxygen	mg/l	4.51		5.39		6.15		6.15		4.11		4.17		4.39		4.17	
Ferrous Iron	mg/l	0.47		0.11						0.06		0.04					
Oxidation-Reduction Potential	millivolts	92.6		27.2		177.1		17.4		72.2		185.6		78.7		98.5	
PH	su	7.04		7.13		7.16		7.15		6.72		7.14		7.15		7.22	
Specific Conductance	us/cm	1243		1119		1037		2910		1555		1292		1014		1058	
Temperature	deg C	21.6		18.3		1		14.7		19.2		19.4		16.7		16	
Turbidity	ntu	12.9		1.38		0.2		3.23		1.03		6.9		5.86		0.86	
Nitrate/Nitrite	mg/l	2.14		2.22						1.9		2.19					
Chloride	mg/l	214	J-	172	J-					443	J-	200	J-				
Sulfate	mg/l	129	J	117	J					91.4	J	123	J				
Ethane	ug/L	2	U	2	U					2	U	2	U				
Ethene	ug/L	2	U	2	U					2	U	2	U				
Methane	ug/l	1.3	J	0.7	J					0.52	J	2	U				
Total Alkalinity CACO3	mg/l	237		229						280		230					
Total Organic Carbon	mg/l	0.765	J	0.821	J					7.95		8.08					

Acronyms:
CACO3 = calcium carbonate
deg C = degrees Celsius
J = Result is estimated
J+ = Resulted is estimated, biased high
ug/L= micrograms per liter
mg/l = milligrams per liter
mS/cm = millsiemens per centimeter
N = parent sample
ntu = Nephelometric Turbidity unit
PCE = tetrachloroethene
Q = qualifier
su = standard pH units
U = Analyte was not detected at the associated value, which is the reporting limit

Table 6
General Chemistry Parameters – September/October 2024 Groundwater

Location		MW-04		MW-05R		MW-06		MW-08A		MW-08B		MW-08C		MW-12D		MW-13D	
Sample Name		MW04-GW090524		MW05R-GW090824		MW06-GW090524		MW08A-GW091024		MW08B-GW090624		MW08C-GW091324		MW12D-GW090524		MW13D-GW090724	
Sample Date		9/5/2024		9/8/2024		9/5/2024		9/10/2024		9/6/2024		9/13/2024		9/5/2024		9/7/2024	
Sample Type		N		N		N		N		N		N		N		N	
Chemical Name	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Dissolved Oxygen	mg/l	6.98		6.8		6.35		8.05		6.89		4.55		4.57		5.97	
Ferrous Iron	mg/l																
Oxidation-Reduction Potential	millivolts	192.1		29.5		92.9		166.3		87.9		-40.1		214.8		99.5	
PH	su	7.28		6.86		7.3		6.9		7.26		7.42		7.04		7.03	
Specific Conductance	us/cm	1750		1541		1310		1852		1025		869		1497		1237	
Temperature	deg C	12.6		15.5		12.3		13.1		13.8		14.6		16.2		15.5	
Turbidity	ntu	0.55		2.16		0.21		8.39		4.81		56.5		0.91		1.29	
Nitrate/Nitrite	mg/l																
Chloride	mg/l																
Sulfate	mg/l																
Ethane	ug/L																
Ethene	ug/L																
Methane	ug/l																
Total Alkalinity CACO3	mg/l																
Total Organic Carbon	mg/l																

Acronyms:
CACO3 = calcium carbonate
deg C = degrees Celsius
J = Result is estimated
J+ = Resulted is estimated, biased high
ug/L= micrograms per liter
mg/l = milligrams per liter
mS/cm = millsiemens per centimeter
N = parent sample
ntu = Nephelometric Turbidity unit
PCE = tetrachloroethene
Q = qualifier
su = standard pH units
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Table 6
General Chemistry Parameters – September/October 2024 Groundwater

Location		MW-13L		MW-13S		MW-14D		MW-14S		MW-15D		MW-15S		MW-16D		MW-16S	
Sample Name		MW13L-GW090724		MW13S-GW090724		MW14D-GW091024		MW14S-GW091024		MW15D-GW090824		MW15S-GW090824		MW16D-GW090824		MW16S-GW090824	
Sample Date		9/7/2024		9/7/2024		9/10/2024		9/10/2024		9/8/2024		9/8/2024		9/8/2024		9/8/2024	
Sample Type		N		N		N		N		N		N		N		N	
Chemical Name	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Dissolved Oxygen	mg/l	7.73		2.24		1.82		0.73		4.32		6.19		6.45		5.38	
Ferrous Iron	mg/l																
Oxidation-Reduction Potential	millivolts	81.9		94.1		188.2		157.8		130.5		87.3		133.8		69.5	
PH	su	7.08		6.98		7.2		7		6.93		6.9		7.16		7.04	
Specific Conductance	us/cm	1311		2202		1415		1716		1567		1733		886		1448	
Temperature	deg C	14.7		17.4		18.2		22.3		15		14.7		14.8		16.7	
Turbidity	ntu	6.44		7.64		0.3		5.61		6.37		1.22		2.37		3.73	
Nitrate/Nitrite	mg/l																
Chloride	mg/l																
Sulfate	mg/l																
Ethane	ug/L																
Ethene	ug/L																
Methane	ug/l																
Total Alkalinity CACO3	mg/l																
Total Organic Carbon	mg/l																

Acronyms:
CACO3 = calcium carbonate
deg C = degrees Celsius
J = Result is estimated
J+ = Resulted is estimated, biased high
ug/L= micrograms per liter
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N = parent sample
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Table 6
General Chemistry Parameters – September/October 2024 Groundwater

Location		MW-17D		MW-17S		MW-18		MW-19		MW-20D		MW-20S		MW-21		MW-22	
Sample Name		MW17D-GW090524		MW17S-GW090524		MW18-GW090724		MW19-GW090724		MW20D-GW090724		MW20S-GW090724		MW21-GW090824		MW22-GW090824	
Sample Date		9/5/2024		9/5/2024		9/7/2024		9/7/2024		9/7/2024		9/7/2024		9/8/2024		9/8/2024	
Sample Type		N		N		N		N		N		N		N		N	
Chemical Name	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Dissolved Oxygen	mg/l	5.01		1.16		6.58		6.69		5.87		4.27		7.17		6.98	
Ferrous Iron	mg/l																
Oxidation-Reduction Potential	millivolts	53.1		-33.6		97.7		67.6		85.4		62.1		63.4		65.4	
PH	su	6.84		6.81		6.97		6.99		7.2		7.07		7.09		7.07	
Specific Conductance	us/cm	1299		1422		1571		1453		884		928		1532		852	
Temperature	deg C	18.8		18		13.7		14.3		15.8		14.4		17.8		15.2	
Turbidity	ntu	25.2		6.88		5.66		3.02		0.88		2.99		6.96		6.13	
Nitrate/Nitrite	mg/l																
Chloride	mg/l																
Sulfate	mg/l																
Ethane	ug/L																
Ethene	ug/L																
Methane	ug/l																
Total Alkalinity CACO3	mg/l																
Total Organic Carbon	mg/l																

Acronyms:
CACO3 = calcium carbonate
deg C = degrees Celsius
J = Result is estimated
J+ = Resulted is estimated, biased high
ug/L= micrograms per liter
mg/l = milligrams per liter
mS/cm = millsiemens per centimeter
N = parent sample
ntu = Nephelometric Turbidity unit
PCE = tetrachloroethene
Q = qualifier
su = standard pH units
U = Analyte was not detected at the associated value, which is the reporting limit

Table 6
General Chemistry Parameters – September/October 2024 Groundwater

Location		MW-23A		MW-23B		MW-23C		MW-24		MW-25A		MW-25B		MW-25C		MW-26A	
Sample Name		MW23A-GW091224		MW23B-GW091224		MW23C-GW091224		MW24-GW090824		MW25A-GW090724		MW25B-GW090724		MW25C-GW090724		MW26A-GW090824	
Sample Date		9/12/2024		9/12/2024		9/12/2024		9/8/2024		9/7/2024		9/7/2024		9/7/2024		9/8/2024	
Sample Type		N		N		N		N		N		N		N		N	
Chemical Name	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Dissolved Oxygen	mg/l	4.12		4.88		1.86		4.96		4.16		2.78		3.57		3.53	
Ferrous Iron	mg/l																
Oxidation-Reduction Potential	millivolts	112.3		177.8		20.4		124		164.4		183.2		193.6		156.3	
PH	su	7.02		7.1		7.12		7.23		6.97		7.07		7.27		6.97	
Specific Conductance	us/cm	1793		1393		1012		1266		1849		2838		2564		1981	
Temperature	deg C	20		20.9		23.1		15.9		23.2		21.4		19.3		26.1	
Turbidity	ntu	7.85		3.93		8.97		0.3		6.58		5.46		0.73		0.91	
Nitrate/Nitrite	mg/l																
Chloride	mg/l																
Sulfate	mg/l																
Ethane	ug/L																
Ethene	ug/L																
Methane	ug/l																
Total Alkalinity CACO3	mg/l																
Total Organic Carbon	mg/l																

Acronyms:
CACO3 = calcium carbonate
deg C = degrees Celsius
J = Result is estimated
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ug/L= micrograms per liter
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N = parent sample
ntu = Nephelometric Turbidity unit
PCE = tetrachloroethene
Q = qualifier
su = standard pH units
U = Analyte was not detected at the associated value, which is the reporting limit

Table 6
General Chemistry Parameters – September/October 2024 Groundwater

Location		MW-26B		MW-26C		MW-26D		MW-27		MW-28		MW-29A		MW-29B		MW-29C	
Sample Name		MW26B-GW091324		MW26C-GW090724		MW26D-GW090824		MW27-GW091024		MW28-GW090724		MW29A-GW091024		MW29B-GW091024		MW29C-GW091024	
Sample Date		9/13/2024		9/7/2024		9/8/2024		9/10/2024		9/7/2024		9/10/2024		9/10/2024		9/10/2024	
Sample Type		N		N		N		N		N		N		N		N	
Chemical Name	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Dissolved Oxygen	mg/l	3.52		3.15		3.54		6.72		6.62		5.26		2.35		3.65	
Ferrous Iron	mg/l																
Oxidation-Reduction Potential	millivolts	210.6		46.8		42.7		110.1		81.7		234.1		114.6		78.6	
PH	su	5.49		7.21		7.18		6.99		6.98		7.15		6.84		7.08	
Specific Conductance	us/cm	1320		1125		871		1697		1865		1592		1117		1275	
Temperature	deg C	21.1		19.6		21.9		15.7		15.6		18.4		21.3		17.4	
Turbidity	ntu	0.76		1.07		0.61		1.22		38.3		0.4		0.72		3.92	
Nitrate/Nitrite	mg/l																
Chloride	mg/l																
Sulfate	mg/l																
Ethane	ug/L																
Ethene	ug/L																
Methane	ug/l																
Total Alkalinity CACO3	mg/l																
Total Organic Carbon	mg/l																

Acronyms:
CACO3 = calcium carbonate
deg C = degrees Celsius
J = Result is estimated
J+ = Resulted is estimated, biased high
ug/L= micrograms per liter
mg/l = milligrams per liter
mS/cm = millsiemens per centimeter
N = parent sample
ntu = Nephelometric Turbidity unit
PCE = tetrachloroethene
Q = qualifier
su = standard pH units
U = Analyte was not detected at the associated value, which is the reporting limit

Table 6
General Chemistry Parameters – September/October 2024 Groundwater

Location		MW-30RA		MW-30RB		MW-31A		MW-31B		MW-31C		MW-32A		MW-32B		MW-34A	
Sample Name		MW30RA-GW090824		MW30RB-GW090824		MW31A-GW091024		MW31B-GW091024		MW31C-GW091024		MW32A-GW090824		MW32B-GW091224		MW34A-GW090624	
Sample Date		9/8/2024		9/8/2024		9/10/2024		9/10/2024		9/10/2024		9/8/2024		9/12/2024		9/6/2024	
Sample Type		N		N		N		N		N		N		N		N	
Chemical Name	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Dissolved Oxygen	mg/l	6.68		5.53		6.05		4.39		1.13		4.97		4.46		3.27	
Ferrous Iron	mg/l																
Oxidation-Reduction Potential	millivolts	55.7		91.4		188.8		133.5		43.2		93.9		113.4		181.4	
PH	su	6.92		6.91		7.09		6.84		6.85		7.12		7.31		7.09	
Specific Conductance	us/cm	1743		1877		1489		1034		909		1417		1045		1171	
Temperature	deg C	15.9		14.8		14.5		13.2		13		16.3		16.1		24.2	
Turbidity	ntu	4.07		0.38		1.07		1.83		4.15		33.3		1.61		1.12	
Nitrate/Nitrite	mg/l																
Chloride	mg/l																
Sulfate	mg/l																
Ethane	ug/L																
Ethene	ug/L																
Methane	ug/l																
Total Alkalinity CACO3	mg/l																
Total Organic Carbon	mg/l																

Acronyms:
CACO3 = calcium carbonate
deg C = degrees Celsius
J = Result is estimated
J+ = Resulted is estimated, biased high
ug/L= micrograms per liter
mg/l = milligrams per liter
mS/cm = millsiemens per centimeter
N = parent sample
ntu = Nephelometric Turbidity unit
PCE = tetrachloroethene
Q = qualifier
su = standard pH units
U = Analyte was not detected at the associated value, which is the reporting limit

Table 6
General Chemistry Parameters – September/October 2024 Groundwater

Location		MW-34B		MW-34C		MW-34D		MW-36		MW-37D		MW-37S		MW-38D		MW-38S	
Sample Name		MW34B-GW090524		MW34C-GW090524		MW34D-GW090624		MW36-GW090624		MW37D-GW090624		MW37S-GW090624		MW38D-GW090624		MW38S-GW090624	
Sample Date		9/5/2024		9/5/2024		9/6/2024		9/6/2024		9/6/2024		9/6/2024		9/6/2024		9/6/2024	
Sample Type		N		N		N		N		N		N		N		N	
Chemical Name	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Dissolved Oxygen	mg/l	3.94		5.61		4.09		1.88		4.41		4.29		6.32		6.72	
Ferrous Iron	mg/l																
Oxidation-Reduction Potential	millivolts	151.4		101.5		-9.6		149.9		194.3		212.9		155.5		105.9	
PH	su	6.99		7.26		7.17		6.94		5.55		6.94		7.11		7.07	
Specific Conductance	us/cm	1094		2510		779		1590		1677		2560		1306		1332	
Temperature	deg C	22.5		17		15.2		16.8		16.2		16		14.9		14.4	
Turbidity	ntu	2.4		0.92		0.57		2.91		0.44		1.2		8.7		6.26	
Nitrate/Nitrite	mg/l																
Chloride	mg/l																
Sulfate	mg/l																
Ethane	ug/L																
Ethene	ug/L																
Methane	ug/l																
Total Alkalinity CACO3	mg/l																
Total Organic Carbon	mg/l																

Acronyms:
CACO3 = calcium carbonate
deg C = degrees Celsius
J = Result is estimated
J+ = Resulted is estimated, biased high
ug/L= micrograms per liter
mg/l = milligrams per liter
mS/cm = millsiemens per centimeter
N = parent sample
ntu = Nephelometric Turbidity unit
PCE = tetrachloroethene
Q = qualifier
su = standard pH units
U = Analyte was not detected at the associated value, which is the reporting limit

Table 6
General Chemistry Parameters – September/October 2024 Groundwater

Location		MW-39D		MW-39S		MW-40D		MW-40S		MW-41D		MW-41S		MW-42D		MW-42D	
Sample Name		MW39D-GW100324		MW39S-GW100324		MW40D-GW093024		MW40S-GW093024		MW41D-GW100224		MW41S-GW100224		FD10-GW100224		MW42D-GW100224	
Sample Date		10/3/2024		10/3/2024		9/30/2024		9/30/2024		10/2/2024		10/2/2024		10/2/2024		10/2/2024	
Sample Type		N		N		N		N		N		N		FD		N	
Chemical Name	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Dissolved Oxygen	mg/l	4.31		3.98		3.2		4.54		3.41		5.01				4.82	
Ferrous Iron	mg/l															0.92	
Oxidation-Reduction Potential	millivolts	-137.3		141.7		91.1		212.3		76		188.2				140.3	
PH	su	7.25		7.16		7.36		7.08		7.36		7.04				7.2	
Specific Conductance	us/cm	1014		1159		865		1691		820		1730				1040	
Temperature	deg C	16.6		16		16		16.1		14.7		15.4				15.4	
Turbidity	ntu	20.8		36.4		13.2		10.2		12.2		1.95				23.1	
Nitrate/Nitrite	mg/l													2.58		2.54	
Chloride	mg/l													152		176	
Sulfate	mg/l													149		215	
Ethane	ug/L													2	U	0.39	J
Ethene	ug/L													2	U	2	U
Methane	ug/l													1.9	J	2.1	
Total Alkalinity CACO3	mg/l													233		228	
Total Organic Carbon	mg/l													0.673	J	0.731	J

Acronyms:
CACO3 = calcium carbonate
deg C = degrees Celsius
J = Result is estimated
J+ = Resulted is estimated, biased high
ug/L= micrograms per liter
mg/l = milligrams per liter
mS/cm = millsiemens per centimeter
N = parent sample
ntu = Nephelometric Turbidity unit
PCE = tetrachloroethene
Q = qualifier
su = standard pH units
U = Analyte was not detected at the associated value, which is the reporting limit

Table 6
General Chemistry Parameters – September/October 2024 Groundwater

Location		MW-42S		MW-43D		MW-43S		MW-44D		MW-44S		MW-45	
Sample Name		MW42S-GW091224		MW43D-GW100124		MW43S-GW100124		MW44D-GW100124		MW44S-GW100124		MW45-GW090724	
Sample Date		9/12/2024		10/1/2024		10/1/2024		10/1/2024		10/1/2024		9/7/2024	
Sample Type		N		N		N		N		N		N	
Chemical Name	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Dissolved Oxygen	mg/l	4.3		10.2		4.05		5.7		5.01		7.22	
Ferrous Iron	mg/l	0.32											
Oxidation-Reduction Potential	millivolts	37.1		-27		127.1		178.8		198.3		53.8	
PH	su	7.3		7.36		7		7.17		7.12		7.08	
Specific Conductance	us/cm	1490		1063		1638		1006		1541		1160	
Temperature	deg C	14.9		15.1		14.5		12.5		12.7		15	
Turbidity	ntu	87.4		45.7		6.79		4.44		328		44.9	
Nitrate/Nitrite	mg/l	2.03											
Chloride	mg/l	269											
Sulfate	mg/l	118											
Ethane	ug/L	2	U										
Ethene	ug/L	2	U										
Methane	ug/l	0.24	J										
Total Alkalinity CACO3	mg/l	241											
Total Organic Carbon	mg/l	0.799	J										

Acronyms:
CACO3 = calcium carbonate
deg C = degrees Celsius
J = Result is estimated
J+ = Resulted is estimated, biased high
ug/L= micrograms per liter
mg/l = milligrams per liter
mS/cm = millsiemens per centimeter
N = parent sample
ntu = Nephelometric Turbidity unit
PCE = tetrachloroethene
Q = qualifier
su = standard pH units
U = Analyte was not detected at the associated value, which is the reporting limit

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Appendix A
Field Forms

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HEALTH AND SAFETY PLAN FORM

The following personnel have read and fully understand the contents of this APP and SSHP and further agree to all requirements contained herein.

Name	Affiliation	Date	Signature
John Rezac	Wasatch Env	9/5/24	
Joe Borgerding	CDM Smith	9/5/24	
Emma Goldberg	CDM Smith	9/5/24	
RYAN TANASY	WASATCH ENV	9/5/24	
Isaac Nonce	CDM Smith	9/5/24	
Melanie Blanton	CDM Smith	9/5/24	
Maria Day-Johnson	CDM Smith	9/5/24	
Lydia Lytle	CDM Smith	9/8/24	
Bob Alexander	CDM Smith	9/10/24	
Rachel Kubina	Wasatch	9.10.24	
Paige Williams	Wasatch	9.10.24	

Field Health and Safety Meeting Record

CDM Smith Trainer: Maria Day-Johnson Date: 09/04/2024 Time: 0720

Site: 7056 1600E PCE Plume VA

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: ~~5 ppm~~ MDJ 914 10 ppm *Other:*

Protective Clothing/Equipment: Level D – hi-vis, hard hats, steel toed boots, safety glasses, nitriles.

Special Equipment: PID

Chemical Hazards: PCE / TCE ~ 250 ug/L

Physical Hazards: Slips, trips, falls, heat stress, lightning, biological, driving

Emergency Actions: 911, University of Utah Medical

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)		***Signature***
Maria Day-Johnson	DEN CDM Smith	
Emma Goldberg	DEN CDM Smith	
Isaac Nance	DEN CDM Smith	
Melanie Blanton	TPA CDM Smith	
Ryan Tanaka	Wasatch Env	
Paige Williams	Wasatch Env.	
Joe Borgording	Den CDM Smith	
Neil Smith	DEN CDM Smith	

Field Health and Safety Meeting Record

CDM Smith Trainer: Maria Day-Johnson Date: 09/05/2024 Time: 0710

Site: 7605 WOODE VA PCE Plume

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10 ppm *Other:*

Protective Clothing/Equipment: Level D PPE, hi-vis, steel toes, safety glasses, nitriles

Special Equipment: PID, gas cylinders

Chemical Hazards: PCE/TCE ~250 µg/L

Physical Hazards: Slips/trips/falls, heat stress, lightening, biological, driving

Emergency Actions: 911, University of Utah Medical

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)			***Signature***
Maria Day-Johnson	DEN	CDM Smith	
Emma Goldberg	DEN	CDM Smith	
Joe Borgerding	DEN	CDM Smith	see Borgerding
John Kezar	Wasatch	ENV	
Ryan Panasy	Wasatch	ENV	
Isaac Nance	DEN	CDM Smith	
Melonie Blanton	TPA	CDM Smith	

Field Health and Safety Meeting Record

CDM Smith Trainer: Maria Day-Johnson Date: 9/6/24 Time: 0710

Site: VAPCE Plume 700S 1600E

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10 ppm *Other:*

Protective Clothing/Equipment: Level D, steel toes, hard hats, safety glasses, hi-vis, nitrile gloves

Special Equipment: PID, gas cylinders

Chemical Hazards: PCE/TCE ~230 µg/L

Physical Hazards: Slips/trips/falls, driving, heat stress, ~~cold~~ MDS 91 to, biological, gas cylinders, lifting

Emergency Actions: 911, University of Utah Medical

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)		*Signature*
Maria Day-Johnson	CDM Smith DEN	
Joe Borgerding	CDM Smith Den	
Isaac Nance	CDM Smith Den	
Paige Williams	Wasatch Env.	
Ryan Panasik	Wasatch Env.	
Emma Goldberg	CDM Smith DEN	
Melanie Beebe	CDM TPA	

Field Health and Safety Meeting Record

CDM Smith Trainer: Maria Day-Johnson Date: 9/7/2624 Time: 0725

Site: VA PCE Plume 7005 1600E

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10 ppm *Other:*

Protective Clothing/Equipment: Level D, steel toes, hard hats, hi-vis, Safety glasses. nutile gloves.

Special Equipment: PID, gas cylinders

Chemical Hazards: PCE/TCE ~230 µg/L

Physical Hazards: Slips/trips/falls, lifting, driving, heat stress, biological,

Emergency Actions: 911, University of Utah Medical.

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)	***Signature***
Maria Day-Johnson CDM Smith DEN	
Isaac Nance CDM Smith DEN	
Melanie Blanton TPW CDM Smith	
Ryan Tansey WASATCH ENV	
Joe Borgerding CDM Smith Den	
Emma Goldberg CDM Smith Den	

Field Health and Safety Meeting Record

CDM Smith Trainer: Maria Day-Johnson Date: 9/7/2024 Time: 0705

Site: VA PCE Plume 700S 1600E

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10 ppm *Other:*

Protective Clothing/Equipment: Level D, steel toes, hard hats, hi-vis, safety glasses, Nitrile gloves.

Special Equipment: PID, gas cylinders

Chemical Hazards: TCE/PCE 230 µg/L

Physical Hazards: Slips/trips/falls, lifting, driving, heat stress, biological.

Emergency Actions: 911, University of Utah medical

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)		***Signature***
Mara Day Johnson	CDM Smith DEN	
Emma Goldberg	CDM Smith DEN	
John Reza	Wasatch En	
Ryan Pansy	Wasatch Env	
Joe Borgerding	CDM Smith Den	
Melanie Blenton	CDM TPA	

Field Health and Safety Meeting Record

CDM Smith Trainer: Maria Day-Johnson Date: 9/10/2024 Time: 0720

Site: SLC VA PCE Plume 7005 Wood E

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10 ppm *Other:*

Protective Clothing/Equipment: Level D, steel toes, hard hat, hi-vis, safety glasses, nitriles

Special Equipment: PID, gas cylinders

Chemical Hazards: TCE / PCE ~230 µg/L

Physical Hazards: Slips / trips / falls, heat stress, lifting, driving, gas cylinders

Emergency Actions: 911, University of Utah medical.

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)	***Signature***
Maria Day-Johnson CDM Smith DEN	
Joe Borgerding CDM Smith Den	
RYAN PARKER WASATCH ENV	
Rachel Kubina Wasatch Env	
Bob Alexander CDM Smith ABQ	
Melanie Blanton CDM Smith TPA	
Emma Goldberg CDM Smith DEN	
Lydia Lytle CDM Smith DEN	

Field Health and Safety Meeting Record

CDM Smith Trainer: Maria Day-Johnson Date: 9/11/2024 Time: 0720

Site: SLC VA PCE PLUME 7005 1600E

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10 ppm *Other:*

Protective Clothing/Equipment: Level D PPE, steel toed boots, hard hat, hi-vis, safety glasses, nitrile gloves.

Special Equipment: PID, ~~safety glasses~~ MDJ 9/11 gas cylinders

Chemical Hazards: PCE/TCE ~230 ug/L

Physical Hazards: Slips/trips/falls, heat stress, lifting, driving, gas cylinders.

Emergency Actions: 911, University of Utah Medical, or Workcare 888-449-7787

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)	***Signature***
Paige Williams Wasatch	Paige Williams
Joe Borgerding CDM Den	Joe Borgerding
Rachel Rubina Wasatch	
Maria Day-Johnson CDM Den	
Lydia Lytle cdmsmith	
Melanie Blanton CDM Smith	
Emmett Goldberg CDM Smith	Emmett Goldberg

Field Health and Safety Meeting Record

CDM Smith Trainer: Maria Day - Johnson Date: 9/11/2024 Time: 0754

Site: SLC VA PCE Plume 700 S 1600 E

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10 ppm *Other:*

Protective Clothing/Equipment: Level D PPE, steel toed boots, hard hat, hi-vis, safety glasses, nitrile gloves.

Special Equipment: ~~PCE/TCE ~230 µg/L~~ PID / Gas Cylinders

Chemical Hazards: PCE/TCE ~230 µg/L

Physical Hazards: Slips/trips/falls, driving, heat stress, air quality, lifting cylinders

Emergency Actions: 911, University of Utah Medical of Workcare 888-449-7787

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)		***Signature***
Maria Day - Johnson	CDM Smith	
John Rezac	Wasatch	
Emma Goldberg	CDM Smith	
Joe Borgerding	CDM Smith Den	
Rachel Kubaine	Wasatch	
Melanie Blanton	CDM Smith	
Lydia Leffle	CDM Smith	

Field Health and Safety Meeting Record

CDM Smith Trainer: Isaac Nance Date: 9/30/2024 Time: 0830

Site: SLC VA PCE Plume 7005 1600E

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10ppm *Other:*

Protective Clothing/Equipment: Level D PPE, steel toes, hard hats, hi-vis, safety glasses, gloves

Special Equipment: PID, gas cylinders

Chemical Hazards: PCE/TCE ~230 mg/L

Physical Hazards: slips/trips/falls, driving, heat stress, lifting, high pressure gas

Emergency Actions: 911, U of U medical, workcare 888-449-7787

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)	***Signature***
Rachel Kubina Wasatch Env	Rachel Kubina
Paige Williams Wasatch Env.	Paige Williams
Isaac Nance CDM Den	Isaac Nance

Field Health and Safety Meeting Record

CDM Smith Trainer: Maria Day-Johnson Date: 09/13/2024 Time: 0715

Site: SLC VA PCE PLUME 700S 1600E

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10ppm *Other:*

Protective Clothing/Equipment: Level D PPE, steel toes, hard hats, hi-vis, safety glasses, nitriles

Special Equipment: PID, gas cylinders

Chemical Hazards: PCE/TCE ~230µg/L

Physical Hazards: Slips/trips/falls, driving, heat stress, air quality lifting cylinders pumps ect.

Emergency Actions: 911, University of Utah Medical, Workcare 888-449-7787

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)		***Signature***
Lydia Light	CDM Smith	
Joe Borgerding	CDM Smith DEN	
Melanie Blanton	CDM Smith TPA	
Paige Williams	Wasatch	
Emma Goldberg	CDM Smith	
Rachel Kubin	Wasatch	
Maria Day-Johnson	CDM Smith DEN	

Field Health and Safety Meeting Record

CDM Smith Trainer: Isaac Nance Date: ~~9/30/2~~ 10/1/2024 Time: 0600

Site: SLC VA PCE Plume 700S 1600E

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10ppm *Other:*

Protective Clothing/Equipment: Level D PPE, steel toes, hard hats, hi-vis, safety glasses, gloves

Special Equipment: PID, gas cylinders

Chemical Hazards: PCE/TCE ~230mg/L

Physical Hazards: slips/trips/falls, driving, heat stress, lifting, high pressure gas

Emergency Actions: 911, U of U medical, workcare

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)	***Signature***
Isaac Nance CDM Den	Isaac Nance
Rachel Kubina WSP Env	Rachel Kubina

Field Health and Safety Meeting Record

CDM Smith Trainer: Isaac Nance Date: 10/2/2024 Time: 0800

Site: SLC UA PCE Plume 700S 1600E

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10ppm *Other:*

Protective Clothing/Equipment: Level D ppe, steel toes, hard hats, hi-vis, safety glasses, gloves.

Special Equipment: PFD, gas cylinders

Chemical Hazards: PCE/TCE ~230 mg/L

Physical Hazards: slips/trips/falls, driving, heat stress, lifting, high pressure gas

Emergency Actions: 911, UofU medical, workcore

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)	***Signature***
Isaac Nance / CDM / Denver	Isaac Nance
Paige Williams / WEI	Paige Williams

Field Health and Safety Meeting Record

CDM Smith Trainer: Isaac Nance Date: 10/3/2024 Time: 0730

Site: SLC VA PCE Plume 700S 1600E

Review:

- Health & Safety Plan
- Buddy Teams
- Hospital Route/Nearest Phone Location
- Weather Concerns
- Potential Problems
- Problems Previously Occurred

Action Levels: 10 ppm *Other:*

Protective Clothing/Equipment: Level D ppe, steel toes, hard hats, hi-vis, safety glasses, gloves

Special Equipment: PID, gas cylinders

Chemical Hazards: PCE/TCE ~ 230 ug/L

Physical Hazards: slips/trips/falls, driving, heat stress, lifting, high pressure gas

Emergency Actions: 911, U of U medical, workcare

Other Issues:

Check:

- H&S Monitoring Equipment/Calibration
- First Aid Kit/Eye Wash Station
- Fire Extinguisher Communications/Radio Check
- H&S Plan (each item) Respiratory Protection/Cartridges

Name/Firm/Office (Please Print)	***Signature***
Isaac Nance CDM Denver	
Ryan Tanasi Wasatch Env.	
Ryan Christiansen Wasatch Env	

CDM Smith

WATER LEVEL MEASUREMENTS

Project: PCE Plume T00S1600E

Project No:

Weather Conditions: Sunny

Date: 9/4/2024

Measurement Device: Waterlevel meters

Measured By: MDJ, EG, MB, RP, JB, IN

Well	Date	Time	Depth to Water (feet)	Reference TOC = top of casing, TOH = top of housing	Comments
MW-01D	9/4/24	1344	172.14	TOH	Transducer bat % and sample count: 16052/24000 61% @9/8 946 Barometer: 16052/24000 61% @9/8 933, DQ
MW-01S	9/4/24	1339	156.91	TOH	Transducer bat % and sample count: Replace rock
MW-02	9/4/24	1419	170.11	TOH	
MW-03RA	9/4/24	0830	187.81	TOC	
MW-03RB	9/4/24	0830	205.18	TOC	Transducer bat % and sample count: 31329/72000 94% no pump
MW-03RC	9/4/24	0853	9/11 @ 1820 205.13	TOC	could not get past 94ft
MW-03RD	9/4/24	0920	9/11 @1830 205.30	TOC	Could not get past 180ft
MW-04	9/4/24	1120	134.81	TOH	Transducer bat % and sample count: 16200/24000 Transducer bat % and sample count: 61% @9/13 1600
MW-05R	9/4/24	1036	213.73	TOC	
MW-06	9/4/24	1104	116.61	TOH	Transducer bat % and sample count: 16074/24000 67% 9/8 1020
MW-08A	9/4/24	1432	61.16	TOH	
MW-08B	9/4/24	1435	59.82	TOH	
MW-08C	9/4/24	1429	58.40	TOC	Air line clogged w/ rust/corrosion Quick connect missing
MW-12D	9/4/24	0915	55.41	TOH	bolt cutter did not work. accidentally ripped of cap.
MW-12S	9/6/24	1000	DRY	TOH	One bolt missing, other is stripped cut open 9/6/24
MW-13D	9/4/24	1125	13.67	TOH	Transducer bat % and sample count: 9/7 9.38 16050/48000 79% future start 10:00 bolts/locks Okay

Future start 9/8 11 am

CDM Smith

WATER LEVEL MEASUREMENTS

Well	Date	Time	Depth to Water (feet)	Reference TOC = top of casing, TOH = top of housing	Comments
MW-13L	9/4/24	1140	17.80	TOH	no well cap, standing water no bolts
MW-13S	9/4/24	1133	14.21	TOH	bolts and lock okay
MW-14D	9/4/24	1520	artesian	NA	Pressure: 56 inH_2O
MW-14S	9/4/24	1042	5.42	TOH	Transducer bat % and sample count: bolts stripped, lock okay
MW-15D	9/8/24	8:40	48.79	TOH	Transducer bat % and sample count: Transducer would pulled read. van parked over well, 9/4-9/7 dummy lock
MW-15S	9/8/24	0817	47.31	TOH	van parked over well 9/4-9/7 broken lock hoop lock corrosion
MW-16D	9/6/24	1010	10.25	TOH	Transducer bat % and sample count: 9/7@1139 16052/48000 79% Future Start 1200 bolts stripped, lock stuck
MW-16S	9/6/24	1408	11.18	TOH	1 missing bolt, other stripped. no well cap.
MW-17D	9/4/24	1535	0.32	TOC	Pressure: ___ PSI, ___ bar. If no pressure, add stickup. If water is below existing TOC, remove sticku and gauge. If water is above existing TOC, gauge with stickup. Record stickup height.
MW-17S	9/4/24	1544	6.75	TOH	Stripped screws no lock
MW-18	9/4/24	1421	82.49	TOH	Standing water bolts & lock good.
MW-19	9/4/24	1433	81.79	TOH	bolts good, no lock or cap Standing water almost reaching well opening
MW-20D	9/4/24	1510	83.49	TOH	bolts good, lock good.
MW-20S	9/4/24	1454	83.80	TOH	bolts good
MW-21	9/4/24	1540	64.35	TOH	1 bolt very tight
MW-22	9/6/24	10:22 ~~1540~~ MDJ 9/6	62.92 ~~64.35~~ MDJ 9/6	TOH	bolt cut on 9/6/24
MW-23A	9/4/24	1225	186.98	TOC	
MW-23B	9/4/24	1247	197.55	TOC	
MW-23C	9/4/24	1240	217.72	TOC	Need new swag lock fitting tubing sheared

CDM Smith

WATER LEVEL MEASUREMENTS

Well	Date	Time	Depth to Water (feet)	Reference TOC = top of casing, TOH = top of housing	Comments
MW-24	9/4/24	1301	184.50	TOC	
MW-25A	9/4/2024	1026	177.1	TOC	
MW-25B	9/4/2024	1043	~~81.23~~ HDS 9/4 170.00	TOC	
MW-25C	9/4/2024	1105	209.54	TOC	
MW-26A	9/4/2024	1135	189.59	TOC	missing quick connect.
MW-26B	9/4/2024	1207	194.38	TOC	
MW-26C	9/4/2024	1149	218.78	TOC	
MW-26D	9/4/2024	1159	218.77	TOC	
MW-27	9/4/2024	1252	187.13	TOC	
MW-28	9/5/2024	0856	186.01	TOC	Replace bolts
MW-29A	9/4/2024	1648	116.07	TOC	Air fitting Corroded shut
MW-29B	9/4/2024	1701	151.71	TOC	"
MW-29C	9/4/2024	1713	157.21	TOC	"
MW-30RA	9/4/24	1019	228.25	TOC	Transducer bat % and sample count: 15 15881 / 24000 61% 9/8 107 future start 12.00
MW-30RB	9/4/24	1023	230.74	TOC	
MW-30C	9/4/2024	1323	230.35	TOC	Transducer bat % and sample count: 15787 / 48,000 79% no pump, some water in vault
MW-31A	9/4/2024	1558	130.77	TOC	
MW-31B	9/4/2024	1608	134.55	TOC	
MW-31C	9/4/2024	1614	148.05	TOC	

CDM Smith

WATER LEVEL MEASUREMENTS

Well	Date	Time	Depth to Water (feet)	Reference TOC = top of casing, TOH = top of housing	Comments
MW-32A	9/4/2024	1455	84.12	TOH	Transducer bat % and sample count: 918 pulled cable/read. no pump
MW-32B	9/4/2024	1503	84.00	TOC	
MW-32C	9/4/2024	1520	83.42	TOC	Transducer bat % and sample count: 16057/48000 79% no pump
MW-34A	9/5/2024	1044	131.98	TOC	MW 34 Access - Greg Vega 326890/48,000 84% 301-879-2400
MW-34B	9/5/2024	1035	131.58	TOC	Transducer bat % and sample count: MDS 9/5 16008/45000 87% ~~326890/48000 84%~~ 9/6 @ 1053
MW-34C	9/5/2024	1028	130.88	TOC	Transducer bat % and sample count: 16009/48000 85% 9/6 1111
MW-34D	9/5/2024	1022	131.05	TOC	Transducer bat % and sample count: 16009/48000 85% 9/6 1130
MW-36	9/4/24	1205	45.92	TOH	magnet
MW-37D	9/4/24	0824	41.60	TOH	locked, bolted
MW-37S	9/4/24	0825	19.06	TOH	locked, bolted
MW-38D	9/4/24	1610	19.64	TOH	
MW-38S	9/4/24	1612	19.63	TOH	
RG-01	9/4/24	0943	6.45	TOC	missing bolt other bolt broke lock okay
RG-02	9/4/24	1257	2.55	TOC	missing a bolt, other bolt broke.
RG-03	9/4/24	1216	3.27	TOC	missing bolt other bolt broke
RG-04	9/4/24	0858	10.33	TOC	missing a bolt, other bolt broke, lock corrosion.
RG-05	9/4/24	1306	24.31	TOC	both bolts broke, lock ok when opening.
RG-06	9/4/24	1053	2.30	TOC	1 bolt missing, other corroded & broke
RG-07	9/4/24	1117	21.31	TOC	1 bolt missing

CDM Smith

WATER LEVEL MEASUREMENTS

Well	Date	Time	Depth to Water (feet)	Reference TOC = top of casing, TOH = top of housing	Comments
RG-08	9/4/24	1150	5.41	TOC	no bolts, lock corroded
RG-09	9/4/24	0928	6.09	TOC	missing a bolt, other bolt corroded and broke off, lock good
RG-10	9/4/24	1102	27.39	TOC	missing a bolt, other corroded & broke, some standing water, Lock corroded, key doesn't fit
RG-11	9/4/24	1317	29.86	TOC	1 bolt missing 2nd broke, corroded lock

Additional Comments:		DTW	TD	Date	Time
MW-44	S	DTW = 155.35'	TD = 204.1'	9/4/24	0840
	D	179.55'	294.9'	9/4/24	0845
MW-40	S	189.3'	247.8'		0850
	D	203.94'	301.3'		0855
MW-41	S	175.80'	230.4'		0905
	D	196.68'	286.4'		0911
MW-42	S	182.62'	256.9'		0920
	D	204.11'	279.3'		0925
MW-43	S	202.59'	239.82'		0939
	D	214.73'	279.2'		0944
MW-39	S	207.11	293.42'		0955
	D	207.14	358.8'		1000
MW-45		17.7	212.45		1207

Locations with TP bolts: MW-4, MW-6, MW-14, MW-17, MW-28

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/6/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-01D **Purging/Sampling Device:** Compressed gas/MP-10H **Pump depth (ft bgs):** 384

Initial Static Water Level (feet btoc): 172.04 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 172.07 **QC Samples Collected:** NA

Purge Start Time: 08:04 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 09:00 **Controller Settings: Recharge:** 8 secs **Discharge:** 22 secs **Pressure:** 200 psi

Samplers' Signatures: Melanie Blanton **Cycles Per Minute:** 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0814	172.05	16.0	7.17	1025	6.03	187.0	2.04	300	
0819	172.05	16.0	7.17	1,028	6.11	188.9	1.46	300	
0824	172.07	15.7	7.16	1,033	6.31	191.4	1.20	300	
0829	172.09	15.7	7.16	1,034	6.25	187.4	0.68	300	
0834	172.10	15.7	7.16	1,036	5.97	183.8	0.54	300	
0839	172.07	15.8	7.16	1,038	5.98	181.9	0.32	300	
0844	172.07	15.9	7.15	1,036	6.04	180.1	0.28	300	3.2 gallons
0849	172.07	15.7	7.15	1,036	6.10	178.5	0.22	300	
0854	172.07	15.6	7.16	1,037	6.17	177.0	0.19	300	
0859	172.07	15.6	7.16	1,037	6.15	177.1	0.20	300	Total purged = 4.75 gal
		Melanie Blanton							

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

Previous controller settings: Recharge: 16 secs **Discharge:** 14 secs

Pressure: 180 psi **Cycles Per Minute:** ~~1~~ 2 MB **Flow Rate:** 300 mL/min → 0.08 gpm

Screened Interval: 184-224 ft bgs **Minimum purge volume:** 3.1 gallons → 40 mins

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ■ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/5/24

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-02

Purging/Sampling Device: Compressed gas/MP-10H **Pump depth (ft bgs):** 195

Initial Static Water Level (feet btoc): 170.09

Analytical Parameters: VOCs

Final Water Level (feet btoc): 170.07

QC Samples Collected: Field Duplicate FD02-GW

Purge Start Time: 14:50

Ferrous Iron (mg/L): NA **Allowable Drawdown (ft):** 0.3

Sample Time: 15:46

Controller Settings: Recharge: 40 secs **Discharge:** 20 secs **Pressure:** 130 psi

Samplers' Signatures: Mileva Blanton

Cycles Per Minute: 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. ~~mS~~ µs/cm	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
15:00	170.06	15.3	7.10	2.91	5.90	-45.5	14.9	140	
15:05	170.09	15.0	7.14	2.92	5.80	-13.6	8.23	140	
15:10	170.10	15.7	7.15	2.92	6.28	1.0	4.17	140	
15:15	170.09	15.9	7.15	2.92	6.18	3.5	4.20	140	
15:20	170.07	15.7	7.17	2.92	6.20	14.3	2.43	140	
15:25	170.07	14.8	7.17	2.92	5.98	17.5	4.38	140	
15:30	170.07	14.9	7.17	2.92	6.00	17.0	2.84	140	1.6 gallons
15:35	170.08	14.8	7.17	2.92	6.03	16.8	2.44	140	
15:40	170.07	14.9	7.15	2.92	6.10	17.2	1.17	140	
15:45	170.07	14.7	7.15	2.91	6.15	17.4	3.23	140	Total purged ~2.03 gal
		Mileva Blanton							

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

Previous controller settings: Recharge: 45 secs **Discharge:** 15 secs

Pressure: 130 psi **Cycles Per Minute:** 1 **Flow Rate:** 140 mL/min

Screened Interval: 175.5-202.5 ft bgs **Minimum purge volume:** 1.5 gallons @ 1528

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐

Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/11/24

Well ID: MW-03RA

Initial Static Water Level (feet btoc): NA

Final Water Level (feet btoc): NA

Purge Start Time: 0850

Sample Time: 10:45

Samplers' Signatures: Mariah Day Johnson

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** _____ **(Vented to)** _____

Purging/Sampling Device: ZIST/Compressed gas **Pump depth (ft bgs):** 215

Analytical Parameters: VOCs , Anions, Nitrate/Nitrite, Alkalinity, TOC, MEE, microbial

QC Samples Collected: MS/MSD

Ferrous Iron (mg/L): 0.06 mg/L **Allowable Drawdown (ft):** NA

Controller Settings: Recharge: 80 secs **Discharge:** 20 secs **Pressure:** _____ psi

Cycles Per Minute: _____

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
9:05	N/A	17.4	6.24	1751	5.34	97.7	6.67	50	
9:20	N/A	17.5	6.58	1644	4.52	-67.5	8.30	50	
9:35	N/A	17.4	6.72	1572	4.71	15.9	1.89	50	
9:50	N/A	17.9	6.75	1562	4.48	44.7	1.05	50	
10:05	N/A	18.8	6.73	1561	4.35	56.4	0.95	50	
10:20	N/A	18.5	6.72	1562	4.30	67.3	0.98	50	
10:25	N/A	18.9	6.72	1561	4.21	70.2	0.89	50	
10:30	N/A	19.2	6.72	1555	4.11	72.2	1.03	50	Min Purge
Total purged 0.85 gal									

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 80 secs **Discharge:** 20 secs

Pressure: 120 psi **Cycles Per Minute:** _____ **Flow Rate:** 75 mL/cycle

Screened Interval: 215-220 ft bgs **Minimum purge volume:** 0.8 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☑ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 09/11/2024 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) —

Well ID: MW-03RB Purging/Sampling Device: ZIST/Compressed gas Pump depth (ft bgs): 267

Initial Static Water Level (feet btoc): NA Analytical Parameters: VOCs , Anions, Nitrate/Nitrite, Alkalinity, TOC, MEE, microbial

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

Purge Start Time: 0855 Ferrous Iron (mg/L): 0.04 Allowable Drawdown (ft): NA

Sample Time: 1100 Controller Settings: Recharge: 80 secs Discharge: 30 secs Pressure: 120 psi

Samplers' Signatures: [signature] Cycles Per Minute: 0.55

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
0906	NA	16.9	7.59	1151	5.44	180.1	148	100	cloudy
0920	NA	17.2	7.21	1206	6.17	183.9	76.4	100	
0935	NA	16.9	7.14	1272	4.66	183.5	14.9	100	
0950	NA	17.2	7.14	1281	4.72	182.4	9.16	100	
0910:05	NA	18.2	7.14	1282	4.41	181.6	11.6	100	min purge met.
1023.	NA	18.7	7.14	1279	4.41	182.4	13.1	100	
1030	NA	18.8	7.14	1284	4.36	183.0	12.6	100	
1035	NA	18.9	7.14	1284	4.24	183.6	12.3	100	
1040	NA	19.0	7.14	1284	4.25	184.0	10.7	100	
1045	NA	19.0	7.14	1284	4.30	184.1	13.1	100	
1050	NA	19.2	7.14	1287	4.28	184.5	8.61	100	
1055	NA	19.3	7.14	1293	4.19	185.4	7.16	100	
1058	NA	19.4	7.14	1292	4.17	185.6	6.90	100	
1100									Sample Taken, Total Volume Purged ≈ 25 gal

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 80 secs Discharge: 30 secs

Pressure: 130 psi Cycles Per Minute: ____ Flow Rate: 150 mL/cycle

Screened Interval: 267-272 ft bgs Minimum purge volume: 0.9 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/11/24

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-03RC

Purging/Sampling Device: ZIST/Compressed gas **Pump depth (ft bgs):** 307

Initial Static Water Level (feet btoc): NA

Analytical Parameters: VOCs

Final Water Level (feet btoc): NA

QC Samples Collected: MS/MSD

Purge Start Time: 1400

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

Sample Time: 1530

Controller Settings: Recharge: 80 secs **Discharge:** 34 secs **Pressure:** 130 psi

Samplers' Signatures: Jae Borgiel

Cycles Per Minute: 0.53

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1405	NA	18.8	6.41	1076	0.46	183.7	101	150	
1420	NA	17.3	6.64	1048	0.18	-63.2	12.1	150	
1435	NA	16.7	7.17	1018	4.45	-31.6	39.8	150	
1445	NA	17.0	7.15	1018	4.19	29.8	19.0	156	
1450	NA	16.8	7.15	1016	4.45	40.5	17.6	150	
1455	NA	17.6	7.16	1024	4.54	47.6	14.7	156	
1500	NA	16.9	7.16	1021	4.51	55.1	14.8	150	Min Purged reached
1505	NA	16.8	7.15	1017	4.33	60.1	10.9	156	
1510	NA	16.9	7.15	1016	4.35	63.3	9.8	150	
1515	NA	16.7	7.12	1012	4.36	72.1	7.45	156	
1520	NA	16.8	7.13	1013	4.46	76.7	7.11	150	
1525	NA	16.7	7.15	1014	4.39	78.7	5.86	156	
1530		Sample collected 9/11/24							Total purged: 1.5 gal

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 80 secs **Discharge:** 34 secs

Pressure: 130 psi **Cycles Per Minute:** _____ **Flow Rate:** 150 mL/cycle

Screened Interval: 307-312 ft bgs **Minimum purge volume:** 1.1 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 09/11/2024 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** _____

Well ID: MW-03RD **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 359

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 1600 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** NA

Sample Time: 1740 **Controller Settings: Recharge:** 40 secs **Discharge:** 80 secs **Pressure:** 155 psi

Samplers' Signatures: Mara Day Johnson **Cycles Per Minute:** ——

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
~~1445~~ MOS 9/11	NA	16.9	7.17	1093	2.50	65.3	6.50	120	
1615 ~~1430~~ MOS 9/11	NA	15.7	7.12	1082	3.83	-14.7	3.08	120	
1630 ~~1445~~ MOS 9/11	NA	16.3	7.18	1062	4.37	23.8	1.51	120	
1645 ~~1500~~ MOS 9/11	NA	16.0	7.20	1063	4.47	53.1	1.06	120	
1700 ~~1520~~ MOS 9/11	NA	16.5	7.21	1049	4.36	46.5	0.59	120	
1710 ~~1501~~ MOS 9/11	NA	16.0	7.11	1062	4.20	77.9	0.66	120	
1715	NA	16.2	7.22	1054	4.12	83.5	1.53	120	min purge met
1720	NA	15.7	7.26	1055	4.17	90.8	0.87	120	
1725	NA	15.8	7.25	1061	4.12	95.5	1.60	120	
1730	NA	16.0	7.22	1058	4.17	98.5	0.86	120	
1735	NA								
1740	Sample								Total purge 1.6 gal

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

Previous controller settings: Recharge: 80 secs **Discharge:** 40 secs
Pressure: 155 psi **Cycles Per Minute:** _____ **Flow Rate:** 200 mL/cycle

Screened Interval: 359-364 ft bgs **Minimum purge volume:** 1.3 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/5/24

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-04

Purging/Sampling Device: Compressed gas/MP-10H **Pump depth (ft bgs):** 160

Initial Static Water Level (feet btoc): 134.82

Analytical Parameters: VOCs

Final Water Level (feet btoc): 134.95

QC Samples Collected: None

Purge Start Time: 12:59

Ferrous Iron (mg/L): NA **Allowable Drawdown (ft):** 0.3

Sample Time: 13:55

Controller Settings: Recharge: ~~20~~ MB 6 secs **Discharge:** ~~10~~ MB 24 secs **Pressure:** ~~100~~ 130 psi

Samplers' Signatures: Melanie Blotter

Cycles Per Minute: 2 MB

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. ~~us~~(µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
13:09	134.94	12.6	7.28	1.76	6.40	173.2	0.27	150	
13:14	134.96	12.7	7.25	1.76	6.91	181.9	0.42	150	
13:19	134.96	12.8	7.30	1.76	6.99	189.9	0.47	150	
13:24	134.97	12.6	7.27	1.76	7.04	189.4	0.53	150	
13:29	134.95	12.6	7.27	1.75	7.00	185.7	0.59	150	
13:34	134.94	12.8	7.30	1.76	7.02	182.0	0.70	150	
13:39	134.96	12.8	7.30	1.75	7.02	184.3	0.59	150	~~1.44 gallons~~ MB
13:44	134.94	12.6	7.29	1.75	7.07	187.5	0.71	150	~1.52 gallons
13:49	134.95	12.8	7.30	1.75	7.00	190.6	0.63	150	
13:54	134.95	12.6	7.28	1.75	6.98	192.1	0.55	150	Total purged ~2.2 gal
		Melanie Blotter							

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

Previous controller settings: Recharge: 20 secs **Discharge:** 10 secs

Pressure: 100 psi **Cycles Per Minute:** 2 **Flow Rate:** 150 mL/min

Screened Interval: 143-173 ft bgs **Minimum purge volume:** 1.4 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐

Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/8/24

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-05R

Purging/Sampling Device: Compressed gas/MP-10H **Pump depth (ft bgs):** 222

Initial Static Water Level (feet btoc): 213.70

Analytical Parameters: VOCs

Final Water Level (feet btoc): 213.69

QC Samples Collected: None

Purge Start Time: 1540

Ferrous Iron (mg/L): NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1636

Controller Settings: Recharge: 18 secs **Discharge:** 12 secs **Pressure:** 150 psi

Samplers' Signatures: Melissa Blevins

Cycles Per Minute: 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1550	213.74	16.0	6.82	1,556	7.56	94.1	6.19	200	
1555	213.74	15.9	6.95	1,553	7.26	55.7	5.90	200	
1600	213.71	15.9	6.85	1,553	7.17	46.0	4.61	200	
1605	213.68	15.6	6.85	1,550	7.05	39.0	3.39	200	
1610	213.70	15.8	6.85	1,547	7.04	36.3	2.19	200	
1615	213.68	15.3	6.85	1,545	6.93	30.2	1.61	200	
1620	213.67	15.2	6.89	1,542	6.89	30.8	2.28	200	2.0 gallons
1625	213.69	15.2	6.88	1,543	6.85	29.7	1.47	200	
1630	213.69	15.5	6.84	1,542	6.81	29.9	1.52	200	2.75 gallons purged
1635	213.69	15.5	6.86	1,541	6.80	29.5	2.16	200	
		Melissa Blevins							

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

Previous controller settings: Recharge: 30 secs **Discharge:** 10 secs

Pressure: 165 psi **Cycles Per Minute:** 1.5 **Flow Rate:** 160 mL/min

Screened Interval: 198-228 ft bgs **Minimum purge volume:** 1.9 gallons → 40 min @ 0.05 gpm

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐

Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/5/24

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-06

Purging/Sampling Device: Compressed gas/MP-10H **Pump depth (ft bgs):** 128

Initial Static Water Level (feet btoc): 116.40

Analytical Parameters: VOCs

Final Water Level (feet btoc): 116.62

QC Samples Collected: None

Purge Start Time: 11:10

Ferrous Iron (mg/L): NA **Allowable Drawdown (ft):** 0.3

Sample Time: 11:41

Controller Settings: Recharge: 15 secs **Discharge:** 15 secs **Pressure:** 105 psi

Samplers' Signatures: Miller Black

Cycles Per Minute: 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. mS(~~µs~~/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1120	117.73	12.3	7.29	1.31	6.51	106.7	0.42	250	
1125	116.59	12.2	7.30	1.31	6.30	99.5	0.39	250	
1130	116.58	12.4	7.31	1.31	6.30	94.9	0.22	250	1.32 gallons purged
1135	116.61	12.3	7.34	1.31	6.31	93.0	0.27	250	
1140	116.62	12.3	7.30	1.31	6.35	92.9	0.21	250	~2 gal purged total
		Miller Black							

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

Previous controller settings: Recharge: 15 secs **Discharge:** 15 secs

Pressure: 105 psi **Cycles Per Minute:** 2 **Flow Rate:** 250 mL/min

Screened Interval: 100-130 ft bgs **Minimum purge volume:** 1.2 gallons

~ 1.28

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐

Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** ~~9/6/24~~ 9/10/24 MB **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-08A **Purging/Sampling Device:** Compressed gas/Solinist **Pump depth (ft bgs):** 99

Initial Static Water Level (feet btoc): 61.10 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 61.12 **QC Samples Collected:** None

Purge Start Time: 10:20 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1142 **Controller Settings: Recharge:** 15 secs **Discharge:** 15 secs **Pressure:** 75 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 2

Time MB	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
									3.6 MB
10:50 ~~10:30~~	61.12	13.2	6.92	1,850	8.67	135	48.1	500	~~1.8~~ gallons purged - allowed...
11:01	61.12	13.6	6.91	1,851	8.20	152.7	38.7	500	turbidity to decrease.
11:06	61.12	13.4	6.90	1,850	8.17	154.3	29.5	500	
11:11	61.12	13.3	6.90	1,849	8.20	155.4	22.9	500	
11:16	61.12	13.2	6.90	1,847	8.13	159.3	20.6	500	
11:21	61.12	13.2	6.90	1,844	8.11	162.3	16.6	500	
11:26	61.12	13.3	6.92	1,846	8.10	160.4	13.1	500	
11:31	61.12	13.5	6.91	1,847	8.14	163.7	9.63	500	
11:36	61.12	13.3	6.90	1,850	8.03	165.3	9.11	500	
11:41	61.12	13.1	6.90	1,852	8.05	166.3	8.39	500	7.6 gallons purged.
~~11:46~~	MB								

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

Previous controller settings: **Vent:** 13 secs **Drive:** 17 secs
Pressure: 60 psi **Cycles Per Minute:** 2 **Flow Rate:** 400 mL/min ~0.1 gpm
Screened Interval: 91-106 ft bgs **Minimum purge volume:** 0.8 gallons → 8 mins

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/6/24

OVM: FID ☐ PID ■ **In Casing (ppm):** (Initial) 0.0 (Vented to) 0.0

Well ID: MW-08B

Purging/Sampling Device: Compressed gas/Solinist **Pump depth (ft bgs):** 190

Initial Static Water Level (feet btoc): 60.40

Analytical Parameters: VOCs

Final Water Level (feet btoc): 60.45

QC Samples Collected: None

Purge Start Time: 14:25

Ferrous Iron (mg/L): NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1516

Controller Settings: Recharge: 10 secs **Discharge:** 10 secs **Pressure:** 100 psi

Samplers' Signatures: [signature]

Cycles Per Minute: 3

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1435	60.43	13.9	7.23	1,026	6.48	55.4	86.3	300	
1440	60.46	13.8	7.26	1,027	6.40	67.1	64.3	300	
1445	60.46	13.9	7.25	1,028	6.41	75.7	29.3	300	1.6 gallons
1450	60.42	13.8	7.25	1,024	6.50	78.3	21.7	300	
1455	60.41	13.9	7.23	1,026	6.53	79.7	18.8	300	
1500	60.46	13.9	7.24	1,025	6.60	80.3	12.3	300	
1505	60.46	13.7	7.24	1,024	6.75	85.4	8.18	300	
1510	60.42	13.7	7.25	1,024	6.80	86.8	7.41	300	
1515	60.45	13.8	7.26	1,025	6.89	87.9	4.81	300	Total purged ~4 gals
		[signature]							

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

Previous controller settings: **Vent:** 10 secs **Drive:** 10 secs

Pressure: 90 psi **Cycles Per Minute:** 3 **Flow Rate:** 300 mL/min ~0.08 gpm

Screened Interval: 180-200 ft bgs **Minimum purge volume:** 1.5 gallons → 20 mins

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/13/24 **OVM:** FID ☐ PID ■ **In Casing (ppm):** (Initial) 0.0 (Vented to) —

Well ID: MW-08C **Purging/Sampling Device:** ZIST/Gas **Pump depth (ft bgs):** 304

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 0850 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1125 **Controller Settings: Recharge:** 46 secs **Discharge:** 14 secs **Pressure:** 140 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0855	NA	14.3	7.71	825	0.60	-187.5	19.2	175	Air hose fitting, very corroded
0900	NA	14.4	7.41	892	4.63	-70.5	Outside calibration	100	really high turbidity, water
1000	NA	14.4	7.38	879	3.77	-62.1	OCal	175	level not staying up, Purge
1030	NA	14.6	7.42	874	4.43	-26.7	956	175	water odor and PID went
1045	NA	14.4	7.35	869	4.92	-30.2	228	175	above 1.25 ppm. min Purge reached
1050	NA	14.4	7.44	871	4.30	-38.9	116	175	at 1000.
1055	NA	14.5	7.35	869	4.75	-37.1	83.1	175	
1100	NA	14.3	7.45	868	4.49	-45.1	66.7	175	
1115	NA	14.5	7.40	865	4.50	-42.7	60.5	175	
1120	NA	14.5	7.44	872	4.58	-40.3	59.2	175	
1123	NA	14.6	7.42	869	4.55	-40.1	56.5	175	
1125	Sample	Taken,							Turbidity >50 Sample taken
Total	Volume	Purged	3 gal						

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

Previous controller settings: **Vent:** 46 secs **Drive:** 14 secs

Pressure: 150 psi **Cycles Per Minute:** 1 **Flow Rate:** 125 mL/min

Screened Interval: 304-309 ft bgs **Minimum purge volume:** 1.1 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/5/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-12D **Purging/Sampling Device:** MP-50 **Pump depth (ft bgs):** 90

Initial Static Water Level (feet btoc): 55.42 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 55.39 **QC Samples Collected:** None

Purge Start Time: 1013 **Ferrous Iron (mg/L):** — **Allowable Drawdown (ft):** 0.3

Sample Time: 1048 **Controller Settings: Recharge:** 9.5 secs **Discharge:** 10.5 secs **Pressure:** 50 psi

Samplers' Signatures: Emma Holdiay **Cycles Per Minute:** 3

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1018	55.43	18.6	6.82	1424	4.32	229.9	1.37	50	D: 6 R: 14 CPM: 3
1023	55.41	16.5	6.95	1487	4.35	225.8	2.01	125	D: 9 R: 11 CPM 3
1028	55.44	16.3	7.01	1491	4.38	221.0	1.42	~~135~~ 150	D: 10.5 R: 9.5 CPM 3
1033	55.41	16.3	7.03	1494	4.47	218.3	1.14	~~150~~ 150	" min purge met
1038	55.42	16.3	7.07	1494	4.49	216.2	1.12	150	"
1043	55.41	16.2	7.04	1497	4.57	214.8	0.91	150	
1048	Sample								
Total purged: 0.9 gallons									

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

Previous controller settings: Recharge: 4 secs **Discharge:** 14 secs
Pressure: 55 psi **Cycles Per Minute:** 2 **Flow Rate:** 300 mL/min

Screened Interval: 88.5-93.5 ft bgs **Minimum purge volume:** 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☑
Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/7/24

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-13L

Purging/Sampling Device: MP-50 **Pump depth (ft bgs):** 155

Initial Static Water Level (feet btoc): 17.78

Analytical Parameters: VOCs

Final Water Level (feet btoc): 17.83

QC Samples Collected: Field Duplicate FD03-GW

Purge Start Time: 10:55

Ferrous Iron (mg/L): NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1131

Controller Settings: Recharge: 20 secs **Discharge:** 10 secs **Pressure:** 120 psi

Samplers' Signatures: [signature]

Cycles Per Minute: 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1100	17.80	15.1	7.17	1,322	7.76	59.2	24.1	110	
1105	17.81	15.0	7.12	1,318	7.80	60.3	20.3	110	
1110	17.82	14.8	7.11	1,309	7.81	61.6	19.5	110	
1115	17.83	14.8	7.09	1,311	7.84	72.4	12.3	110	0.6 gallons
1120	17.84	14.8	7.10	1,311	7.80	76.3	9.71	110	
1125	17.82	14.8	7.10	1,309	7.75	80.4	7.30	110	
1130	17.83	14.7	7.08	1,311	7.73	81.9	6.44	110	1 gallon purged
		[signature]							

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

Previous controller settings: Recharge: 20 secs **Discharge:** 10 secs → 0.03 ppm

Pressure: 120 psi **Cycles Per Minute:** 2 **Flow Rate:** 110 mL/min

Screened Interval: 150-160 ft bgs **Minimum purge volume:** 0.6 gallons → 20 mins

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐

Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: ~~9/7/24~~ 9/17/24

OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 20.9 (Vented to) 4.9

Well ID: MW-13D Purging/Sampling Device: MP-50 Pump depth (ft bgs): 82

Initial Static Water Level (feet btoc): 13.62' Analytical Parameters: VOCs

Final Water Level (feet btoc): 13.92' QC Samples Collected: MS/MSD

Purge Start Time: 8:36 Ferrous Iron (mg/L): — Allowable Drawdown (ft): 0.3

Sample Time: 9:14 Controller Settings: Recharge: 25 secs Discharge: 5 secs Pressure: 35 psi

Samplers' Signatures: [signature] Cycles Per Minute: 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
8:58	14.13	14.7	6.73	1240	3.78	140.0	~~23.5~~	150	
9:48	14.01	15.7	7.03	1247	5.86	62.4	~~23.5~~	100	
8:52	14.00	15.5	7.02	1241	5.42	74.9	8.85	100	
8:56	13.99	15.6	7.02	1240	5.71	85.7	5.15	100	
9:00	13.99	15.5	7.03	1239	5.89	91.4	3.36	100	
9:04	14.00	15.5	7.03	1238	5.81	95.8	2.29	100	
9:08	14.00	15.5	7.03	1237	5.97	99.5	1.29	100	OK to sample
									1.4 gal total volume purged
0914	Sample								

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

Previous controller settings: Recharge: 20 secs Discharge: 10 secs

Pressure: 40 psi Cycles Per Minute: 2 Flow Rate: 100 mL/min

Screened Interval: 79-84 ft bgs Minimum purge volume: 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☑

Total Purge Volume Recorded: ☑

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/7/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-13S **Purging/Sampling Device:** MP-50 **Pump depth (ft bgs):** 19

Initial Static Water Level (feet btoc): 14.21 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 16.08 **QC Samples Collected:** None

Purge Start Time: 9:25 **Ferrous Iron (mg/L):** — **Allowable Drawdown (ft):** 1.3

Sample Time: 1030 **Controller Settings: Recharge:** 56 secs **Discharge:** 4 secs **Pressure:** 20 psi

Samplers' Signatures: Emma Fordney **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0935	14.53	20.0	7.50	1674	7.42	147.0	14.7	50	
0940	14.75	17.7	7.05	2059	2.82	128.0	35.2	50	
0945	14.95	17.2	~~6.35~~ EG 9/16/24 6.93	2189	1.43	123.0	32.9	50	
0950	15.03	17.0	6.96	1683.50	1.09	117.5	25.0	50	
0955	15.11	17.0	6.98	2197	1.14	115.5	19.0	50	
1000	15.32	17.0	7.14	2192	1.46	114.2	15.0	50	
1005	15.45	17.3	6.99	2187	1.82	107.3	12.6	50	
1010	15.55	17.3	6.99	2187	1.89	109.0	9.63	50	new purge vol: 0.6 gal
1015	15.67	17.1	6.99	2177	2.07	103.8	9.84	50	min purge met
1020	15.81	17.2	6.99	2184	2.14	99.3	8.56	50	
1025	15.89	17.4	6.98	2202	2.24	94.1	7.64	50	n
1030	Sample								
	Total Vol: 0.9 gallons								

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

Previous controller settings: Recharge: 56 secs **Discharge:** 4 secs
Pressure: 20 psi **Cycles Per Minute:** 1 **Flow Rate:** 50 mL/min

Screened Interval: 15.5-20.5 ft bgs **Minimum purge volume:** 0.4 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☑
Total Purge Volume Recorded: ☑

Q2

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/10/~~2~~24 EG 9/10/24

OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) —

Well ID: MW-14S Purging/Sampling Device: MP-50 Pump depth (ft bgs): 12

Initial Static Water Level (feet btoc): 5.44 Analytical Parameters: VOCs

Final Water Level (feet btoc): 7.38 QC Samples Collected: None

Purge Start Time: 1005 Ferrous Iron (mg/L): _____ Allowable Drawdown (ft): 4

Sample Time: 1109 Controller Settings: Recharge: _____ secs Discharge: _____ secs Pressure: _____ psi

Samplers' Signatures: Emmett Folding Cycles Per Minute: _____

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1009	5.67	21.8	7.17	1511	3.35	186.0	20.6	50	
1014	5.85	21.7	7.06	1613	1.61	187.0	19.2	50	
1019	6.05	21.8	7.04	1638	1.05	183.7	14.2	50	Transducer: 16124/48000 79%
1024	6.15	21.9	7.02	1649	0.90	181.2	11.3	50	
1029	6.28	22.0	7.02	1650	0.71	179.3	11.9	50	EG 9/10/24
1034	6.49	22.1	7.03	1656	1.28	173.2	~~15:46~~ 10.9 EG 9/10/24	50	~~new min purge: 0.9~~
1039	6.53	22.1	7.01	1659	1.20	151.4		50	
1044	6.68	22.2	7.00	1665	1.09	155.9	8.68	50	~~min purge met~~ EG 9/10/24
1049	6.78	22.2	7.00	1677	0.95	157.2	6.85	50	
1054	6.90	22.3	7.00	1690	0.92	157.9	5.75	50	~~parameters stable~~ EG 9/10/24
1059	7.02	22.3	7.00	1700	0.78	158.1	4.22	50	min purge met
1104	7.14	22.3	7.00	1716	0.73	157.8	5.61	50	parameters stable
1109	sample								
	0.6	gallons	purged.						

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

Previous controller settings: Recharge: 57 secs Discharge: 3 secs
Pressure: 20 psi Cycles Per Minute: 1 Flow Rate: 50 mL/min

Screened Interval: 4.5-14.5 ft bgs Minimum purge volume: 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/10/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-14D **Purging/Sampling Device:** Artesian/Open Valve **Pump depth (ft bgs):** NA

Initial ~~Static Water Level~~ pressure (feet btoc): pressure: >100 in H_2O EG 9/10/24 **Analytical Parameters:** VOCs

Final ~~Water Level~~ pressure (feet btoc): 52 in H_2O EG 9/10/24 **QC Samples Collected:** None

Purge Start Time: 0858 **Ferrous Iron (mg/L):** — **Allowable Drawdown (ft):** NA

Sample Time: 0946 **Controller Settings: Recharge:** — secs **Discharge:** — secs **Pressure:** — psi

Samplers' Signatures: Emma Holtorg **Cycles Per Minute:** —

pressure (in H_2O)

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0901	78 in H_2O	25.8	7.15	1443	0.65	182.0	2.62	600	
0906	—	22.6	7.15	1424	0.93	196.0	0.75	600	
0911	62 in H_2O	20.6	7.16	1419	1.11	199.5	1.07	500	min purge met
0916	60 in H_2O	19.5	7.19	1418	1.58	201.2	0.55	500	
0921	58 in H_2O	18.8	7.18	1417	1.71	202.4	0.61	500	
0926	56 in H_2O	18.4	7.19	1415	1.69	175.5	0.33	400	
0931	52 in H_2O	18.3	7.22	1414	1.79	183.3	0.43	400	
0936	50 in H_2O	18.2	7.19	1413	1.68	186.6	0.54	400	
0941	49 in H_2O	18.2	7.20	1415	1.82	188.2	0.30	400	parameters stable
0946	sample		final pressure			(52 ~~psi~~ in H_2O EG 9/10/24			

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

Previous controller settings: Recharge: NA **Discharge:** NA
Pressure: NA **Cycles Per Minute:** NA **Flow Rate:** 350 mL/min

Screened Interval: 49-54 ft bgs **Minimum purge volume:** 0.4 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☑
Total Purge Volume Recorded: ☑ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/8/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-15D **Purging/Sampling Device:** MP-50 **Pump depth (ft bgs):** 72

Initial Static Water Level (feet btoc): 48.79 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 48.89 **QC Samples Collected:** None

Purge Start Time: 0943 **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** 0.3

Sample Time: 1040 **Controller Settings: Recharge:** 11 secs **Discharge:** 9 secs **Pressure:** 35 psi

Samplers' Signatures: Emma Fordham **Cycles Per Minute:** _____

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0945	48.89	14.4	6.61	1045	2.11	157.9	91.0	160	
0950	48.90	15.1	6.85	1527	3.65	133.0	91.5	160	
0955	48.89	15.0	6.89	1537	3.88	129.4	45.4	150	0.5 gallons
1000	48.87	15.0	6.90	1547	3.97	128.1	24.7	150	min purge met
1005	48.89	15.0	6.91	1557	4.20	127.6	17.5	150	1 gal purged
1010	48.89	15.0	6.91	1559	4.17	127.9	12.2	150	
1015	48.89	15.1	6.91	1564	4.32	128.1	11.9	150	
1020	48.89	15.0	6.91	1563	4.25	128.7	10.2	150	1.5 gal
1025	48.87	15.0	6.94	1563	4.29	130.0	8.02	150	
1030	48.87	15.0	6.92	1564	4.26	129.0	6.51	150	2.0
1035	48.87	15.0	6.93	1567	4.32	130.5	6.37	150	
	Total: 2.4 gal								
1040	sample								

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

Previous controller settings: Recharge: 11 **Discharge:** 9

Pressure: 40 **Cycles Per Minute:** 3 **Flow Rate:** 275 mL/min

Screened Interval: 69-74 ft bgs **Minimum purge volume:** 0.6 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☑
Total Purge Volume Recorded: ☑ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 8/8/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-15S **Purging/Sampling Device:** MP-50 **Pump depth (ft bgs):** 54

Initial Static Water Level (feet btoc): 47.27 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 47.27 **QC Samples Collected:** None

Purge Start Time: ~~9:28~~ 9:23 **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** 0.3

Sample Time: 10:18 **Controller Settings: Recharge:** 12 secs **Discharge:** 8 secs **Pressure:** ~~30~~ 35 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 3

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
9:28	47.29	14.8	6.88	1743	7.25	0.8	11.6	225	
9:33	47.30	14.8	6.89	1699	6.28	15.6	10.8	225	
9:38	47.32	14.8	6.89	1702	6.19	30.7	6.54	250	
9:43	47.33	14.8	6.90	1732	6.27	45.3	4.15	250	
9:48	47.35	14.8	6.90	1733	6.22	559	3.06	225	
9:53	47.34	14.7	6.90	1735	6.24	65.0	2.37	225	
9:58	47.32	14.7	6.90	1732	6.23	72.9	2.01	250	
10:03	47.33	14.7	6.90	1730	6.22	78.2	1.93	250	
10:08	47.30	14.7	6.90	1730	6.20	83.4	1.82	150	
10:13	47.29	14.7	6.90	1733	6.19	87.3	1.22	250	OK to sample 3.4 gallons purged

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

half gallons = 1/1

Previous controller settings: Recharge: 8 secs **Discharge:** 12 secs

Pressure: 30 psi **Cycles Per Minute:** 3 **Flow Rate:** 275 mL/min

Screened Interval: 52.5-55 ft bgs **Minimum purge volume:** 0.5 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/8/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** ----

Well ID: MW-16S **Purging/Sampling Device:** MP-50 **Pump depth (ft bgs):** 16

Initial Static Water Level (feet btoc): 11.21 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 11.47 **QC Samples Collected:** Field Duplicate FD04-GW

Purge Start Time: 1125 **Ferrous Iron (mg/L):** — **Allowable Drawdown (ft):** 0.3

Sample Time: 1232 / 1237 (FD04) **Controller Settings: Recharge:** 25 secs **Discharge:** 5 secs **Pressure:** 18 psi

Samplers' Signatures: Emma Adley **Cycles Per Minute:** 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1127	11.34	16.8	6.87	1357	4.56	-45.7	97.0	50	
1132	11.39	16.3	7.00	1398	5.17	-29.3	68.4	50	
1137	11.42	16.1	7.01	1413	5.49	-5.3	35.6	50	min purge met
1142	11.44	16.0	7.00	1413	5.45	13.9	23.5	60	
1147	11.45	15.9	7.01	1414	5.54	28.4	15.6	60	0.5 gal
1152	11.45	16.0	7.00	1416	5.52	39.0	7.97	60	
1157	11.45	16.0	7.01	1415	5.42	45.5	6.72	60	
1202	11.49	15.9	7.01	1413	5.50	51.8	7.08	60	
1207	11.49	15.9	7.01	1411	5.51	57.8	5.28	60	
1212	11.49	16.2	7.01	1423	5.30	62.0	3.77	60	1.0 gal
1217	11.45	17.0	7.02	1451	5.47	71.7	EA 9/10/24 7.87	60	
1222	11.45	16.7	7.03	1448	5.44	68.8	3.69	60	
1227	11.47	16.7	7.04	1440	5.38	69.5	3.73	60	
1232	Sample:		Total Vol:	1.4 gal					

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

Previous controller settings: Recharge: 25 secs **Discharge:** 5 secs
Pressure: 18 psi **Cycles Per Minute:** 2 **Flow Rate:** 150 mL/min

Screened Interval: 9-19 ft bgs **Minimum purge volume:** 0.2 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/8/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-16D **Purging/Sampling Device:** MP-50 **Pump depth (ft bgs):** 67

Initial Static Water Level (feet btoc): 10.22 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 10.23 **QC Samples Collected:** None

Purge Start Time: 11:20 **Ferrous Iron (mg/L):** — **Allowable Drawdown (ft):** 0.3

Sample Time: 11:45 **Controller Settings: Recharge:** 20 secs **Discharge:** 10 secs **Pressure:** 25 psi

Samplers' Signatures: Joel Ryan **Cycles Per Minute:** 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
11:25	10.24	15.0	7.18	878	5.56	133.0	5.89	150	
11:30	10:31	14.9	7.16	889	6.56	132.6	3.85	150	min purge met
11:35	10.32	14.6	7.15	884	6.14	133.2	3.12	150	
11:40	10.31	14.8	7.16	886	6.45	133.8	2.37	150	OK to sample
									1 gallon purged

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

½ gallons : 11

Previous controller settings: Recharge: 20 **Discharge:** 10

Pressure: 25 **Cycles Per Minute:** 2 **Flow Rate:** 200 mL/min

Screened Interval: 62-72 **Minimum purge volume:** 0.6 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/5/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) —

Well ID: MW-17S Purging/Sampling Device: MP-50 Pump depth (ft bgs): 20

Initial Static Water Level (feet btoc): 9.73 Analytical Parameters: VOCs

Final Water Level (feet btoc): 9.38 QC Samples Collected: None

Purge Start Time: 1735 Ferrous Iron (mg/L): — Allowable Drawdown (ft): 0.3

Sample Time: 1401 Controller Settings: Recharge: 55 secs Discharge: 5 secs Pressure: 20 psi

Samplers' Signatures: Emma Fordham Cycles Per Minute: 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1306	7.04	17.8	6.84	1528	2.56	-85.2	13.3	100	D: 10 R: 50 20 psi
1311	7.36	17.7	6.80	1558	1.33	-85.8	8.86	60	D: 5 R: 55
1316	7.55	17.9	6.81	1566	1.31	-81.8	8.48	60	" "
1321	7.62	18.0	6.81	1563	1.26	-76.2	8.60	60	
1326	7.88	17.8	6.80	1560	1.24	-67.5	6.58	60	
1331	8.01	17.9	6.80	1560	1.23	-61.5	6.87	60	
1336	8.20	17.9	6.81	1567	1.21	-54.5	6.39	60	
1341	8.48	17.9	6.80	1422	1.20	-48.9	6.22	60	min purgemet
1346	8.65	18.1	6.81	1419	1.19	-42.4	6.06	60	
1351	8.83	18.0	6.78	1418	1.21	-38.5	6.37	60	
1356	9.04	18.0	6.81	1422	~~1.16~~ EG 7/9/24 1.16	-33.6	6.88	60	
1401	Sample Time								
	Total Vol purged = 1.8 gal								

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

Previous controller settings: Recharge: 55 secs Discharge: 5 secs

Pressure: 20 psi Cycles Per Minute: 1 Flow Rate: 50 mL/min

Screened Interval: 6-21 ft bgs Minimum purge volume: 0.6 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/5/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-17D **Purging/Sampling Device:** Artesian/Open Valve **Pump depth (ft bgs):** 49

Initial Static Water Level (feet btoc): 1.77 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 1.79 **QC Samples Collected:** None

Purge Start Time: ~~1445~~ EG 9/5/24 ~~1425~~ 1450 EG 9/5/24 **Ferrous Iron (mg/L):** — **Allowable Drawdown (ft):** NA

Sample Time: 1545 **Controller Settings: Recharge:** 10 secs **Discharge:** 10 secs **Pressure:** 30 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 3

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1455	1.80	21.8	6.90	1414	7.31	46.0	25.8	50	D:8 R:12
1500	1.78	20.8	6.79	1378	5.99	44.4	27.5	60	D:10 R:10 psi 30
1505	1.80	19.8	6.82	1343	5.60	44.0	31.7	75	
1510	1.79	19.2	6.84	1327	5.52	43.4	63.5	100	
1515	1.80	19.2	6.78	1307	5.30	46.5	48.2	100	min. purge met
1520	1.81	18.8	6.84	1197	4.93	47.6	40.0	100	
1525	1.81	18.8	6.81	1214	4.93	49.6	32.4	100	
1530	1.81	18.6	6.84	1264	5.40	53.1	26.3	100	
1535	1.82	18.6	6.84	1236	5.45	54.2	25.1	100	
1540	1.82	18.8	6.84	1299	5.01	53.1	25.2	100	
1545	Sample								
Total purged: 1.3 gallons									

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

Previous controller settings: Recharge: 12 secs **Discharge:** 8 secs

Pressure: NA/30 psi **Cycles Per Minute:** NA/3 **Flow Rate:** 300 mL/min

Screened Interval: 44-54 ft bgs **Minimum purge volume:** 0.4 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☑
Total Purge Volume Recorded: ☑ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/7/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-18 **Purging/Sampling Device:** MP-50 **Pump depth (ft bgs):** 88

Initial Static Water Level (feet btoc): 82.42 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): ~~82.42~~ 82.54 EG 9/7/24 **QC Samples Collected:** Field Duplicate FD05-GW

Purge Start Time: 1407 **Ferrous Iron (mg/L):** — **Allowable Drawdown (ft):** 0.3

Sample Time: 1500 / 1505 **Controller Settings: Recharge:** 18 secs **Discharge:** 12 secs **Pressure:** 50 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1410	82.45	14.5	6.62	1655	7.50	4.4	79.6	200	
1415	82.51	14.0	7.01	1591	6.91	28.9	82.6	200	min purge met
1420	82.47	14.1	7.02	1567	7.22	50.2	33.5	250	
1425	82.48	13.6	7.05	1556	6.96	64.0	17.6	250	
1430	82.49	13.7	7.01	1563	6.90	72.9	10.1	250	
1435	82.48	13.7	7.01	1563	6.91	78.3	12.8	250	
1440	82.52	13.8	7.00	1567	6.80	85.1	8.76	250	2.5 gallons
1445	82.44	13.7	7.00	1565	6.60	89.6	9.18	250	
1450	82.51	13.8	6.99	1570	6.64	94.9	7.54	250	3.0 gal
1455	82.53	13.7	6.97	1571	~~6.96~~ 6.58 EG 9/7/24	97.7	5.66	250	
1500	Sample	MW-18							
1505	Sample	FD05							

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

Previous controller settings: Recharge: 18 secs **Discharge:** 12 secs
Pressure: 50 psi **Cycles Per Minute:** 2 **Flow Rate:** 170 mL/min

Screened Interval: 80-90 ft bgs **Minimum purge volume:** 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/7/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-19 **Purging/Sampling Device:** MP-50 **Pump depth (ft bgs):** 89

Initial Static Water Level (feet btoc): 81.73' **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 81.79' **QC Samples Collected:** Field Duplicate FD06-GW

Purge Start Time: 12:38 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 13:35 **Controller Settings: Recharge:** 18 secs **Discharge:** 12 secs **Pressure:** 55 psi

Samplers' Signatures: Joel Ryan **Cycles Per Minute:** 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
12:51	81.75	16.1	6.26	1715	5.97	9.2	331	150	
12:56	81.76	15.5	6.80	1534	6.07	9.9	61.4	140	
13:01	81.83	16.4	6.91	1496	6.35	24.9	22.8	200	
13:06	81.76	14.5	6.96	1453	6.57	36.8	11.9	150	
13:11	81.79	14.4	6.98	1453	6.54	42.8	7.02	225	
13:16	81.79	14.3	6.98	1451	6.71	50.1	3.16	230	
13:21	81.86	14.3	6.99	1452	6.70	57.9	2.92	220	
13:26	81.79	14.3	6.99	1455	6.78	64.3	2.24	200	
13:31	81.79	14.3	6.99	1453	6.69	67.6	3.02	200	OK to sample
									2.4 gallons purged
									Field dup 06 ~~13:36~~ 13:40

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

Previous controller settings: Recharge: 18 secs **Discharge:** 12 secs

Pressure: 55 psi **Cycles Per Minute:** 2 **Flow Rate:** 300 mL/min

Screened Interval: 84-94 ft bgs **Minimum purge volume:** 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐

Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/7/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-20D **Purging/Sampling Device:** MP-50 **Pump depth (ft bgs):** 124

Initial Static Water Level (feet btoc): 83.49' **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 83.50' **QC Samples Collected:** None

Purge Start Time: 11:29 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 12:06 **Controller Settings: Recharge:** 20 secs **Discharge:** 10 secs **Pressure:** 55 psi

Samplers' Signatures: John Fyn **Cycles Per Minute:** 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
11:38	83.49	15.8	7.18	849	~~6~~ 5.95	43.7	5.48	100	
11:43	83.50	16.0	7.19	866	5.94	55.2	4.27	100	
11:48	83.50	15.9	7.19	881	5.77	69.1	2.41	100	
11:53	83.50	15.9	7.19	883	5.94	77.0	2.01	100	
11:58	83.51	15.8	7.20	882	5.97	81.7	1.15	100	
12:03	83.51	15.8	7.20	884	5.87	85.4	0.88	100	OK to sample
									1.2 gallons purged

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

Previous controller settings: **Recharge:** 20 secs **Discharge:** 10 secs
Pressure: 70 psi **Cycles Per Minute:** 2 **Flow Rate:** 100 mL/min

Screened Interval: 119-129 ft bgs **Minimum purge volume:** 1.0 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

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GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/7/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) —

Well ID: MW-20S Purging/Sampling Device: MP-50 Pump depth (ft bgs): 88

Initial Static Water Level (feet btoc): 83.84 Analytical Parameters: VOCs

Final Water Level (feet btoc): 83.95 QC Samples Collected: None

Purge Start Time: 1135 Ferrous Iron (mg/L): — Allowable Drawdown (ft): 0.3

Sample Time: 1202 Controller Settings: Recharge: 15 secs Discharge: 15 secs Pressure: 50 psi

Samplers' Signatures: Emma Harding Cycles Per Minute: 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1137	83.92	17.5	6.97	996	10.21	68.7	11.6	160	D:15 R:15 50 psi
1142	83.94	14.8	7.02	944	5.54	57.3	9.44	160	
1147	84.02	14.5	7.10	930	4.26	55.7	6.62	160	
1152	83.98	14.5	7.08	926	4.28	58.7	4.00	160	min purge met
1157	~~83.45~~ 83.97 EG 9/7/24	14.4	7.07	928	4.27	62.1	2.94	160	
1202	sample								
Total	volume: 1.4 gallons								

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

Previous controller settings: Recharge: 15 secs Discharge: 15 secs

Pressure: 50-55 psi Cycles Per Minute: 2 Flow Rate: 90 mL/min

Screened Interval: 79.5-89.5 ft bgs Minimum purge volume: 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/8/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.5 (Vented to) 0.0

Well ID: MW-21 Purging/Sampling Device: MP-50 Pump depth (ft bgs): 70

Initial Static Water Level (feet btoc): 64.34 Analytical Parameters: VOCs

Final Water Level (feet btoc): 64.36 QC Samples Collected: None

Purge Start Time: 1330 Ferrous Iron (mg/L): — Allowable Drawdown (ft): 0.3

Sample Time: 1431 Controller Settings: Recharge: 13 secs Discharge: 7 secs Pressure: 25 psi

Samplers' Signatures: Emma Fortberg Cycles Per Minute: 3

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1341	64.35	19.8	5.39	1913	8.34	45.1	235	75	R13 D7 35 psi
1346	64.36	17.6	7.02	1521	7.15	1.7	61.5	100	
1351	64.36	17.4	7.06	1506	7.28	14.8	41.2	100	
1356	64.35	17.0	7.06	1491	7.39	31.5	23.3	125	0.5 gal
1401	64.35	16.9	7.07	1493	7.31	42.7	25.6	100	min Purge met
1406	64.36	17.3	7.08	1512	7.20	50.8	15.1	100	
1411	64.37	17.7	7.07	1522	7.24	56.4	11.0	100	
1416	64.37	17.9	7.08	1525	7.22	59.8	10.42	100	1 gal
1421	64.38	17.9	7.08	1530	7.12	61.7	5.43	100	
1426	64.36	17.8	7.09	1532	7.17	63.4	6.96	100	
1431	Sample								

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

Previous controller settings: Recharge: 13 secs Discharge: 7 secs
Pressure: 25 psi Cycles Per Minute: 3 Flow Rate: 100 mL/min

Screened Interval: 62-72 ft bgs Minimum purge volume: 0.6 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/8/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-22 **Purging/Sampling Device:** MP-50 **Pump depth (ft bgs):** 72

Initial Static Water Level (feet btoc): 62.93 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 62.95 **QC Samples Collected:** None

Purge Start Time: 1459 **Ferrous Iron (mg/L):** — **Allowable Drawdown (ft):** 0.3

Sample Time: 1542 **Controller Settings: Recharge:** 13 secs **Discharge:** 17 secs **Pressure:** 35 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1502	62.96	17.8	6.84	1432	9.87	82.5	380	150	
1507	62.95	15.2	7.05	1281	7.36	63.1	128	150	
1512	62.95	15.6	7.42	1077	7.21	58.5	47.4	150	
1517	62.95	15.8	7.21	844	7.22	81.9	17.6	150	0.5 gallons
1522	62.95	15.3	7.07	850	6.82	66.6	13.4	175	
1527	62.95	15.6	7.08	849	6.86	61.8	9.48	150	
1532	62.95	15.3	7.07	849	6.90	62.3	7.47	150	
1537	62.95	15.2	7.07	852	6.98	65.4	6.13	150	
1542	Sample								
	1.3	gal total							

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

Previous controller settings: Recharge: 13 secs **Discharge:** 17 secs
Pressure: 35 psi **Cycles Per Minute:** 2 **Flow Rate:** 300 mL/min

Screened Interval: 64-74 ft bgs **Minimum purge volume:** 0.6 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/12/24

OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) _____

Well ID: MW-23A Purging/Sampling Device: ZIST/Compressed gas Pump depth (ft bgs): 210

Initial Static Water Level (feet btoc): NA Analytical Parameters: VOCs

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

Purge Start Time: 10:42 Ferrous Iron (mg/L): N/A Allowable Drawdown (ft): NA

Sample Time: 13:50 Controller Settings: Recharge: 120 secs Discharge: 20 secs Pressure: 116 psi

Samplers' Signatures: _____ Cycles Per Minute: 35

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
11:20	NA	20.9	6.67	1801	4.52	135.1	5.16	35	
11:25	NA	20.5	6.70	1822	4.62	135.5	5.32	35	
11:30	NA	20.6	6.51	1859	4.30	148.9	24.3	35	Min Purged
11:35	NA	20.7	6.87	1856	4.07	117.1	47.3	35	
11:46	NA	20.8	6.75	1867	4.00	111.1	53.8	35	
11:45	NA	21.1	6.54	1718	3.87	114.6	51.9	10	
1150	NA	21.1	6.51	1873	3.82	111.5	52.7	10	
1155							65.0		Paused Purge at 12:06
1217 Restarted purge.									
13:05	NA	19.9	7.07	1799	4.18	109.3	13.6	15	
13:10	NA	19.8	7.05	1798	4.15	107.9	17.8	15	
13:15	NA	20.1	7.02	1795	4.16	111.0	12.3	15	
13:20	NA	20.1	7.03	1791	3.92	109.9	10.9	15	
13:25	NA	20.0	7.03	1812	3.94	110.5	9.62	15	

~~13:30~~

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs Discharge: 20 secs
Pressure: 110 psi Cycles Per Minute: 0.4 Flow Rate: 50 mL/cycle

Screened Interval: 210-220 ft bgs Minimum purge volume: 0.1 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/12/24

Well ID: MW-23A

Initial Static Water Level (feet btoc): NA

Final Water Level (feet btoc): NA

Purge Start Time: 10:42

Sample Time: 13:50

Samplers' Signatures:

OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to)

Purging/Sampling Device: ZEST/compressed gas Pump depth (ft bgs): 210

Analytical Parameters: VOCs

QC Samples Collected: None

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

Controller Settings: Recharge: 120 secs Discharge: 20 secs Pressure: 110 psi

Cycles Per Minute: 35

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1330	NA	20.0	7.03	1814	4.14	110.7	11.7	15	
1333	NA	20.1	7.03	1800	4.68	111.0	10.2	15	
1336	NA	20.1	7.03	1791	4.18	111.7	8.98	15	
1339	NA	20.0	7.02	1793	4.25	111.8	8.21	15	
1341	NA	20.0	7.02	1793	4.17	112.3	7.85	15	Total Purge 1 L

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

Previous controller settings: Recharge: 120 secs Discharge: 26 secs
Pressure: 110 psi Cycles Per Minute: 0.4 Flow Rate: 50 mL/min

Screened Interval: 210-220 ft bgs Minimum purge volume: 0.1 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/12/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-23B **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 250

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 1038 **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** NA

Sample Time: 1227 **Controller Settings: Recharge:** _____ secs **Discharge:** _____ secs **Pressure:** _____ psi

Samplers' Signatures: _____ **Cycles Per Minute:** _____

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1137	—	21.5	7.65	974	7.09	193.6	106	150	R:120 D:35 130 psi
1152	—	21.5	7.13	1379	7.12	194.7	13.2	150	min purge met
1157	—	21.5	7.12	1388	5.28	194.4	13.4	150	
1202	—	21.2	7.12	1392	5.31	169.8	13.0	150	
1207	—	21.2	7.11	1389	5.17	174.3	10.9	150	
1212	—	21.4	7.10	1391	4.91	176.4	7.89	150	
1217	—	21.2	7.11	1392	4.92	177.2	6.86	150	
1222	—	20.9	7.10	1393	4.88	177.8	5.93	150	
1227	Sample								

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs **Discharge:** 35 secs
Pressure: 130 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 150 mL/cycle

Screened Interval: 250-260 ft bgs **Minimum purge volume:** 0.2 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/12/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-23C **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 348

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 1320 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** NA

Sample Time: 1535 **Controller Settings: Recharge:** 130 secs **Discharge:** 23 secs **Pressure:** 130 psi

Samplers' Signatures: Maria Day Johnson **Cycles Per Minute:**

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1331	—	21.5	7.14	1024	4.73	154.3	6.77	50	
1346	—	21.5	6.94	1036	2.95	166.0	5.08	50	
~~1357~~ 1401	—	21.5	6.76	1039	3.03	171.7	2.70	50	
1416	—	21.2	6.84	1057	1.74	-5.8	2.53	50	
1445	—	21.2	7.05	1027	2.03	-5.7	29.3	50	
1456	—	21.2	7.07	1021	1.55	-16	25.5	50	min purge met
1503	—	21.5	7.11	1014	1.97	3.5	18.4	50	
1511	—	21.8	7.10	1015	1.76	8.0	14.7	50	
1519	—	22.5	7.12	1,012	1.50	17.7	9.84	50	
1524	—	22.9	7.11	1,008	1.58	19.9	9.71	50	
1529		23.1	7.12	1,012	1.56	20.4	8.97	50	Total purged 0.7 gal.

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: **Recharge:** 120 secs **Discharge:** 23 secs

Pressure: 130 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 50 mL/cycle

Screened Interval: 348-358 ft bgs **Minimum purge volume:** 0.5 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/8/24

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-24

Purging/Sampling Device: Solinst 407 BP/Gas **Pump depth (ft bgs):** 211

Initial Static Water Level (feet btoc): 184.42

Analytical Parameters: VOCs

Final Water Level (feet btoc): 184.43

QC Samples Collected: None

Purge Start Time: 0903

Ferrous Iron (mg/L): NA **Allowable Drawdown (ft):** 0.3

Sample Time: 0954

Controller Settings: Recharge: _____ secs **Discharge:** _____ secs **Pressure:** _____ psi

Samplers' Signatures: Miller B

Cycles Per Minute: 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0913	184.45	16.0	7.33	1,255	4.94	130.3	13.9	175	
0918	184.43	16.0	7.35	1,256	4.90	125.8	1.60	175	
0923	184.43	16.0	7.34	1,256	4.84	124.7	0.97	175	
0928	184.43	15.9	7.34	1,256	4.80	123.9	0.56	175	
0933	184.43	15.8	7.34	1,255	4.85	122.9	0.43	175	
0938	184.43	15.9	7.34	1,254	4.80	121.1	0.47	175	1.8 gallons
0943	184.43	16.0	7.30	1,260	4.83	123.9	0.40	175	
0948	184.43	15.9	7.28	1,265	4.90	123.2	0.33	175	2.5 gallons
0953	184.43	15.9	7.23	1,266	4.96	124.0	0.30	175	↓
		Miller B							

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

Previous controller settings: Recharge: 30 secs **Discharge:** 20 secs

Pressure: 145 psi **Cycles Per Minute:** 1.5 **Flow Rate:** 175 mL/min → 0.05 gpm

Screened Interval: 209.5-239.5 ft bgs **Minimum purge volume:** 1.8 gallons → 35 mins

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐

Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/7/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-25A **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 201

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 0920 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** NA

Sample Time: 1150 **Controller Settings: Recharge:** 120 secs **Discharge:** 30 secs **Pressure:** 115 psi

Samplers' Signatures: Jacob Moore **Cycles Per Minute:** 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
0945	NA	20.0	7.07	1858	5.04	204.0	31.7	60	
1000	↓	20.3	6.99	1862	4.31	87.4	196	↓	
1015	↓	20.7	6.98	1849	4.18	50.6	71.6	↓	
1030	↓	21.0	6.98	1849	4.32	81.0	33.4	↓	
1045	↓	21.7	6.98	1848	4.31	111.5	20.4	↓	
1100	↓	22.2	6.98	1848	3.75	129.1	12.8	↓	
1105	↓	22.3	6.98	1848	4.09	137.3	15.6	↓	
1110	↓	22.9	6.98	1847	4.19	145.6	11.6	↓	
1115	↓	22.9	6.98	1850	4.14	151.2	11.2	↓	Min purge
1120	↓	23.1	6.98	1852	4.17	155.9	7.64	↓	
1125	↓	22.9	6.97	1856	4.21	160.8	7.26	↓	
1130	↓	23.2	6.97	1849	4.16	164.4	6.58	↓	
1150									Sample - total purge 1gal

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs **Discharge:** 24 secs
Pressure: 110 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 75 mL/cycle

Screened Interval: 201-211 ft bgs **Minimum purge volume:** 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ■ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/7/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: MW-25B Purging/Sampling Device: ZIST/Compressed gas Pump depth (ft bgs): 231

Initial Static Water Level (feet btoc): NA Analytical Parameters: VOCs

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

Purge Start Time: 1150 Ferrous Iron (mg/L): NA Allowable Drawdown (ft): NA

Sample Time: JPB ~~1150~~ 1325 Controller Settings: Recharge: ~~30~~ 120 secs Discharge: 30 secs Pressure: 120 psi

Samplers' Signatures: 9/7/24 [signature] JPB 9/7/24 Cycles Per Minute: 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1155	NA	20.4	6.85	2870	1.50	222.2	1.98	100	
1210	NA	20.8	6.95	2870	0.72	127.6	20.0	100	
1225	NA	21.6	6.99	2869	1.75	93.1	65.0	100	
1240	NA	22.4	7.04	2850	2.35	161.3	59.8	100	
1255	NA	22.0	7.05	2854	2.59	178.9	19.5	100	
1305	NA	21.9	7.07	2843	2.67	181.3	10.2	100	min Purge met
1310	NA	21.5	7.07	2843	2.74	181.5	7.96	100	
1315	NA	21.5	7.07	2834	2.75	183.0	4.29	100	
1320	NA	21.4	7.07	2838	2.78	183.2	5.46	100	
1325	Sample	Taken							
Total	Volume	purged	0.95	gal					

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs Discharge: 30 secs

Pressure: 120 psi Cycles Per Minute: 0.4 Flow Rate: 150 mL/cycle

Screened Interval: 231-241 ft bgs Minimum purge volume: 0.8 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/7/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-25C **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 308

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 0915 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** NA

Sample Time: 1050 **Controller Settings: Recharge:** 120 secs **Discharge:** 40 secs **Pressure:** 140 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
9:30	NA	18.4	8.02	2357	3.78	197.7	13.7	150	
9:45	NA	18.4	8.93	2550	2.55	181.5	6.73	150	
10:00	NA	19.1	7.36	2563	3.04	187.5	1.58	150	
10:15	NA	19.2	7.31	2560	3.25	183.4	1.22	150	
10:30	NA	19.4	7.27	2562	3.74	188.2	1.16	150	
10:35	NA	19.2	7.27	2563	3.46	190.9	0.89	150	min Purge met
10:40	NA	19.4	7.25	2569	3.50	192.2	0.80	150	
10:45	NA	19.3	7.27	2564	3.51	193.6	0.73	150	
10:50	Sample	Taken							
Total	Volume	Purged	1.25	gal					

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)
Previous controller settings: Recharge: 120 secs **Discharge:** 40 secs
Pressure: 140 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 180 mL/cycle

Screened Interval: 307.5-317.5 ft bgs **Minimum purge volume:** 1.1 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/7/24-9/8/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-26A **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 205

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 1505 on 9/7, 0850 on 9/8 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** NA

Sample Time: 1320 **Controller Settings: Recharge:** 210 secs **Discharge:** 20 secs **Pressure:** 120 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 0.26

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments	
1550	NA	27.9	7.02	2060	4.25	144.8	0.6	30		
1610		24.2	6.92	2105	4.18	153.8	6.74	↓		
1630		27.6	7.00	2091	4.13	101.0	70.3	↓	Pause purging - total vol 663 mL	9/7
0910		22.5	7.06	2045	4.62	237.7	39.6	30	Resume purging 9/8	9/8
0930		22.8	7.03	1980	4.46	222.3	46.9	↓		
0950		24.1	7.00	1967	4.19	202.0	25.1	↓		
1010		24.3	6.99	1967	4.16	196.3	17.7	↓		
1030		25.4	7.00	1971	4.01	162.1	5.13	↓		
1100		25.6	6.99	1973	3.63	168.7	4.57	20	Flow rate slowing, no settings changes	
1130		26.7	7.00	1970	3.21	170.0	2.69	20		
1200		27.4	6.97	1988	3.24	166.2	8.00	30	Flow rate increased, no settings changes	
1230		26.4	6.97	1976	3.30	158.6	1.32	↓		
1245		26.0	6.96	1974	3.40	164.3	1.49	↓		
1250		25.8	6.97	1975	3.40	165.2	1.19	↓		

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 180 secs **Discharge:** 20 secs
Pressure: 120 psi **Cycles Per Minute:** 0.3 **Flow Rate:** 75 mL/cycle

Screened Interval: 205-215 ft bgs **Minimum purge volume:** 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/8/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: MW-26A cont. Purging/Sampling Device: ZIST Pump depth (ft bgs): 205

Initial Static Water Level (feet btoc): NA Analytical Parameters: VOCs

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

Purge Start Time: 0850 on 9/8 Ferrous Iron (mg/L): NA Allowable Drawdown (ft): NA

Sample Time: 1320 Controller Settings: Recharge: 210 secs Discharge: 20 secs Pressure: 120 psi

Samplers' Signatures: Bree Maw Cycles Per Minute: 0.26

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1300	NA	26.1	6.98	1970	3.75	146.9	1.03	30	Min purge reached @ 0.7 gal
1305		26.2	6.97	1981	3.54	154.9	1.01		
1310		26.1	6.97	1981	3.53	156.3	0.91		
1320									Sample, low flow under 40mL, multiple cycles to fill VOA

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

Previous controller settings: Recharge: _____ secs Discharge: _____ secs

Pressure: _____ psi Cycles Per Minute: _____ Flow Rate: _____ mL/min

Screened Interval: 205-215 ft bgs Minimum purge volume: 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/8/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: MW26-B Rebuild of water Column Purging/Sampling Device: ZiSt Pump depth (ft bgs): _____

Initial Static Water Level (feet btoc): NA Analytical Parameters: NA

Final Water Level (feet btoc): NA QC Samples Collected: NA

Purge Start Time: 0930 - Rebuild began Ferrous Iron (mg/L): NA Allowable Drawdown (ft): _____

Sample Time: N/A Controller Settings: Recharge: NA secs Discharge: NA secs Pressure: NA psi

Samplers' Signatures: Dave Bergeron Cycles Per Minute: NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0930	10	10s/120s	no movement		1006	50	30s/120s	no movement	
0940	10	20s/120s	no movement		1008	60	10s/120s	no movement	
0942	10	30s/120s	no movement		1010	60	20s/120s	no movement	
0944	20	10s/120s	no movement		1012	60	30s/120s	no movement	
0946	20	20s/120s	no movement		1014	70	10s/120s	no movement	
0948	20	30s/120s	no movement		1016	70	20s/120s	no movement	
0950	30	10s/120s	no movement		1018	70	30s/120s	no movement	
0952	30	20s/120s	no movement		1020	80	10s/120s	no movement	
0954	30	30s/120s	no movement		1030	80	20s/120s	no movement	
0956	40	10s/120s	no movement		1055	80	30s/120s	no movement	
0958	40	20s/120s	no movement		1125	90	10s/120s	no movement	
1000	40	30s/120s	no movement		1155	90	20s/120s	no movement	
1002	50	10s/120s	no movement		1210	90	30s/120s	no movement	
1004	50	20s/120s	no movement		1225				water Column restored, Breakthrough again next cycle

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

Previous controller settings: Recharge: _____ secs Discharge: _____ secs

Pressure: _____ psi Cycles Per Minute: _____ Flow Rate: _____ mL/min

Screened Interval: _____ ft bgs Minimum purge volume: _____ gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/13/2024 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) _____

Well ID: MW-26B Purging/Sampling Device: _____ Pump depth (ft bgs): _____

Initial Static Water Level (feet btoc): _____ Analytical Parameters: _____

Final Water Level (feet btoc): _____ QC Samples Collected: _____

Purge Start Time: _____ Ferrous Iron (mg/L): _____ Allowable Drawdown (ft): _____

Sample Time: _____ Controller Settings: Recharge: _____ secs Discharge: _____ secs Pressure: _____ psi

Samplers' Signatures: _____ Cycles Per Minute: _____

PSI RID Comments

~~Time~~	~~Water Level (ft btoc)~~	~~Temperature (Degrees C)~~ MD 9/13	~~pH~~ MD 9/13	~~Specific Cond (µs/cm)~~	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0849	30 PSI	10s/120s	no movement						
0856	30PSI	20s/120s	no movement						
0859	30 PSI	30s/120s	no movement						
0901	60 PSI	10s/120s	no movement						
0906	60 PSI	20s/120s	no movement						
	60 PSI	30s/120s	no movement						
0919	80 psi	10s/120s	no movement						
0921	80 psi	20s/120s	no movement						
0925	80 psi	30s/120s	no movement						
0935	100psi	10s/120s EG, 9/13/24	~~no movement~~ bubbles, first cycle at setting						
0957	100 psi	20s/120s	minimal movement						
~~1532~~ 1032	100 PSI	30s/120s	no movement.						
1047	120 PSI	10s/120s	no movement						
1100	Shut water								

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

Previous controller settings: Recharge: _____ secs Discharge: _____ secs

Pressure: _____ psi Cycles Per Minute: _____ Flow Rate: _____ mL/min

Screened Interval: _____ ft bgs Minimum purge volume: _____ gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/8/24

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-26B **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 235

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 0900 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** NA

Sample Time: 13:03 **Controller Settings: Recharge:** 120 secs **Discharge:** 20 secs **Pressure:** 100 psi

Samplers' Signatures: Joe Borgese **Cycles Per Minute:**

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
0915	NA	17.3	7.00	1427	2.23	-59.9	17.9	100	inconsistant flow
0930									Breakthrough, 1.5L purged
1225	Total	purge @ breakthrough #	2 = 2.1	Liters					water column restored, breakthrough again
1350									Resume, water column rebuild #2
1609									water column rebuilt
1615									Breakthrough #3 PSI: 100, R:120s D:25s
9/13 1118	Purge	restarted.							PSI ~ 100
1127	NA	21.9	7.02	1466	1.95	172.0	3.39	75	
1133	NA	20.8	6.99	1436	1.92	146.1	5.25	75	MNA purge met
1138	NA	20.6	6.9	1421	2.08	132.6	4.70	75	
1143	NA	20.7	6.81	1416	2.31	142.6	3.73	75	
1148	NA	20.7	6.98	1413	2.53	~~135~~ 137.5	2.14	75	
1153	NA	20.6	6.76	1411	2.74	~~130~~ 147.3	1.75	75	
1158	NA	20.6	7.01	1402	2.91	135.7	1.64	75	
1203	NA	20.8	6.98	1403	3.45	127.2	2.24	75	

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs **Discharge:** 25 secs
Pressure: 140 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 125 mL/cycle

Screened Interval: 235-245 ft bgs **Minimum purge volume:** 0.8 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ■
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/13/24

OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: MW-26B

Purging/Sampling Device: ZIST Pump depth (ft bgs): 235

Initial Static Water Level (feet btoc): _____

Analytical Parameters: VOCs

Final Water Level (feet btoc): _____

QC Samples Collected: None

Purge Start Time: _____

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

Sample Time: 13:03

Controller Settings: Recharge: 120 secs Discharge: 20 secs Pressure: 100 psi

Samplers' Signatures: _____

Cycles Per Minute: _____

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
12:08	NA	20.3	6.97	944	3.27	127.7	1.60	75	
12:13		20.7	6.88	1403	3.36	131.7	1.76	75	
12:18		20.8	6.77	1394	3.35	137.9	1.26	75	
12:23		20.7	6.62	1401	3.44	147.9	1.40	75	
12:28		20.9	6.43	1399	3.43	154.9	9.32	75	
1233		21.1	6.31	1399	3.49	159.2	1.81	75	
1238		21.1	6.09	901	3.58	172.4	1.20	75	
1243		21.1	5.85	1397	3.55	189.4	1.15	75	
1248		21.0	5.59	1397	3.45	203.7	1.06	75	
1253		21.0	5.48	1375	3.50	207.3	0.76	75	
1258	↓	21.1	5.49	1320	3.52	210.6	0.76	75	Total purged 1.2 gallons

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

Previous controller settings: Recharge: _____ secs Discharge: _____ secs

Pressure: _____ psi Cycles Per Minute: _____ Flow Rate: _____ mL/min

Screened Interval: _____ ft bgs Minimum purge volume: _____ gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/7/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-26C **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 315

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 1452 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** NA

Sample Time: 1620 **Controller Settings: Recharge:** 120 secs **Discharge:** 45 secs **Pressure:** 140 psi

Samplers' Signatures: Jose Borrego **Cycles Per Minute:** 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1500	NA	20.6	6.94	1120	2.56	-54.6	3.14	150	
1515	NA	20.8	7.01	1109	2.09	-33.0	8.03	150	
1530	NA	21.3	7.19	1131	2.33	49.4	3.61	150	
1545	NA	19.9	7.19	1126	2.89	12.1	5.97	150	
1555	NA	19.7	7.19	1128	2.90	25.1	0.99	150	
1600	NA	19.8	7.20	1125	2.99	32.1	0.94	150	min Purge met
1605	NA	19.7	7.20	1124	3.10	39.1	1.10	150	
1610	NA	19.7	7.20	1123	3.09	42.2	1.10	150	
1615	NA	19.6	7.21	1125	3.15	46.8	1.07	150	
1620	Sample	Taken							
Total	Volume	Purged	1.3	gal					

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs **Discharge:** 45 secs
Pressure: 150 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 250 mL/cycle

Screened Interval: 315-325 ft bgs **Minimum purge volume:** 1.1 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/8/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: MW-26D Purging/Sampling Device: ZIST/Compressed gas Pump depth (ft bgs): 348

Initial Static Water Level (feet btoc): NA Analytical Parameters: VOCs

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

Purge Start Time: 1330 Ferrous Iron (mg/L): NA Allowable Drawdown (ft): NA

Sample Time: 1530 Controller Settings: Recharge: 120 secs Discharge: 25 secs Pressure: 150 psi

Samplers' Signatures: [signature] Cycles Per Minute: 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1345	NA	22.5	6.82	991	3.47	49.8	1.99	100	
1400	NA	21.1	6.80	985	2.63	-104.5	0.71	100	
1415	NA	21.0	7.11	964	2.01	-119.0	7.10	100	
1430	NA	21.5	7.17	921	3.20	-35.0	1.83	100	
1445	NA	21.6	7.17	905	3.37	10.4	0.70	100	
1500	NA	21.7	7.17	885	3.61	31.7	0.96	100	
1515	NA	21.7	7.18	880	3.49	35.5	1.50	100	
1520	NA	21.7	7.17	870	3.57	41.5	3.12	100	min Purge met
1525	NA	21.9	7.18	871	3.54	42.7	0.61	100	
1530	Sample	Taken							
Total	Volume	Purged	1.4	gal					

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs Discharge: 25-40 secs

Pressure: 150-180 psi Cycles Per Minute: 0.4 Flow Rate: 200 mL/cycle

Screened Interval: 348-358 ft bgs Minimum purge volume: 1.2 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

9/10/24

Site Name: 700S 1600E PCE Plume

Date: ~~9/8/24~~ NB

OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: MW-27

Purging/Sampling Device: Compressed gas

Pump depth (ft bgs): 210

Initial Static Water Level (feet btoc): NB ~~187.10~~ 187.95

Analytical Parameters: VOCs

Final Water Level (feet btoc): 187.10

QC Samples Collected: None

Purge Start Time: 0827

Ferrous Iron (mg/L): NA

Allowable Drawdown (ft): NA

Sample Time: 0918

Controller Settings: Recharge: 35 secs Discharge: 25 secs Pressure: 150 psi

Samplers' Signatures: Nicole Black

Cycles Per Minute: 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0837	187.09	17.0	6.99	1,720	8.80	37.4	3.96	200	
0842	187.10	15.8	6.59	1,715	7.25	83.2	2.04	200	
0847	187.11	15.7	6.96	1,713	7.15	92.4	1.89	200	
0852	187.11	15.7	6.94	1,712	6.83	102.7	1.12	200	
0857	187.10	15.7	6.97	1,715	6.90	107.4	0.86	200	
0902	187.10	15.7	6.97	1,703	6.60	103.3	1.18	200	1.8 gallons
0907	187.10	15.6	7.00	1,703	6.65	108.4	1.14	200	
0912	187.10	15.6	6.98	1,699	6.70	109.3	1.05	200	
0917	187.10	15.7	6.99	1,697	6.72	110.1	1.22	200	2.5 gallons purged.
		Nicole	Black						

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

Previous controller settings: Recharge: 40 secs Discharge: 20 secs → 0.05 gpm

Pressure: 140 psi Cycles Per Minute: 1 Flow Rate: 175 mL/min

Screened Interval: 200-220 ft bgs Minimum purge volume: 1.8 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐

Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/7/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-28 **Purging/Sampling Device:** Compressed gas **Pump depth (ft bgs):** 200

Initial Static Water Level (feet btoc): 186.02 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 185.86 **QC Samples Collected:** MS/MSD

Purge Start Time: 1250 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** NA

Sample Time: 1456 **Controller Settings: Recharge:** 30 secs **Discharge:** 30 secs **Pressure:** 145 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1440	185.87	15.9	6.99	1,841	7.00	81.0	33.3	175	Allowed turbidity to drop - see field notes
1445	185.86	15.5	6.97	1,861	6.67	80.3	35.9	175	
1450	185.86	15.5	6.98	1,863	6.60	81.2	36.2	175	
~~1455~~	185.86	15.6	6.98	1,865	6.62	81.7	38.3	175	5 gallons purged
		[signature]							

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

Previous controller settings: **Recharge:** 45 secs **Discharge:** 15 secs

Pressure: 145 psi **Cycles Per Minute:** 1 **Flow Rate:** 175 mL/min (~0.05 gpm)

Screened Interval: 190-210 ft bgs **Minimum purge volume:** 1.8 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/10/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-29A **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 128

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

Final Water Level (feet btoc): NA **QC Samples Collected:** Field Duplicate FD07-GW

Purge Start Time: 0905 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1110 **Controller Settings: Recharge:** 120 secs **Discharge:** 20 secs **Pressure:** 80 psi

Samplers' Signatures: Jeff Borzejeski **Cycles Per Minute:** 0.43

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
0930	NA	17.3	7.00	2007	5.60	255.7	3.55	50	
0945	NA	17.2	7.12	1801	5.21	259.8	2.75	50	
1000	NA	17.1	7.11	1668	5.47	256.5	1.38	50	
1015	NA	17.5	7.15	1607	5.55	255.3	0.68	50	
1030	NA	17.8	7.17	1600	5.24	252.9	0.66	50	
1045	NA	18.0	7.15	1597	5.13	245.8	0.50	50	
1055	NA	18.2	7.15	1590	5.22	238.7	0.40	50	min purge met
1100	NA	18.1	7.17	1593	5.29	237.4	0.45	50	
1105	NA	18.4	7.15	1592	5.26	234.1	0.40	50	
1110	Sample	Taken							
Total	volume	Purged	0.75	gal					

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs **Discharge:** 20 secs
Pressure: 80 psi **Cycles Per Minute:** 0.5 **Flow Rate:** 40 mL/cycle

Screened Interval: 120-130 ft bgs **Minimum purge volume:** 0.5 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ■ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/10/24

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** _____ **(Vented to)** _____

Well ID: MW-29B

Purging/Sampling Device: ZIST/Compressed gas **Pump depth (ft bgs):** 190

Initial Static Water Level (feet btoc): NA

Analytical Parameters: VOCs

Final Water Level (feet btoc): NA

QC Samples Collected: None

Purge Start Time: 8:40

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

Sample Time: 12:20

Controller Settings: Recharge: _____ secs **Discharge:** _____ secs **Pressure:** _____ psi

Samplers' Signatures: [signature]

Cycles Per Minute: _____

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
9:35	N/A	17.6	6.77	254.6	17.1	6.7	4.28	50	
10:01	N/A	16.5	6.95	498.3	14.1	10.2	3.18	50	
10:15	N/A	17.0	6.80	950	1.86	58.4	1.75	50	
10:30	N/A	17.2	6.81	1047	2.09	77.8	1.61	50	
10:45	N/A	17.4	6.81	1076	2.25	96.5	1.14	50	
11:00	N/A	17.8	6.81	1088	2.31	108.6	1.03	50	
11:16	N/A	18.5	6.81	1107	2.61	113.3	1.01	50	
11:25	N/A	19.6	6.84	1108	2.88	119.5	1.45	50	
11:30	N/A	19.9	6.83	1113	2.92	132.4	1.18	50	
11:35	N/A	20.6	6.82	1117	2.85	122.7	1.17	50	
11:40	N/A	20.7	6.84	1119	2.62	121.6	1.81	50	reached purge
11:45	N/A	20.7	6.85	1120	2.37	120.4	2.72	50	
11:50	N/A	21.6	6.83	1117	2.42	120.6	1.88	25	
12:00	N/A	21.2	6.84	1122	2.75	115.9	—	50	

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 100 secs **Discharge:** 35 secs

Pressure: 95 psi **Cycles Per Minute:** 0.5 **Flow Rate:** 100 mL/cycle

Screened Interval: 190-200 ft bgs **Minimum purge volume:** 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 09/10/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** _____ **(Vented to)** _____

Well ID: MW-29B **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 190

Initial Static Water Level (feet btoc): _____ **Analytical Parameters:** VOCs

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

Purge Start Time: 8:40 **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** NA

Sample Time: 12:20 **Controller Settings: Recharge:** _____ secs **Discharge:** _____ secs **Pressure:** _____ psi

Samplers' Signatures: _____ **Cycles Per Minute:** _____

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
12:05	N/A	21.3	6.87	1121	2.56	116.9	0.74	50	
12:10	N/A	21.0	6.84	1121	2.42	116.9	1.05	50	
12:15	N/A	21.3	6.84	1117	2.35	114.6	0.72	50	
12:20	Sample								total Purged 3.8 L

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

Previous controller settings: Recharge: 100 secs **Discharge:** 35 secs
Pressure: 95 psi **Cycles Per Minute:** 0.5 **Flow Rate:** 100 mL/min

Screened Interval: 190-200 ft bgs **Minimum purge volume:** 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/10/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: MW-29C Purging/Sampling Device: ZIST/Compressed gas Pump depth (ft bgs): 230

Initial Static Water Level (feet btoc): NA Analytical Parameters: VOCs

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

Purge Start Time: 1150 Ferrous Iron (mg/L): NA Allowable Drawdown (ft): NA

Sample Time: 1345 Controller Settings: Recharge: 120 secs Discharge: 40 secs Pressure: 110 psi

Samplers' Signatures: [signature] Cycles Per Minute: 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1205	NA	18.0	7.04	1291	0.16	-115.6	8.74	100	
1230	NA	17.3	7.09	1277	0.13	-122.2	7.96	~~100~~	125 JPB 9/10/24
1245	NA	17.5	7.01	1173	0.09	-120.9	13.7	125	
1300	NA	17.1	6.84	921	1.18	-26.7	6.68	125	
1315	NA	17.5	7.04	1227	3.05	32.0	3.68	125	
1320	NA	17.5	7.03	1198	3.47	44.6	1.03	125	min purge reached
1325	NA	17.7	7.06	1248	3.30	61.9	2.77	125	ORP slow to stabalize
1330	NA	17.5	7.08	1266	3.73	74.0	3.23	125	
1335	NA	17.6	7.09	1265	3.63	76.6	1.78	125	
1340	NA	17.4	7.08	1275	3.65	78.6	3.92	125	
1345	Sample	Taken							
Total	Volume	Purged	1.25	gal					

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs Discharge: 40 secs

Pressure: 110 psi Cycles Per Minute: 0.4 Flow Rate: 200 mL/cycle

Screened Interval: 230-240 ft bgs Minimum purge volume: 0.8 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/8/24

OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: MW-30RA

Purging/Sampling Device: Compressed gas Pump depth (ft bgs): 245

Initial Static Water Level (feet btoc): 227.93'

Analytical Parameters: VOCs

Final Water Level (feet btoc): 227.93

QC Samples Collected: None

Purge Start Time: 1122

Ferrous Iron (mg/L): NA Allowable Drawdown (ft): 0.3

Sample Time: 1215

Controller Settings: Recharge: 30 secs Discharge: 30 secs Pressure: 200 psi

Samplers' Signatures:

Cycles Per Minute: 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1122								150	=48 MIN TO MIN PURGE
1155	227.93	16.3	6.94	1745	6.68	44.4	9.25	150	
1200	227.93	15.9	6.93	1743	6.60	47.2	6.39	150	
1205	227.93	15.9	6.92	1741	6.46	52.5	5.98	150	
1210	227.93	15.9	6.92	1743	6.68	55.7	4.07	150	
1215									SAMPLE ~ 2.5 gallons

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

Previous controller settings: Recharge: 30 secs Discharge: 30 secs

Pressure: 200 psi Cycles Per Minute: 1.5 Flow Rate: 225 mL/min

Screened Interval: 240-250 ft bgs Minimum purge volume: 1.9 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/8/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-30RB **Purging/Sampling Device:** Compressed gas **Pump depth (ft bgs):** 285

Initial Static Water Level (feet btoc): 230.75 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 230.68 **QC Samples Collected:** None

Purge Start Time: 11:00 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 12:01 **Controller Settings: Recharge:** 15 secs **Discharge:** 15 secs **Pressure:** 200 psi

Samplers' Signatures: Miller Blair **Cycles Per Minute:** 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1110	230.74	15.2	6.89	1864	5.43	78.8	10.5	200	
1115	230.70	15.2	6.89	1,877	5.50	84.2	7.89	200	
1120	230.68	15.1	6.88	1,883	5.46	87.3	4.46	200	
1125	230.68	15.0	6.89	1,882	5.55	89.8	1.52	200	
1130	230.68	14.9	6.90	1,879	5.45	91.5	1.08	200	
1135	230.68	14.9	6.92	1,875	5.55	88.7	1.11	200	
1140	230.68	14.9	6.91	1,875	5.60	90.9	1.03	200	
1145	230.68	14.9	6.91	1,876	5.55	91.5	0.89	200	2.3 gallons
1150	230.68	14.9	6.91	1,880	5.52	91.5	0.76	200	
1155	230.68	14.9	6.90	1,877	5.57	92.0	0.54	200	
1200	230.68	14.8	6.91	1,877	5.53	91.4	0.38	200	3 gallons purged
		Miller Blair							

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

Previous controller settings: Recharge: 42 min **Discharge:** 18 secs
Pressure: 200 psi **Cycles Per Minute:** 1.5 **Flow Rate:** NA

Screened Interval: 280-290 ft bgs **Minimum purge volume:** 2.2 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ■ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/12/24 and 9/13/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-30C **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 317

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

Final Water Level (feet btoc): NA **QC Samples Collected:** Field Duplicate FD08-GW

Purge Start Time: 1335 on 9/12/24 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** NA

Sample Time: _____ **Controller Settings: Recharge:** 240 secs **Discharge:** 30 secs **Pressure:** _____ psi

Samplers' Signatures: Jose Borrego **Cycles Per Minute:** 0.25

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1400	NA	21.6	8.25	759	5.63	128.0	50.1	50	Breakthrough purge volume 2 Liters
									could not get purge water on 9/13/24

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)
Previous controller settings: Recharge: 240 sec **Discharge:** 30 secs
Pressure: 150 psi **Cycles Per Minute:** 0.2 **Flow Rate:** 150 mL/cycle

Screened Interval: 317-327 ft bgs **Minimum purge volume:** 1.1 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/10/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-31A **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 138

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 1510 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1740 **Controller Settings: Recharge:** 120 secs **Discharge:** 20 secs **Pressure:** 95 psi

Samplers' Signatures: Jose Borgeida **Cycles Per Minute:** 0.43

JPB 9/10/24

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
~~1330~~ 1530	NA	22.4	7.00	1311	5.06	187.3	5.85	50	
~~1345~~ 1545	NA	17.7	6.95	1103	5.32	185.2	10.62	50	
~~1400~~ 1600	NA	16.9	7.03	982	5.70	170.2	3.40	50	
~~1430~~ 1630	NA	16.6	6.94	807	5.77	182.0	4.13	50	
1645	NA	15.5	7.00	1307	5.57	185.1	4.90	50	
1700	NA	15.3	7.08	1398	6.28	176.0	3.82	50	
1715	NA	14.9	7.04	1450	5.53	182.2	2.46	50	
1720	NA	14.7	7.06	1476	5.63	185.1	1.57	50	
1725	NA	14.6	7.08	1484	5.91	186.8	1.46	50	min Purge
1730	NA	14.5	7.08	1487	6.08	188.4	1.43	50	
1735	NA	14.5	7.09	1489	6.05	188.8	1.07	50	
1740	Sample	Taken							
Total	purge	volume	0.75	gal					

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs **Discharge:** 15 secs
Pressure: 80 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 50 mL/cycle

Screened Interval: 138-148 ft bgs **Minimum purge volume:** 0.5 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/10/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-31B **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 190

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: ~~15:00~~ JPB 9/10/24 15:00 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** NA

Sample Time: 1625 **Controller Settings: Recharge:** 120 secs **Discharge:** 30 secs **Pressure:** 100 psi

Samplers' Signatures: See Borgia **Cycles Per Minute:** 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
~~1536~~	~~N/A~~	19.1	6.92	627	6.31	156.8	1.11	100	
~~1545~~	~~N/A~~	13.1	6.77	494	2.02	-16.7	65.6	150	
JPB 9/10/24 ~~1600~~	NA	13.5	6.81	970	4.06	78.1	6.05	150	
1605	NA	13.2	6.84	1021	4.30	115.7	2.29	150	
1610	NA	13.3	6.83	1026	4.34	126.1	1.58	150	
1615	NA	13.3	6.83	1032	4.30	132.6	1.52	150	min purge
1620	NA	13.2	6.84	1034	4.39	133.5	1.83	150	
1625	Sample	Taken							
Total	Purge	Volume	0.9	2.1					

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs **Discharge:** 30 secs

Pressure: 100 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 180 mL/cycle

Screened Interval: 190-200 ft bgs **Minimum purge volume:** 0.7 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/10/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-31C **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 228

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 16:45 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** NA

Sample Time: 1745 **Controller Settings: Recharge:** 120 secs **Discharge:** 35 secs **Pressure:** 105 psi

Samplers' Signatures: ~~TT~~ 9/13/24 [signature] **Cycles Per Minute:** 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1710	NA	13.7	6.72	926	10.3	-73.4	18.8	150	
1715	NA	13.6	6.77	810	1.00	-81.9	10.4	150	
1720	NA	13.3	6.61	652	0.91	-47.3	23.3	150	
1725	NA	13.2	6.68	827	1.07	15.0	9.43	150	0.8 gallons purged
1730	NA	13.2	6.70	885	1.07	36.9	5.91	150	
1735	NA	13.1	6.80	907	1.08	39.3	4.38	150	
1740	NA	13.0	6.85	909	1.13	43.2	4.15	150	1 gallon purged.

[signature]

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs **Discharge:** 48 secs

Pressure: 105 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 170 mL/cycle

Screened Interval: 228-238 ft bgs **Minimum purge volume:** 0.8 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond.	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/8/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-32A **Purging/Sampling Device:** Solinist/Compressed gas **Pump depth (ft bgs):** 119

Initial Static Water Level (feet btoc): 84.13' **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 84.15 **QC Samples Collected:** None

Purge Start Time: 14:00 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1446 **Controller Settings: Recharge:** 20 secs **Discharge:** 10 secs **Pressure:** 100 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1410	84.15	15.2	6.97	1,411	4.69	82.0	65.8	200	
1415	84.12	15.2	7.12	1,414	4.80	85.4	73.7	200	
1420	84.15	15.4	7.14	1,416	4.83	90.1	60.5	200	1 gallon
1425	84.15	16.0	7.13	1,413	4.80	89.3	53.7	200	
1430	84.15	16.1	7.20	1,414	4.85	91.6	~~51.2~~ 42.2	200	turb. 42.2 NTU
1435	84.15	16.4	7.14	1,414	4.90	91.9	35.2	200	
1440	84.15	16.4	7.11	1,418	4.96	93.1	35.2	200	
1445	84.15	16.3	7.12	1,417	4.97	93.9	33.3	200	

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

Previous controller settings: **Recharge:** 20 secs **Discharge:** 10 secs → 0.05 gpm

Pressure: 100 psi **Cycles Per Minute:** 2 **Flow Rate:** 200 mL/min

Screened Interval: 114-124 ft bgs **Minimum purge volume:** 0.9 gallons → 20 mins

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/12/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** —

Well ID: MW-32B **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 170

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 1050 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1155 **Controller Settings: Recharge:** 180 secs **Discharge:** 30 secs **Pressure:** 80 psi

Samplers' Signatures: Dee Bezgee **Cycles Per Minute:** 0.3

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1100	NA	16.3	7.36	1059	2.28	171.8	10.6	175	
1115	NA	16.2	7.41	1054	3.01	165.3	2.26	175	
1125	NA	15.9	7.35	1045	4.50	141.6	1.03	175	
1130	NA	16.0	7.34	1046	4.27	96.9	1.29	175	
1135	NA	16.2	7.32	1046	4.24	104.0	1.05	175	min Purge
1140	NA	16.1	7.31	1045	4.51	106.8	1.71	175	
1145	NA	15.9	7.31	1046	4.62	109.0	1.43	175	
1150	NA	16.1	7.31	1045	4.46	113.4	1.61	175	
1155	Sample	Taken							
Total	Volume	Purged	0.75	gal					

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)
Previous controller settings: Recharge: 180 secs **Discharge:** 30 secs
Pressure: 80 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 160 mL/cycle

Screened Interval: 170-180 ft bgs **Minimum purge volume:** 0.6 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/6/2024 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 2.0 (Vented to) —

Well ID: MW-34A Rebuild of water column Purging/Sampling Device: ZIST Pump depth (ft bgs): 148

Initial Static Water Level (feet btoc): NA Analytical Parameters: NA

Final Water Level (feet btoc): NA QC Samples Collected: NA

Purge Start Time: 0905 – Rebuild began Ferrous Iron (mg/L): NA Allowable Drawdown (ft): NA

Sample Time: NA Controller Settings: Recharge: NA secs Discharge: NA secs Pressure: NA psi

Samplers' Signatures: NA Cycles Per Minute: NA

Time	~~Water Level (ft btoc)~~	~~Temperature (Degrees C)~~	~~pH~~ MDJ 9/6	~~Specific Cond. (µs/cm)~~	~~Dissolved Oxygen (mg/L)~~	~~ORP (mV)~~	~~Turbidity (NTU)~~	~~Flow Rate (mL/min)~~	MDJ 9/6 Comments
0905	10 PSI	10s / 120s	movement		1047	50 PSI	20s/120s	no movement	
0912	10 PSI	10s / 120s	no movement		1056	50 PSI	30s/120s	no movement	
0931	20 PSI	30s/120s	no movement.		1100	60 PSI	10s/120s	no movement	
0936	10 PSI	30s / 120s	no movement		1106	60 PSI	20s / 120s	no movement	
0944	20 PSI	10s / 120s	no movement		1122	60 PSI	30/120s	no movement	
0953	20 PSI	20s / 120s	no movement		1130	60 PSI	10s / 120s	no movement	
0959	20 PSI	30s / 120s	no movement		1217	70 PSI	20s / 120s	no movement	
1003	30 PSI	10s / 120s	no movement		1230	70 PSI	30s / 120s	no movement	
1010	30 PSI	20s / 120s	no movement		1254	80 PSI	10s/120s	~~No movement~~ mostly 3 bubbles minimal movement.	
1015	30 PSI	30s / 120s	no movement		1305	80 PSI	10s/120s	minimal movement	
1017	40 PSI	10s / 120s	no movement		1323	80 PSI	30s/120s	no movement	
1021	40 PSI	20s / 120s	no movement		1325	90 PSI	10s/120s	no movement	
1027	40 PSI	30s / 120s	no movement		1335	90 PSI	20s/120s		Water
1038	50 PSI	10s/120s	no movement			90 PSI			

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

Previous controller settings: Recharge: _____ secs Discharge: _____ secs
Pressure: _____ psi Cycles Per Minute: _____ Flow Rate: _____ mL/min

Screened Interval: _____ ft bgs Minimum purge volume: _____ gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/4/2024 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** ____

Well ID: MW-34A **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 148

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 1340 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1535 **Controller Settings: Recharge:** 120 secs **Discharge:** 30 secs **Pressure:** 90 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1405	NA	25.7	6.98	1260	3.45	188.7	0.72	50	
1420		24.8	7.06	1234	3.20	179.5	3.21		
1435		23.6	7.07	1223	3.42	177.7	3.25		
1450		24.2	7.09	1205	3.40	177.0	1.80		
1505		23.7	7.09	1179	3.45	178.8	1.40		
1510		23.9	7.08	1180	3.35	179.8	1.40		
1515		24.2	7.09	1176	3.40	180.3	1.41		
1520		24.2	7.09	1171	3.27	181.4	1.12		
1535									Sample – 0.5 gal purged

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)
Previous controller settings: Recharge: 120 secs **Discharge:** 14 secs
Pressure: 90 psi **Cycles Per Minute:** ____ **Flow Rate:** ____ mL/cycle

Screened Interval: 140-150 ft bgs **Minimum purge volume:** 0.5 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ■ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 09/05/2024 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.1 **(Vented to)** 0.0

Well ID: MW-34B **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 175

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 1415 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1650 **Controller Settings: Recharge:** 120 secs **Discharge:** 35 secs **Pressure:** 95 psi

Samplers' Signatures: Maria Day Johnson **Cycles Per Minute:** 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1508	NA	21.3	6.74	1109	5.22	-133.1	1.34	60	
1536	NA	22.1	6.92	1109	3.31	157.5	0.54	60	
1607	NA	21.6	6.98	1115	4.39	154.3	0.97	60	
1427	NA	23.1	6.99	1101	3.59	161.6	1.16	60	
1635	NA	22.5	7.00	1099	4.08	146.9	0.96	60	
1640	NA	22.3	7.00	1094	4.21	149.6	2.29	60	min purge met.
1645	NA	22.5	6.99	1094	3.94	151.4	2.40	60	
1650	Sample Collected.								Total purged 0.7 gal

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)
Previous controller settings: Recharge: 120 secs **Discharge:** 35 secs
Pressure: 95 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 50-120 mL/cycle

Screened Interval: 175-185 ft bgs **Minimum purge volume:** 0.6 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

700S 1600E
Site Name: PCE Plume **Date:** 9/5/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.1 **(Vented to)** 0.0

Well ID: MW-34C **Purging/Sampling Device:** ZIST/Compressed gas **Pump depth (ft bgs):** 250

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: 1445 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1705 **Controller Settings: Recharge:** 120 secs **Discharge:** 30 secs **Pressure:** 100 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
1500	NA	16.1	7.0	2534	2.55	-83.6	6.46	140	
1515		17.0	7.13	2530	3.23	-3.1	29.3		
1530		17.0	7.21	2529	3.68	28.0	11.5		
1545		17.0	7.21	2521	4.44	53.2	5.30		
1600		16.9	7.25	2521	4.87	69.4	2.45		min purge met
1615		17.0	7.24	2518	4.93	85.0	1.86		
1630		17.0	7.25	2507	5.23	92.0	1.29		
1645		17.0	7.25	2512	5.39	98.2	1.55		
1650		17.0	7.26	2508	5.38	99.8	1.18		
1655		17.0	7.26	2510	5.61	101.5	0.92	↓	Total purge 1.8 gals.

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs **Discharge:** 30 secs
Pressure: 110 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 160 mL/cycle

Screened Interval: 250-260 ft bgs **Minimum purge volume:** 0.9 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ■ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/6/24

Well ID: MW-34D

Initial Static Water Level (feet btoc): NA

Final Water Level (feet btoc): NA

Purge Start Time: ~~1400~~ 9/6 0905

Sample Time: 1021

Samplers' Signatures:

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Purging/Sampling Device: ZIST/Compressed gas **Pump depth (ft bgs):** 315

Analytical Parameters: VOCs

QC Samples Collected: None

Ferrous Iron (mg/L): NA **Allowable Drawdown (ft):** 0.3

Controller Settings: Recharge: 120 secs **Discharge:** 35 secs **Pressure:** 110 psi

Cycles Per Minute: 0.4

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/cycle)	Comments
0915	NA	15.2	6.97	789	2.37	-24.3	9.71	200	
0925	↓	15.1	7.11	783	2.78	9.5	4.93	↓	
0935	↓	15.1	7.18	780	3.56	38.5	2.47	↓	
0945	↓	15.0	7.17	780	3.71	19.6	0.85	↓	
0950	↓	15.4	7.15	785	3.84	7.0	0.81	↓	
0955	↓	15.2	7.17	780	4.01	-5.3	0.77	↓	
1000	↓	15.2	7.16	780	4.07	-10.7	0.57	↓	
1005	↓	15.3	7.16	780	4.10	-10.8	0.60	↓	
1010	↓	15.2	7.17	779	4.09	-9.6	0.57	↓	
1021									Sample - 1.2 gallons purged

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47
Max discharge 4.46 mL/ft of WC (w/o VB)

Previous controller settings: Recharge: 120 secs **Discharge:** 35 secs

Pressure: 110-125 psi **Cycles Per Minute:** 0.4 **Flow Rate:** 240 mL/cycle

Screened Interval: 315-325 ft bgs **Minimum purge volume:** 1.1 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ■ Simultaneous Purge Allowed: ■

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GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/6/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: MW-36 Purging/Sampling Device: MP-50 Pump depth (ft bgs): 50

Initial Static Water Level (feet btoc): 45.95 Analytical Parameters: VOCs

Final Water Level (feet btoc): 45.94 QC Samples Collected: None

Purge Start Time: 14:45 Ferrous Iron (mg/L): — Allowable Drawdown (ft): 0.3

Sample Time: 15:10 Controller Settings: Recharge: 16 secs Discharge: 14 secs Pressure: 30 psi

Samplers' Signatures: Jose Borgeson Cycles Per Minute: 2

JPB 9/6/24

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
14:50	45.95	17.9	6.90	1600	1.49	146.7	11.1	120	min Purge met
14:55	~~45.64~~ 45.94	17.2	6.94	1592	1.84	146.7	5.25	120	
15:00	45.94	16.8	6.95	1586	1.84	148.7	4.61	120	
15:05	45.93	16.8	6.94	1590	1.88	149.9	2.91	150	
15:10	sample	taken							
Total	Volume	Purged	1 gal						

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

Previous controller settings: Recharge: 16 secs Discharge: 14 secs

Pressure: 35- 50 psi Cycles Per Minute: 2 Flow Rate: 190 mL/min

Screened Interval: 47-52 ft bgs Minimum purge volume: 0.2 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐

Total Purge Volume Recorded: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/6/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** _____

Well ID: MW-37S **Purging/Sampling Device:** MP-50 **Pump depth (ft bgs):** 30

Initial Static Water Level (feet btoc): 19.03 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 19.32 **QC Samples Collected:** None

Purge Start Time: 0830 **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** 0.3

Sample Time: 0855 **Controller Settings: Recharge:** 25 secs **Discharge:** 5 secs **Pressure:** 25 psi

Samplers' Signatures: Emma Stalberg **Cycles Per Minute:** 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0835	19.21	16.5	6.98	2524	5.13	212.8	0.78	150	min purge met
0840	19.29	16.1	6.87	2587	4.32	211.6	0.94	150	
0845	19.31	16.1	6.86	2563	4.13	212.7	1.28	150	
0850	19.31	16.0	6.94	2560	4.29	212.9	1.20	150	new min purge met
0855	Sample								
	Total volume purged = 0.8 gal								

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

Previous controller settings: Recharge: 25 secs **Discharge:** 5 secs
Pressure: 20-25 psi **Cycles Per Minute:** 2 **Flow Rate:** 150 mL/min

Screened Interval: 25-35 ft bgs **Minimum purge volume:** 0.1 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ■ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/6/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) —

Well ID: MW-37D Purging/Sampling Device: MP-50 Pump depth (ft bgs): 65

Initial Static Water Level (feet btoc): 41.54 Analytical Parameters: VOCs

Final Water Level (feet btoc): 41.56 QC Samples Collected: None

Purge Start Time: 08:37 Ferrous Iron (mg/L): — Allowable Drawdown (ft): 0.3

Sample Time: 0922 Controller Settings: Recharge: 15 secs Discharge: 15 secs Pressure: 30 psi

Samplers' Signatures: [signature] Cycles Per Minute: _____

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
08:42	41.56	16.9	7.10	1681	7.06	182.9	1.41	100	
08:47	41.57	16.2	6.43	1685	3.98	190.9	1.19	100	min purge met
08:52	41.56	16.0	6.23	1676	4.18	187.7	1.20	100	
08:57	41.55	16.1	6.17	1674	4.28	189.0	0.59	100	
~~08~~ 0902	41.58	16.0	5.81	1673	4.36	189.2	0.39	100	
0907	41.56	16.1	5.62	1675	4.35	191.0	0.74	100	
0912	41.57	16.2	5.58	1677	4.39	193.2	0.69	100	
0917	41.56	16.2	5.55	1677	4.41	194.3	0.44	100	
0922	Sample								
	Total	Volume	Purged	1.7 gal					

JPB 9/6/24

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

Previous controller settings: Recharge: 15 secs Discharge: 15 secs

Pressure: 40 psi Cycles Per Minute: 2 Flow Rate: 150 mL/min

Screened Interval: 60-70 ft bgs Minimum purge volume: 0.2 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☑
Total Purge Volume Recorded: ☑ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/6/24

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-38S

Purging/Sampling Device: MP-50 **Pump depth (ft bgs):** 32

Initial Static Water Level (feet btoc): 20.62

Analytical Parameters: VOCs

Final Water Level (feet btoc): 20.68

QC Samples Collected: MS/MSD

Purge Start Time: 11:22

Ferrous Iron (mg/L): — **Allowable Drawdown (ft):** 0.3

Sample Time: 1222

Controller Settings: Recharge: 20 secs **Discharge:** 10 secs **Pressure:** 25 psi

Samplers' Signatures: Dell Borgiel

Cycles Per Minute: 2

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
11:27	20.61	14.6	7.07	1350	6.90	93.9	64.2	200	min Purge met
11:32	20.59	14.5	7.07	1347	6.84	96.3	31.2	200	
11:37	20.58	14.6	7.06	1348	6.81	99.1	26.3	200	
11:42	20.63	14.5	7.07	1351	6.83	101.9	19.7	200	
11:47	20.59	14.6	7.07	1349	6.80	104.4	9.59	200	
11:52	20.65	14.5	7.07	1344	6.84	105.1	10.3	200	
11:57	20.69	14.4	7.07	1343	6.81	105.3	11.8	200	
12:02	20.69	14.4	7.05	1339	6.78	104.3	11.3	200	
12:07	20.68	14.4	7.07	1339	6.78	105.3	8.45	200	
12:12	20.69	14.5	7.07	1326	6.74	105.7	8.26	200	
12:17	20.65	14.4	7.07	1332	6.72	105.9	6.26	200	
12:22	Sample	Taken							
Total	Volume	Purged	3.5	gal					

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

Previous controller settings: Recharge: 15 secs **Discharge:** 15 secs

Pressure: 25 psi **Cycles Per Minute:** 3 **Flow Rate:** 100 mL/min

Screened Interval: 27-37 ft bgs **Minimum purge volume:** 0.1 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/6/24

OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) —

Well ID: MW-38D Purging/Sampling Device: MP-50 Pump depth (ft bgs): 65

Initial Static Water Level (feet btoc): 19.65 Analytical Parameters: VOCs

Final Water Level (feet btoc): 19.67 QC Samples Collected: None

Purge Start Time: 1127 Ferrous Iron (mg/L): — Allowable Drawdown (ft): 0.3

Sample Time: ~~1300~~ 1330 EG 9/6/24 Controller Settings: Recharge: 15 secs Discharge: 5 secs Pressure: 40 psi

Samplers' Signatures: Emma Mabrey Cycles Per Minute: 3

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1130	19.65	15.6	7.12	1307	5.63	164.6	106	140	
1135	19.70	15.2	7.13	1310	5.74	173.2	70.3	140	
1140	19.70	15.1	7.13	1310	5.78	174.2	67.8	140	min purge met
1145	19.69	15.2	7.15	1310	5.92	175.0	45.2	140	
1150	19.66	15.0	7.13	1309	6.01	175.3	43.8	140	
1155	19.67	15.0	7.13	1308	6.03	175.6	36.9	140	
1200	19.69	14.9	7.14	1309	6.13	175.9	28.5	140	
1205	19.66	15.0	7.17	1309	6.65	147.3	30.9	140	
1210	19.65	15.0	7.06	1312	6.32	152.8	23.0	140	
1215	19.65	14.8	7.12	1307	6.29	155.3	20.6	140	
1220	19.65	14.9	7.10	1311	6.35	157.0	18.5	140	
1225	19.65	14.8	7.10	1309	6.45	159.5	15.9	140	
1230	19.65	14.8	7.06	1307	6.40	160.4	14.8	140	
1235	19.64	14.8	7.12	1311	6.35	148.6	9.91	140	
1240	19.64	14.8	7.11	1310	6.36	151.5	12.5	140	

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

Previous controller settings: Recharge: 15 secs Discharge: 5 secs
Pressure: 40 psi Cycles Per Minute: 3 Flow Rate: 240 mL/min

Screened Interval: 60-70 ft bgs Minimum purge volume: 0.2 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/3/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 14.6 **(Vented to)** 0.0

Well ID: MW-39S **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** 279

Initial Static Water Level (feet btoc): 206.97 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 207.07 **QC Samples Collected:** None

Purge Start Time: 0949 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1315 **Controller Settings: Recharge:** 40 secs **Discharge:** 20 secs **Pressure:** 150 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1000	207.02	16.2	7.18	1180	4.84	259.1	Overrange	150	
1020	207.03	16.1	7.17	1138	4.85	225.3	612	150	
1040	207.00	16.1	7.17	1139	4.46	203.4	383		
1050	206.98	16.3	7.16	1133	4.34	193.9	290		Min purge 2.4 gal met
1110	206.98	16.7	7.13	1150	4.28	198.3	173		
1130	206.98	16.0	7.17	1149	4.21	145.6	112		
1150	206.98	16.3	7.17	1145	4.23	145.4	95.2		
1210	207.07	16.4	7.17	1173	3.90	142.2	77.9		
1230	207.07	16.7	7.17	1171	4.27	132.2	51.8		
1250	207.07	17.3	~~7.17~~ 7.16	1163	3.69	136.4	43.4		
1300	207.07	16.1	7.17	1160	3.95	139.5	37.8		
1305	207.07	16.0	7.16	1163	4.03	139.7	36.2		
1310	207.07	16.0	7.16	1159	3.98	141.7	36.4		Total purged = 8.0 gal
1315	Sample								Stable, sample

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

Previous controller settings: Recharge: _____ **Discharge:** _____

Pressure: _____ **Cycles Per Minute:** _____ **Flow Rate:** _____

Screened Interval: 269-289 ft bgs **Minimum purge volume:** 2.4 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☒
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

Time	Water Level	Temperature	pH	Spec. Cond.	Dissolved Oxygen	ORP	Turbidity	Flow Rate	Comments
1245	19.67	14.9	7.10	1308	6.47	153.5	~~1.2~~ 9.69	140	
1250	19.67	14.8	7.09	1305	6.40	154.8	EG: 9/6/24 9.49	140	
1255	19.67	14.9	7.11	1306	6.32	155.5	8.70	140	
1300	sample -	sampled	through	YSI,	needed	to	get	extra	bottles
1330	sample								

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/3/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 2.4 **(Vented to)** 0.0

Well ID: MW-39D **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** 343

Initial Static Water Level (feet btoc): 206.96 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 207.02 **QC Samples Collected:** None

Purge Start Time: 0941 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1135 **Controller Settings: Recharge:** 40 secs **Discharge:** 20 secs **Pressure:** 120 psi

Samplers' Signatures: Isaac Maue **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0955	207.02	15.9	7.27	1025	5.68	-101.3	43.8	150	
1005	207.02	15.8	7.23	1025	5.17	-34.2	47.1	150	
1015	207.02	15.9	7.24	1025	4.92	-54.7	43.9		
1025	207.03	16.0	7.23	1023	4.78	-83.4	41.5		
1035	207.04	16.0	7.24	1021	4.73	-101.1	32.5		
1045	207.04	16.2	7.22	1020	4.60	-112.0	26.1		
1055	206.98	16.2	7.24	1020	4.44	-116.0	21.9		Min purge 2.9 gal met
1105	207.02	16.4	7.24	1017	4.46	-124.1	18.7		
1115	207.02	16.7	7.24	1015	4.48	-132.0	18.2		
1120	207.02	16.5	7.24	1014	4.43	-134.6	19.0		
1125	207.02	16.6	7.25	1014	4.31	-137.3	20.8		Total purged = 4.1 gal
1135	Sample								Stable, Sample

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

Previous controller settings: Recharge: _____ **Discharge:** _____

Pressure: _____ **Cycles Per Minute:** _____ **Flow Rate:** _____

Screened Interval: 328-358 ft bgs **Minimum purge volume:** 2.9 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☒
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ■

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/30/2024 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-40S **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** 235

Initial Static Water Level (feet btoc): 189.14 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 189.16 **QC Samples Collected:** None

Purge Start Time: 1610 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1815 **Controller Settings: Recharge:** 30 secs **Discharge:** 30 secs **Pressure:** 105 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1610	189.16	16.4	7.05	1726	5.44	197.1	763	160	
1620	189.18	16.0	7.06	1716	5.14	202.1	148	160	
1630	189.16	16.0	7.06	1710	4.92	204.6	102		
1640	189.16	15.9	7.10	1716	5.05	163.6	69.3		
1650	189.16	16.3	7.07	1711	4.80	184.5	51.7		
1700	189.16	16.1	7.07	1710	4.64	192.2	41.0		Min purge 2.1 gal met
1705	189.16	16.1	7.07	1708	4.62	198.2	37.5		
1710	189.16	16.1	7.07	1707	4.73	200.7	34.4		
1715	189.16	16.1	7.08	1702	4.83	172.6	28.0		
1720	189.16	16.2	7.07	1706	4.66	177.0	26.1		
1725	189.16	16.1	7.07	1703	4.64	184.9	24.1		
1730	189.16	16.0	7.07	1707	4.61	190.7	21.0		
1735	189.16	16.0	7.07	1706	4.49	195.8	19.0		
1740	189.16	16.0	7.07	1703	4.56	199.7	17.6	↓	

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

Previous controller settings: Recharge: _____ **Discharge:** _____
Pressure: _____ **Cycles Per Minute:** _____ **Flow Rate:** _____

Screened Interval: 230-240 ft bgs **Minimum purge volume:** 2.1 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☒

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/30/2024 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) _____ (Vented to) _____

Well ID: MW-40S Purging/Sampling Device: _____ Pump depth (ft bgs): _____

Initial Static Water Level (feet btoc): _____ Analytical Parameters: _____

Final Water Level (feet btoc): _____ QC Samples Collected: _____

Purge Start Time: _____ Ferrous Iron (mg/L): _____ Allowable Drawdown (ft): _____

Sample Time: _____ Controller Settings: Recharge: _____ secs Discharge: _____ secs Pressure: _____ psi

Samplers' Signatures: _____ Cycles Per Minute: _____

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1745	189.16	16.0	7.08	1701	4.60	202.9	15.7	160	
1750	189.16	16.1	7.08	1696	4.48	205.4	15.0	|	
1755	189.16	16.1	7.08	1694	4.49	208.0	12.3	|	
1800	189.16	15.9	7.08	1697	4.53	209.2	11.4	|	
1805	189.16	16.1	7.08	1700	4.54	210.6	11.6	|	
1810	189.16	16.1	7.08	1691	4.54	212.3	10.2	↓	Total purged = 5.3 gal
1815	Sample								Stable, sample

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

Previous controller settings: Recharge: _____ secs Discharge: _____ secs

Pressure: _____ psi Cycles Per Minute: _____ Flow Rate: _____ mL/min

Screened Interval: _____ ft bgs Minimum purge volume: _____ gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/30/2024 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: MW-40D Purging/Sampling Device: QED/Gas Pump depth (ft bgs): 300

Initial Static Water Level (feet btoc): 208.40 Analytical Parameters: VOCs

Final Water Level (feet btoc): 208.65 QC Samples Collected: None

Purge Start Time: 1615 Ferrous Iron (mg/L): NA Allowable Drawdown (ft): 0.3

Sample Time: 1910 Controller Settings: Recharge: 40 secs Discharge: 20 secs Pressure: 145 psi

Samplers' Signatures: Isaac Nance Cycles Per Minute: 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1615	208.72	16.9	7.33	887	3.10	36.0	Overrange	100	
1625	208.68	16.4	7.34	882	3.25	43.1	Overrange	110	
1635	208.65	16.5	7.37	882	3.15	46.2	Overrange		
1645	208.65	16.3	7.35	879	3.11	54.9	661		
1655	208.65	16.1	7.35	876	3.28	59.6	342		
1705	208.65	16.2	7.36	878	3.06	61.8	260		
1715	208.65	16.3	7.35	876	3.07	63.1	171		
1725	208.65	16.4	7.36	874	3.21	64.1	119		
1735	208.65	16.6	7.35	873	3.19	66.0	79.5		
1745	208.65	16.4	7.36	872	3.11	68.5	61.7		Min purge 2.6 gal met
~~1750~~ 1755 1746 9/30	208.65	16.4	7.36	872	3.14	70.4	52.0		
1805	208.65	16.8	7.35	870	3.20	75.2	34.5		
1815	208.65	16.7	7.36	867	3.13	80.4	22.5		
1825	208.65	16.7	7.36	867	3.15	81.6	24.1	↓	

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

Previous controller settings: Recharge: _____ Discharge: _____

Pressure: _____ Cycles Per Minute: _____ Flow Rate: _____

Screened Interval: 295-305 ft bgs Minimum purge volume: 2.6 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☒
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/30/2024 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** _____ **(Vented to)** _____

Well ID: MW-40D **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** _____

Initial Static Water Level (feet btoc): _____ **Analytical Parameters:** VOCs

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

Purge Start Time: _____ **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** 0.3

Sample Time: _____ **Controller Settings: Recharge:** _____ secs **Discharge:** _____ secs **Pressure:** _____ psi

Samplers' Signatures: _____ **Cycles Per Minute:** _____

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1835	208.65	16.1	7.36	867	3.33	85.4	19.3	110	
1840	208.65	15.9	7.35	865	3.37	86.1	17.9		
1845	208.65	15.9	7.36	866	3.24	87.4	16.0		
1850	208.65	15.9	7.36	864	3.35	88.1	14.4		
1855	208.65	16.0	7.36	865	3.23	89.1	13.9		
9/30 1900	208.65	16.0	7.36	865	3.20	91.1	13.2		Total purged = 5.1 gal
1910	Sample								Stable, sample

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

Previous controller settings: Recharge: _____ **Discharge:** _____
Pressure: _____ **Cycles Per Minute:** _____ **Flow Rate:** _____

Screened Interval: 295-305 ft bgs **Minimum purge volume:** 2.6 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/2/2024 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-41S **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** 221

Initial Static Water Level (feet btoc): 175.44 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 175.50 **QC Samples Collected:** None

Purge Start Time: 1610 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1710 **Controller Settings: Recharge:** 40 secs **Discharge:** 20 secs **Pressure:** 105 psi

Samplers' Signatures: Paige Williams **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1630	175.50	16.7	7.00	1704	5.95	187.1	6.81	150	
1640	175.50	16.1	7.04	1732	5.05	184.9	3.22	150	
1645	175.50	16.0	7.03	1731	4.94	185.8	2.68		
1650	175.50	15.8	7.04	1730	5.01	186.0	2.59		
1655	175.50	15.8	7.04	1730	4.99	187.4	2.04		
1700	175.50	15.4	7.04	1730	5.01	188.2	1.95		Min purge met 2.0 gal
1710	Sample								Stable, sample, total purge = 2.4 gal

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

Previous controller settings: Recharge: _____ **Discharge:** _____

Pressure: _____ **Cycles Per Minute:** _____ **Flow Rate:** _____

Screened Interval: 216-226 ft bgs **Minimum purge volume:** 2.0 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☒
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☒

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/2/2024 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-41D **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** 277

Initial Static Water Level (feet btoc): 196.49 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): ~~10/2~~ 10/4 196.30 **QC Samples Collected:** None

Purge Start Time: 1625 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1905 **Controller Settings: Recharge:** 40 secs **Discharge:** 20 secs **Pressure:** 155 psi

Samplers' Signatures: Jacob Moore **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1640	196.30	16.7	7.40	816	4.63	14.7	290	160	
1700	196.30	17.1	7.40	795	3.77	42.0	-		Air tank ran out, swapped @ 1710
1720	196.30	17.5	7.39	796	3.81	55.0	165		Min purge 2.4 gal met @ 1722
1740	196.30	16.8	7.38	800	3.62	69.3	69.6		Air tank ran out, swapped @ 1750
1800	196.30	15.3	7.37	807	3.63	71.8	46.8		
1810	196.30	14.9	7.36	816	3.65	72.6	39.4		
1820	196.30	14.7	7.37	823	3.55	74.5	27.6		
1830	196.30	15.0	7.35	824	3.56	69.0	20.9		
1835	196.30	14.7	7.36	824	3.44	70.0	19.3		
1840	196.30	14.6	7.36	823	3.40	71.2	17.1		
1850	196.30	15.0	7.34	820	3.41	73.4	12.9		
1855	196.30	14.7	7.36	821	3.37	74.4	12.9		
1900	196.30	14.7	7.36	820	3.41	76.0	12.2	↓	Total purged = 6.6 gal
1905	Sample								Stable, sample.

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

Previous controller settings: Recharge: _____ **Discharge:** _____

Pressure: _____ **Cycles Per Minute:** _____ **Flow Rate:** _____

Screened Interval: 272-282 ft bgs **Minimum purge volume:** 2.4 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☒
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/12/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) _____

Well ID: MW-425 Purging/Sampling Device: BP/gas Pump depth (ft bgs): 222

Initial Static Water Level (feet btoc): 192.65 Analytical Parameters: VOCs, anions, nitrate/nitrite, Alkalinity, TOC, MEE, microbial

Final Water Level (feet btoc): 192.85 QC Samples Collected: none

Purge Start Time: 0850 Ferrous Iron (mg/L): 0.32 Allowable Drawdown (ft): 0.3

Sample Time: 1101 Controller Settings: Recharge: 20 secs Discharge: 40 secs Pressure: 100 psi

Samplers' Signatures: [signature] Cycles Per Minute: 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0920	192.85	14.9	7.29	1,545	5.76	94.1	over range	250	2.1 gallons purged
0935	193.00	15.0	7.30	1,544	5.16	89.5	over range	250	minimum purged reached
0950	192.85	15.0	7.30	1,531	4.65	60.5	over range	250	
1005	192.85	15.1	7.31	1,511	4.49	43.3	~~over~~ 829	250	
1020	192.85	15.0	7.31	1,503	4.40	40.0	443	250	
1035	192.85	15.1	7.31	1,500	4.38	39.7	158	250	
1050	192.85	15.0	7.30	1,493	4.36	38.2	93.1	250	
1055	192.85	14.9	7.30	1,491	4.31	37.9	88.7	250	
1100	192.85	14.9	7.30	1,490	4.30	37.1	87.4	250	5 gallons purged

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

Previous controller settings: Recharge: _____ secs Discharge: _____ secs

Pressure: _____ psi Cycles Per Minute: _____ Flow Rate: _____ mL/min

Screened Interval: 246-256 ft bgs Minimum purge volume: 2.2 gallons

0.07 gpm → 32 mins

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/2/2024 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 1.3 **(Vented to)** 0.0

Well ID: MW-42D **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** 277

Initial Static Water Level (feet btoc): 203.46 **Analytical Parameters:** VOCs , Anions, Nitrate/Nitrite, Alkalinity, TOC, MEE, microbial

Final Water Level (feet btoc): 203.48 **QC Samples Collected:** Field Duplicate FD10-GW100Z @ 0800

Purge Start Time: 0918 **Ferrous Iron (mg/L):** 0.92 **Allowable Drawdown (ft):** 0.3

Sample Time: 1210 **Controller Settings: Recharge:** 40 secs **Discharge:** 20 secs **Pressure:** 130 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0930	203.50	15.1	7.22	1045	5.37	204.8	490	250	
0945	203.47	15.2	7.21	1047	4.97	195.9	420	250	
1000	203.47	15.2	7.21	1041	4.81	191.3	263		
1015	203.47	16.1	7.21	1047	4.93	176.3	181		1019 Air tank empty, swap
1030	203.47	15.0	7.23	1042	4.75	170.2	103		MM purge 2.3 gal met
1045	203.47	15.0	7.23	1042	4.78	163.1	72.6		
1100	203.48	15.0	7.23	1042	4.73	130.4	71.4		
1115	203.48	15.1	7.22	1041	4.74	139.1	50.2		
1130	203.48	15.2	7.22	1040	4.78	142.1	34.6		
1135	203.48	15.3	7.21	1039	4.77	142.1	31.0		
1150	203.48	15.3	7.22	1037	4.83	141.2	23.3		
1155	203.48	15.3	7.22	1040	4.85	142.4	25.5		
1200	203.48	15.4	7.20	1040	4.82	140.3	23.1	↓	Stable, total purge = 10.7 gal
1210	Sample								Stable, Sample

1050 mL for Microbial

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

Previous controller settings: Recharge: _____ **Discharge:** _____

Pressure: _____ **Cycles Per Minute:** _____ **Flow Rate:** _____

Screened Interval: 272-282 ft bgs **Minimum purge volume:** 2.3 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☒ Minimum Purge Met and Notated: ☒

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/1/2024 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 15.7 **(Vented to)** 0.0

Well ID: MW-43S **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** 230

Initial Static Water Level (feet btoc): 202.28 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 202.30 **QC Samples Collected:** None

Purge Start Time: 0940 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1135 **Controller Settings: Recharge:** 40 secs **Discharge:** 20 secs **Pressure:** 110 psi

Samplers' Signatures: Isaac Moore **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1000	202.28	14.7	6.93	1684	4.87	141.5	188	200	
1010	202.28	14.6	6.94	1637	4.30	155.6	82.2		
1020	202.30	14.7	6.97	1636	4.21	145.5	37.8		Min purge met @ 2 gal
1030	202.30	14.6	6.96	1642	4.09	126.6	25.4		
1040	202.30	14.6	6.97	1640	4.07	131.1	12.7		
1050	202.30	16.3	6.95	1644	4.14	137.6	11.8		
1100	202.30	14.9	6.97	1643	4.11	136.2	10.6		
1110	202.30	14.4	6.98	1639	4.09	134.0	5.95		
1115	202.30	14.3	6.99	1641	4.08	125.2	6.65		
1120	202.30	14.3	7.00	1639	4.11	123.9	7.35		
1125	202.30	14.5	7.00	1638	4.05	127.1	6.79		Total purge = 6.1 gal
1135	Sample								Stable, sample

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

Previous controller settings: Recharge: _____ **Discharge:** _____

Pressure: _____ **Cycles Per Minute:** _____ **Flow Rate:** _____

Screened Interval: 225-235 ft bgs **Minimum purge volume:** 2.0 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☒
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/1/2024 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 15.4 **(Vented to)** 0.0

Well ID: MW-43D **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** 279

Initial Static Water Level (feet btoc): 214.27 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 214.19 **QC Samples Collected:** None

Purge Start Time: 0945 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1225 **Controller Settings: Recharge:** 40 secs **Discharge:** 20 secs **Pressure:** 155 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen ~~(mg/L)~~ %	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1001	214.19	14.8	7.30	1,135	18.2	79.3	835	175	
1011	214.19	14.8	7.34	1,100	13.0	44.7	522	175	
1021	214.19	14.8	7.34	1,099	12.4	27.1	373	175	
1031	214.19	14.8	7.35	1,097	13.0	17.2	214	175	
1041	214.19	14.8	7.34	1,090	11.4	11.3	189	175	Min purge 2.4 gal met
1101	214.19	14.9	7.34	1,085	9.7	-2.5	150	175	
1121	214.19	14.9	7.31	1,074	10.5	-10.8	102	175	
1131	214.19	15.4	7.35	1,074	9.7	-15.9	82.0	175	1140 ran out of air, switched tanks
1145	214.20	15.5	7.35	1,082	10.4	-18.7	70.2	175	
1155	214.20	14.8	7.31	1,067	10.3	-21.4	57.1	175	
1200	214.19	14.8	7.37	1,073	10.1	-23.0	50.7	175	
1205	214.19	14.8	7.37	1,072	9.8	-24.0	50.3	175	
1210	214.19	14.8	7.36	1,062	9.7	-25.0	49.7	175	
1215	214.19	14.8	7.37	1,068	~~11.0~~ 10.1	-26.0	46.8	175	
1220	214.19	15.1	7.36	1,063	10.2	-27.0	45.7	175	Stable, Total purge = 7.2 gal

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

Previous controller settings: Recharge: 40 **Discharge:** 20
Pressure: 155 **Cycles Per Minute:** 1 **Flow Rate:** 175

Screened Interval: 2742-284 ft bgs **Minimum purge volume:** 2.4 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/1/2024 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-44S **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** 200

Initial Static Water Level (feet btoc): 155.68 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 155.65 **QC Samples Collected:** None

Purge Start Time: 1425 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1720 **Controller Settings: Recharge:** 40 secs **Discharge:** 20 secs **Pressure:** 130 psi

Samplers' Signatures: Isaac Nave **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1435	155.65	13.8	7.05	1535	7.57	142.2	Overrange	150	
1455	155.65	12.9	7.11	1538	6.03	165.6	Overrange	175	
1515	155.65	12.8	7.11	1540	5.47	183.5	Overrange		Min purge 1.8 gal met
1525	155.65	12.8	7.13	1533	5.50	169.5	Overrange		
1545	155.65	12.7	7.11	1543	5.27	182.2	Overrange		
1605	155.65	12.6	7.13	1541	5.26	168.7	Overrange		
1625	155.65	12.6	7.12	1543	5.10	188.8	822		
1645	155.65	12.7	7.12	1539	5.08	192.3	657		
1655	155.65	12.6	7.12	1537	5.06	195.8	365		
1705	155.65	12.7	7.12	1541	5.00	197.2	356		
1710	155.65	12.7	7.12	1541	5.01	198.3	328		All parameters stable except turbidity, 2+ hour purge. Consulted w/ Neil Smith, OK to sample.
1720	Sample								
									Total purge = 8.1 gal

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

Previous controller settings: Recharge: _____ **Discharge:** _____

Pressure: _____ **Cycles Per Minute:** _____ **Flow Rate:** _____

Screened Interval: 195-205 ft bgs **Minimum purge volume:** 1.8 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☒
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/1/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: MW-44D **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** 285

Initial Static Water Level (feet btoc): 178.98 **Analytical Parameters:** VOCs

Final Water Level (feet btoc): 179.00 **QC Samples Collected:** None

Purge Start Time: 1410 **Ferrous Iron (mg/L):** NA **Allowable Drawdown (ft):** 0.3

Sample Time: 1515 **Controller Settings: Recharge:** 40 secs **Discharge:** 20 secs **Pressure:** 110 psi

Samplers' Signatures: PKubina **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1425	179.00	12.7	7.16	1,008	5.70	173.2	76.3	325	
1435	179.00	12.6	7.12	1,000	5.63	187.4	43.9	325	
1440	179.00	12.5	7.17	1,004	5.60	188.8	33.9	325	Min purge 2.5gal met
1450	179.00	12.5	7.18	1,007	5.76	149.4	14.2	325	
1500	179.00	12.5	7.17	1,006	5.74	171.3	8.01	325	
1505	179.00	12.5	7.17	1,006	5.69	175.4	5.98	325	
1510	179.00	12.5	7.17	1,006	5.70	178.8	4.44	325	Total purge = 5.2 gal
1515	Sample								Stable, Sample

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

Previous controller settings: Recharge: 40 **Discharge:** 20

Pressure: 110 **Cycles Per Minute:** 1 **Flow Rate:** 325

Screened Interval: 280-290 ft bgs **Minimum purge volume:** 2.5 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV		
Water Level	± 0.3 foot	Turbidity	< 50 NTU and ±10% OR < 10 NTU

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☒
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 9/7/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: MW-45 Purging/Sampling Device: QED/Gas Pump depth (ft bgs): 205

Initial Static Water Level (feet btoc): 17.78 Analytical Parameters: VOCs

Final Water Level (feet btoc): 17.70 QC Samples Collected: None

Purge Start Time: 0835 Ferrous Iron (mg/L): NA Allowable Drawdown (ft): 0.3

Sample Time: 1026 Controller Settings: Recharge: ~~NA~~ MB ~~18~~ 10 secs Discharge: ~~NA~~ MB ~~12~~ 10 secs Pressure: ~~90~~ MB 120 psi

Samplers' Signatures: [signature] Cycles Per Minute: ~~NA~~ MB ~~2~~ MB 3

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0845	17.76	14.7	7.14	1,174	7.24	-38.3	overrange	300	2 cycles @ 18/12 @ 90 psi
0850	17.76	15.0	7.13	1,168	7.13	-6.2	overrange	300	
0855	17.72	15.2	7.12	1,172	6.50	-7.8	overrange	300	
0900	17.70	15.1	7.11	1,168	6.25	-16.0	768	300	2.0 gallons
0905	17.70	14.9	7.13	1,166	6.29	-10.1	overrange	300	
0910	17.68	14.7	7.13	1,166	6.35	2.4	overrange	300	
0915	17.72	14.9	7.12	1,164	6.50	3.7	overrange	300	
0920	17.72	14.8	7.13	1,164	6.20	5.6	overrange	400	3 cycles @ 10/10 to reduce turb.
0925	17.68	14.7	7.14	1,166	6.10	MB ~~330~~ 67	300	400	
0930	17.66	14.5	7.13	1,163	6.12	10.8	overrange	400	pause readings, see field notes.
1010 MB ~~0935~~	17.70	14.9	7.10	1,160	7.15	42.0	93.4	400	resume readings, turb. < 100
1015	17.70	15.0	7.07	1,160	7.17	50.2	48.7	400	
1020	17.70	15.1	7.09	1,160	7.20	51.4	46.3	400	
1025	17.70	15.0	7.08	1,160	7.22	53.8	44.9	400	5 gallons purged.

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

Previous controller settings: Recharge: _____ Discharge: _____

Pressure: _____ Cycles Per Minute: _____ Flow Rate: _____

Screened Interval: 200-210 ft bgs Minimum purge volume: 1.9 gallons → 25 mins @ 0.08 gpm

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/11/24

Well ID: EW-01

Initial Static Water Level (feet btoc): 203.60

Final Water Level (feet btoc): 203.55

Purge Start Time: 13:30

Sample Time: 1521

Samplers' Signatures: [signature]

OVM: FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Purging/Sampling Device: QED/Gas **Pump depth (ft bgs):** 280

Analytical Parameters: VOCs , Anions, Nitrate/Nitrite, Alkalinity, TOC, MEE, microbial

QC Samples Collected: None

Ferrous Iron (mg/L): 0.47 **Allowable Drawdown (ft):** 0.3

Controller Settings: Recharge: 20 secs **Discharge:** 40 secs **Pressure:** 100 psi

Cycles Per Minute: 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
1345	203.55	21.5	7.00	1,221	5.09	105.7	11.0	100	
1400	203.59	22.4	7.08	1250	4.79	80.7	13.2	100	
1415	203.56	22.8	7.03	1,245	5.48	75.9	12.9	100	
1430	203.58	22.0	7.06	1250	5.27	86.2	10.5	100	
1445	203.52	22.2	7.05	1249	4.50	87.1	12.2	100	2-3 gallons purged
1500 ~~1450~~ MB	203.55	28.7	7.10	1252	3.84	94.7	12.0	100	Paused to change gas tank.
1505 ~~1455~~ MB	203.55	22.1	6.98	1250	4.84	95.2	10.1	100	
1510 ~~1500~~ MB	203.55	21.5	7.00	1249	4.58	90.5	11.8	100	
1515	203.55	21.5	7.01	1,244	4.49	93.2	12.6	100	
1520	203.55	21.6	7.04	1,243	4.51	92.6	12.9	100	3 gallons purged
		[signature]		[signature]					

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

Previous controller settings: Recharge: _____ **Discharge:** _____

Pressure: _____ **Cycles Per Minute:** _____ **Flow Rate:** _____

Screened Interval: 260-300 ft bgs **Minimum purge volume:** 0.0 gallons → 2.3 gallons
@0.03 → 75 mins

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 9/11/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** 0.0 **(Vented to)** 0.0

Well ID: IW-01 **Purging/Sampling Device:** QED/Gas **Pump depth (ft bgs):** 260

Initial Static Water Level (feet btoc): 202.25' **Analytical Parameters:** VOCs , Anions, Nitrate/Nitrite, Alkalinity, TOC, MEE, microbial

Final Water Level (feet btoc): 202.65' **QC Samples Collected:** None

Purge Start Time: 0935 **Ferrous Iron (mg/L):** 0.11 **Allowable Drawdown (ft):** 0.3

Sample Time: 1111 **Controller Settings: Recharge:** 20 secs **Discharge:** 46 secs **Pressure:** 100 psi

Samplers' Signatures: [signature] **Cycles Per Minute:** 1

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0950	202.65	17.9	7.08	1,107	6.18	62.4	9.17	125	
1005	202.65	17.8	7.13	1,123	6.23	27.8	6.10	125	
1020	202.66	17.7	7.12	1,129	5.28	24.5	5.11	125	
1035	202.69	18.2	7.15	1,111	5.26	22.1	3.27	125	
1050	202.68	18.2	7.14	1,118	5.91	31.6	2.66	125	2.25 gallons purged
1100	202.64	18.4	7.14	1,122	5.40	27.0	1.89	125	
1105	202.65	18.2	7.12	1,121	5.43	27.5	2.15	125	
1110	202.65	18.3	7.13	1,119	5.39	27.2	1.38	125	3.5 gallons purged

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

Previous controller settings: Recharge: _____ **Discharge:** _____

Pressure: _____ **Cycles Per Minute:** _____ **Flow Rate:** _____

Screened Interval: 250-270 ft bgs **Minimum purge volume:** 0.0 gallons → 2.1 gallons ⇒ 70 mins 0.03 gpm

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐ Minimum Purge Met and Notated: ☐
Total Purge Volume Recorded: ☐ Simultaneous Purge Allowed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/03/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** N/A **(Vented to)** N/A

Well ID: RG-01 **Purging/Sampling Device:** HydraSleeve **Pump depth (ft bgs):** NA

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: NA **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** NA

Sample Time: 0807 **Controller Settings: Recharge:** NA secs **Discharge:** NA secs **Pressure:** NA psi

Samplers' Signatures: _____ **Cycles Per Minute:** NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments

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

Previous controller settings: Recharge: NA secs **Discharge:** NA secs

Pressure: NA **Cycles Per Minute:** NA **Flow Rate:** NA mL/min

Screened Interval: 9-19 **Minimum purge volume:** NA

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/03/14 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** N/A **(Vented to)** N/A

Well ID: RG-02 **Purging/Sampling Device:** HydraSleeve **Pump depth (ft bgs):** NA

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: NA **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** NA

Sample Time: 0845 **Controller Settings: Recharge:** NA secs **Discharge:** NA secs **Pressure:** NA psi

Samplers' Signatures: _____ **Cycles Per Minute:** NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments

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

Previous controller settings: Recharge: NA secs **Discharge:** NA secs

Pressure: NA **Cycles Per Minute:** NA **Flow Rate:** NA mL/min

Screened Interval: 5-15 **Minimum purge volume:** NA

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/03/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** N/A **(Vented to)** N/A

Well ID: RG-03 **Purging/Sampling Device:** HydraSleeve **Pump depth (ft bgs):** NA

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: NA **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** NA

Sample Time: 0834 **Controller Settings: Recharge:** NA secs **Discharge:** NA secs **Pressure:** NA psi

Samplers' Signatures: _____ **Cycles Per Minute:** NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments

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

Previous controller settings: Recharge: NA secs **Discharge:** NA secs

Pressure: NA **Cycles Per Minute:** NA **Flow Rate:** NA mL/min

Screened Interval: 3-8 **Minimum purge volume:** NA

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/03/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** N/A **(Vented to)** N/A

Well ID: RG-04 **Purging/Sampling Device:** HydraSleeve **Pump depth (ft bgs):** NA

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: NA **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** NA

Sample Time: 1130 **Controller Settings: Recharge:** NA secs **Discharge:** NA secs **Pressure:** NA psi

Samplers' Signatures: _____ **Cycles Per Minute:** NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments

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

Previous controller settings: Recharge: NA secs **Discharge:** NA secs

Pressure: NA **Cycles Per Minute:** NA **Flow Rate:** NA mL/min

Screened Interval: 10-20 **Minimum purge volume:** NA

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 10/03/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) N/A (Vented to) N/A

Well ID: RG-05 Purging/Sampling Device: HydraSleeve Pump depth (ft bgs): NA

Initial Static Water Level (feet btoc): NA Analytical Parameters: VOCs

Final Water Level (feet btoc): NA QC Samples Collected: Field Duplicate FD09-GW100324

Purge Start Time: NA Ferrous Iron (mg/L): _____ Allowable Drawdown (ft): NA

Sample Time: 1190 Controller Settings: Recharge: NA secs Discharge: NA secs Pressure: NA psi

Samplers' Signatures: _____ Cycles Per Minute: NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments

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

Previous controller settings: Recharge: NA secs Discharge: NA secs

Pressure: NA Cycles Per Minute: NA Flow Rate: NA mL/min

Screened Interval: 20-30 Minimum purge volume: NA

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/03/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** N/A **(Vented to)** N/A

Well ID: RG-06 **Purging/Sampling Device:** HydraSleeve **Pump depth (ft bgs):** NA

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: NA **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** NA

Sample Time: 1017 **Controller Settings: Recharge:** NA secs **Discharge:** NA secs **Pressure:** NA psi

Samplers' Signatures: _____ **Cycles Per Minute:** NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments

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

Previous controller settings: Recharge: NA secs **Discharge:** NA secs

Pressure: NA **Cycles Per Minute:** NA **Flow Rate:** NA mL/min

Screened Interval: 4-9 **Minimum purge volume:** NA

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/03/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** N/A **(Vented to)** N/A

Well ID: RG-07 **Purging/Sampling Device:** HydraSleeve **Pump depth (ft bgs):** NA

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: NA **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** NA

Sample Time: 0955 **Controller Settings: Recharge:** NA secs **Discharge:** NA secs **Pressure:** NA psi

Samplers' Signatures: _____ **Cycles Per Minute:** NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments

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

Previous controller settings: Recharge: NA secs **Discharge:** NA secs

Pressure: NA **Cycles Per Minute:** NA **Flow Rate:** NA mL/min

Screened Interval: 20-30 **Minimum purge volume:** NA

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/03/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** N/A **(Vented to)** N/A

Well ID: RG-08 **Purging/Sampling Device:** HydraSleeve **Pump depth (ft bgs):** NA

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: NA **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** NA

Sample Time: 0907 **Controller Settings: Recharge:** NA secs **Discharge:** NA secs **Pressure:** NA psi

Samplers' Signatures: _____ **Cycles Per Minute:** NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments

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

Previous controller settings: Recharge: NA secs **Discharge:** NA secs

Pressure: NA **Cycles Per Minute:** NA **Flow Rate:** NA mL/min

Screened Interval: 8-18 **Minimum purge volume:** NA

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/03/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** N/A **(Vented to)** N/A

Well ID: RG-09 **Purging/Sampling Device:** HydraSleeve **Pump depth (ft bgs):** NA

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: NA **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** NA

Sample Time: 0815 **Controller Settings: Recharge:** NA secs **Discharge:** NA secs **Pressure:** NA psi

Samplers' Signatures: _____ **Cycles Per Minute:** NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments

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

Previous controller settings: Recharge: NA secs **Discharge:** NA secs

Pressure: NA **Cycles Per Minute:** NA **Flow Rate:** NA mL/min

Screened Interval: 5-15 **Minimum purge volume:** NA

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume **Date:** 10/03/24 **OVM:** FID ☐ PID ■ **In Casing (ppm): (Initial)** N/A **(Vented to)** N/A

Well ID: RG-10 **Purging/Sampling Device:** HydraSleeve **Pump depth (ft bgs):** NA

Initial Static Water Level (feet btoc): NA **Analytical Parameters:** VOCs

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

Purge Start Time: NA **Ferrous Iron (mg/L):** _____ **Allowable Drawdown (ft):** NA

Sample Time: 1029 **Controller Settings: Recharge:** NA secs **Discharge:** NA secs **Pressure:** NA psi

Samplers' Signatures: _____ **Cycles Per Minute:** NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments

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

Previous controller settings: Recharge: NA secs **Discharge:** NA secs

Pressure: NA **Cycles Per Minute:** NA **Flow Rate:** NA mL/min

Screened Interval: 20-30 **Minimum purge volume:** NA

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: 700S 1600E PCE Plume Date: 10/03/24 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) N/A (Vented to) N/A

Well ID: RG-11 Purging/Sampling Device: HydraSleeve Pump depth (ft bgs): NA

Initial Static Water Level (feet btoc): NA Analytical Parameters: VOCs

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

Purge Start Time: NA Ferrous Iron (mg/L): _____ Allowable Drawdown (ft): NA

Sample Time: 1115 Controller Settings: Recharge: NA secs Discharge: NA secs Pressure: NA psi

Samplers' Signatures: _____ Cycles Per Minute: NA

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments

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

Previous controller settings: Recharge: NA secs Discharge: NA secs

Pressure: NA Cycles Per Minute: NA Flow Rate: NA mL/min

Screened Interval: 30-40 Minimum purge volume: NA

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	±1°C	DO	±10% OR ±0.2mg/L (whichever is greater)
pH	±0.1 pH unit		
Specific Cond	±3%		
ORP	±10mV	Turbidity	< 50 NTU and ±10% OR < 10 NTU
Water Level	± 0.3 foot		

Ferrous Fe Analyzed: ☐

PCE

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA Plume 7005 1600E

Instrument (Name/Model No./Serial No.): YSI ProQuatro

Manufacturer: YSI U121927X

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/5/24	7.01	7.0 pH	6309007 9/15/25	N	6.95	Pass	Jee
9/5/24	10.12	10.0 pH	6308010 8/23/25	N	10.05	Pass	Jee
9/5/24	4.03	4.0 pH	44030046 3/20/26	N	4.01	Pass	Jee
9/5/24	1.365	1409 µmho/cm 3/20/26	8403134 3/20/26	N	1.409	Pass	Jee
9/5/24	256 mV	220 mV	15112 7/9/25	N	220.3	Pass	Jee
9/5/24	86.7%	653.7 mmHg	—	N	86.5%	Pass	Jee
9/6/24	6.92	7.00 pH		N	7.00	P	
	10.02	10.00 pH		N	10.00	P	
	4.01	4.00 pH		N	4.00	P	
	1396	1409 µmho/cm		N	1409	P	
	216.5	220.0 mV		1	220.4	P MDJ 9/16	MDJ 9/16
	86.2%	654.8 mmHg		N	86.5%	P	

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE PLUME 7005 1600E

Instrument (Name/Model No./Serial No.): Pro Plus / U84261X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/7/24	96.5%	656 mmHg	—	N	7.61 mg/L	Pass	[signature]
↓	1411 mS/cm	1409	8208544 9/9/24	N	1416	Pass	[signature]
↓	7.13 pH	7.0	6309007 9/15/25	N	7.05	Pass	[signature]
↓	10.05 pH	10.0	6308010 8/23/25	N	10.02	Pass	[signature]
↓	4.03 pH	4.0	8301138 1/23/25	N	4.00	Pass	[signature]
↓	231.1 ORP	220	15112 7/9/25	N	219.7	Pass	[signature]
9/8/24	7.08	7.02	6309007 9/15/25	N	~~7.02~~ 7.07	P	[signature]
↓	10.11	10.05	6308010 8/23/25	N	10.07	P	[signature]
↓	3.94	4.00	8301138 1/23/25	N	3.99	P	[signature]
↓	1445	1409	8208544 9/9/24	N	1301	P	[signature]
↓	82.0%	648.72 mmHg	—	N	85.5% / 7.49 mg/L	P	[signature]
9/8/24	207.9	220	15112 7/9/25	N	220.5	P	[signature]

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume

Instrument (Name/Model No./Serial No.): 2100Q 19040C07S141

Manufacturer: HACH

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
10/3/24	—	10.0 NTU	A4057 S125	N	10.9	P	[signature]
↓	—	20.0 NTU	A4067 S125	N	20.2	P	[signature]
↓	—	100.0 NTU	A4060 S125	N	104	P	[signature]
↓	—	800.0 NTU	A4057 S125	N	803	P	[signature]

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume 700S 1600E

Instrument (Name/Model No./Serial No.): YSI Pro Quatro 24E105296

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/7/24	7.06	7.0pH	44030047 3/18/26	N	7.01	Pass	Jesse
9/7/24	10.05	10.0pH	44040147 4/4/26	N	10.08	Pass	Jesse
9/7/24	4.03	4.0 pH	44050075 5/11/26	N	3.99	Pass	Jesse
9/7/24	90.2%	657.3 mmHg	—	N	88.2%	Pass	Jesse
9/7/24	1422	1409 umhos/cm	8403134 3/30/26	N	1413	Pass	Jesse
9/7/24	220.5	200mV	15112 7/9/25	N	220.0	Pass	JM
9/8/24	7.09	7.02	44030047 3/18/26	N	7.01	P	Emma
	9.85	10.05	44040147 4/4/26	N	9.86	P	Emma
	4.09	4.01	44050075 5/11/26	N	3.98	P	Emma
	1440	1409 umhos/cm	8403134 3/30/26	N	1409	P	Emma
↓	95.0%	648.72 mmHg	—	N	7.49 mg/L	P	Emma
9/8/24	232	ORP 220mV	15112 7/9/25	N	220	P	JM

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA ~~Plume~~ PCE PLUME 7005/600E
MOD 9/13

Instrument (Name/Model No./Serial No.): U123207X

Manufacturer: ~~Hach~~ 2100 Q

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/12/24	—	20 NTU	Lot A4138 08/25	—	19.5	pass	
9/12/24	—	100 NTU	Lot A4138 08/25	—	99.1	P	
9/12/24	—	800 NTU	Lot A4138 08/25	—	~~99.1~~ EG 9/12/24 809	P	
9/12/24	—	10 NTU	Lot A4158 C9/25	—	~~EG 9/12/24 9.9~~ 9.86	P	
~~9/12/24~~ EG 9/12/24							

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE PLUME 700516000E

Instrument (Name/Model No./Serial No.): YSI U121927X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/10/24	93.4%	DO 758 mm Hg	—	N	99.6%	P	MB
	1.429	Conductivity 1.409 umho/cm	8403134 3/30/26	N	1.411	P	MB
	3.93	pH 4.0	15112 9/19/25	N	3.98	P	MB
	6.97	pH 7.0	44036477 3/18/26	N	6.98	P	MB
	9.96	pH 10.0	44040147 4/14/26	N	10.01	P	MB
↓	213	ORP 220mV	44050075 5/11/26	N	220	P	MB
9/12/24	107.7%	DO 646.43 mmHg	—	N	8.26 mg/L	P	LL
9/12/24	1451	Conductivity 1409 uMho/cm	8403134 3/30/26	N	1409	P	LL
~~9/12/24~~	~~4.06 3.93~~ LL 9/12/24	~~pH 4.0~~	~~44050675 5/11/26~~	~~N~~	~~3.97~~	~~P~~	~~LL~~
~~9/12/24~~	~~7.04~~	~~pH 7.0~~	~~44036047 3/18/26~~	~~N~~	~~7.03~~	~~P~~	~~LL~~
		~~pH 10.0~~					
9/12/24	4.05	pH 4.0	44050675 5/11/26	N	4.03	P	LL
9/12/24	7.08	pH 7.0	44036047 3/18/26	N	7.07	P	LL
9/12/24	10.04	pH 10.0	44040147 4/14/26	N	10.08	P	LL
9/12/24	227.0	ORP 220mV	~~15112~~ 07/09/25	N	220.0	P	LL

LL 9/12/24

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE PLUME 7005 600E

Instrument (Name/Model No./Serial No.): YSi 24E/05296

Manufacturer: YSi

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/10/24	6.86	7.0pH	6309007 9/15/25	N	7.03	Pass	Jsee
9/10/24	9.98	10.0pH	6308010 8/23/25	N	10.03	Pass	Jsee
9/10/24	3.98	4.0pH	44030046 3/20/26	N	4.01	Pass	Jsee
9/10/24	1422	1409 umho/cm	8403139 3/20/26	N	1412	Pass	Jsee
9/10/24	221.0	220mV	15112 7/9/25	N	234.15	Pass	Jsee
9/10/24	95.9%	662.5mmHg	—	N	87.1%	Pass	Jsee
9/11/24	7.03	7.0pH	6309007 9/15/25	N	7.01	Pass	Jsee
9/11/24	10.08	10.0pH	6308010 8/23/25	N	10.05	Pass	Jsee
9/11/24	4.09	4.0pH	44030046 3/20/26	N	4.00	Pass	Jsee
9/11/24	1431	1409 umho/cm	8403134 3/20/26	N	1413	Pass	Jsee
9/11/24	73.4%	662.5mmHg	—	N	90.3%	Pass	Jsee
9/12/24	1196	1409	8403134 3/20/26	N	1413	P	JSR
9/12/24	231.2	220	15112 7/9/25	N	220.0	P	JSR
9/12/24	6.89	7.0	6309007 9/15/25	N	7.02	P	JSR
9/12/24	4.11	4.0	44030046 3/20/26	N	4.00	P	JSR
9/12/24	9.74	10.0	6308010 7/18/25	N	10.07	P	JSR
9/12/24	86.5	755 mmHg		N	99.2	P	JSR

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume 700S 1600E

Instrument (Name/Model No./Serial No.): YSI pro Quatro M20220X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/8/24	89.1%	DO 759 mm Hg	—	N	98.2%	P	MB
↓	4.11	pH 4.0	44020567 2/22/26	N	4.04	P	MB
	7.13	pH 7.0	6402010 2/5/26	N	7.01	P	MB
	10.09	pH 10.0	44020094 2/6/24	N	10.02	P	MB
	1.420	conductivity 1,409	8403134 3/30/26	N	1,411	P	MB
↓	216	ORP 220	15112 7/9/25	N	220	P	MB

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VAPE PLUME 7005 1600E

Instrument (Name/Model No./Serial No.): Minirae 3000 592-601807

Manufacturer: Honeywell

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/4/2024	—	100ppm Isobutylene	304-40191667I-1 11/12/2024	N	99.8 ppm	Pass	JM
↓	0.0	Fresh Air	↓ JMC 9/4	N	0.0 ppm	Pass	JM
9/5/24	0.0	Fresh Air	—	N	0.0ppm	Pass	JM
9/5/24	—	100 ppm C_4H_8	304-40191667I-1 11/12/2024	N	99.8ppm	Pass	JM
9/6/24	0.0	Fresh Air	~~304-40191667I-1 9/6 11/12/2024~~	N	~~99.8~~ 0.0 JMC 9/6	Pass	Jace
9/6/24	—	100ppm C_4H_8	304-40191667I-1 11/12/24	N	99.8ppm	Pass	JM
9/7/24	0.0	Fresh Air	—	N	0.0ppm	Pass	Jace
9/7/24	—	100ppm C_4H_8	304-40191667I-1 11/12/24	N	99.7ppm	Pass	Jace
9/8/24	0.1	Fresh Air	—	N	0.0ppm	Pass	Jace
9/8/24	—	100ppm C_4H_8	304-40191667I-1 11/12/24	N	99.7ppm	Pass	Jace

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE PLUME 7005 WOOE

Instrument (Name/Model No./Serial No.): Minirae 3000 592-927580

Manufacturer: Honeywell

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/4/2024	~~0.0~~ JM 9/4	~~100ppm Iso Fresh Air~~ JM 9/4	304-40191667I-1 11/12/2024	N	100.0ppm	Pass	JM
↓	0.0	Fresh Air	~~↓~~ JM 9/4	N	0.0 ppm	Pass	JM
9/5/2024	0.0	Fresh Air JDB 9/5/24	~~304-40191667I-1 11/12/2024~~	N	0.0 PPM	Pass	Jee
9/5/2024	—	100 PPM ISO	304-40191667I-1 11/12/2024	N	100.0PPM	Pass	Jee
9/6/2024	0.0	Fresh Air	—	N	0.0	Pass	JM
9/6/2024	—	100 ppm Iso	304-40191667I-1 11/12/2024	N	100.0ppm	Pass	JM
9/7/24	0.0	Fresh Air	—	N	0.0	Pass	JM
9/7/24	—	100ppm C_4H_8	304-40191667I-1 11/12/2024	N	100.0ppm	Pass	JM
9/8/24	0.0	Fresh Air	—	N	0.0ppm	Pass	Jee
9/8/24	—	100 ppm C_4H_8	304-40191667I-1 11/12/2024	N	100.0ppm	Pass	Jee

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume TOOS 1600E

Instrument (Name/Model No./Serial No.): MiniRAE 3000 PID 592-904374

Manufacturer: Honeywell

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/4/24	0.0 ppm	Fresh air	—	N	0.0 ppm	pass	[signature]
9/4/24	—	100.0ppm C_4H_8	304-401916671-1 -Lot# 11/12/24-Exp	N	100.0 ppm	pass	[signature]
9/5/24	0.0 ppm	Fresh air	—	N	0.0 ppm	Pass	[signature]
9/5/24	—	100ppm C_4H_8	304-401916671-1 11/12/24	N	99.9 ppm	Pass	[signature]
9/6/24	0.0	Fresh Air	—	N	0.0 ppm	Pass	[signature]
9/6/24	—	100ppm C_4H_8	304-401916671-1 11/12/24	N	100.0ppm	Pass	[signature]
9/7/24	0.0	Fresh air JPB 9/7/24	~~304-401916671-1 11/12/24~~	N	0.0ppm	Pass	[signature]
9/7/24	—	100.0 ppm C_4H_8	304-401916671-1 11/12/24	N	100.0ppm	Pass	[signature]
9/8/24	0.0	Fresh Air	—	N	0.0 ppm	pass	[signature]
9/8/24	—	100 ppm C_4H_8	304-401916671-1 11/12/24	N	100.0ppm	Pass	[signature]

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume 7005 1600E

Instrument (Name/Model No./Serial No.): PID Honeywell miniRAE 3000+ 592-601807

Manufacturer: Honeywell minRAE 3000+

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/10/24	0.0ppm	Fresh Air	—	N	0.0ppm	Pass	Jee
JPB 9/11/24 9/10/24	—	100 ppm	304-40 1916671-1 11/12/24	N	99.7ppm	Pass	Jee
~~9/10/24~~ 9/11/24	00	Fresh Air	—	N	0.0ppm	pass	Jee
9/11/24	—	100ppm	304-401916671-1 11/12/24	N	99.7ppm	Pass	Jee
9/12/24	0.0ppm	Fresh Air	—	N	0.0ppm	Pass	Jee
9/12/24	—	100 ppm	304-401916671-1 11/12/24	N	99.7ppm	Pass	Jee
9/13/24	0.0ppm	Fresh Air	—	N	0.0ppm	Pass	Jee
9/13/24	—	100 ppm	304-401916671-1 11/12/24	N	99.7ppm	pass	Jee

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume 700S 1600E

Instrument (Name/Model No./Serial No.): PID 592-927580

Manufacturer: Mini RAE 3000+ Honeywell

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/10/24	0.0	Fresh Air	—	N	0.0ppm	Pass	Jee
9/10/24	—	100ppm	304-401916671-1 11/12/24	N	100.0	Pass	Jee
9/11/24	0.0	Freshair	—	N	0.0ppm	Pass	Jee
9/11/24	—	100.0 ppm	304-401916671-1 11/12/24	N	100.0ppm	Pass	Jee
9/12/24	0.0	Freshair	—	N	0.0ppm	Pass	Jee
9/12/24	—	100.0ppm	304-401916671-1 11/12/24	N	100.0ppm	Pass	Jee

EQUIPMENT CALIBRATION LOG

SITE NAME: SCC VA PCE PLUME 70051600E

Instrument (Name/Model No./Serial No.): PID 592-904374

Manufacturer: Honeywell M.n:RAE 3000+

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/10/24	0.0	Fresh air	— 11/12/24	NO	0.0 ppm	pass	
9/10/24	—	100.0 PPM	304-40191667-1	NO	100.0 PPM	PASS	
9/11/24	0.0	Freshair	—	N	0.0ppm	Pass	
9/11/24	—	100.0ppm	304-40191667-1 11/12/24	N	100.0ppm	Pass	
9/12/24	0.0	Fresh air	—	N	0.0ppm	Pass	
9/12/24	—	100 ppm	304-40191667-1 11/12/24	N	100.0ppm	Pass	
9/13/24	0.0	Freshair	—	N	0.0	Pass	
9/13/24	—	100.0ppm	304-40191667-1 11/12/24	N	100.0ppm	Pass	

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA

Instrument (Name/Model No./Serial No.): Hach / turbimeter Model 2100Q / 4104104x

Manufacturer: Hach

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/11/24	~	20 NTU	Lot A3200 10/24	—	19.4	P	
9/11/24	—	100 NTU	Lot A3195 10/24	—	111	P	
9/11/24	—	800 NTU	Lot A3199 10/24	—	800	P	
9/11/24	—	10 NTU	Lot A3339 03/25	—	9.68	P	
9/12/24	—	20 NTU	Lot A3200 10/24	—	19.6	P	
9/12/24	—	100 NTU	Lot A3195 10/24	—	92.8	P	
9/12/24	—	800 NTU	Lot A3199 10/24		793	P	
9/12/24	~	10 NTU	Lot A3339 03/25	—	10.3	P	

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA Plume

Instrument (Name/Model No./Serial No.): U123207X 2100Q Turbidimeter

Manufacturer: Hach

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/10/24	—	20 NTU	Lot A4138 08/25	—	19.5	P	[signature]
9/10/24	—	100 NTU	Lot A4138 08/25	—	102	↓	[signature]
9/10/24	—	800 NTU	Lot A4138 08/25	—	827	↓	[signature]
9/10/24	—	10 NTU	A4158 09/25	—	9.56	↓	[signature]
9/11/24	-	20 NTU	Lot A3200 10/24	—	19.4	P	[signature]
9/11/24	—	100 NTU	Lot A3195 10/24	—	111	P	[signature]
9/11/24	—	800 NTU	Lot A3199 10/24	—	800	P	[signature]
9/11/24	—	10 NTU	Lot A3339 03/25	—	9.68	P	[signature]
9/11/24	—	20 NTU	Lot A4138 08/25	—	20.5	P	[signature]
9/11/24	—	100 NTU	Lot A4138 08/25	—	102	P	[signature]
9/11/24	—	800 NTU	Lot A4138 08/25	—	851	P	[signature]
9/11/24	—	10 NTU	Lot A4158 09/25	—	9.35	P	[signature]

[signature] 9/11/24

EQUIPMENT CALIBRATION LOG

SITE NAME: ~~CDM VA~~ VAPCE Plume 7005 1600E

Instrument (Name/Model No./Serial No.): HACH 2100 Q, S/N 24030D000276
MDS 917

Manufacturer: HACH

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/5/24	~~TURBIDITY~~	10.0 NTU	A4158/09/25	YES	9.16	PASS	
	9.31						
9/6/24	9.48	10 NTU	"	yes	9.84	pass	
	18.6	20 NTU	A4138/8/25	N	18.6	P	MB
	97.9	100 NTU	A4138/8/25	N	97.9	P	MB
	749	800 NTU	A4130/8/25	N	749	P	MB
9/7/24	9.57	10 NTU	A4158/09/25	Y	9.73	P	MB
	19.1	20 NTU	A4138/8/25	N	19.1	P	MB
	98.3	100 NTU	A4138/8/25	N	98.3	P	MB
	773	800 NTU	A4130/8/25	N	773	P	MB

MDS 915

EQUIPMENT CALIBRATION LOG

SITE NAME: ~~CDM VA~~ SLC VA PCE PLUME @005\600E

Instrument (Name/Model No./Serial No.): 2100 Q U104104X, 20100D001d06

Manufacturer: HACH

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
09/05/24	10.1 NTU	10.0 NTU	A3339 | 03/25	NO	10.1 NTU	PASS	
9/6/24	9.98 NTU	10.0 NTU	A3339/03/25	N	10.2 NTU	Pass	Jee
9/7/24	—	20 NTU	A3200 10/24	N	20.4	Pass	Jee
9/7/24	—	100 NTU	A3195 10/24	N	104	Pass	Jee
9/7/24	—	800 NTU	A3199 10/24	N	839	Pass	Jee
9/7/24	—	10 NTU	A3339 3/25	N	9.93	Pass	Jee
9/8/24	—	20 NTU	↓	N	19.7	P	
↓	—	100 NTU	↓	N	97.2	P	
↓	—	800 NTU	↓	N	792	P	
↓	9.72	10 NTU	↓	N	9.72	P	
9/10/24	—	20 NTU	↓	N	21.2	P	
↓	—	100 NTU	↓	N	99.5	P	
↓	—	800 NTU	↓	N	800	P	
↓	9.33	10 NTU	↓	N	10.5	P	

MDS 9/12/24

EQUIPMENT CALIBRATION LOG

SITE NAME: ~~CDM VA~~ SC PCE Plume 7005 Lease

Instrument (Name/Model No./Serial No.): 2100Q / 24030D000283

Manufacturer: HACH

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/5/24	9.24 NTU	10.0 NTU	A4158 // 09/25	No	9.22 NTU	Pass	
9/6/24	19.8	20 NTU	A4138 // 08/25	No	~~19.8~~ ~~19.0 NTU~~ EG 9/6/24	Pass	
9/6/24	100	100 NTU	A4138 // 08/25	No	~~798~~ 99.9 EG 9/6/24	pass	
9/6/24	798	800 NTU	A4138 // 08/25	No	796	pass	
9/6/24	—	10 NTU	A4158 // 09/25	No	9.3	Pass	
9/7/24	—	20 NTU	A413 08/25	No	19.9	pass	
9/7/24	—	100 NTU	A4138 08/25	↓	101	pass	
9/7/24	—	~~10 NTU~~ 800 NTU EG 9/7/24	A4138 08/25	↓	806	pass	
9/7/24	—	10 NTU	A4138 08/25	↓	9.54	pass	
9/8/24	—	20 NTU	A4138 08/25	No	20.4	pass	
9/8/24	—	100 NTU	A4138 08/25	↓	97.6	↓	
9/8/24	—	800 NTU	A4138 08/25	↓	721	↓	
9/8/24	—	10.0 NTU	A4138 EG 9/7 08/25	↓	9.17	↓	

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume 700S 1600E

Instrument (Name/Model No./Serial No.): Hach 2100Q turbidimeter 24030000276

Manufacturer: Hach

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/12/24	9.45	10.0	A4158 9/25	N	9.89	P	MB
↓	20.3	20	A4138 9/25	N	20.3	P	MB
↓	100	100	A4138 8/25	N	100	P	MB
↓	789	800	A4130 8/25	N	789	P	MB

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume 1700S/600E

Instrument (Name/Model No./Serial No.): Turbidimeter, CU123215X

Manufacturer: Hach 2100Q

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/13/24	—	20 NTU	A4138 8/25	N	19.9	Pass	Jee
9/13/24	—	100 NTU	A4138 8/25	N	99.5	Pass	Jee
9/13/24	—	800 NTU	A4130 8/25	N	783	Pass	Jee
9/13/24	10.1	10 NTU	A4158 9/25	N	9.83	Pass	Jee

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VAPCE Plume 7005 1600E

Instrument (Name/Model No./Serial No.): Hach 2100Q turbidimeter 24030002276

Manufacturer: Hach

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/8/24	9.83	10	A4158 9/25	N	9.90	P	MB
↓	18.9	~~20~~	A4138 9/25	N	18.9	P	MB
↓	102	100	A4138 8/25	N	102	P	MB
↓	801	800	A4130 8/25	N	801	P	MB
9/10/24	9.26	10	A4158 9/25	N	9.83	P	MB
↓	19.1	20	A4138 9/25	N	19.1	P	MB
↓	104	100	A4138 8/25	N	104	P	MB
↓	790	800	A4130 8/25	N	790	P	MB
9/11/24	9.90	10	A4158 9/25	N	10.0	P	MB
↓	19.2	20	A4138 9/25	N	19.2	P	MB
↓	94.6	100	A4138 8/25	N	94.6	P	MB
↓	793	800	A4130 8/25	N	793	P	MB

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume 7005 1600E

Instrument (Name/Model No./Serial No.): YSI PRO QUATRO 21236781X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/7/24	95.1	DO	distilled H_2O	N	96.8	P	MB
	1436	1409 umho/cm conductivity	8310609 11/14/25	N	1420	P	MB
	4.19	pH 4.0	440500 5/11/26	N	4.11	P	MB
	7.10	pH 7.0	4403C047 3/18/26	N	7.01	P	MB
	10.11	pH 10.0	4404047 4/14/26	N	10.04 MB	P	MB
↓	203	ORP 220mv	15112 7/9/25	N	212	P	MB

MDO 09/10

EQUIPMENT CALIBRATION LOG

SITE NAME: ~~SLC VA~~ SLC VA PCE Plume 700S 1600E

Instrument (Name/Model No./Serial No.): YSI Pro Quatro U120220X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/5/24	6.98	7.00 pH	44020567 2/22/26	N	7.03	Pass	JM
9/5/24	9.99	10.00 pH	44040147 4/4/26	N	10.02	Pass	JM
9/5/24	4.06	4.00 pH	44030046 3/20/26	N	3.99	Pass	JM
9/5/24	1318	1409 uS/cm	8403134 3/20/26	N	1412	Pass	JM
9/5/24	254.4	220mV	15112 7/9/25	N	219.9	Pass	JM
9/5/24	74.8%	653.7 mm Hg	—	N	8.59 mg/L	Pass	JM
9/6/24	7.01	7.0 pH	44020567 2/22/26	N	7.00	pass	Zee
9/6/24	10.00	10.0 pH	44040147 4/4/26	N	10.08	Pass	Zee
9/6/24	4.00	4.0 pH	44030046 3/20/26	N	3.93	Pass	Zee
9/6/24	1424	1409 us/cm	8403134 3/20/26	N	1425	pass	Zee
9/6/24	77.6 %	653.7 mm Hg	—	N	7.27 mg/L	pass	Zee

MDJ 9/7

EQUIPMENT CALIBRATION LOG

SITE NAME: ~~GFM VA~~ VA PCE Plume 7005 11600E

Instrument (Name/Model No./Serial No.): YSI Pro / U84261X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/5/24	7.01	7.00 pH	6309007 // 09/15/25	NO	6.98	Pass	
9/5/24	9.98	10.0 pH	6308010 // 08/23/25	NO	10.01	Pass	
9/5/24	4.11	4.0 pH	8301138 // 1/23/25	NO	4.10	Pass	
9/5/24	1273	1409 µs/cm	8208544 // 9/9/24	NO	1100	Pass	
9/5/24	300.1	220 mV	15112 // 07/09/25	No	215.3	Pass	
9/5/24	1092 %L	658.7 mmHg	—	NO	8.74 mg/L	Pass	
9/6/24	1235 µS/cm	1409 µS/cm	8208544 // 9/9/24	No	1342 µS/cm	Pass	Emma Fosberg
9/6/24	98.0 %L	654.81 mmHg	—	No	7.76 mg/L	Pass	Emma Fosberg
9/6/24	~~7.02~~ 6.94	7.02 pH	6309007 // 9/15/25	No	6.96	pass	Emma Fosberg
9/6/24	9.59	10.05	6308010 // 8/23/25	No	10.00	pass	
9/6/24	4.12	4.00	8301138 // 1/23/25	No	3.96	pass	
9/6/24	173.0	220 mV	15112 // 7/9/25	No	220.5	pass	

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume 700S 1600E

Instrument (Name/Model No./Serial No.): Pro Plus handheld/U84261X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/13/24 LL ~~9/13/24~~	~~1461~~	~~conductivity 1409 um ho/cm~~	~~#8208544~~				
9/13/24	1431	conductivity 1409 um ho/cm	8403134 03/30/26	N	1417	P	LL
9/13/24	4.03	Ph 4.0	8301138 01/23/24	N	4.01	P	LL
9/13/24	6.97	Ph 7.0	6309007 09/15/25	N	6.99	P	LL
9/13/24	9.11	Ph 10.0	6308010 08/23/25	N	9.90	P	LL
9/13/24		DO 650.6	—	N	6.56	P	LL
9/13/24	202.5	ORP 220	1512 7/9/25	N	↑	↑	↑
				N ~~201.9~~ LL 9/13/24	201.9	P	LL

EQUIPMENT CALIBRATION LOG

SITE NAME: ~~CDM-VA~~ MDJ 9/7 VA PCE Plume 700S 600E

Instrument (Name/Model No./Serial No.): YSI ProQuatro U123678X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/5/24	93.3 ~~96.2~~ %	DO	distilled water	N ~~93.3~~ →	93.3	P	JSR
	1151	1409 umho/cm conductivity	8310609 11/14/25	N ~~1140~~ →	1140	P	JSR
	3.88	pH 4.0	440500 5/11/26	N	4.0	P	JSR
	7.01	pH 7.0	44030047 3/18/26	N	7.01	P	JSR
	9.99	pH 10.0	44040147 4/4/26	N	10.01	P	JSR
	236	ORP 220	1512 7/9/25	N	219.9	P	JSR
9/6/24	95.6	DO	distilled H_2O	N	97.4	P	MB
	1453	conductivity 1409/umho/cm	8310609 11/14/25	N	1447	P	MB
	4.19	pH 4.0	440500 5/11/26	N	4.12	P	MB
	7.016	pH 7.0	44030047 3/18/26	N	7.14	P	MB
	10.14	pH 10.0	44040147 4/4/26	N	10.08	P	MB
	240	ORP 220 mv	1512 7/9/25	N	214	P	MB
	~~203.7~~ LW 9/13/24						

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PLE PLUME 7005 10002

Instrument (Name/Model No./Serial No.): PRO QUATRO 23675X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/8/24	98.1	DO 759 bar. pressure mmHg	—	N	98.9	P	MB
↓	1,420	conductivity 1,409	8310609 11/14/25	N	1,413	P	MB
	4.19	pH 4.0	44050075 5/11/26	N	4.03	P	MB
	6.83	pH 7.0	44030047 3/18/26	N	6.94	P	MB
	9.93	pH 10.0	44040148 4/4/26	N	10.03	P	MB
↓	211	ORP 220 mV	15112 7/9/25	N	223	P	MB
9/10/24	97.9	DO 758 mm Hg	—	N	99.1	P	MB
↓	1,430	conductivity 1,409	8310609 11/14/25	N	1,422	P	MB
	4.19	pH 4.0	44050075 5/11/26	N	4.03	P	MB
	7.11	pH 7.0	44030047 3/18/26	N	7.03	P	MB
	9.90	pH 10.0	44040148 4/4/26	N	10.07	P	MB
↓	233	ORP 220 mV	15112 7/9/25	N	221	P	MB

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PLE Plume 7003 600E

Instrument (Name/Model No./Serial No.): PRO QUADRO U12367 8X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/11/24	93.4	DO 757mmHg	—	N	98.6	P	MB
	1,406	conductivity 1,409	83106609 11/14/25	N	1,410	P	MB
	3.90	pH 4.0	44050075 5/11/26	N	3.99	P	MB
	7.10	pH 7.0	44030047 3/18/26	N	7.03	P	MB
	9.89	pH 10.0	44040148 4/4/26	N	9.98	P	MB
	236	ORP 220	15112 7/9/25	N	221	P	MB
9/12/24	102.9	DO 755 mmHg	—	N	98.9	P	MB
	1,410	conductivity 1,409	83106609 11/14/25	N	1,409	P	MB
	4.06	pH 4.0	44050075 5/11/26	N	4.03	P	MB
	7.03	pH 7.0	44030047 3/18/26	N	7.00	P	MB
	9.83	pH 10.0	44040148 4/4/26	N	10.00	P	MB
	228.3	ORP 220	15112 7/9/25	N	220	P	MB

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE PLUME 700S 1600E

Instrument (Name/Model No./Serial No.): YSI Pro Quatro U123678X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/13/24	7.19	7.0pH	44030047 3/18/26	N	7.03	Pass	Joe
9/13/24	9.86	10.0pH	44040147 4/4/26	N	10.09	Pass	Joe
9/13/24	4.09	4.0pH	44050075 5/11/26	N	4.07	Pass	Joe
9/13/24	1435 JPB 9/13/24	~~8310609~~ H 1409	8310609 11/14/25	N	1427	Pass	Joe
9/13/24	242.97mV	220mV	15112 7/9/25	N	232.6mV	Pass	Joe
9/13/24	85.6%	666.1mmHg	—	N	91%	Pass	Joe

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume 700S 1600E

Instrument (Name/Model No./Serial No.): YSI ProQuatro 24E105296

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/5/24	88.3%	657.3 mmHg	—	N	86.5%	Pass	[signature]
9/5/24	7.08	7.0 pH	44030047 3/18/26	N	7.03	Pass	[signature]
9/5/24	10.16	10.0 pH	44040147 4/4/26	N	10.09	Pass	[signature]
9/5/24	3.99	4.0 pH	44050075 5/11/26	N	4.00	Pass	[signature]
9/5/24	1415	1409 µmhos/cm	8403134 3/30/26	N	1416	Pass	[signature]
9/5/24	249.0 mV	220 mV	1512 7/9/25	N	236.0 mV	Pass	[signature]
9/6/24	91.0%	658.3 mmHg	—	N	86.7	Pass	[signature]
9/6/24	7.02	7.0 pH	44030047 3/18/26	N	7.01	Pass	[signature]
9/6/24	9.85	10.0 pH	44040147 4/4/26	N	10.02	Pass	[signature]
9/6/24	4.07	4.0 pH	44050075 5/11/24	N	4.00	Pass	[signature]
9/6/24	1441 mS/cm	1409 mmho/cm	8403134 3/30/26	N	1410	Pass	[signature]
9/6/24	232.3	220 mV	1512 7/9/25	N	219.9	Pass	[signature]

PCE

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VAPlume 700S 1600E

Instrument (Name/Model No./Serial No.): U121927 X YSI Pro Quatro

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/7/24	7.08	7.01	~~44040147 4/4/24~~ 44030047 3/18/26	No	7.03	pass	
9/7/24	10.11	10.04	44040147 4/4/26	No	10.00	↓	↓
9/7/24	~~3.94~~ 3.84 EG 9/7/24	4.00	44050075 5/11/26	No	3.94		
9/7/24	~~1411~~ 1418 EG 9/7/24	1409	8403134 3/30/26	No	1409		
9/7/24		651.5 mmHg (85.7%)	—	No	85.7% 7.28 mg/L	↓	
9/7/24	228.0	220	15112 7/9/25	No	220.1	Pass	
9/8/24	84.4%	653.4 mmHg	—	No	86.0%	Pass	
↓	7.04 pH	7.0	44030047 3/18/26	No	7.01	Pass	
	10.06 pH	10.0	44040147 4/4/26	No	10.03	Pass	
	3.98 pH	4.0	44050075 5/11/26	No	4.00	Pass	
	1409 mS/cm	1363	8403134 3/30/26	No	1410	Pass	
	220.6	220 mV	15112 7/9/25	No	219.9	Pass	

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume 7005 1600E

Instrument (Name/Model No./Serial No.): Pro Quatro U120720X

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/11/24	60.3%	656 mmHg	—	N	7.55 mg/L	Pass	JM
↓	7.09 pH	7.0 pH	44020567 2/22/26	N	7.01	Pass	JM
	10.02 pH	10.0	6402010 2/5/26	N	10.02	Pass	JM
	4.08 pH	4.0 pH	44020094 2/6/26	N	4.00	Pass	JM
	1318 µS/cm	1409	8403134 3/30/26	N	1411	Pass	JM
	215.6	220 mV	15112 7/9/25	N	219.9	Pass	JM

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC UA PCE Plume

Instrument (Name/Model No./Serial No.): Pro Quatro 24J101870

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/30/24	86.1% DO	657 mmHg	—	N	86.5	Pass	
↓	7.03 pH	7.00	44060287 6/24/26	N	7.02	Pass	
↓	10.05 pH	10.00	44050301 5/16/26	N	10.06	Pass	
↓	3.93 pH	4.00	440 70311 7/24/26	N	4.00	Pass	
↓	1302 uS/cm	1409	8405830 6/30/26	N	1409	Pass	
↓	193.9 mV	220.0	7855464 8/24	N	231.5	Incorrect Cal Soln Pass	
10/1/24	86.5% DO	660.7 mmHg	—	N	85.7	Pass	
↓	7.16 pH	7.00	44060287 6/24/26	N	7.05	pass	RK
↓	10.12	10.0	44050301 5/16/26	N	10.12	Pass	RK
↓	3.92	4.0	44070311 7/24/26	N	4.00	Pass	RK
↓	1430	1409	8405830 6/30/26	N	1409	Pass	RK
↓	~~258~~ 250.6 RK	240	8/24	N	240.0	Pass	RK

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume

Instrument (Name/Model No./Serial No.): Pro Quatro 24J101870

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
10/2/24	87.7%DO	656.1 mmHg	–	N	86.3%	P	JL
↓	7.04 pH	7.00	44060287 6/24/26	N	7.04	P	JL
↓	9.92 pH	10.00	44050301 5/16/26	N	10.12	P	JL
↓	4.04 pH	4.00	44070311 7/24/26	N	4.00	P	JL
↓	1380 uS/cm	1409	84058830 6/30/26	N	1410	P	JL
↓	267.6	220	15132 9/4/25	N	220.1	P	JL
10/3/24	84.9%DO	654.6 mmHg	–	N	86.1%	P	JL
↓	7.16 pH	7.00	44060287 6/24/26	N	7.04	P	JL
↓	10.11 pH	10.00	44050301 5/16/26	N	10.11	P	JL
↓	3.98 pH	4.00	44070311 7/24/26	N	4.00	P	JL
↓	1385 uS/cm	1409	84058830 6/30/26	N	1410	P	JL
↓	223.6 mV	220	15132 9/4/25	N	220.0	P	JL

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC VA PCE Plume

Instrument (Name/Model No./Serial No.): Pro Quatro 24J 101869

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/30/24	99.0% DO	657.9 mm Hg	—	N	86.6	Pass	
↓	6.95 pH	7.00	44060257 6/24/26	N	7.03	Pass	
	10.06 pH	10.00	44050301 5/16/26	N	10.06	Pass	
	3.88 pH	4.00	44070311 7/24/26	N	4.00	Pass	
	1339 µS/cm	1409	8405830 6/30/26	N	1410	Pass	
↓	227.0 mV	220	785464 8/24	N	224.6	Incorrect Cal Soln Pass	
10/1	10/1/24	84.9% DO	660.7 mm Hg	—	N	86.6	Pass
↓	7.18 pH	7.00	44060257 6/24/26	N	7.05	Pass	
	10.10 pH	10.00	44050301 5/16/26	N	10.11	Pass	
	4.10 pH	4.00	44070311 7/24/26	N	4.00	Pass	
	1400 µS/cm	1409	8405830 6/30/26	N	1410	Pass	
↓	220.6	220	785464 8/24	N	220.3	Pass	

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC UA PCE Plume

Instrument (Name/Model No./Serial No.): Pro Quatro 24J101869

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
10/2/24	81.7% DO	656.1 mm Hg	—	N	86.3%	P	TL
↓	7.17 pH	7.00	44060287 6/24/26	N	7.05	P	TL
↓	10.12 pH	10.00	4405031 5/16/26	N	10.13	P	TL
↓	4.02 pH	4.00	44070311 7/24/26	N	4.00	P	TL
↓	1404 µS/cm	1409	84058330 6/30/26	N	1409	P	TL
↓	242.9 mV	220	15132 9/4/25	N	220.0	P	TL
10/3/24	89.0% DO	654.6 mm Hg	—	N	86.1%	P	TL
↓	7.12 pH	7.00	44060287 6/24/26	N	7.04	P	TL
↓	10.14 pH	10.00	4405031 5/16/26	N	10.12	P	TL
↓	4.01 pH	4.00	44070311 7/24/26	N	4.00	P	TL
↓	1379 µS/cm	1409	84058330 6/30/26	N	1409	P	TL
↓	223.4	220	15132 9/4/25	N	220.0	P	TL
							TL

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC UA PCE Plume

Instrument (Name/Model No./Serial No.): Mini RAE 3000, S92-913065

Manufacturer: Honeywell

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/30/24	–	Fresh Air	–	N	0.0	Pass	
↓	–	100ppm C_4H_8	24-1618 3/22/2028	N	100.0	Pass	
10/1/24	–	Fresh Air	–	N	0.0	Pass	
↓	–	100ppm C_4H_8	24-1618 3/22/2028	N	100.0	Pass	
10/2/24	–	Fresh Air	–	N	0.0	Pass	
↓	–	100ppm C_4H_8	24-1618 3/22/2028	N	100.0	Pass	
10/3/24	–	Fresh Air	–	N	0.0	Pass	
↓	–	100ppm C_4H_8	24-1618 3/22/2028	N	100.0	Pass	

EQUIPMENT CALIBRATION LOG

SITE NAME: SLC UA PCE Plume

Instrument (Name/Model No./Serial No.): 2100Q 19040C075141

Manufacturer: HACH

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
9/30/24	-	10.0 NTU	A4057 5/25	N	10.8	P	
↓	-	20.0 NTU	A4067 5/25	N	20.1	P	
↓	-	100.0 NTU	A4060 5/25	N	100	P	
↓	-	800.0 NTU	A4057 5/25	N	804	P	
10/1/24	-	10.0	A4057 5/25	N	11.1	P	
↓	-	20.0	A4067 5/25	N	20.7	P	
↓	-	100.0	A4060 5/25	N	102	P	
↓	-	800.0	A4057 5/25	N	801	P	
10/2/24	-	10.0 NTU	A 4057 5/25	N	11.8	P	
↓	-	20.0 NTU	A4067 6/25	N	22.6	P	
↓	-	100.0 NTU	A 4060 6/25	N	102.0	P	
↓	-	800.0 NTU	A.4057 5/25	N	803.0	P	

DECONTAMINATION CHECKLIST

Activity: GW Sampling & Water Levels **Date:** 9/7/2024

Answer each question by checking the appropriate column (yes, no, not observed [N/O] or not applicable [N/A]). If "no" is checked, provide an explanation on the form.

Equipment	Yes	No	N/O	N/A
1. Was the decontamination pad constructed onsite per the UFP-QAPP?				X
2. Was all sampling equipment decontaminated properly prior to use and between sample intervals?	X			
3. Was each decontamination event recorded in the log book?	X			
4. Was clean equipment stored separately from non-decontaminated equipment?	X			
5. Was phosphate-free detergent and/or steam cleaning used?	X			
6. Was IDW handled in accordance with the approved work plan?	X			

Comments and Corrective Actions

Initial and date when corrective actions have been implemented.

Non-Sampling equipment was decontaminated using alconox and DI water.
Dedicated equipment is used for most wells.
Wells w/out dedicated equipment is deconed & equipment blanks collected daily.

The Field Team Leader and Project Manager shall sign this checklist upon completion of all items on the checklist.

Field Team Leader: Maria Day-Johnson Date 9/7/2024

Project Manager: _____ Date _____

FIELD DOCUMENTATION CHECKLIST

Activity: GW Sampling + Water Levels **Date:** 9/7/2024

Answer each question by checking the appropriate column (yes, no, or not applicable [N/A]). If "no" or "N/A" are checked, provide an explanation in the comments section.

Field Documentation	Yes	No	N/A
1. Was all original field data recorded in indelible ink?	X		
2. Were log books and field forms (including DQCRs) filled out properly, accurately recounting the day's events? This includes documenting activities performed, weather conditions, personal protective equipment used, problems encountered, details of samples collected, site visitors, descriptions of photos taken, notes of conversations with Project Manager/Field Team Leader/Project Geologist, decontamination procedures used, etc.	X		
3. Were deficiencies reported to the Project Manager?			X
4. Were the equipment arrival date, equipment type, onsite storage location, and serial number recorded on the log for each field instrument?	X		
5. Were factory calibration certificates received with the field instruments and recorded on the log?	X		
6. Are instruments being calibrated before and after use when necessary, and against know standards and/or per manufacturer specifications? (Passing calibration is within 10% of the standard.)	X		
7. Are all instrument calibrations being accurately documented on the appropriate logs, including frequency of calibration checks, calibration acceptance criteria, and corrective actions for calibration failures?	X		
8. Was the date that the field instrument left the site recorded in the logbook or on the instrument's log?	X		
9. Was all IDW segregated by matrix/type to facilitate analysis and disposal? Were all IDW containers properly labeled as required in the QAPP?	X		

Comments and Corrective Actions

List all corrective actions. Initial and date when corrective actions have been implemented.

The Field Team Leader and Project Manager shall sign this checklist upon completion of all items on the checklist.

Field Team Leader: Maria Day-Johnson Date 9/7/2024

Project Manager: _____ Date _____

PREPARATORY INSPECTION/MOBILIZATION CHECKLIST

Activity: GW Sampling and Water Levels **Date:** 9/7/2024

Answer each question by checking the appropriate column (yes, no, not observed [N/O] or not applicable [N/A]). If "no" is checked, provide an explanation on the form.

Activity	Yes	No	N/O	N/A	Remarks
1. Have copies of all work plans, including the health and safety plan, been printed for availability onsite? Have appropriate copies of all forms in the plans been prepared for site use?	X				
2. Have pertinent work plans and requirements been explained to project personnel, including project documentation and recordkeeping requirements?	X				
3. Have all personnel working onsite read over the health and safety plan provided by CDM Smith (acknowledgement is by signing the health and safety plan signature form from the SSHP)?	X				
4. Are the required materials, supplies, and equipment available, on-hand, in working order, and in accordance with plans and technical specifications?	X				
5. Have all applicable Safety Data Sheets been made available at the site?	X				
6. Has all equipment been properly calibrated per manufacturer's requirements?					
7. Have sample locations been marked out using a GPS unit or by a surveyor, as appropriate?	X				
8. Have all applicable permits, licenses, and certificates been identified and/or obtained?	X				
9. Have all utilities been marked out prior to the start of activities?				X	
10. Does the subcontractor need to clear heavy underbrush or any overhead obstructions to access any locations?				X	
11. Was all subcontractor equipment thoroughly checked, including inspection and testing of the emergency shutdown button on the drilling rig, generators, etc.?				X	
12. Have the necessary laboratories been contracted to perform the requested analyses?	X				
13. Has a designated staging area been established to store IDW and hold the decontamination pad?	X				No decon pad necessary
14. For sample locations not in public right-of-way, have all appropriate access agreements ben obtained?	X				
15. For existing wells, have keys been obtained?	X				

WATER LEVEL AND MONITORING WELL SAMPLING CHECKLIST

Activity: GW Sampling & Water Levels **Date:** 9/7/2024

Answer each question by checking the appropriate column (yes, no, or not applicable [N/A]). If "no" or "N/A" are checked, provide an explanation in the comments section.

Synoptic Water Level Measurements	**Yes**	**No**	**N/A**
1. Were synoptic water level measurements collected prior to each groundwater sampling event, with all measurements for the event collected within the required 24-hour period?		X	
Monitoring Well Sampling Procedures			
2. Was sampling equipment appropriate for the purpose and site conditions?	X		
3. Were new protective gloves worn between sampling locations and/or intervals?	X		
4. Was sampling equipment decontaminated between each location and/or sampling intervals, or dedicated/disposable equipment used?	X		
5. Was the correct technique/method used to purge each well prior to sample collection?	X		
6. If using a submersible pump, was the depth to which the pump was lowered recorded in the logbook or field form?	X		
7. Was low-flow sampling conducted in accordance with the approved UFP-QAPP and SOP?	X		
8. Were field water quality monitoring instruments (e.g., YSI) calibrated per the UFP-QAPP?	X		
9. Was a steady pumping rate reached and maintained so that total drawdown in the well was < 0.3 feet; or was the pump kept at a flow rate between 200 to 500 mL per minute?	X		
10. Were wells purged until parameters stabilized before collecting samples?	X		
11. Were purge parameters recorded in the logbook or on the well sampling form?	X		
12. Was the purge line disconnected from the flow-through cell prior to sample collection and the flow rate < 250 mL per minute?	X		
13. Were the bottles pre-preserved as required in the UFP-QAPP?	X		
14. Were bottles adequately protected prior to sample collection to prevent cross-contamination?	X		
15. Was headspace in sample containers for volatiles eliminated?	X		
16. Were the appropriate QA/QC samples collected (duplicates, rinsate blanks, MS/MSD)?	X		
17. Were sample containers filled in the correct order – VOCs, hydrocarbons, metals, geochemical parameters?	X		
18. Was purge water properly containerized as IDW?	X		
Sample Shipment			
19. Was the following information recorded on each sample label and in the logbook and/or field form – sample ID (including sample depth interval), location, analysis, date, time, preservative, sampler initials, and any other relevant information?	X		
20. Were adhesive labels placed on each sample using indelible ink, or covered with clear tape?	X		
21. Were duplicate samples labeled such that they would be "blind" to the laboratory?	X		

Sample Shipment (continued)	Yes	No	N/A
22. Were MS/MSD samples noted in the logbook/field form and on the COC?	X		
23. Were the COCs properly filled out, readable, and signed?	X		
24. Were the sample coolers properly packed, including ice, trip blank (if appropriate), temperature blank, and a COC unique to the cooler?	X		
25. Were copies of the COCs retained by field personnel?	X		
26. Were custody seals signed, dated, and placed on each cooler prior to shipment?	X		
27. Were the coolers shipped priority overnight for next day delivery to the laboratory?	X		

Comments and Corrective Actions

List all corrective actions. Initial and date when corrective actions have been implemented.

The Field Team Leader and Project Manager shall sign this checklist upon completion of all items on the checklist.

Field Team Leader: Mara Dy-Johnson Date 9/7/2024

Project Manager: _____ Date _____

SLC PCE Plume 700E 1600S GW 9/03/24

Personel: Maria Day-Johnson (author), Emma Goldberg, Joseph Borgerding, Melanie Branton, Neil Smith.

Weath: 90 °F Sunny

PPE: Steel toes

1430: Arrived onsite to unload equipment.

1700 Began site walk.

1830: Offsite

9/3/2024

Scale: 1 square = _____

SLC PCE PLUME 700E 1600S GW 09/04/2024

Personel: Maria Day-Johnson (author), Emma Goldberg, Isaac Nance, Joseph Borgerding, Melanie Branton, Neil Smith.

Wasatch: John Rezac, Ryan Pursey, Paige Willier

Weather: 85+ °F, Hazy

PPE: Modified level D, hard hats, steel toes, hi-vis, safety glasses, nitrile gloves.

Activities: Synoptic W.L. event of 92 wells and collecting transducer data.

0650 Arrived onsite & unlocked gates.

0655 Began PID calibration

0720 H&S meeting

0800 Team A left the Connex yard.

0820 Arrived at MW-03R

0920 Pulled Transducer from MW03BR & down loaded. Set Future start for 10 am.

0940 Redeploy MW-03RB transducer

0940 Transducer got stuck 9 ft down.

0950 Spoke w/ Neil. leaving as is, moving to new well.

1005 Arrived at MW-25 took photo

1120 Arrived at MW-24 took photo

1217 Arrived at MW-23 took photo

1305 Arrived at MW-30C took photo some water in vault

Scale: 1 square = _____

Rite in the Rain

SLC PCE Plume 700E 1600S GW 9/4/24

1355 Could not redeploy MW-30C Transducer
1416 Arrived at MW-08 took photo
1445 Arrived at MW-32 took photo
1455 Could not get MW32A transducer to read placed back in well. Will need to collect transducer data when we sample.
1530 Called Greg Vegs for MW-34 access 801-879-2400
1545 Arrived at MW-31
1618 Talked to Greg, confirmed we can Conduct WLs & sampling tomorrow @ 7am. Need to check in to Sunnyside entrance office before proceeding onsite to MW-34
1620 Met w/ Team C, handed off purge forms for them to build bottle kits
1630 Arrived at MW-29 took pictures Arrived back at site & clean up.
1815 Offsite
~~18~~ MDJ 9/4

9/4/2024

Scale: 1 square = _____

SLC VAPCE Plume 700E 1600S GW 9/5/2024

Personel: Maria Day-Johnson, Isaac Nance, Emma Goldberg, Melanie Branton, Neil Smith Wasatch John Rezec, Ryan Pansey. VA: Zane

Weather Sunny 80+

PPE: Modified level D PPE, hard hats, hi vis safety glasses, nitrile gloves.

Activities: Finish WLs & begin Sampling.
A: MW-34 A/B/C/D
B: MW-04, MW-06, MW02, MW-01S/D
C: MW-12S/D, MW-15S/D or MW-17S/D

0700 Arrived onsite
0710 H&S meeting
0715 Began calibrating, loading, and pulling together sample kits & hoses
0835 Called Air gas to swap to smaller cylinders for safety. Will get those tomorrow
0850 Called Field Environmental. We have the MP-10H.
0930 Loaded traffic control for team C
1000 Dropped off traffic control for team C
1010 Checked in w/ Greg for access to MW-34
1015 Arrived at MW-34

Scale: 1 square = _____

Rite in the Rain

SLC VA PCE Plume 700E 1600S GW 09/05/24

1020 Collected Water levels.

1100 Began setting up for purging. Missing a wrench

1120 Met Team B a MW-06 collected wrench. Met Zane from VA.

1140 Moved traffic control for team C from 12SID to 17SID

1230 Set up at ~~at~~ MW-34 B&C

1310 Began purge at MW-34 B&C.

1315 Redeployed MW-34A.

1341 Called Noah from BESST for trouble shooting.

1420: Reattached the fuse and pinched for a temporary fix will need to be sodered.

1425 Restarted purge.

1650 Sample MW34B-GW090524 collected

1705 Sample MW34C-GW090524 collected

1706 Greg came by to have us leave MW-34.

1724 Arrived back at Connex to unload equipment

1800 Offsite gates locked.

[signature] 9/5/24

Scale: 1 square =

SLC VA PCE Plume 700S 1600E 9/6/24

Personel: Maria Day-Johnson (Author) Emma Goldberg Isaac Nance, Melanie Blanton, Joe Bordegary

Wasatch: Ryan Pansay, Paige Williams

0700 Onsite.

0710 H&S Meeting.

0715 Begin Equipment calibration.

0820 Arrived at Oakland construction office and checked in w/Greg.

0822 ~~Checke~~ MDS 9/6 Arrived at MW-34C Began setup.

0855 Breakthrough at MW-34A. Called Ben for bubbling information.

0905 Began rebuilding the water column for MW-34A.

0936 Called Eon to track down where the hydra sleeves. (check spam) Shipped on 21st, hasn't moved since 27th

1018 Recieved call from Melanie Swag lock fitting for MW-01S not going on tubing go to try heat gun.

1021

1045 Pulled MW-34B for transducer

1059 Redeployed MW-34B.

1105 Pulled MW-34C for transducer

1115 Redeployed MW-34C

→ Sample MW34D-GW090624 Collected.

Scale: 1 square =

Rite in the Rain

SLCVA Plume 700S Recos 9/6/2024

1123 pulled MW-34D for transducer reading.
1138 Redeployed MW-34D.
1152 Field called to check equipment.
1153 Argos called to drop off cylinders. Sent J. Nance to meet them.
1202 Melanie called, MW01S redeployed and purged for about 30 minutes prior to drive line blowing off. Not able to pull pump. Grabbing fishing gear.
1210 Spoke w/ Neil Smith. Instructed TeamB to continue and try to fish drive tubing and pull the pump.
1220 J Nance returned to MW-34. Cylinders delivered.
1300 Melanie called MW01S safety cable snapped
1305 Asked Melanie to measure how much the tubing is above the casing.
1340 Began purge at MW-34A
1535 Sample MW34A-GW090624 collected
1553 Checked out of construction zone for MW-34
1600 Arrived at connex to unload
1610 TB01-GW090624 collected

Scale: 1 square = _____

SLCVA Plume 700S/600E 9/6/2024

1634 Wasatch Offsite
1635 Team B to deliver packed sample cooler
1700 Locked connex & offsite

9/6/2024

Scale: 1 square = _____

Rite in the Rain

SLC VA Plume 700E 16005 9/7/2024

Personnel: Maria Dy-Johnson (author), Isaac Nance, Emma Goldberg, Joseph Bordegaray, Melanie Benton
Wasatch: Ryan Pansey, John Rozec

Weather: 80+ Sunny, Hazy.

PPE: Level D.

Activities: Team A: MW-25A-D
Team B: MW-13L, MW-45, MW-27, MW-28
Team C: MW-18, MW-19, MW-20 S/D

0650: Teams onsite and began loading equipment. Equipment Calibration for PID & HACHs, & YSI ORP.

0725 H&S meeting.

0800 Arrived at MW-25. Began setup on MW-25A & MW-25B

0915 MW-25C purge began

0920 MW-25A purge began.

0920 Team B called, MW-45 turbidity elevated spoke to Neil, Have team purge for 2 hrs if it stabilized & is below 100 NTU collect sample. If above call Neil for decision.

0938 Arrived at MW-13D pulled transducer

1044 Redeployed MW-13D transducer

1114 Arrived at MW-14S for transducer, block party occuring.

1056 MW25-GW090724

Scale: 1 square = _____

SLC VA PCE Plume 700E 16005 9/7/24

1114 Arrived at MW-15. Adventurer Van still over the wells. Left note on windshield.

1126 Arrived at MW-16D.

1139 Collected transducer information and redeployed

1200 Arrived back at MW-25

1150 MW25A-GW090724 sampled & purge began at MW-25B.

1325 MW25B-GW090724 Sample collected.

1345 Arrived at MW-26. Began set up on MW-26A & MW-26C

1452 Began purge at MW-26C, got water.

1620 Sample MW26C-GW090724 collected.

1630 Purge paused at MW-26A. Total purged 6663mL ~~gal~~ MDJ 9/7

1715 Offsite

9/7/24

Scale: 1 square = _____

Rite in the Rain

SLC VA PCE Plume 700E 1600S 09/08/24

Personal: Maria Day-Johnson (author) Isaac Nance
Emma Goldberg, Joseph Bergsding, Melanie Blanton

Weather: 80 °F, overcast.

PPE: Level D

Activities: Team A: MW-26A/B/D
Team B: MW-27, MW 08R, MW-24
Team C: MW-21, MW-22, MW 16S/D

0655 Team onsite
0705 H&S briefing.
0710 Began loading equipment and finish calibrating ORP & PIDs.
0749 Team A arrived at MW-26 and
~~0705~~ began setup.
~~8~~ 16 Pulled transducer at MW15D, not reading.
0850 Purge started at MW-26A
0900 MDJ 9/8/24 Purge started at MW-26B.
0922 Arrived at MW-01.
0930 Recieved call about breakthrough potentially
1016 Arrived at MW-06
1021 Read transducer at MW06
1040 Arrived near MW-04, soccer games occuring not time to grab data.
1106 Arrived at MW03RB, collected transducer
1150 M. Day-Johnson back at MW-26, Still purging & rebuilding water column

Scale: 1 square = _____

SLC VA PCE Plume 700E 1600S 9/8/24

1223 Breakthrough at MW-26B. Again at 90 PSI when adjusting for flowrate.
1300 MW03RB transducer fished
1320 MW26A-GW090824 collected.
1340 Arrived at MW-32, dropped off pump and pulled transducers
1530 Sample MW32D-GW090824
1603 Lydia Lytle arrived onsite at MW-26
1615 Break through at MW-26B.
1635 Arrived back at connex to unload and clean up
1715 offsite

09/08/2024

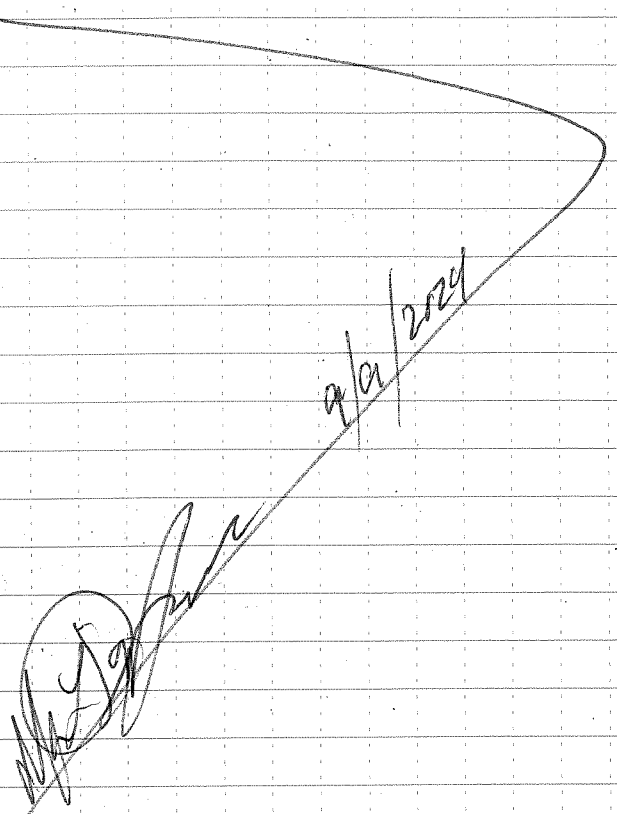
Scale: 1 square = _____

Rite in the Rain

SLC VA PCE Plume 700E 1600S 09/09/24

0930 Began packing coolers for shipping.
0940 TB02-GW090924 collected.
0950 TB03-GW090924 collected.

9/9/2024



Scale: 1 square = _____

VA
SLC PCE Plume 700E 1600S 09/10/2024

Personal: Maria Day-Johnson (author), Emma Goldberg, Joe Boregerding, Melanie Blanton, Lydia Lytle, Bob Alexander

Wasatch: Ryan Panasay, Rachel Kubima

Weather: 85+°F Sunny Breezy

PPE: Level D.

Activities: Team A: MW-29 A/B/C, MW-31
Team B: MW-08A, MW-24
Team C: MW/4S/D deploy pumps fish
MW-01s. Transducers.

0650: Arrived onsite.
0700 Began loading and calibrating equipment.
0720: HRS meeting
0725: Began calibrating and loading equipment.
0810: Arrived at MW-29 and began setup.
0840: Purge began MW-29B.
0904 Purge began MW-29A.
1110: Sample MW29A-GW091024.
1115 FD07-GW091024.
1135 E. Goldberg & Bob Alexander arrived at MW-29.
1145 E. Goldberg off to deploy pumps
1150 MW-29C purge started.
1220 MW29C-GW091024. Sample collected

Scale: 1 square = _____

Rite in the Rain

SLC VAPCE Plume ~~to~~ MOJ9110 7005 1600E 9/10/24

1320 Bob Alexander & Lydia Lytle offsite for the airport.
1345 MW29C-GW09102424 collected.
1406 Arrived at MW-31.
1410 M Dy Johnson relinquished field book to Joseph Borgerding.
1430 Lydia Lytle arrived at MW-31
1435 Rachel Kubina arrived MW-31
1500 Purge began at MW 31-B
1510 Purge began at MW 31-A
1550 Lydia Lytle and Rachel Kubina offsite
1625 Sample MW-31B GW09102424 collected
1640 Maria Johnston and Emma Goldberg and Melanie Blanton onsite
1645 Purge began at MW 31-C
1650 Maria Johnson and Emma Goldberg offsite
1740 Sample MW-31A GW09102424 collected
1745 Sample MW-31C GW09102424 collected
1810 Arrived at KONEX
1825 Joe Borgerding relinquished field book to Maria Johnson
1840 Offsite

9/10/2024

Scale: 1 square =

SLC VAPCE Plume 7005 1600S 9/11/2024

Personel: Mary Day-Johnson (author), Lydia Lytle, Joe Borgerding, Emma Goldberg, Melanie Blanton.
Wasatch: Paige Williams & Rachael Kubina
PPE: Level D modified
Weather: Sunny 90+°F, Haze 1460+
Activities: A: MW-03
B: IW-01/EW-01
C: Deploy MW-32C, MW-30C, MW04 transducer.

0650: Onsite.
0700 Began finishing calibration and loading equipment.
0720 Health and safety meeting.
0725 Began loading equipment.
0800 Team A arrived at MW-03 and began setup.
0850 Purge began at MW-03RA
0855 Purge began at MW-03RB
Called airgas - should get air cylinders around 11 am.
0936 Called Emax to confirm the bottles, could not get it to reach an operator.
1045 Sample MW03RA-GW09112424 collected MS/MSD.
1100 Sample MW03RB-GW09112424 collected

Scale: 1 square =

Rite in the Rain

SLC VAPCE Plume 7005 1600E 9/11/2024

1205 Melanie arrived at MW-03 to inform us that the removal pump fell down the well.

1210 Spoke to Emma Argus is down 4 delivery drivers and will try to deliver tomorrow.

1400 Purge began at MW-03C.

1445 Called Neal about Team C not getting the WLM down, drop tubing might be too long. Said to proceed 215T and the 2 pilot study wells over the next two days.

1530 Sample MW03RC-GW091124 collected. MS/MSD

1550 E. Goldberg & R. Kabina arrived at MW-03 to grab samples for shipping.

1600 Purge began at MW-03RD.

1740 MW03RD-GW091124 collected.

1800 Pulled MW03RA in prep for pump test

1810 Pulled MW03RB in prep for pump test

1820 Pulled MW03RC in prep for pump test. Collected WL.

1830 Pulled MW03RD in prep for pump test. Collected WL.

1906 Team offsite

9/11/2024

Scale: 1 square = _____

SLC City PCE Plume 7005 1600E 9/12/2024

Personnel: Maria Day-Johnson (Author), Emma Goldberg, Joe Borgenicht, Melanie Blanton, Lydia Lytle.

Watch: John Rezec, Rachael Kabina.

PPE: Level D

Weather: Sunny 70°F

Activities: Team A: MW-23A/B/C, MW-32B/C

Team B: MW-42S/D, MW-01S

Team C: MW-30C, MW-08C, MW-24

MW-26B time depending

0650: Arrived Onsite.

0700 Began calibrating and loading equipment.

0754 MBS meeting

0830 Arrived at MW-23.

0845 Setup on MW-23A. No water, controller not turning on. M. Day Johnson & E. Goldberg return to connex. For allen wrenches, MW-23B pumped 9 gals of water.

09 Called Neal, found MW-23B pump

0955 Arrived back at MW-23 to fix 215T

1038 Purge began at MW-23B.

1042 Purge began at MW-23A

1043 Melanie called, tumb issues at

Scale: 1 square = _____

Rite in the Rain

SLCVA PCE Plume 700S 1600E 9/12/24

MW-48S, >100NTU, purged 2 hours ~10gals, asking if they can sample if stabilizes below 100NTU.

1145 J. Borgerding called. Difficulties getting MW-32C past 160ft, WLM went 280ft, & WL about 83ft.

1155 Paused purge at MW-23A, signs of breakthrough.

1200 Called Ben, rate through the turbidity spike and keep purging.

1210 Called J. Borgerding, told them to pull MW-32C and move on if MW-32B is sampled.

1217 Restarted purge at MW-23A.

1227 Sample MW23B-GW091224 Collected.

1317 Melanie called, swapped controllers, Still getting air spraying from underline. Swapped bladders, lines, controllers & bleeders.

1320 Purge began at MW-23C.

1329 Neil called, ~~told~~ told to move on from MW-42D & MW-32C. Try MW-08C tomorrow afternoon.

1350 MW23A-GW091224 sample collected.

1425 Melanie called, steel hook bent, got something 40ft and dropped for

Scale: 1 square = _____

SLCVA Plume 700S 1600E 9/12/2024

MW01S fishing, failed.

1430 Called Joe, having them bring my MW-30C.

1445 Called Neil about fishing. Maybe try S hook.

1450 Called Melanie, no way to secure S hook to steel cable, steel cable deforming.

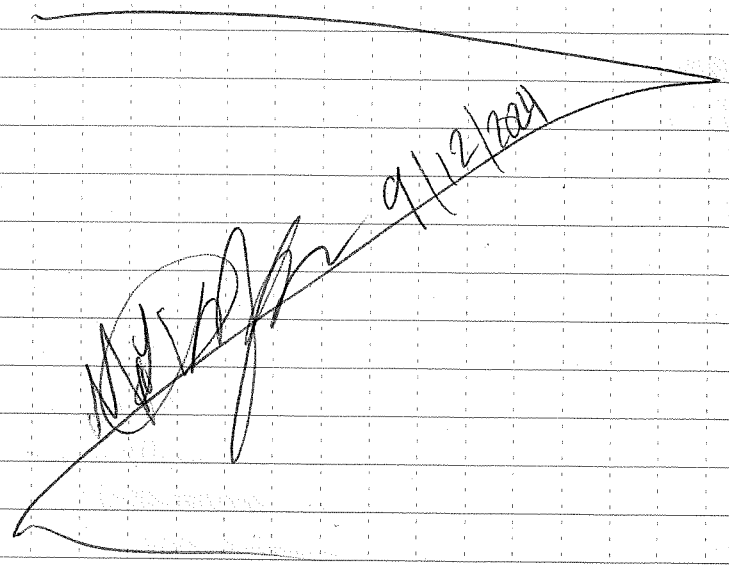
1500 J. Borgerding arrived at MW-23, helped replace parts on MW-30C.

1535 MW23C-GW091224 collected.

1555 Pulled MW-23B to store in connex.

1610: Arrived back at the connex to unload

1715: Offsite



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Rite in the Rain

SLC VA PCE PLUME 7005 MOVE 09/13/2024

Personel: Mara Day-Johnson (Author), Emma Goldberg, Melanie Blanton, Joe Borgerding, Lydia Lytle

Wasatch: Rachael Kuhana, Paige Williams

PPE: Level D

Weather: 85+°F

Activities: MW-30C, MW-08C, MW-26B

- Clean up connex
- Ship samples
- Ship equipment
- Call Utah barricade
- Airgas?

0650 Arrived onsite.

0700: Begin packing and calibrating equipment.

0718: H&S meeting

0800 Team A arrived at MW-26B.

0805 Team A pulled MW-26B. M. Blanton called for Zane's number.

0820 J. Borgerding called, auger corroded at MW-08C, replaced w/ MW-08B. and checked settings.

0849 Began rebuilding MW-26B.

0910 J. Borgerding called. large turbidity at MW-08C, smelly water, PID 1 ppm.

1000 Emma Goldberg to get transducer

1002 Called Joe about turb

Scale: 1 square = _____

SLC VA PCE Plume 7005 MOVE 9/13/2024

~~Call Neil~~ MDJ 9/13/2024

1050 Zane ~~showed~~ showed up on MW-24 to see how the well was going.

1058 Called Neil 3 reading below 100 and sample if all other parameters are stable. Get 1" J plugs for MW-03

1118 Purge began at MW-26B.

1140 J. Borgerding called, directed to go and rebuild MW-30C.

1148 M. Blanton called, equipment batch one dropped off. Asked to go get caps for MW-03.

1235 Called Ned to ask about Airgas. Call Airgas and plan on having Wasatch handle next week.

1300 TBOS-GW1324 collected.

1305 MW26B-GW091324 collected.

1318 J. Borderging called, continual bubbling.

1324 Called N. Smith, continue rebuilding at MW-30C.

1324 Answer B. Carreons call increase recharge to 240 s for rebuild.

1400 Arrived back at connex to unload.

1430 Checked in w/ J. Borgerding, continuing rebuild, they called BESST, pump should be fine.

Scale: 1 square = _____

Rite in the Rain

SLC VA PCE PLUME 7005 1600E 9/13/24

1445 Packed equipment for shippment at FedEx, packed sample cooler.

1530 Arrived at MW-30C inithessed vigorous bubbling.

1535 Called Neal sent video of bubbles. Told to pull pump replace check valves and redeploy.

1545 Disconnected MW-30C, heand gurgling from the well vault while it depressurized

1552 Pulled MW-30C to replace check valves anel look at pump.

1630 Deployed the pump at MW-30C.

1640 Arrived back at connex to unload equipment.

1745 Offsite.

9/13/2024

Scale: 1 square = _____

Scale: 1 square = _____

Rite in the Rain

CONTENTS

PAGE	REFERENCE	DATE

9/4/2024 SLC VA MB

Personnel: Team B: Melanie Blanton (COM Smith), Ryan Panacy (Wasatch)

PPE: modified level D

weather: high 82°F/low 58°F, sunny

TASK: conduct site wide monitoring well gauging event.

0700: COM Smith + Wasatch on site. conduct H+S meeting / organize gear / equipment. Calibrate PID's,

0800: Mark up maps + team B wells on table.

0815: Begin team B gauging - See water level form.

1300: MW-28 tamper proof bolts are locked - will attempt with impact drill tomorrow.

1445: Team B finished with assigned wells. MOB to team C to pick up Paige (Wasatch) to replace Ryan (Wasatch).

1500: Ryan P. offsite - Melanie + Paige gauge MW-14D, MW-175/D for team C.

Scale: 1 square = _____

Rite in the Rain

9/4/24 SLC VA MB

1605: Team B take over gauging MW-01 + EW-01 for Team C.

1630: Team B at conex's - conduct site cleanup / prep sample kits with Teams A + C.

1815: All offsite, will return tomorrow to begin sampling event.

Melanie Blanton

Scale: 1 square = _____

9/5/24 SLC VA MB

Personnel: Team B: Melanie Blanton (COM), Ryan Paracy (Wasatch)

Weather: sunny, high 85°F / low 61°F

PPE: Modified level D

Task: continue groundwater monitoring event

0700: All staff on site. conduct H+S meeting.

0730: calibrate equipment / load gear

0845: MB + RP mob to MW-28 to open tamper proof bolts with impact.

0900: successfully opened, 3 tamper proof bits broken. will order more. Mob back to Conex's.

915: load gas (nitrogen) cylinder + rack.

0945: Team B mob to MW-06 with Neil Smith (COM).

1000: Troubleshoot Solinst controller / set up connections to well head + nitrogen tank.

1050: Solinst controller leaking -

Scale: 1 square = _____

Rite in the Rain

9/5/24 SLC VA MB

bring out QED MP10.

11:10: Begin purge at MW-06. See purge log for details.

1141: Sample MW-06 for VOCs. Placed on ice.

1155: Mob to MW-04.

1215: troubleshoot compressor

12:59: Begin MW-04 purge See purge log for details.

13:55: Collect MW-04 for VOC's. Placed on ice.

1415: Mob to MW-02.

1430: establish recharge/discharge

1450: 140 mL/min flow rate established. Begin MW-02 purge.

1546: collect MW02-GW09 & FB02-GW09 for VOCs. placed on ice.

1610: Team B mob to MW-17 to pick up traffic control.

1620: return to Conex's - drop off equipment/traffic control + pick up remaining traffic control at laydown yard.

Scale: 1 square = _____

9/5/24 SLC VA MB

1645: organize samples/equipment/gear at Conex's. Dispose of IDW in poly tank.

1750: All offsite will calibrate equipment before going to site tomorrow.

Scale: 1 square = _____

Rite in the Rain

9/6/24 SLC VA

Personnel: Melanie Blanton (MB) Team B (COH), Ryan Pinacy (Wasatch)
Weather: Sunny, high
PPE: modified level D
Task: continue groundwater monitoring event,

0700: All onsite, calibrate all equipment + conduct H+S meeting
0730: load equipment / gear.
0745: Team B mob to MW-01.
0750: set up at MW-01D. establish flow rate. RP to cut locks.
0804: flow established. Begin MW-01D purge.
RP offsite to cut select MW locks with grinder.
0835: RP back on site.
0845: RP offsite to Carex's to get MW-15 pump.
0900: Begin MW-15 pump install to 204 Ft bls. sample MW01D.
11.00: pump installed, establish 100 ml/min flow rate.

9/6/24 SLC VA MB

11:11: 100 mL/min flow established. Begin MW-01S purge.
1150: No more flow, drive line blew off the top of the housing. Attempt to retrieve.
1330: pump safety cable snapped - drive line + pump stuck downhole. Inform Maria + Neil - will discuss options. Mob to MW-08.
1345: set up at MW-08A
1355: Establish flow at MW-08A.
1420: still no water - hook up to MW-08B to attempt purge.
1425: Begin MW08B purge.
1516: collect MW08B-GW09624 for VOC's. placed on ice.
1520: attempt purge at MW08A again. all lines secure, may be possible pump issue/ blockage. will inform Maria.
1545: No flow observed. Pack up equipment + traffic control

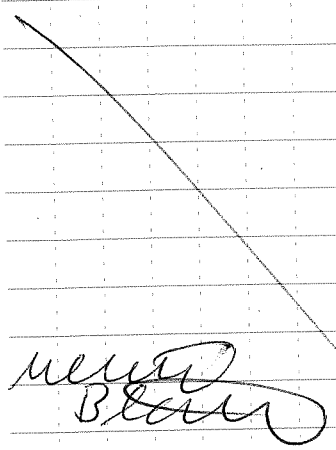
Rite in the Rain

9/6/24 SLC VA MB

and mob to conex's.

1600: package samples for shipment/ store equipment.

1645: Team C to Fedex. All offsite.



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9/7/24 SLC VA MB

Personnel: Team B: Melanie Blanton (CDM), Ryan Panacy (Wasatch)

Weather: Sunny,

PPE: Modified level D

Task: continue groundwater monitoring event with nitrogen gas cylinder sampling.

0700: All onsite. Equipment calibrated (YSI's & turbidity meters in hotel). conduct H&S meeting. Load equipment/ gear.

0810: Mob to MW-45 with bladder pump.

0835: Begin MW-45 purge at 2 cycles, 18 recharge/ 12 discharge at 90 PSI.

0920: Turbidity over range. Call Maria. Neil advised to increase flow to clear out fines. Increase to 400 ml/min at 3 cycles, recharge 10/discharge 10 at 120 PSI. Pause readings until turb. stabilizes.

Scale: 1 square = _____

Rite in the Rain

9/7/24 SLC VA MB

0940: turbidity at 599 NTU
0945: turbidity at 409 NTU
0950: turbidity at 290 NTU
0955: turbidity at 219 NTU
1000: turbidity at 162 NTU
1005: turbidity at 119 NTU
1007: turbidity at 98 NTU, resume parameter readings.
1026: collect MW45-GW09724 for VOC's. Placed on ice.
1035: mob to ~~MW-13L~~ MB MW-13L
1055: collect MW13L-GW09724 for VOC's & FD03-GW for VOC's. placed on ice.
11:15: purchase ice & drinking water.
1130: Mob to Conex's to dispose of IDW.
12:00: Mob to MW-28
1220: establish flow rate.
1250: Begin MW-28 purge. See purge log.
1300: Turbidity over range. Purge until below 50 NTU.
1350: 391 NTU - continue purging.

Scale: 1 square = _____

9/7/24 SLC VA MB

1408: 56 NTU. continue purge.
1420: 89 NTU. Reduce flow. continue purge
1440: Turbidity 33.3 NTU - Take stabilization readings.
1456: collect MW28-GW09724 & MS/MSD for VOC's. Placed on ice. Turbidity under 50 NTU & within 10%.
1510: Mob to MW-27.
1520: Attempt MW-27 purge. low on nitrogen.
1600: still no observed flow - ran out of nitrogen. Mob to Conex's to unload/inventory samples/decon bladder pump/take equipment blank.
1615: Decon bladder pump/install new bladder.
1635: collect EB01-GW09724 for VOC's. Placed on ice.
1640: unload/inventory samples/dispose of IDW.
1715: All offsite.

Scale: 1 square = _____

Rite in the Rain

9/8/24 SLC VA MB

Personnel: Team B: Melanie Blanton (CDM), Ryan Panacy (Wasatch)
Weather: sunny, high 91°F/low 67°F
PPE: modified level D
Task: continue groundwater monitoring event

0700: All on site. calibrate all equipment (see cal logs), load equipment, gather samples/gear.
0715: conduct H+S meeting
0730: Team B mob to MW-27. Will attempt to purge.
0830: still no water after diagnosing with Neil Smith (PTL). Possible bad bladder/pump. will revisit when replacements are delivered. Move on to MW-24.
0855: establish ~175 mL/min flow at MW-24.
0903: established, begin purge.

Scale: 1 square = _____

9/8/24 SLC VA MB

0954: collect MW24-GW09824 for VOCs. Placed on ice.
~~0905~~ MB 1005: Mob to get ice + go to Conex's to switch out gas cylinder.
1040: Mob to MW-30RA/B.
1100: Begin MW-30RB purge (200 mL/min).
1122: Begin MW-30RA purge (150 mL/min)
1201: collect MW30RB-GW09824 for VOC's placed on ice.
1215: collect MW30RA-GW09824 ~~9824~~ MB for VOC's. placed on ice.
1230: Mob to Conex's for MW-32 sample/tubing
1300: Mob to MW-32 to attempt MW-32A purge.
1315: no pump down well - call Mario. Found pump at Conex, will bring it to well.
1335: Mario on site with dedicated bladder pump. ~~Set~~ MB Deploy + set at 119 ft bls.
1400: Begin MW-32A purge.

Scale: 1 square = _____

Rite in the Rain

9/8/24 SLC VA MS

See gw purge log.

1446: collect MW 327-GW09824 for VOC's. Placed on ice.

1500: Mob to conex to pickup MW-05R pump to deploy & sample well.

1520: Deploy MW-05R pump & set at 222 ft bls.

1540: Begin MW-05R purge. See GW purge log.

1636: collect MW05R-GW09824 for VOC's. Placed on ice.

1645: pull pump & store in conex - manhole cover won't bolt down with pump in well.

1700: Mob to Conex's to dispose of IDW, store equipment, organize samples.

1720: All off site

Scale: 1 square = _____

9/10/24 SLC VA MB

Personnel: Team B: Melanie Blanton (CDM), Ryan Panacy (Wasatch)

Weather: sunny, high 88°F/low 66°F

PPE: level D

Task: continue groundwater monitoring event.

0700: All on site. Calibrate all equipment (see cal. logs), load equipment/gear, H+S meeting.

0800: Team B mob to MW-27 to replace bladder in pump & sample

0815: pump pulled, bladder replaced. re-install.

0827: Begin MW-27 purge. See GW purge log.

0918: collect MW27-GW09024 for VOC's. placed on ice.

0930: Mob to MW-08A to replace bladder & sample.

0940: bladder replaced. deploy pump.

Scale: 1 square = _____

Rite in the Rain

9/10/24 SLC VA MB

1020: Begin MW-08A purge.

1142: collect MW08A-GW091024 for VOCs. placed on ice.

1215: Mob to conex's to dispose of IDW + materials for MW-44 S/D.

1250: Mob to MW-44 S/D.

* Melanie call workcare for sprained ankle — informed Kara Fineham (PM).

1315: Deploy bladder pump w/ 20 ft of 3/8 x 1/2' HDPE tubing at 232 ft bls.

1430: No water with 35 refill/25 discharge (cycle) — pull pump to inspect. Water in drop tube, bladder, + sample lines - re-deploy

1505: Troubleshoot with Ben (corp) - increase refill to 50/discharge 10.

1526: Ben advised to reverse and increase discharge to 45 + 15 recharge. Reduce PSI to 100 +

Scale: 1 square = _____

MB

~~PW~~ 9/10/24 SLC VA MB

pull up pump bladder from 215' to 200', with drop tube bottom at 220'.

1600: still ~~PW~~ MB no flow observed. pull pump + take apart to assure satisfactory build

1615: pump in good condition. Test pump in 5 gallons of water - pump working at surface.

1630: Team B mobilize to Conex's to store gear.

1650: RP offsite - MB to assist team A with sampling.

1800: Mob to Conex's to dispose of IDW/store equipment/organize samples.

1830: All off site.

Melanie
Ben

Scale: 1 square = _____

Rite in the Rain

9/11/24 SLC VA MB

Personnel: Team B: Melanie Blanton (CDM), Paige Williams (Wasatch)

Weather: Sunny, high 90°F/low 56°F

PPE: modified level D

Task: continue groundwater monitoring event.

0700: all on site - load equipment/gear. Conduct H+S meeting.

0800: Team B mob to IW-01 with non-dedicated bladder pump.

0815: deploy bladder to 215' with 45 ft of drop tubing (set at 260').

0840: Attempt purge at 100 psi, 20 recharge/40 discharge.

0900: controller not working - replace with back up.

0920: new controller working

0935: Begin IW-01 purge (minimum purge 2.1 gallons) 125 mL/min flow rate.

Scale: 1 square = _____

9/11/25 SLC VA MB

11:11: Collect ~~MW~~ MB IW01-GW091124 for various analytes (see COC) - placed on ice.

11:45: Bladder pump lost down hole - wait for steel fish tape to fish out

1245: pump pulled out - decon + install new bladder for set up at EW-01.

1315: pump down well at EW-01. waiting on flow

1330: 100 mL/min flow established. Begin EW-01 purge - see GW purge log.

1430: MB assist team C with set up at MW-42S.

1521: Collect EW01-GW091124 for multiple analytes (see COC) - placed on ice.

1540: pull pump - decon + install new bladder.

1620: Collect EB02-GW091124 for various parameters (see COC).

Scale: 1 square = _____

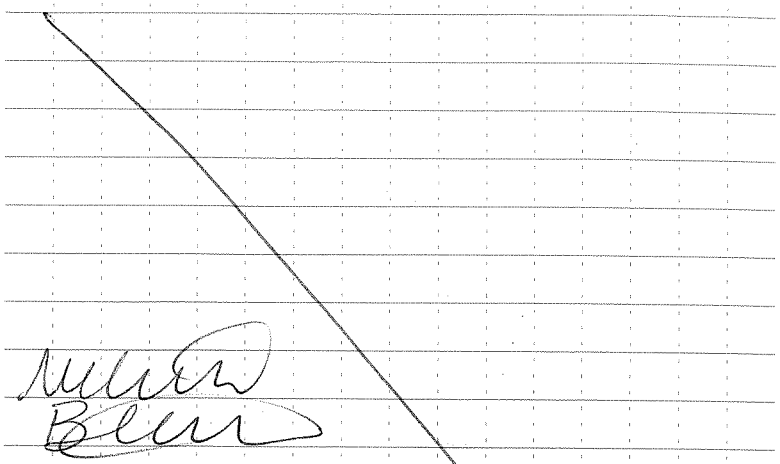
Rite in the Rain

9/11/24 SLC VA MB

1645: MB go to assist Team A.

1840: Mob to conex's to store equipment.

1905: All offsite.



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9/12/24 SLC VA MB

personnel: Melanie Blanton (COM), John Rezac (Wasatch) - Team B.

weather: over cast, high 69°F/low 50°F

PPE: Level D (modified)

Task: continue groundwater monitoring event.

0700: All on site. Calibrate all equipment. Conduct H&S meeting. Load all gear into vehicles.

0800: Team B mob to MW-425 with bladder pump to redeploy.

0815: cut 7.5 ft of drop tubing

0830: pump deployed to 222' w/ 25 ft of drop tubing. establish flow.

0850: 250 mL/min flow achieved. Very turbid - conduct readings every 15 mins.

1101: collect MW425-GW09122024... for multiple analytes (see COC). placed on ice.

Scale: 1 square = _____

Rite in the Rain

9/12/24 SLC VA MB

noticed air in sample line causing water to spurt rapidly.

1125: pull bladder pump.

1135: sediment in bladder. Decon + replace.

1150: Deploy other bladder pump + drop tubing to 222', 50 ft of drop tube.

1230: No flow observed - rapid sputtering with air in line. Diagnose issue w/ Ben Carreon - advised to try another controller after adjusting PSI, recharge / discharge.

1300: Attempt purge with new controller - still air in sample line. inform Maria - advised to stand by.

1320: Advised to move on to MW-015 - pack up + close MW-42.

Scale: 1 square = _____

9/12/24 SLC VA MB

1340: Mob to MW-015 to fish pump out of well.

1420: steel cable ~~bent~~ MB hook bent around 180' and lost hooked pump back down hole - weight too much for cable. Call Maria to inform.

1430: Attempt again w/ tied treble hook.

1450: treble hook broke off steel cable on pump downhole - inform Maria. Mob back to Carex's. Instructed to unload + release John.

1500: MB Mob to MW-23 to assist Maria.

1445: Mob to Carex

1520: All offsite

MB Blanco

Scale: 1 square = _____

Rite in the Rain

9/13/24 SLC VA MB

Personnel: Team B: Melanie Blanton (CDM), Paige Williams (Wasatch)

Weather: Sunny - high 73°F/low 58°F

PPE: level D

Task: continue groundwater monitoring event. Tag new wells, clean up Conex / pack equipment

0700: all on site. H&S meeting

0745: Team B round up all traffic control + tag new wells.

0900: Move traffic control to lay down yard.

0930: collect EB03-GW091324 for multiple analytes. See COC.

0945: Team B organize/pack equipment (rentals) with photo documentation.

11:15: Mob to FedEx w/ 13 packed boxes.

1145: Run to plumbing supply store to get slip caps

Scale: 1 square = _____

9/13/24 SLC VA MB

1245: Back on site - replace slip caps at MW-03.

1330: Attempt to open MW-04 - tamper proof bolt stripped. Need angle grinder.

1400: Mob to Conex to unpack Team A gear.

1500: Melanie & Paige offsite to buy sawzall for cutting MW-04 tamper proof bolt

1535: on site - charge battery.

1600: pickup equipment boxes from Maria

1612: Mob to FedEx

1635: Return - cut bolt at MW-04.

1735: Mob to Conex - lock up.

1750: all off site

Scale: 1 square = _____

Rite in the Rain

SLC PCE Plume 700E 9/5/24
1600S GW ~~9/4/24~~ EH 9/6/24

Personnel: Emma Goldberg (author), Joe Borgerding, John Read Wasatch

Weather: Sunny 85°F

PPE: Level D

Activities: WLs at 12S/D, 15S/D, Sample 12S/D, 17S/D, 15S/D / MW-22, MW-16

0700 Team on-site H&S meeting, calibrate, assemble kits and equipment.

0900 Arrive at MW-12S/D

0915 WL at 12D. To open it the bolt cutter didn't work. The well cap ripped off.

0920 Emma calls Neil/Mana, bolt cutters won't work at 12S. Neil to look for larger bolt cutters, Team C moves on to MW-15S/D for WL.

0930 MW-15S/D parked over. Still return to MW-12D for sampling

Scale: 1 square = _____

Rite in the Rain

9/5/24

1013 start purge at MW-12D
1048 sample MW-12D
1100 Clean up, move traffic control to the side for pick-up later. Return to connex to ~~pack~~ EG 9/5/24 tape samplers and gather materials for MW-17S/D. Bring transducer equipment to Team A. Pick up tamper proof bolts from Team B
1205 arrive at MW-17S/D
1335 purge start at MW-~~17S~~ 17S EG 9/5/24

1401 MW-17S sample. Neil Smith helps deploy pump at MW-17D
1425 purge start at 1425 at MW-17D.
1445 Air and water tubes were mixed, rearranged to correct.

Scale: 1 square = _____

9/5/24

1450 Purge start at MW-17D
1540 woman stops by with questions. Her house was sampled a few yrs ago. I directed her to purplume.org.
1545 MW-17D sampled
1630 MW-15S/D still parked over.
~~1700~~ EG 9/5/24
1640 return to connex to unload/debrief.
1745 off-site

Emma Goldberg 9/6/24

Scale: 1 square = _____

Rite in the Rain

SLC PCE Plume TODE 9/6/24
1100S GW

Personnel: Team C -- Emma Goldberg (author), Lee Borgendale, Paige Williams

Weather: sunny, 85°F

PPE: Level D

Activities: collect remaining dWLs, sample 37S/D & 38S/D

0700 Team on-site to calibrate and prep equipment

0800 Leave site to MW-37S/D.

0805 MW-38S/D still parked over

0810 arrive at MW-37S/D

0830 Purge start at MW-37S

0837 purge start at MW-37D

0855 Sample MW-37S

0922 Sample MW-37D.

0940 Depart from MW-37S/D

1000 WL at MW-12S EG 9/6/24 Dry

1010 WL at MW-10D.

1022 WL at MW-22

1030 Stop by MW-01 to get magnet from Team B.

1040 arrive at MW-38S/D; setup traffic control

Scale: 1 square = _____

9/6/24

1122 MW38S purge start

1130 MW38D purge start

1222 MW38S sample

1300 MW38D purge stabilized. begin sampling & realize it is through YSI. Emma back to connex for extra samples.

1330 MW38D samples

1350 return to connex to empty purge water and grab MW-36 sample tubing/bottles.

1415 arrive at MW-36

1445 MW-36 purge start

1450 YSI pH reading "---". no sensor damage visible. To be addressed during calibration. Switched to new YSI.

1510 MW-36 sample.

1530 leave MW-36. Pick up samples from Team B to pack cooler.

Scale: 1 square = _____

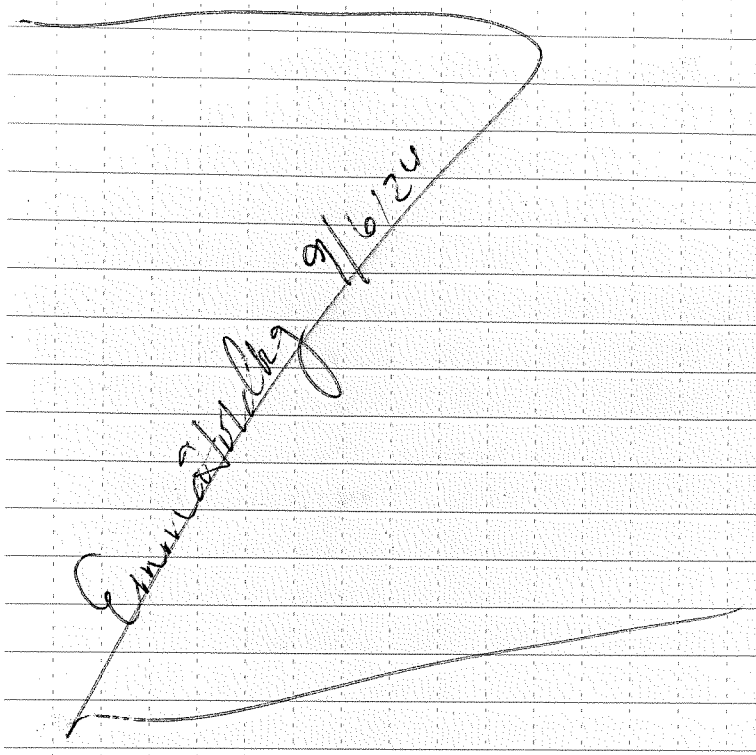
Rite in the Rain

9/6/24

1540 return to connex to pack cooler for shipment.

1645 cooler dropped off at FedEx. J. Borgardina E. Goldberg back to connex.

1715 off-site



Emma Goldberg 9/6/24

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SLC PCE Plume 700E 9/7/24

1600S GW

Personnel: Team B: Emma Goldberg (author), John Rezac (Wasatch)

Weather: 90°F sunny.

PPE: Level D

Activities: Sample MW-13S/D and MW-20S/D

0700 Team on-site to calibrate and prep equipment

0730 Health & Safety meeting

0800 Leave site to MW-13S/D. Realize ORP solution left in YSI so Emma goes back to connex.

0836 purge start at ~~MW-30~~ MW-13D EG 9/7/24

PID reads ~~above~~ up to 25 for a few minutes when placed inside vault but vents quickly. 0-0.1 ppm in breathing zone. EG 9/7/24

0914 MW-13D sampled

0925 MW-13S purge start

0930 Maria stops by to pull transducer

Scale: 1 square = _____

Rite in the Rain

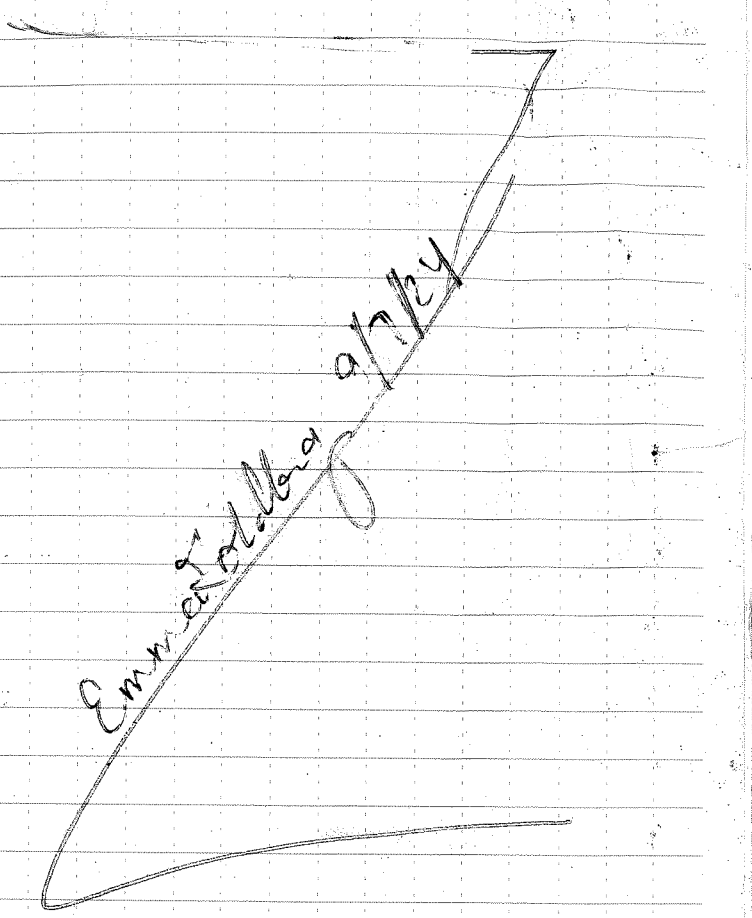
9/7/24

1030 MW-13S sample
1100 arrive at MW-20S/D
1129 MW-20D purge start
1135 MW-20S purge start
1202 MW-20S sample.
1206 MW-20D sample
1220 Emma runs to 7/11 for more ice.
John sets up at MW-19
1238 MW-19 purge start.
1245 Emma returns.
1335 MW-19 sample
1407 MW-18 purge start
1500 MW-18 sample
1505 FD05-GW sample
1542 call Maria -- no more sampling today -- we will drop off ~~trip blk~~ EB 9/7/24 trip blanks, ice to teams and possibly fish out transducer from 03RB.
1600 Drop off ice to Maria/Team A
1615 Drop off ice to TeamB

Scale: 1 square = _____

9/7/24

and trip blanks to Teams A/B
1630 return to connex to finish unloading.
1715 off-site



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Rite in the Rain

SLC PCE Plume 700E 1600S GW 9/8/24

Personnel: Team B Emma Goldberg (author), John Rezac (Wasatch)
Weather: sunny, 90°F
PPE: Level D
Activities: sample MW-15S/D, MW-16S/D, MW-21, MW-22

0700 On-site to calibrate/load trucks. Health and safety meeting
0740 Emma gets ice. Jonah's truck dies, so Ryan (Team B) jump starts it.
0750 MW-15S/D no longer parked over.
0800 Mana arrives to help pull/read transducer
0830 transducer has been pulled but the air line to the pump falls ~1 ft below TOH. We are able to pull it with a flathead & tape
0900 ~~0845~~ Emma leaves to get 15S/D tubing and bottles
Eg 9/8/24

Scale: 1 square = _____

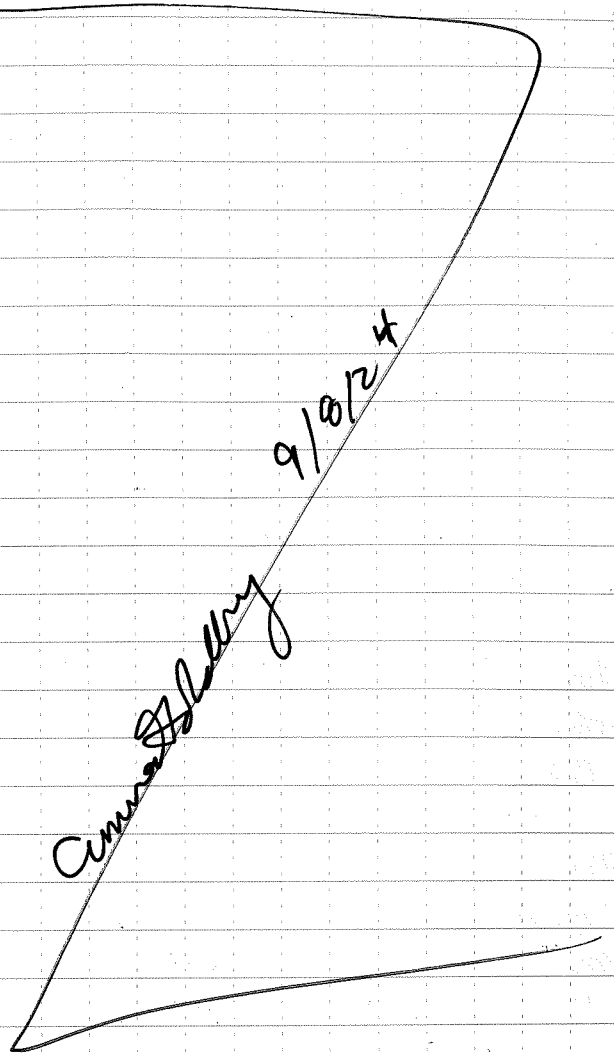
9/8/24

0920 Emma returns, realizes YSI is missing
0923 MW-15S purge start
0940 Emma returns with YSI
0943 MW-15D purge start.
1018 MW-15S sample.
1040 MW-15D sample
1050 set up at MW-16S/D
1125 purge start at MW-16S
1220 MW-16D purge start
1245 sample MW-16D
1232 Sample MW-16S
1237 sample ~~MW~~ Eg 9/8/24 FD04
1300 Drop off Mana's sunglasses, empty purge water at Connex
1315 set up at MW-21
1330 start pump no water for 5 minutes up pressure to 35 psi
1340 water comes out.
1431 Sample MW-21
1440 set up at MW-22
1459 MW-22 purge start
1542 MW-22 Sample
1600 return to connex to unload

Scale: 1 square = _____

Rite in the Rain

1730 off-site.



SLC PCE Plume 700 E 1600 S GW 9/10/24

Personnel: Team C: Rachel Kubina, Emma Goldberg (arrived)
Weather: 85° sunny
PPE: Level D
Activities: Sample 14S ID
0700 arrive on-site.
0715 Health and safety.
YSI U9.507 IX
batteries dead.
moved out of commission.
0800 Leave for MW-14S/D
0815 Arrive. Emma forgot purge buckets,
0840 Emma returns.
calls Maria -- pressure reading is not clear, looks like it is pegged above 100 psi. FTL approval to proceed at MW-14D.
~~0858~~
0858 purge start at MW-14D.
1005 Note: Bob Alexander is here for internal audit.
Purge starts at MW-14S

Scale: 1 square = _____

Scale: 1 square = _____

Rite in the Rain

1109 sample 14-S needed 2 cycles per bottle.
1125 cleaned up at MW-14SD
1130 Arrive at Team A, drop off Bob.
1135 Emma to return to connex and begin unloading
1145 Rachel returns and helps unload/reload for pump deployment.
1215 Emma and Rachel to MW-32.
~~1230~~ 1230 EG 9/10/24 MW-32 parked over. move on to MW-03R.
1245 pause for snack/bathroom
1310 call Maria looking for MW-03R, she says to move on to MW-30C
1320 Begin sending pump down MW-30C, gets stuck. Attempt to force it down with momentum.
1350 Maria calls -- we are going to switch out

Scale: 1 square = _____

Maria and Rachel so Team A has magnet. Emma and Maria will continue sending MW-30C down the well.
1417 Maria arrives. Rachel depart. Still unable to get tubing/pump down about 20-30 ft of tubing left above ground
1433 Maria calls Ben Carew suggested a downhole camera (we don't have), leave it & see if gravity will work, or call Neil to see if we can sample with the pump at its current depth.
1445 Maria calls Neil Smith. Suggests using a WL that fits through a 2.1ST receiver to see if we can get past the blockage.

Scale: 1 square = _____

Rite in the Rain

1500 return to connex (Mana and Emma) to retrieve WL meter to identify blockage.

1515 stop by Team B (Melanie and Ryan) to retrieve 500ft WL meter.

1540 return to ~~MW-03~~ MW-30C
Ea 9/10/24

~~1623 redeployed pu~~
Ea 9/10/24

1545 Send down WL meter. reaches pump receiver depth without issue.

1600 redeploy MW-30C pump. ~~After~~ some lifting and dropping, pump finally sits.

1623 MW-30C deployment complete. pack up vehicles for MW03

1635 stop by Team A (Joe Borgerding) to grab magnet. Melanie Blanton jobs Joe.

1650 Mana and Emma join Rubina and Lydia to drop off gas cylinders at connexes.

1713 Lydia, Mana, and Emma arrive at MW-03R to deploy pump.

1759 MW-03RB pump redeployed. A filter was missing from the pump tip so Emma retrieved one from Joe at around 1715.

1805 Return to connex to unload and debreef.

1830 offsite

Emma Holder 9/10/24

9/10/24

Rite in the Rain

S-C PCE Plume 700E 1600S GW 9/11/24

Personnel: Emma Goldberg, Rachel Kubina

Weather: Sunny, hazy, 95°F

PPE Level D

Activities: Deploy pumps, sample 42 S/D

0700 on-site to calibrate.

0715 Health and safety meeting

~~0~~ 0745 Kubina and Emma off-site to Wasatch. EG 9/11/24

0815 arrive at Wasatch, load truck and sedan with boxes

0830 Emma stops by Marshalls Industrial for Hydrasleeve string.

0900 Emma and Kubina return to connex to unpack.

Delivered:

- ZiST controller
- drop tubing
- bonded tubing
- extra bladders
- pump in Husky bag
- battery
- filters and pieces for ZiST pump

Scale: 1 square = _____

0915 Emma and Kubina return to MW-32C. It is no longer parked over so they attempt to deploy pump and it gets stuck around 170 ft. We can push the tubing down but it gets stuck and stops moving at around 200 ft.

0945 Emma leaves to get 500 ft WL meter so they can check if there is blockage

1000 Gate is locked, likely from VA staff. Emma retrieves keys from Maria and gets WL meter from Joe Borgerding.

1015 Emma returns. WL meter goes down fine, no blockage. Same issue with tubing.

Scale: 1 square = _____

Rite in the Rain

1040 Emma calls Maria. Agree to pull pump and move on to attempt samples at MW-425/D.

1100 Arrive back at Connex to load ZIST controller.

1110 No gas cylinders. Melanie confirms there's not enough gas to pump at MW-425/D.

1120 Kubina and Emma to air gas

1230 Back on-site after air-gas. Kubina to join Team A/B with gas & fishing tape. Emma to Connex to get materials for MW-425/D.

1235 Emma takes break to help with fatigue.

1315 Emma returns to connex

1345 Emma arrives at MW-425/D for setup

1430 WL meter does not reach past pump. pump is lowered further.

1435 WL collected at 192.59.

~~1440~~ EH 9/11/24 Purge start. No water

1450 Maria calls Neil - he thinks the drop tubing is too long

~~We're~~ EH 9/11/24 will pull pump for today and try again tomorrow.

1530 pump is pulled. Emma talks to Team A, decide to prioritize shipment of microbial samples today

1550 Emma and Joe return to connex to pack cooler for shipment

1640 Emma and Lydia head to FedEx

Scale: 1 square = _____

Rite in the Rain

1650 microbial samples dropped off

~~1750~~ EG 9/11/24

1700 Emma & Lydia return. Emma, Lydia, and Joe finish Qcing and packing coolers for shipping tomorrow

1745 CDM Smith whole team pulls pumps at MW03R.

1830 Return to connex

1900 off-site

9/11/24

Emma Kelley

Scale: 1 square = _____

SLC PCE Plume TCE 16005 GW 9/12/24

Personel: Joe Borgerding, Rachel Kubina

Weather: Partly Cloudy 65°F

PPE level D

Activities: Sample MW-32B, deploy Pump at 32C, sample MW-8C, MW-30C Time Permitting

0700 onsite to Calibrate, load equipment

0820 offsite to airgas

0920 Arrive at Konex to unload airgas Cylinders, and load equipment

1000 Drop Cylinder off at MW-28 for Team t

1020 Arrive at MW-32, attempt to deploy Pump at MW-32C, Pump stuck

1050 Begin Purge at ~~MW~~ MW-32B

JPB 9/12/24

1155 Sample taken at MW-32B

1225 Arrive at MW-08, Car parked over well. Placed a Cone on it.

1245 Arrive at MW-30C

1335 Begin Purge at MW 30C

1400 Breakthrough occured at MW-30C

1430 Pulled Pump from MW-30C

1500 Rebuild Pump at MW-28 site with Maria Johnson

1550 arrive at MW-30C and deploy Pump

Scale: 1 square = _____

Rite in the Rain

SLC VA PCE Plume 700s 1600E GW 9/12/24

1620 Arrive at Konex to unload equipment

1715 Off Site

See Brisoell 9/12/24

Scale: 1 square = _____

SLC PCE Plume 700E 1600s GW 9/13/24

Personell: Joe Borgerding, Rachel Kubina

weather: Sunny 65°F

PPE Level D

Activities: Sample MW-08C and MW-30C

0700 onsite to load equipment

0815 Arrive at MW-08C

0850 Purge began at MW-08C

0900 MW-08C high turbidity, troubleshooting Purge water stability

1125 Sample taken at MW-08C

1145 unload traffic control at dirt Lot

1205 begin water column rebuild at MW-30C

1300 Talked to Maria Johnson about troubleshooting water column rebuild. Left messages for technical support from BessT Inc.

1330 Spoke to technical support from BessT Inc. They did not belive our issue was due to a rebuild mistkake. They suggested a full system purge, they also

Scale: 1 square = _____

Rite in the Rain

SLCVA PCE Plume 700s 1600E GW 9/13/24

1330 Noted there may be residual pressure in the line.

1400 Attempting to rebuild water column but air seems to leaking in pump.

1530 Maria Johnson arrived at well MW-30C. Troubleshooting leaky air from purge outlet

1552 Pulled MW-30C to rebuild check valves.

1630 Redeployed pump at MW-30C

1645 Arrive at Konex to unload and clean site.

1745 Offsite.

9/13/24
[illegible]

Scale: 1 square = _____

Scale: 1 square = _____

Rite in the Rain

SLC VA PCE PLUME 700S 1600E 9/13/24

1745 Packed equipment for shippment at FedEx, packed sample cooler.

1530 Arrived at MW-30C methesied vigorous bubbling.

1535 Called Neal sent video of bubbles. Told to pull pump replace check valves and redeploy.

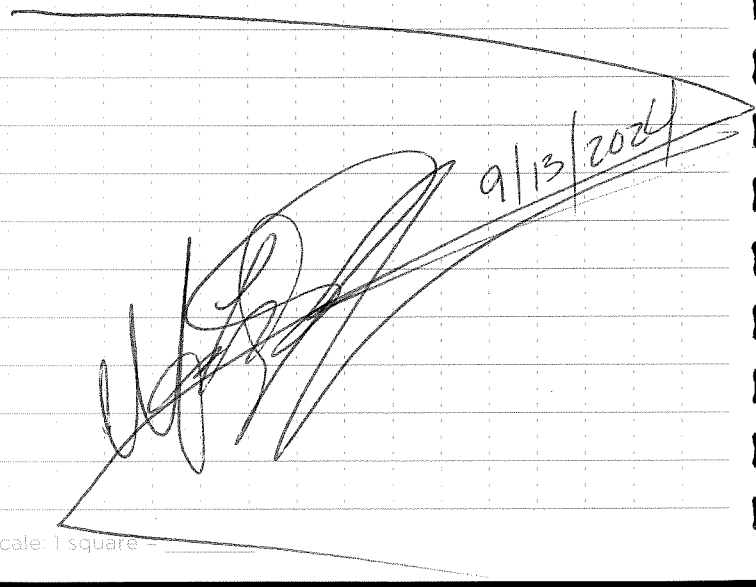
1545 Disconnected MW-30C, heard gurgling from the well vault while it depressurized

1552 Pulled MW-30C to replace check valves and look at pump.

1630 Deployed the pump at MW-30C

1640 Arrived back at conney to unload equipment.

1745 Offsite.



Scale: 1 square = _____

SLC VA PCE Plume 700S 1600E 9/30/24

Personnel: Isaac Nance (Cauthe, CDM), Rachel Kubina (Wasatch), Paige Williams (Wasatch)

PPE: Level D

Weather: 78°F, Sunny

Activities: Wasatch to deploy pumps, hydrosleeves CDM Smith to sample MW-40S/D

0815 I. Nance, R. Kubina, P. Williams onsite

0830 H&S meeting

0845 Calibrate YSIs, HACH, PID, turbid. meter. can't locate ORP solution in Conex storage

0930 Call Maria Day (CDM) gets ORP cal soln on hold @ Grainger

1000 Load up other equipment, Wasatch @ pump deploy

1030 I Nance to grainger for ORP Soln

1045 pH/ORP probe solution not cal standard. ORP on YSIs meets check, proceed w/ sampling per I. Nance/ Neal Smith (CDM) call.

1100 R. Kubina & P Williams done deploying pumps

1115 I. Nance back onsite, finish loading equip.

1155 I. Nance, P. Williams to MW-40S/D. R. Kubina to RC1 wells to deploy hydrosleeves

1230 Incorrect air quick connect on well, trouble-shooting solutions

1345 I. Nance call N. Smith, solution to try

Scale: 1 square = _____

Rite in the Rain

SLC VA PCE Plume 700S 1600E 9/30/24

to build coupling to convert well air line connection from automotive to industrial connection

1400 P. Williams to Ace to look for parts

1430 P. Williams calls, not connect parts at Ace, will try Home Depot

1515 P. Williams back onsite w/ parts, set up on MW-405/D

1550 Water from MW-405 @ 40/20 105 psi

1556 Water from MW-405D @ 40/20 130 psi

1600 P. Williams offsite

1645 R. Kubina done deploying hydrasleeves

1655 R. Kubina offsite

1815 MW405 parameters stable, Sample MW405-GW093024

1910 MW405D parameters stable, Sample MW405D-GW093024

1935 I. Nance to Conex storage to unload

2000 I. Nance offsite

9/30/2024

Scale: 1 square = _____

SLC VA PCE Plume 700S 1600E 10/1/2024

Personnel: Isaac Nance (CDM) Rachel Kubina (Wasatch), I. Nance Author

PPE: Level D

Weather: 81°F, Sunny

Activities: GW sampling @ MW-435D, MW-445/D

0700 I. Nance, R. Kubina onsite

0730 Calibrate YSI, PID, HACH

0800 H&S meeting

0815 Load equipment

0830 I. Nance, R. Kubina to MW-435/D

0835 ~1" standing water in vault w/ sheen, PID >100, will let vent. 0.0 ppm in breathing zone

0850 Vault vented, begin purge setup

0940 MW-435 begin purge

0945 MW-435D begin purge

1135 Sample MW-435: MW435-GW100124

1140 MW-~~40~~435D air supply run out, switch tanks w/ R

1225 Sample MW-435D: MW435D-GW100124

1245 Leave MW-435/D, I. Nance, R. Kubina to conex storage for new air tanks

1300 Replaced air tanks on truck,

1320 Head to MW-445/D

1325 Begin setup @ MW-445/D

Scale: 1 square = _____

Rite in the Rain

SLC VA PCE Plume 700S 1600E 10/1/24

1410 Begin purge @ MW-44D

1425 Begin purge @ MW-44S

1515 MW-44D stable, sample MW44D-GW100124

1640 R. Kubina to conex storage to unload MW-44D equipment

1645 Parameter (turbidity) not stabilizing @ MW-44S. I. Nance calls Neil Smith (CDM) for direction. N. Smith confirms if >2 hour purge and other parameters stable, proceed with sampling.

~~1720 MW-44S turbidity st.~~ TZ 10/1

1710 R. Kubina offsite, left keys w/ I. Nance

1720 MW-44S turbidity still not stable, but other parameters are and purge time at 175 min. Turbidity at 328 but proceed with sample collection for MW-44S. Sample: MW44S-GW100124.

1750 I. Nance to conex storage to unload equipment

1830 I. Nance offsite.

10/1/2024

SLC VA PCE Plume 700S 1600E 10/2/2024

Personnel: Isaac Nance (CDM, Author), Paige Williams (Wasatch)

PPE: Level D

Weather: 62°F, Sunny

Activities: GW sampling MW-42D, MW-41S/D

0700 I. Nance, P. Williams onsite

0730 Calibrate YSIs, PID, HACH

0800 H&S meeting

0815 Load up sampling equipment, use/renew ORP Standard soln today for cal

0915 I. Nance, P. Williams to MW-42D, setting up sample equipment

0918 Begin purge @ MW-42D

0940 I. Nance call Wynn (VA) to open gate to MW-41S/D

0945 Wynn opens gate to MW-41S/D, asks about 5 gal bukets left in secondary containment. P. Williams talks to Wynn and clarifies they were just water from purging and were transfered into the large blak tank at the IPW area.

1019 Nitrogen tank empty, swap out, resume purge

~~1210~~ 1145 I. Nance call Maria Day (CDM) to confirm sample method for microbial - minimum 1L through filter, send filter to lab. P. Williams offsite for lunch

Scale: 1 square = _____

Rite in the Rain

SLC VA PCE Plume 700S 1600E 10/2/2024

1210 Sample MW-42D: MW42D-GW100224, ~~1320 I. Nance,~~ P. Williams onsite.

10/2

1320 I. Nance, P. Williams to corex Storage to get new air tanks, pack samples for shipping

1450 P. Williams to Fedex to ship samples.

1450 I. Nance call Airgas to check status of additional cylinders for delivery. Airgas was out of 12S size cylinders so not out for delivery, will deliver 10/3

1500 I. Nance call Airgas to check if cylinders can be picked up because running low on site, they confirm cylinders can be picked up today.

1505 I. Nance to MW-41S/D to set up

1525 P. Williams back on site, agrees to go pick up nitrogen cylinders

1535 P. Williams offsite to Airgas

1610 Begin purge @ MW-41S

1625 Begin purge @ MW-41D

1645 P. Williams onsite w/ 4 new 12S Nitrogen cylinders from Airgas

1710 Sample MW-41S: MW41S-GW100224, MW-41D air tank empty, swap, resume purge.

1750 MW-41D air tank empty, swap, resume purge

Scale: 1 square = _____

SLC VA PCE Plume 700S 1600E 10/2/24

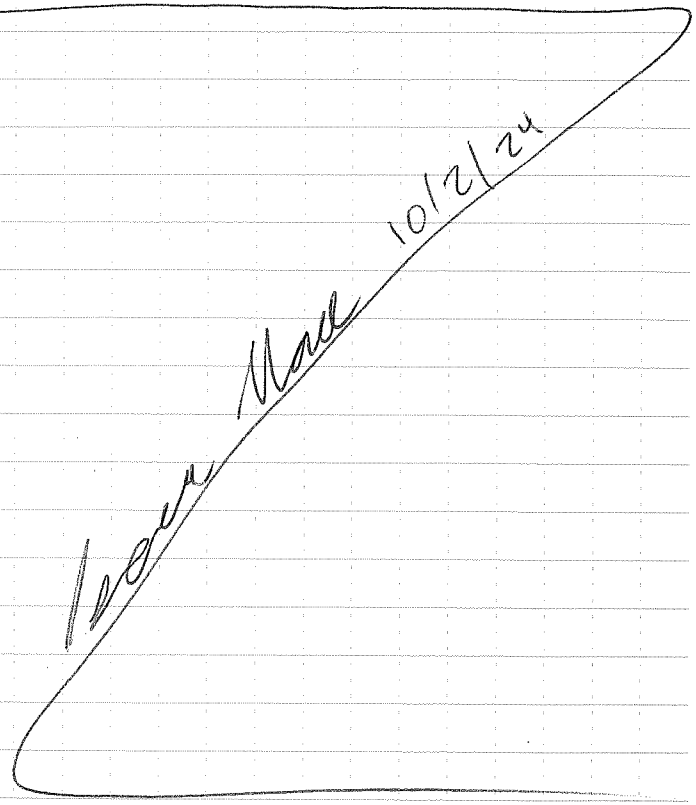
1905 Sample MW-41D: MW41D-GW100224

1920 I. Nance, P. Williams to corex storage to unload equipment

1940 P. Williams offsite

1950 I. Nance to MW-39S/D to place cones in front of parking spot

2000 I. Nance offsite



Scale: 1 square = _____

Rite in the Rain

SLC UA PCE Plume 700S 1600E 10/3/2024
Personnel: Isaac Nance (CDM, Author), Ryan Panasy (Wasatch), Ryan Christiansen (Wasatch)
PPE: level D
Weather: 81°F, Sunny
Activities: Sample RG-01 through RG-11, Sample MW-395/D, Ship samples, demob
0700 I. Nance onsite
0715 R. Panasay onsite, Ryan Christiansen onsite
0730 H&S meeting
0745 R. Panasy, R. Christiansen load up for hydrasleeve sampling, head to RG wells
0800 Calibrate YSIs, PID, HACH
0830 Load up equipment for MW-395/D
0850 I. Nance to MW-395/D
0941 Begin purge @ MW-39D
0949 Begin purge @ MW-39S
1045 Airgas calls I. Nance, delivery driver nearby to drop off 4 cylinders, pick up emptues
1050 I. Nance calls R. Christiansen to have him meet Airgas driver on site
1135 Sample MW-39D: MW39D-GW100324
1315 Sample MW-39S: MW39S-GW100324
1345 I. Nance back to conex storage to

Scale: 1 square = _____

SLC UA PCE Plume 700S 1600E 10/3/24
pack samples for shipping, unload equipment. R. Panasy and R. Christiansen already at conex storage, done w/ hydrasleeve samples at all RG-wells. limited sample volume at RG-02, RG-03, RG-10, RG-11. RG-03 not a full VOA, others are 2 VOAs.
1350 I, Nance call Neil Smith (CDM) to update on progress
1430 Packed up sample cooler to ship to lab
1500 Packed up equipment to return to Field Environmental
1510 R. Christiansen offsite
1520 I. Nance give conex keys to R. Panasy, R. Panasy offsite, I. Nance to Fedex to ship samples and equipment
1400 Samples and equipment dropped at Fedex, I. Nance offsite.

Isaac Nance 10/3/2024

Scale: 1 square = _____

Rain in the Rain

FIELD ENVIRONMENTAL INSTRUMENTS, INC.
www.fieldenvironmental.com

301 Brushton Ave
Suite A
Pittsburgh, PA 15221
Toll Free (800) 393-4009
Local (412) 436-2600
Fax (412) 436-2616

Photo-Ionization Detector Calibration Certificate

	Lot #	Expiration
Isobutylene Gas	23-9494	7/20/2027

ID: 107 or 1693

Cal Standard	Reading	Acceptable Range
100 ppm	100.2	(98 - 102)

Pump Flow mL/min	Acceptable Range
487	(300+)

Response Factor
1.0

Bump Test Reading	Acceptable Range
101.4	97-109

Ensure Water Trap (ID: 2609) and Tubing Included with Rental Package — Confirmed

Alkaline Pack Batteries Checked / Removal Tool Screwdriver Included — Yes
(4 X AA Batteries)

Model	MiniRae 3000
Lamp	10.6 eV
S/N	592-913065
Barcode	U78065X
Order #	565937

Calibrated By Noah Holaday

Date of Calibration 9/27/2024

Rev 4.0 6/7/24

All calibrations performed by FEI conform to manufacturer's specifications. Please report any issues within 24 hours of receiving equipment.
All calibration gas used is traceable to NIST. Additional documentation is available upon request.

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Bladder Pump Conformanee Certifieate

Controller Testing:

Refill Time	10	sec
Discharge Time	5	sec
Throttle	200	psi

Controller: MP10H
S/N: MP10H-1518

☑ Solenoid Function Check
☑ Cooling Fan Function Check

Max PSI Achieved: 200

Air Souree: N2
S/N: N/A

mL per cycle: Good (120-180)

Pump Model: 1
S/N: N/A
Order #: 565937

☐ Portable ☐ Pump decontaminated and cleaned

Co2 Regulator Testing @100 PSI:

Max Regulator PSI	N/A
Regulator PSI Setting	N/A
Co2 Regulator SN#	N/A

N2 Regulator Testing @ 200 PSI:

Max Regulator PSI	325
Regulator PSI Setting	325
N2 Regulator SN#	121199

Calibrated By: Ron Isurankura

Date of Calibration: 09/27/2024

☑ 30 Second Video Attatched

All calibrations performed by Field Environmental Instruments conform to manufacturer's specifications.
Any problems must be reported to Field Environmental within 24 hours of receiving equipment.

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Water Level Meter Certificate

Tape and Reel Cleaned/Checked for Nicks	Confirmed
Probe Tested?	Confirmed
Speaker Sounding?	Confirmed
All Housing Screws in place?	Confirmed
Draw-Down Mode Functioning? (Heron Units)	Confirmed
Thumb Screws Tightened? (Heron Units)	Confirmed
Video Taken and Attached to Order	Confirmed
Twist Knob Brake Contains Rubber Stopper	Confirmed

Model	Heron Water Level Meter
S/N	12HF2210171FR
UX	114683

Probe (Heron Units Only)

Model	
S/N	NA
UX	NA

Calibrated By	Nicholas Logsdon
FEI Order #	565937
Date of Calibration	9/27/2024

Rev 2.0 2/23/24

All calibrations performed by Field Environmental Instruments conform to manufacturer's specifications.
Any problems must be reported to Field Environmental within 24 hours of receiving equipment.

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Local (412) 436-2600
Fax (412) 436-2616

Water Level Meter Certificate

Tape and Reel Cleaned/Checked for Nicks	Confirmed
Probe Tested?	Confirmed
Speaker Sounding?	Confirmed
All Housing Screws in place?	Confirmed
Draw-Down Mode Functioning? (Heron Units)	Confirmed
Thumb Screws Tightened? (Heron Units)	Confirmed
Video Taken and Attached to Order	Confirmed
Twist Knob Brake Contains Rubber Stopper	Confirmed

Model	Heron Water Level Meter
S/N	12HF2403236H
UX	124436

Probe (Heron Units Only)

Model	Water Level Meter Probe
S/N	
UX	

Calibrated By	Erica Ashcraft
FEI Order #	565937
Date of Calibration	9/27/2024

Rev 2.0 2/23/24

All calibrations performed by Field Environmental Instruments conform to manufacturer's specifications.
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Bladder Pump Conformance Certificate

Controller Testing:

Refill Time	10	sec
Discharge Time	5	sec
Throttle	100	psi

Co2 Regulator Testing @100 PSI:

Max Regulator PSI	N/A
Regulator PSI Setting	N/A
Co2 Regulator SN#	N/A

Controller: MP10H
S/N: MP10H1172

☑ Solenoid Function Check
☑ Cooling Fan Function Check

Max PSI Aehieved: 285

N2 Regulator Testing @ 200 PSI:

Max Regulator PSI	500
Regulator PSI Setting	300
N2 Regulator SN#	121423

Air Source: N2
S/N: N/A

mL per cycle:

Pump Model: 1
S/N:
Order #: 565937

☐ Portable ☐ Pump decontaminated and cleaned

Calibrated By: Cristian Dejesus

Date of Calibration: 09/27/2024

☑ 30 Second Video Attatched

All calibrations performed by Field Environmental Instruments conform to manufacturer's specifications.
Any problems must be reported to Field Environmental within 24 hours of receiving equipment.

Geotech Bladder Pump Specifications

	1.66SS36	1.66SS18	.85SS24	.675SS18	1.66 Port	.85 Port	.675 Port
Pump Housing	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS
Pump Ends	Virgin PTFE	Virgin PTFE	Virgin PTFE	316 SS	316 SS	316 SS	316 SS
O.D.	1.66"	1.66"	.85"	.675"	1.66"	.85"	.675"
Length	38"	20"	25"	18"	19"	18 5/8"	18 3/4"
Weight	5 lbs	2.5 lbs	1.6 lbs	.83 lbs	3 lbs	1.1 lbs	.83 lbs
Volume/Cycle	625 mL	313 mL	59.6 mL	38.4 mL	150 mL	29 mL	15 mL
Min Well I.D.	2"	2"	1"	.75"	2"	1"	.75"
Max Depth	1000'	1000'	250'	250'	200'	200'	200'

QED Sample Pro Pump Specifications

	1.75	0.75
Pump Housing	316 SS	316 SS
Pump Ends	303 SS	303 SS
O.D.	1.75"	0.75"
Length	14.75"	10.75"
Weight	4.25 lbs	0.5 lbs
Volume/Cycle	100 mL	15 mL
Max Depth	250'	200'

All calibrations performed by Field Environmental Instruments conform to manufacturer's specifications.
Any problems must be reported to Field Environmental within 24 hours of receiving equipment.

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Fax (412) 436-2616

YSI Pro Plus Calibration Certificate

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
PH 7 @ 25^{C}	44070163	7/18/2026	7.06	7.00	(6.86 - 7.14)
			pH mV value	-3.4	(0 mV +/- 50mV)

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
PH 4 @ 25^{C}	44070311	7/24/2026	4.12	4.00	(3.92 - 4.08)
			pH mV value	170.1	(161.6mV to 176.6mV)

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
PH 10 @ 25^{C}	44040147	4/4/2026	9.89	10.00	(9.8 - 10.20)
			pH mV value	-171.1	(-168.4mV to -183.4mV)

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
Conductivity	8403134	3/30/2026	1467.000	1409.000	(1.338 to 1.479)
			Cell Constant	4.8	(4.0 to 6.0)

Check Standard	Temp ©	Reading	Acceptable Range
ORP	24.3	220.0	(+/- 20mV from the solution mv value)

ORP Offset: -5.80 (0 +/- 100mV)

Dissolved Oxygen	% Saturation	mg/L
	100.0	8.42

Barometer	mm Hg	Sensor Value	Acceptable Range
	760.0	5.8	(4.31 - 8.0)

New DO Membrane: (•) Yes ( ) No

Model	Pro Quatro
S/N	24J101869
Barcode	U124688X
Order #	565937

( ) Black ( ) Blue (•) Yellow

Calibrated By: Travis O'Rourke

Date of Calibration: 9/27/2024

*Solutions provided by Reagents (800-732-8484)

Revision 2, 4/4/24

All calibrations performed by FEI conform to manufacturer's specifications. Please report any issues within 24 hours of receiving equipment.
All calibration solutions used are traceable to NIST. Additional documentation is available upon request.

FIELD ENVIRONMENTAL INSTRUMENTS, INC.
www.fieldenvironmental.com

301 Brushton Ave
Suite A
Pittsburgh, PA 15221
Toll Free (800) 393-4009
Local (412) 436-2600
Fax (412) 436-2616

YSI Pro Plus Calibration Certificate

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
PH 7 @ 25^{C}	44070163	7/18/2026	7.13	7.00	(6.86 - 7.14)
			pH mV value	-4.2	(0 mV +/- 50mV)

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
PH 4 @ 25^{C}	44070311	7/24/2026	4.11	4.00	(3.92 - 4.08)
			pH mV value	170.7	(160.8mV to 175.8mV)

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
PH 10 @ 25^{C}	44040147	4/4/2026	9.92	10.00	(9.8 - 10.20)
			pH mV value	-172.7	(-169.2mV to -184.2mV)

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
Conductivity	8403134	3/30/2026	1485.000	1409.000	(1.338 to 1.479)
			Cell Constant	4.7	(4.0 to 6.0)

Check Standard	Temp ©	Reading	Acceptable Range
ORP	24.3	220.0	(+/- 20mV from the solution mv value)

ORP Offset: -7.30 (0 +/- 100mV)

Dissolved Oxygen	% Saturation	mg/L
	100.0	8.47

Barometer	mm Hg	Sensor Value	Acceptable Range
	760.0	6	(4.31 - 8.0)

New DO Membrane: (•) Yes ( ) No

Model: Pro Quatro
S/N: 24J101870
Barcode: U124689X
Order #: 565937

( ) Black ( ) Blue (•) Yellow

Calibrated By: Travis O'Rourke

Date of Calibration: 9/27/2024

*Solutions provided by Reagents (800-732-8484)

Revision 2, 4/4/24

All calibrations performed by FEI conform to manufacturer's specifications. Please report any Issues within 24 hours of receiving equipment.
All calibration solutions used are traceable to NIST. Additional documentation is available upon request.

FIELD ENVIRONMENTAL INSTRUMENTS, INC.

www.fieldenvironmental.com

301 Brushton Ave
Suite A
Pittsburgh, PA 15221
Toll Free (800) 393-4009
Local (412) 436-2600
Fax (412) 436-2616

Hach Colorimeter Calibration Certificate

Wavelength	Blank	Control Value*	Standard 1 (ABS) 0.050 +/-	Control Value*	Standard 2 (ABS) 0.100 +/-	Control Value*	Standard 3 (ABS) 0.150 +/-
420 nm	0.000	0.611	0.609	1.211	1.204	1.845	1.834
520 nm	0.000	0.612	0.624	1.210	1.225	1.841	1.881
610 nm	0.000	0.592	0.611	1.175	1.179	1.785	1.808

*control value based on certificate of analysis

Calibration Standard Kit

Lot #:	A4029
Expiration Date:	1/31/2026

Order #	565937
Model	DR900
S/N	230606601012
Barcode	U116584X

Calibrated By: Travis O'Rourke

Date of Calibration 9/27/2024

All calibrations performed by Field Environmental Instruments conform to manufacturer's specifications.
Any problems must be reported to Field Environmental within 24 hours of receiveing equipment.

FIELD ENVIRONMENTAL INSTRUMENTS, INC.
www.fieldenvironmental.com

301 Brushton Ave
Suite A
Pittsburgh, PA 15221
Toll Free (800) 393-4009
Local (412) 436-2600
Fax (412) 436-2616

Hach Turbidity Meter Calibration Certificate

	Lot #	Exp Date	Reading
10 NTU	A4057	5/1/25	10.8
20 NTU	A4067	6/1/25	19.7
100 NTU	A4060	6/1/25	98.5
800 NTU	A4057	5/1/25	809.0

Model	**2100q**
S/N	19040C075141
Barcode	U93874X
Order #	565937

Calibrated By Travis O'Rourke

Revision 1, 3/26/24

Date of Calibration 09/27/24

All calibrations performed by Field Environmental Instruments conform to manufacturer's specifications.
Any problems must be reported to Field Environmental within 24 hours of receiveing equipment.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 09/04/2024	**Prepared by:** Maria Day-Johnson

Personnel on site, including Contractors:	CDM Smith –Maria Day-Johnson, Melanie Blanton, Emma Goldberg, Isaac Nance, Joseph Borgerding, Neil Smith Wasatch –John Rezac, Ryan Panasy, Paige Williams
Visitors/Others:	NA

Weather	**Sunny**	Partly Cloudy	Overcast	Rain	Snow
Temperature	**85+ º F**	70 to 85º F	50 to 70 º F	32 to 50 º F	0 To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Water level equipment

Description of Field Activities – including samples/data collected, etc:

- A H&S tailgate was conducted at the IDW yard area.
- Synoptic Water Level Event was completed except for the following wells.
  - MW-03RC/D could not get the water level meter past the tubing. These water levels will be collected after the intervals are sampled.
  - MW-34 all intervals, gained access for 9/5.
  - MW-28 need impact driver for access.
  - MW-12S/D need larger bolt cutters, lock corroded.
  - MW-15S/D vehicle parked over well.
  - MW-16D need larger bolt cutters, lock corroded.
  - MW-22 need larger bolt cutters, lock corroded.
- Groundwater Sampling
  - No samples collected.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- MW-08 was found with a fresh layer of asphalt encroaching the well box lid. The asphalt was chipped away to allow access. MW-08C airline quick connect is corroded and will need to be replaced.
- MW-23C needs a new swagelok fitting on the airline as the existing fitting is damaged.
- MW-26A water line quick connect is missing and will be replaced.
- MW-29A/B/C corrosion noted on airline fittings.
- All RG wells are missing bolts.
- Vehicles were parked over MW-15S/D. Field teams will reattempt water level measurements on September 5th.
- Locks at MW-12S/D, MW-16D, and MW-22 were unable to be opened due to corrosion. The field team will attempt to cut and replace the lock at MW-36 on September 5th.
- ZIST locations continued to be challenging when attempting to collect water levels. This is due to tight tolerances when deploying a water level meter in a 1-inch casing with a pump and tubing.

Projected Work – Near Term:

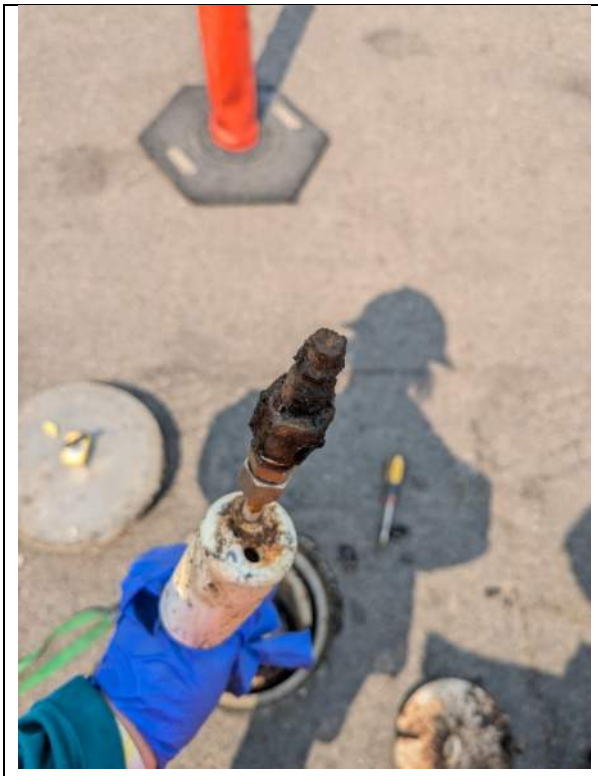
- Finish water levels and begin groundwater sampling.

Other Activities/Remarks:

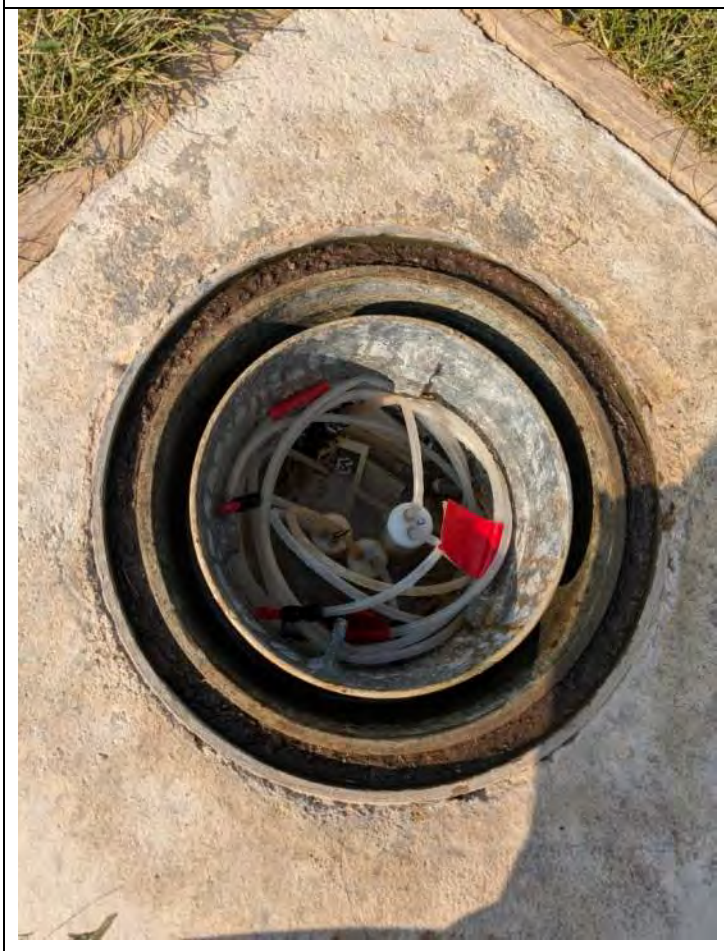
- None

Photos:

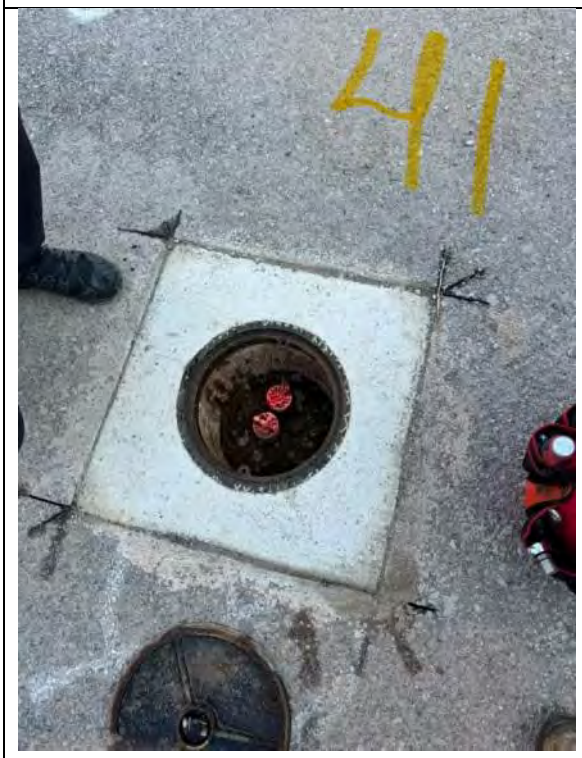
Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date:** 09/04/2024 **Location:** MW-08C **Description:** Corroded airline quick connect and missing water line quick connect.
	Date: 09/04/2024 **Location:** MW-08 **Description:** Asphalt encroaching on edge of monitoring well lid.

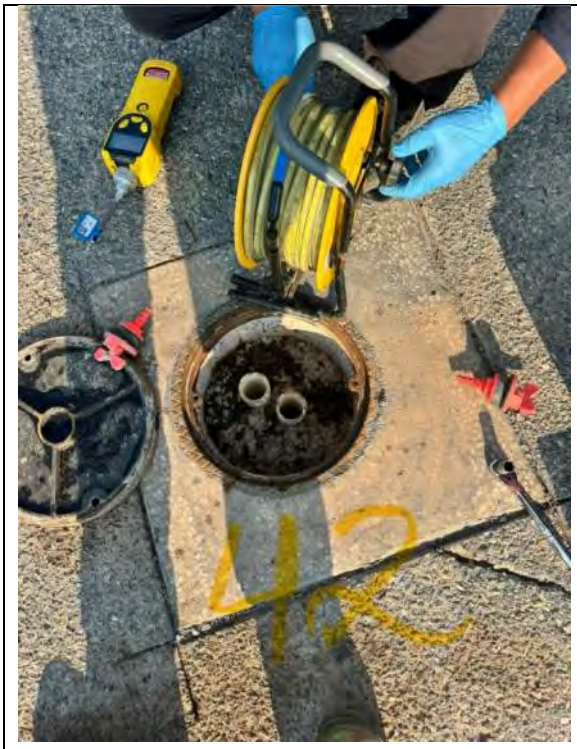
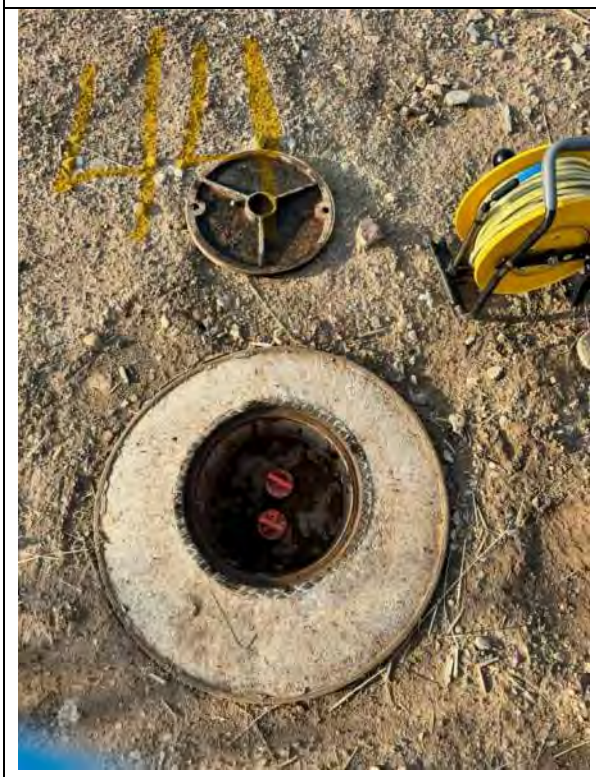
Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/04/2024 **Location:** MW-30C **Description:** Transducer deployed, no pump in well.
	**Date:** 09/04/2024 **Location:** MW-29 **Description:** Some water in well vault.

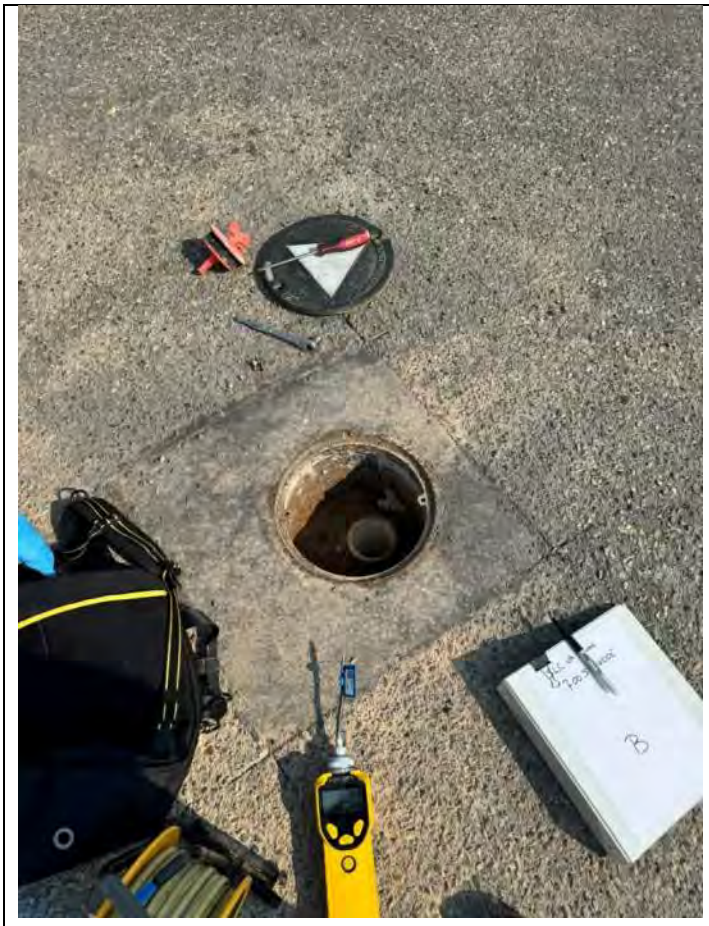
Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/04/2024 **Location:** MW-40 **Description:** New well pair.
	**Date:** 09/04/2024 **Location:** MW-41 **Description:** New well pair.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date:** 09/04/2024 **Location:** MW-42 **Description:** New well pair.
	**Date:** 09/04/2024 **Location:** MW-44 **Description:** New well pair.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date:** 09/04/2024 **Location:** EW-01 **Description:** New well.
	Date: 09/04/2024 **Location:** MW-17S/D **Description:** Current condition.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 09/05/2024	**Prepared by:** Maria Day-Johnson

Personnel on site, including Contractors:	CDM Smith –Maria Day-Johnson, Melanie Blanton, Emma Goldberg, Isaac Nance, Joseph Borgerding, Neil Smith Wasatch –John Rezac, Ryan Panasy
Visitors/Others:	VA-Zane Kozarec

Weather	**Sunny**	Partly Cloudy	Overcast	Rain	Snow
Temperature	**85+ º F**	70 to 85º F	50 to 70 º F	32 to 50 º F	0 To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Water level equipment and low-flow groundwater sampling equipment

Description of Field Activities – including samples/data collected, etc:

- YSIs, turbidity meters, and PIDs were calibrated onsite.
- A H&S tailgate was conducted at the IDW yard area.
- Synoptic Water Level Event was completed except for the following wells:
    - MW-03RC/D – the field team could not get the water level meter past the tubing. These water levels will be collected after the intervals are sampled.
    - MW-12S, MW-16D, MW-22 – the field team will use an angle grinder tomorrow to remove the corroded locks.
    - MW-15S/D – vehicle parked over well.
- Groundwater Sampling
    - Groundwater/QC samples collected (for VOCs):
        - MW-02 (MW02-GW090524), FD02-GW090524
        - MW-04 (MW04-GW090524)
        - MW-06 (MW06-GW090524)
        - MW-12D (MW12D-GW090524)
        - MW-17S (MW17S-GW090524)
        - MW-17D (MW17D-GW090524)
        - MW-34B (MW34B-GW090524)
        - MW-34C (MW34C-GW090524)

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- Team A encountered ZIST controller issues. Spoke with BESST, the controller has a wire that comes lose that can be reattached. This controller will need to be maintained by BESST at the end of the event to solder the loose wire.
- Team A was finishing up work on MW-34 around 5 pm. Gates need to close prior to 5 pm, and team needs to be off the well prior to the gate closing. This is due to ongoing construction activities occurring at Rowland Hall.
- Team B Solinst controller leaks. An additional MP-10H with appropriate hoses and regulator will be shipping to the site from field.
- Team B MW-28 bolts broke getting into well vault. New bolts will need to be installed.
- Team C was unable to access MW-15 S/D due to a vehicle being parked on the wells. Once the teams have public information flyers from the VA, Team C will leave one on the windshield to see if it will move.
- Team C was unable to open MW-12S, MW-16D, and MW-22 due to lock corrosion. Ryan from Wasatch has offered to bring an angle grinder to try remove the locks.
- Team C MP-50 secondary controller was not functioning. The team has an MP-10 and compressor to try for a second set up tomorrow.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

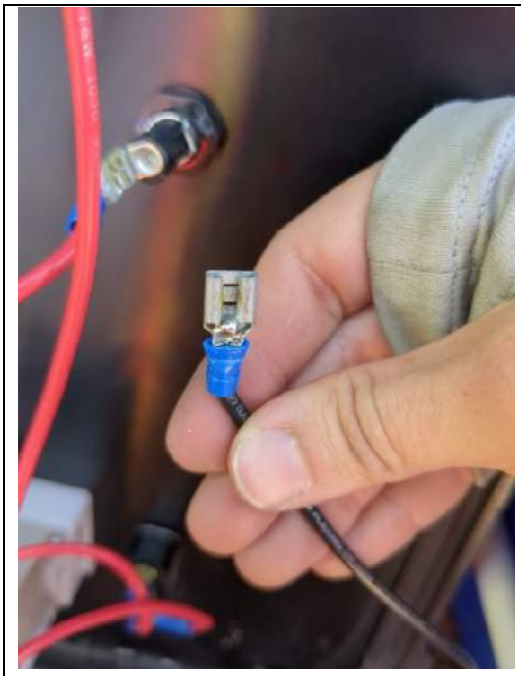
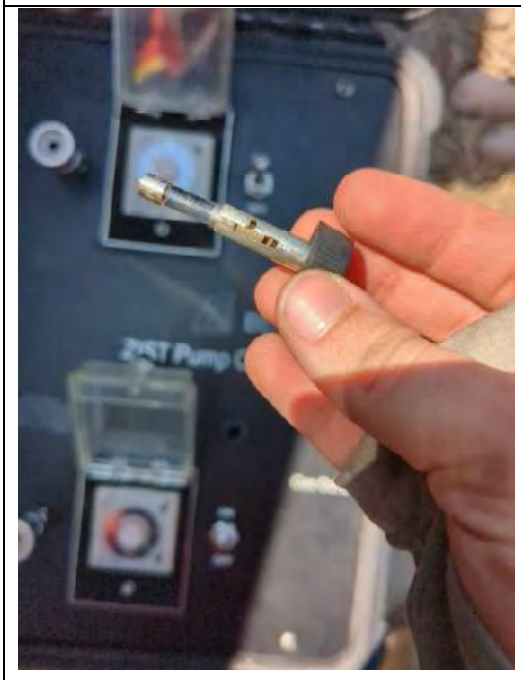
Projected Work – Near Term:

- Continue groundwater sampling, collect few remaining water levels, and well maintenance (replace bolts, locks, and tags).

Other Activities/Remarks:

- None

Photos:

	**Date:** 09/05/2024 **Location:** MW-34 **Description:** Loose wire in BESST controller.
	**Date:** 09/05/2024 **Location:** MW-34 **Description:** Replaced fuse in BESST controller.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 09/06/2024	**Prepared by:** Maria Day-Johnson

Personnel on site, including Contractors:	CDM Smith –Maria Day-Johnson, Melanie Blanton, Emma Goldberg, Isaac Nance, Joseph Borgerding Wasatch – Ryan Panasy, Paige Williams
Visitors/Others:	NA

Weather	**Sunny**	Partly Cloudy	Overcast	Rain	Snow
Temperature	**85+ º F**	70 to 85º F	50 to 70 º F	32 to 50 º F	0 To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Water level equipment and low-flow groundwater sampling equipment

Description of Field Activities – including samples/data collected, etc:

- YSIs, turbidity meters were calibrated offsite, and PIDs were calibrated onsite.
- A H&S tailgate was conducted at the IDW yard area.
- Groundwater Sampling
    - Groundwater/QC samples collected (for VOCs):
        - MW-01D (MW01D-GW090624)
        - MW-08B (MW08B-GW090624)
        - MW-36 (MW36-GW090624)
        - MW-37S (MW37S-GW090624)
        - MW-37D (MW37S-GW090624)
        - MW-38S (MW38S-GW090624)
        - MW-38D (MW38S-GW090624)
        - MW-34A (MW34A-GW090624)
        - MW-34D (MW34D-GW090624)
        - TB01-GW090624
- Synoptic Water Level Event was completed except for the following wells.
    - MW-03RC/D could not get WL meter past the tubing. Spoke with Neil, this water level will be collected after this well is sampled.
    - MW-15S/D vehicle parked over well.
- All samples that have collected thus far have been shipped under FedEx tracking: 279210876837

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- Team A had breakthrough occur at MW-34A. The team was able to rebuild the water column and sample.
- Team B redeployed the MW-01S pump from the Connex after installing a new swage lock fitting. The drive line fell from the housing 30 minutes into purge. While trying to fish the drive line the support cable snapped. The pump is lodged about 3 feet up from where it was originally deployed. The team will purchase some cable fishing equipment and attempt to fish the pump later in the event.
- Team B was not able to get water from MW-08A, they suspect a bladder leak or leak in the airline. The pump will need to be pulled and inspected for troubleshooting.
- Team C was unable to access MW-15 S/D due to a vehicle being parked on it. Once the teams have the VA flyers Team C will leave one on the windshield to see if it will move.
- Team C measured the water level at MW-12S and found the well was dry.

Projected Work – Near Term:

- Continue groundwater sampling, collect last couple water levels, and well maintenance with bolts, well tags, and locks.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Other Activities/Remarks:

- None

Photos:

Date: 09/06/2024

Location: MW-37 S/D

Description: Dual purge set up.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/06/2024 **Location:** MW-34A **Description:** Purge setup
	Date: 09/06/2024 **Location:** MW-34A **Description: Purge setup**

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Date: **09**/06/202**4**

Location: MW-01 S/D

Description: MW-01S cable loose, and sample line sticking out of well. Pump lodged about 3 feet up from pump placement.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Date: **09**/06/202**4**

Location: MW-01D

Description: Purge setup

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 09/07/2024	**Prepared by:** Maria Day-Johnson

Personnel on site, including Contractors:	CDM Smith –Maria Day-Johnson, Melanie Blanton, Emma Goldberg, Isaac Nance, Joseph Borgerding Wasatch – Ryan Panasy, John Rezac
Visitors/Others:	NA

Weather	**Sunny**	Partly Cloudy	Overcast	Rain	Snow
Temperature	**85+ º F**	70 to 85º F	50 to 70 º F	32 to 50 º F	0 To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Water level equipment and low-flow groundwater sampling equipment

Description of Field Activities – including samples/data collected, etc:

- YSIs, turbidity meters were calibrated offsite, and PIDs were calibrated onsite.
- A H&S tailgate was conducted at the IDW yard area.
- Groundwater Sampling
    - Groundwater/QC samples collected (for VOCs):
        - MW-13S (MW13S-GW090724)
        - MW-13D (MW13D-GW090724)
            - MS/MSD
        - MW-13L (MW13L-GW090724)
            - FD03-GW090724
        - MW-18 (MW18-GW090724)
            - FD05-GW090724
        - MW-19 (MW19-GW090724)
            - FD06-GW090724
        - MW-20D (MW20D-GW090724)
        - MW-20S (MW20S-GW090724)
        - MW-25A (MW25A-GW090724)
        - MW-25B (MW25B-GW090724)
        - MW-25C (MW25C-GW090724)
        - MW-26C (MW26C-GW090724)
        - MW-28 (MW28-GW090724)
        - MW-45 (MW45-GW090724)
            - EB01-GW090724
        - FB01-GW090724
- Synoptic Water Level Event was completed except for the following wells.
    - MW-03RC/D could not get WL meter past the tubing. Spoke with Neil, this water level will be collected after this well is sampled.
    - MW-15S/D vehicle parked over well. Left a note on the windshield
- No samples were shipped.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- Team A had to stop purge at MW-26A and will resume tomorrow.
- Team C was unable to access MW-15 S/D due to a vehicle being parked on it. A handwritten note has been placed on the windshield. Once the teams have the VA flyers Team C will leave one on the windshield to see if it will move.
- Transducers at MW01, MW-04, MW06, MW-14, and MW-32 where not collected due to the University Utah football game.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Projected Work – Near Term:

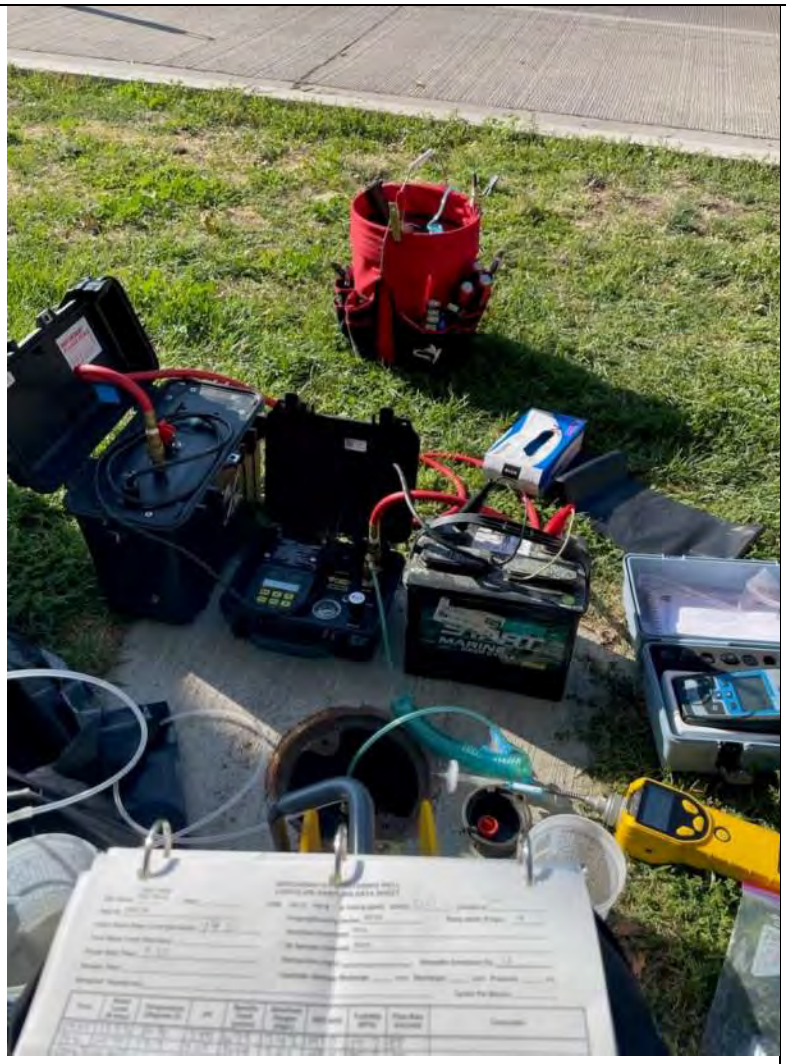
- Continue groundwater sampling, collect last couple water levels, and well maintenance with bolts, well tags, and locks.

Other Activities/Remarks:

- None

Photos:

1.



Date: 09/07/2024

Location: MW-13S

Description: Setup

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Date: 09/07/2024

Location: MW-16S/D

Description: Closed after transducer readings

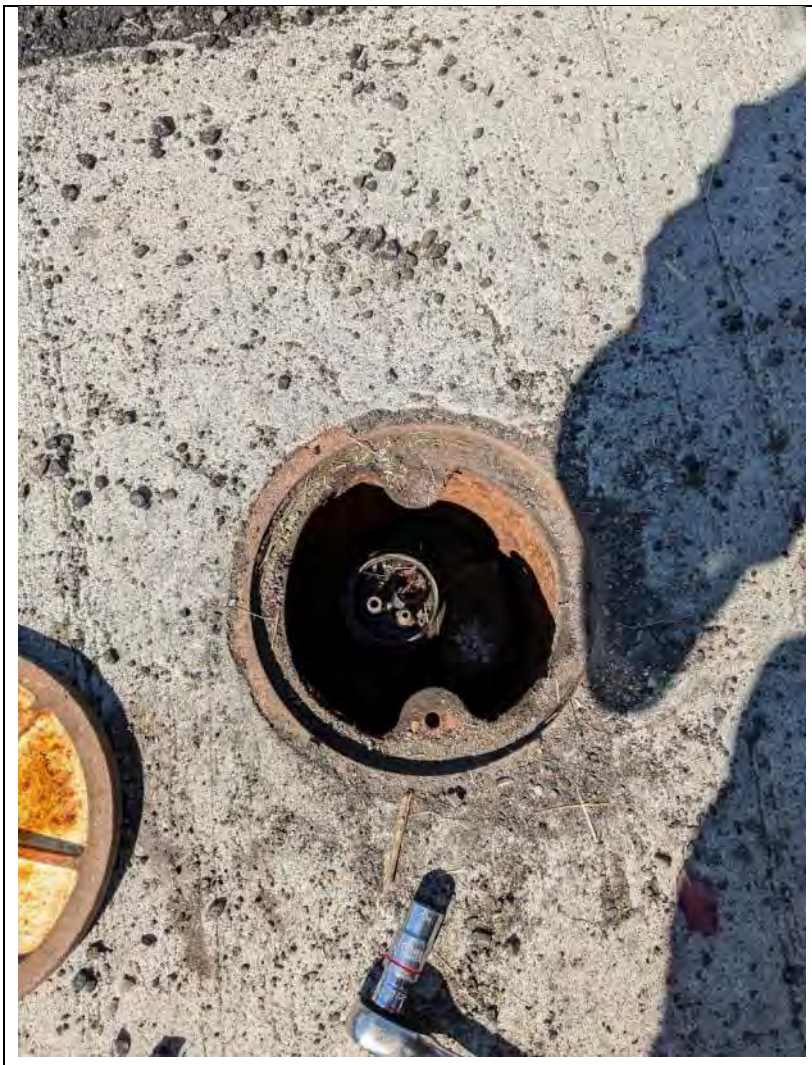
Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Date: 09/07/2024

Location: MW-15S/D

Description: Van parked over wells

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 09/06/2024

Location: MW-16S

Description: Missing well cap

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Date: **09**/06/202**4**

Location: MW-25

Description: Well after sampling prior to locking.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 09/08/2024	**Prepared by:** Maria Day-Johnson

Personnel on site, including Contractors:	CDM Smith –Maria Day-Johnson, Melanie Blanton, Emma Goldberg, Isaac Nance, Lydia Lytle, Joseph Borgerding Wasatch – Ryan Panasy, John Rezec
Visitors/Others:	NA

Weather	**Sunny**	Partly Cloudy	Overcast	Rain	Snow
Temperature	**85+ º F**	70 to 85º F	50 to 70 º F	32 to 50 º F	0 To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Water level equipment and low-flow groundwater sampling equipment

Description of Field Activities – including samples/data collected, etc:

- YSIs and turbidity meters were calibrated offsite. PIDs were calibrated onsite.
- A H&S tailgate was conducted at the IDW yard area.
- Groundwater Sampling
    - Groundwater/QC samples collected (for VOCs):
        - MW-05R (MW05R-GW090824)
        - MW-15D (MW15D-GW090824)
        - MW-15S (MW1SS-GW090824)
        - MW-16S (MW16S-GW090824)
            - FD04-GW090824
        - MW-16D (MW16D-GW090824)
        - MW-21 (MW21-GW090824)
        - MW-22 (MW22-GW090824)
        - MW-24 (MW24-GW090824)
        - MW-26A(MW26A-GW090824)
        - MW-26D (MW26D-GW090824)
        - MW-30RA (MW30RA-GW090824)
        - MW-30RB (MW30RB-GW090824)
        - MW-32A (MW32A-GW090824)
- Synoptic Water Level Event was completed except for the following wells.
    - MW-03RC/D could not get WL meter past the tubing. This water level will be collected after this well is sampled.
- No samples were shipped.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- Team A had break through at MW-26B three times after getting water. The filter and other pump internals will be replaced as needed before another sampling attempt.
- Team A had difficulty deploying MW-32C after pulling the transducer. The team could not get the pump more than 100 ft down hole. This pump will be attempted to be deployed this week prior to sampling.
- Team B could not get purge water at MW-27. This could be a potential bladder issue. The pump bladder will be inspected and replaced if necessary.
- Transducer at MW-01S was not collected as it's tangled with the drive line and snapped safety cable in the well casing. This transducer data will be downloaded once the tubing can be removed.
- MW-04 transducer data was not collected due to soccer games occurring in the park. This transducer data will be downloaded later this week.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

- MW-15D transducer would not read on either laptop or transducer dongle. It was missing the end cap (see photo). The transducer has been pulled and is in the office connex. MW-32A would also not read and is currently pulled and in the office connex. CDM Smith will coordinate with the manufacturer on troubleshooting and potential RMAs.
- MW-14 transducer data was not collected due to previous access issues in the neighborhood on weekends. This transducer data will be downloaded later this week.

Projected Work – Near Term:

- Continue groundwater sampling, collect last couple water levels, and well maintenance with bolts, well tags, and locks.
- Samples collected 9/7-9/8 will be shipped 9/9.

Other Activities/Remarks:

- None

Photos:

	Date: 09/08/2024 **Location:** MW-15D **Description:** Equipment setup

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/08/2024 **Location:** MW-26 **Description:** Condition right before closing and locking the well.
	Date: 09/08/2024 **Location:** Connex Yard **Description:** New Solinst bladders. Successfully installed in MW-05R and sampled.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Date: 09/08/2024

Location: MW-15D

Description: Missing end cap. Potentially damaged as this logger data could not be downloaded.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 09/10/2024	**Prepared by:** Maria Day-Johnson

Personnel on site, including Contractors:	CDM Smith –Maria Day-Johnson, Melanie Blanton, Emma Goldberg, Lydia Lytle, Joseph Borgerding, Bob Alexander Wasatch – Ryan Panasy, Rachel Kubina
Visitors/Others:	NA

Weather	**Sunny**	Partly Cloudy	Overcast	Rain	Snow
Temperature	**85+ º F**	70 to 85º F	50 to 70 º F	32 to 50 º F	0 To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Water level equipment and low-flow groundwater sampling equipment

Description of Field Activities – including samples/data collected, etc:

- YSIs and turbidity meters were calibrated offsite. PIDs were calibrated onsite.
- A H&S tailgate was conducted at the IDW yard area.
- Groundwater Sampling
    - Groundwater/QC samples collected (for VOCs):
        - MW-08A (MW08A-GW091024)
        - MW-14D (MW14D-GW091024)
        - MW-14S (MW14S-GW091024)
        - MW-27 (MW27-GW091024)
        - MW-29A(MW29A-GW091024)
            - FD07-GW091024
        - MW-29B (MW29B-GW091024)
        - MW-29C (MW29C-GW091024)
        - MW-31A(MW31A-GW091024)
        - MW-31B (MW31B-GW091024)
        - MW-31C (MW31C-GW091024)
- Bob Alexander completed his internal field audit.
- Synoptic Water Level Event was completed except for the following wells.
    - MW-03RC/D could not get WL meter past the tubing. This water level will be collected after this well is sampled.
- Pumps were deployed at MW-30C and MW-03RB from the connex for future sampling.
- All samples collected 9/7-9/8 were shipped on 9/9 tracking numbers: 778471176340 and 778471176350.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- Team B could not get purge water at MW-44S with the rental pump. The field team attempted to troubleshoot pump or controller issues and will continue to troubleshoot on 9/10.
- Transducer at MW-01S was not collected as it's tangled with the drive line and snapped safety cable in the well casing. This transducer data will be downloaded once the tubing can be removed.
- One field staff member had a minor injury. They notified the proper personnel and received first aid treatment.

Projected Work – Near Term:

- Continue groundwater sampling, collect last couple water levels, and well maintenance with bolts, well tags, and locks.

Other Activities/Remarks:

- None

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

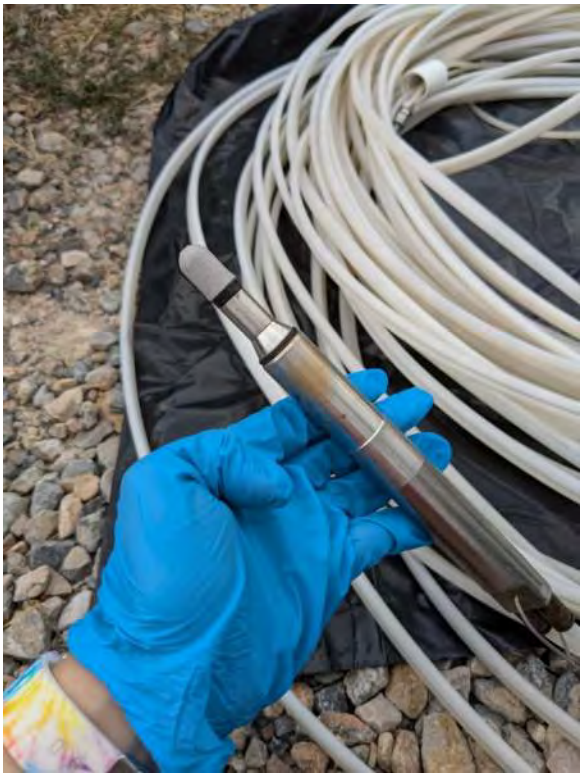
Photos:

	Date: 09/10/2024 **Location:** MW-40S **Description:** Rental pump drop tube assembly.
	Date: 09/10/2024 **Location:** MW-40S **Description:** Rental pump and drop tube assembly.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/10/2024 **Location:** MW-30C **Description:** Pump prior to deployment.
	Date: 09/10/2024 **Location:** MW-30C **Description:** Deployed.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/10/2024 **Location:** MW-03RB **Description:** Broken filter
	**Date:** 09/10/2024 **Location:** MW-03RB **Description:** New filter prior to deployment

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Date: 09/10/2024

Location: MW-29

Description: Groundwater sampling equipment setup

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 09/11/2024	**Prepared by:** Maria Day-Johnson

Personnel on site, including Contractors:	CDM Smith –Maria Day-Johnson, Melanie Blanton, Emma Goldberg, Lydia Lytle, Joseph Borgerding Wasatch – Paige Williams, Rachel Kubina
Visitors/Others:	NA

Weather	**Sunny**	Partly Cloudy	**Overcast**	Rain	Snow
Temperature	**85+ º F**	70 to 85º F	50 to 70 º F	32 to 50 º F	0 To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Water level equipment and low-flow groundwater sampling equipment

Description of Field Activities – including samples/data collected, etc:

- YSIs and turbidity meters were calibrated offsite. PIDs were calibrated onsite.
- A H&S tailgate was conducted at the IDW yard area.
- Groundwater Sampling
    - Groundwater/QC samples collected (for VOCs):
        - MW-03RA (MW03RA-GW091124)
            - MS/MSD
        - MW-03RB (MW03RB-GW091124)
        - MW-03RC (MW03RC-GW091124)
            - MS/MSD
        - MW-03RD (MW03RD-GW091124)
        - IW-01 (IW01-GW091124)
        - EW-01 (EW01-GW091124)
            - EB02-GW091124
    - Groundwater/QC samples collected (for Dissolved Gases, Nitrate/Nitrite, Anions, Alkalinity, TOC, and QuantArray Chlor):
        - MW-03RA (MW03RA-GW091124)
            - MS/MSD (minus QuantArray Chlor)
        - MW-03RB (MW03RB-GW091124)
        - IW-01 (IW01-GW091124)
        - EW-01 (EW01-GW091124)
            - EB02-GW091124 (minus QuantArray Chlor)
- Microbial Samples were shipped under FedEx Tracking: 778529918337 to Microbial Insights. Remaining samples will be shipped to EMAX early afternoon tomorrow.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- Team C could not get water at MW-42S. Team B will try to sample tomorrow with the MP-10H controller and the drop tube assembly.
- Transducer at MW-01S was not collected as it's tangled with the drive line and snapped safety cable in the well casing. This transducer data will be downloaded once the tubing can be removed.
- Hydrasleeves have been lost in transit and not yet delivered.
- AirGas has not delivered or picked up cylinders since Friday. The field team has been grabbing a few cylinders in the morning and or evening to continue work.

Projected Work – Near Term:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

- Continue groundwater sampling and well maintenance with bolts, well tags, and locks.

Other Activities/Remarks:

- None

Photos:

	Date: 09/11/2024 **Location:** IW-01 **Description:** Microbial filter sampling.
	Date: 09/11/2024 **Location:** IW-01 **Description:** Rental pump and drop tube assembly.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/11/2024 **Location:** Left Connex **Description:** MW-03RA/RB/RC/RD pulled and stored in separate bags in anticipation of the pump testing.
	Date: 09/11/2024 **Location:** MW-32C **Description:** Prior to deployment.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 09/12/2024	**Prepared by:** Maria Day-Johnson

Personnel on site, including Contractors:	CDM Smith –Maria Day-Johnson, Melanie Blanton, Emma Goldberg, Lydia Lytle, Joseph Borgerding Wasatch –John Rezec, Rachel Kubina
Visitors/Others:	NA

Weather	**Sunny**	Partly Cloudy	**Overcast**	Rain	Snow
Temperature	85+ º F	**70 to 85º F**	50 to 70 º F	32 to 50 º F	0 To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Water level equipment and low-flow groundwater sampling equipment

Description of Field Activities – including samples/data collected, etc:

- YSIs, turbidity meters and PIDs were calibrated onsite.
- A H&S tailgate was conducted at the IDW yard area.
- Groundwater Sampling
    - Groundwater/QC samples collected (for VOCs):
        - MW-23A (MW23A-GW091224)
        - MW-23B (MW23B-GW091224)
        - MW-23C (MW23C-GW091224)
        - MW-32B (MW32B-GW091124)
        - MW-42S (MW42S-GW091224)
    - Groundwater/QC samples collected (for Dissolved Gases, Nitrate/Nitrite, Anions, Alkalinity, TOC, and QuantArray Chlor):
        - MW-42S (MW42S-GW091224)
- Microbial Samples were shipped under FedEx Tracking: 279439607192 to Microbial Insights. EMAX Samples from 9/10 and 9/11 where shipped under the FedEx Tracking 279439806386 and 279439806397.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- Team B could not get water at MW-42D. This well will need to be sampled with the QED pumps.
- Transducer at MW-01S was not collected as it's tangled with the drive line and snapped safety cable in the well casing. This transducer data will be downloaded once the tubing can be removed.
- MW-01S fishing was not successful. The team tried to use a steel cable hook, the pump was pulled about 40 feet before the steel cable deformed and the tubing or pump dropped back to its original position. A fishing tremble hook was used and the fishing line snapped after hooking the tubing.
- Breakthrough occurred at MW-30C. ZIST parts within the pump were replaced. The team deployed the pump but has not had a chance to rebuild the water column.
- Hydrasleeves have been lost in transit and not yet delivered.
- AirGas has not delivered or picked up cylinders since Friday. The field team has been grabbing a few cylinders in the morning and or evening to continue work.

Projected Work – Near Term:

- Finish up groundwater sampling. Ship equipment and remaining samples.

Other Activities/Remarks:

- None

Photos:

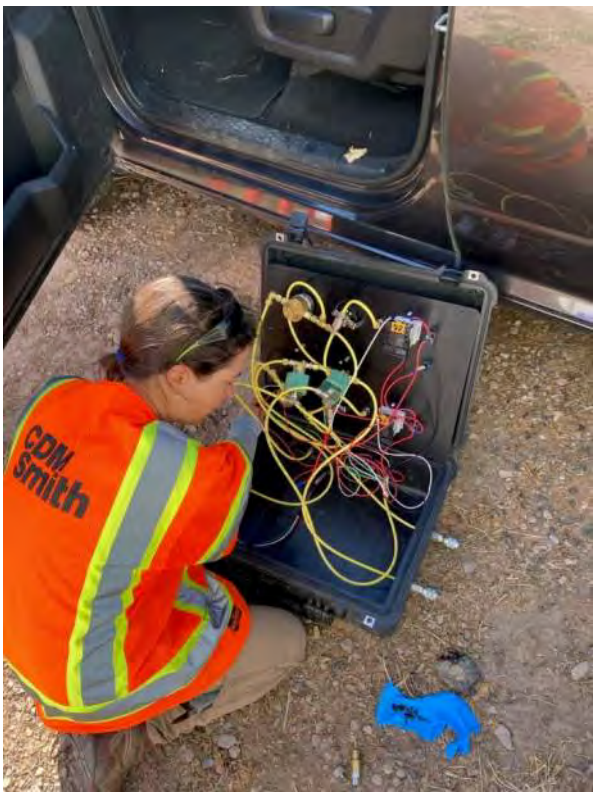
Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/12/2024 **Location:** MW-30C **Description:** Poppet and spring replaced.
	Date: 09/12/2024 **Location:** MW-30C **Description:** Replaced parts from MW-30C after breakthrough.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/12/2024 **Location:** MW-23 **Description:** Condition at MW-23.
	Date: 09/12/2024 **Location:** MW-23C **Description:** Swagelok fitting replaced.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/12/2024 **Location:** MW-42S **Description:** Purge water at the beginning of purge.
	**Date:** 09/12/2024 **Location:** Connex **Description:** Reattaching loose wire in BESST controller.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 09/13/2024	**Prepared by:** Maria Day-Johnson

Personnel on site, including Contractors:	CDM Smith –Maria Day-Johnson, Melanie Blanton, Emma Goldberg, Lydia Lytle, Joseph Borgerding Wasatch –Paige Williams, Rachel Kubina
Visitors/Others:	VA – Zane Kozarec

Weather	**Sunny**	Partly Cloudy	Overcast	Rain	Snow
Temperature	**85+ º F**	70 to 85º F	50 to 70 º F	32 to 50 º F	0 To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Water level equipment and low-flow groundwater sampling equipment

Description of Field Activities – including samples/data collected, etc:

- YSIs, turbidity meters, and PIDs were calibrated onsite.
- A H&S tailgate was conducted at the IDW yard area.
- Groundwater Sampling
    - Groundwater/QC samples collected (for VOCs):
        - MW-26B (MW26B-GW091324)
        - MW-08C (MW08C-GW091324)
    - Groundwater/QC samples collected (for Dissolved Gases, Nitrate/Nitrite, Anions, Alkalinity, TOC):
        - EB03-GW091324
- EMAX Samples from 9/12 and 9/13 were shipped under the FedEx Tracking 27948159966.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- The team tried to rebuild the water column at MW-30C. It appeared the team was pressurizing the casing due to a valve not seated properly. The team pulled the pump and replaced the sample and valve and deployed the pump. The team did not have time to try and rebuild the water column.
- Hydrasleeves have not been delivered.
- AirGas has not delivered or picked up cylinders since Friday. There are 17 cylinders onsite. Stored in the middle connex. AirGas should pick up Monday 9/15.
- Samples were not collected from MW-01S, MW-12S, MW-30C, MW-32C, MW-40S/D, MW-41S/D, MW-42D, MW-43S/D, MW-44S/D, or any of the RG wells due to various circumstances including equipment deficiencies and difficulties with the dedicated pumps. See Neil Smith's 9/13/24 email for more details. Additional details will be provided in a future DSR.

Projected Work – Near Term:

- Wasatch to handle AirGas pick up next week.

Other Activities/Remarks:

- Packed and shipped all rental equipment from Field Environmental.
- Field teams performed housekeeping and general cleanup of the IDW yard.
- Gate keys were handed off to Wasatch for safe keeping.

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/13/2024 **Location:** MW-08C **Description:** Turbid water.
	Date: 09/13/2024 **Location:** MW-30C **Description:** Redeployed.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/13/2024 **Location:** MW-30C **Description:** MW-30C rebuilt on 9/13 before deployment.
	Date: 09/13/2024 **Location:** MW-30C **Description:** MW-30C pump parts

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 09/30/2024	**Prepared by:** Isaac Nance

Personnel on site, including Contractors:	CDM Smith – Isaac Nance Wasatch – Rachel Kubina, Paige Williams
Visitors/Others:	NA

Weather	**Sunny**	Partly Cloudy	Overcast	Rain	Snow
Temperature	85+ º F	**70 to 85º F**	50 to 70 º F	32 to 50 º F	0 To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Water level equipment and low-flow groundwater sampling equipment

Description of Field Activities – including samples/data collected, etc:

- YSIs, turbidity meters, and PIDs were calibrated onsite.
- A H&S tailgate was conducted at the IDW yard area.
- Hydrasleeves were deployed at wells RG-01 through RG-11
- Dedicated bladder pumps were deployed at MW-43S/D and MW 44S/D
- Groundwater Sampling
    - Groundwater samples collected (for VOCs):
        - MW-40S (MW40S-GW093024)
        - MW-40D (MW40D-GW093024)

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- The air line quick connects on wells MW-40S and MW-40D were a different connection type than other wells on site. The team built coupling adapters to convert the connection type so these wells could be sampled.
- ORP was not calibrated onsite due to a lack of ORP solution. The water quality meters were calibrated prior to delivery to the site and this is their first day of use. ORP calibration solution has been ordered to be delivered tomorrow.

Projected Work – Near Term:

- Continue groundwater sampling

Other Activities/Remarks:

- None

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/30/2024 **Location:** MW-40 S/D **Description:** Dual purge set up.
	Date: 09/30/2024 **Location:** MW-40 S/D **Description:** Air line connections.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 09/30/2024 **Location:** RG-04 **Description:** Deploying hydrasleeve.
	Date: 09/30/2024 **Location:** MW-45 **Description:** Deploying dedicated pump.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 10/1/2024	**Prepared by:** Isaac Nance

Personnel on site, including Contractors:	CDM Smith – Isaac Nance Wasatch – Rachel Kubina
Visitors/Others:	NA

Weather	**Sunny**	Partly Cloudy	Overcast	Rain	Snow
Temperature	85+ º F	**70 to 85º F**	50 to 70 º F	32 to 50 º F	0 To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Water level equipment and low-flow groundwater sampling equipment

Description of Field Activities – including samples/data collected, etc:

- YSIs, turbidity meters, and PIDs were calibrated onsite.
- A H&S tailgate was conducted at the IDW yard area.
- Groundwater Sampling
    - Groundwater samples collected (for VOCs):
        - MW-43S (MW43S-GW100124)
        - MW-43D (MW43D-GW100124)
        - MW-44S (MW44S-GW100124)
        - MW-44D (MW44D-GW100124)

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- At MW-43S/D the well vault had around 1" of standing water that seemed to be causing high PID readings. Before the purge and sample equipment was set up, the well vault was vented for 15 minutes until nothing was detected on the PID.
- At MW-44S the turbidity water quality parameter would not stabilize after approximately 3 hours of purging and remained high (300-400 NTU). All other parameters were stable, the water level was stable, minimum purge volume was met, and the purge time exceeded 2 hours, so Neil Smith (CDM Smith) instructed the field team to collect the sample.

Projected Work – Near Term:

- Continue groundwater sampling

Other Activities/Remarks:

- None

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	Date: 10/01/2024 **Location:** MW-43S/D **Description:** Standing water in the well vault.
	Date: 10/01/2024 **Location:** MW-44S **Description:** Sample setup for MW-44S.

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Appendix B
Quality Control Summary Reports

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Quality Control Summary Report

September and October 2024
Groundwater Sampling

Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

May 2025

CDM Smith

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Attachments

Attachment 1 Data Validation Reports
Attachment 2 Data Package Completeness Review Checklists
Attachment 3 Analytical Data Packages

Acronyms

%	percent
%D	percent difference
%R	percent recovery
CDM Smith	CDM Federal Programs Corporation
COC	chain-of-custody
DQI	data quality indicator
DQO	data quality objective
EPA	U.S. Environmental Protection Agency
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
EMAX	EMAX Laboratories, Inc.
MDL	method detection limit
MRL	method reporting limit
MS/MSD	matrix spike/matrix spike duplicate
PARCCS	precision, accuracy, representativeness, comparability, completeness, and sensitivity
PCE	tetrachloroethene
QA	quality assurance
QAPP	quality assurance project plan
QC	quality control
QCSR	quality control summary report
RPD	relative percent difference
RSD	relative standard deviation
SDG	sample delivery group
Site	700 South 1600 East Tetrachloroethene Plume Superfund Site
SM	standard method
USACE	U.S. Army Corps of Engineers
VOC	volatile organic compound

Section 1

Data Usability and Assessment Review

Under the U.S. Army Corps of Engineers (USACE), Kansas City District, Contract No. W912DQ-18-D-3008, Task Order No. W912DQ19F3048, CDM Federal Programs Corporation (CDM Smith) was directed to perform a remedial investigation for Operable Unit 1 of the 700 South 1600 East Tetrachloroethene (PCE) Plume Superfund Site (Site) in Salt Lake City, Utah. To assist in the ongoing remedial investigation at the Site, groundwater samples were collected in two sampling events occurring from September 5 to 13 and September 30 to October 3, 2024. Aqueous samples were shipped to EMAX Laboratories, Inc. (EMAX) in Torrance, California, for analysis.

The purpose of this quality control summary report (QCSR) is to summarize the data validation and determine whether the sample results meet the data quality objective (DQO) of the data usability outlined in the *Quality Assurance Project Plan (QAPP) Remedial Investigation Phase 2, 700 South 1600 East PCE Plume, Salt Lake City, Utah* (CDM Smith 2020), *Final Treatability Study Work Plan, 700 South 1600 East PCE Plume Site Operable Unit 1, Salt Lake City, Utah,* (CDM Smith 2023), and the *Final Quality Assurance Project Plan, Feasibility Study, 700 South 1600 East PCE Plume, Salt Lake City, Utah* (CDM Smith 2024).

1.1 Usability Summary

Data collected and validated during this field investigation are usable as reported. Applicable data validation qualifiers were added if required. No sample results were rejected. Specific details are provided in the data validation reports summarized in Section 5 and presented in **Attachment 1** of this report.

Section 2

Quality Assurance Objectives

Quality assurance (QA) objectives for measurement data are expressed in terms of precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS). The PARCCS parameters characterize the quality of the data and as such are called data quality indicators (DQIs). The DQIs provide a mechanism for ongoing quality control (QC) and evaluating and measuring data quality throughout the project.

A review of the collected data is necessary to determine if data measurement objectives established in the QAPPs (CDM Smith 2020, 2023, 2024) were met. In general, the following data measurement objectives were considered:

- Achievement of analytical method and reporting limit requirements
- Adherence to and achievement of appropriate laboratory analytical and field QC requirements
- Achievement of required measurement performance criteria for DQIs (the PARCCS parameters)
- Adherence to sampling and sample handling procedures
- Adherence to the sampling design and deviations documented on field change notifications, if required

The data validation review of the DQIs and other QA objectives determines if the data are of sufficient quality to support their intended use.

Section 3

Field and Laboratory Quality Assurance Activities

CDM Smith completed field sampling activities between September 5 to 13 and September 30 to October 3, 2024. The following table provides a summary of the number of samples collected during each of the sampling rounds and the dates each sampling event occurred:

EMAX SDG 24I020 – Groundwater – September 5 to 6, 2024
17 samples
1 field duplicate sample
1 trip blank sample
EMAX SDG 24I027 – Groundwater – September 8 to 9, 2024
13 samples
1 field duplicate sample
1 trip blank sample
EMAX SDG 24I028– Groundwater – September 7 and 9, 2024
13 samples
3 field duplicate samples
1 trip blank sample
1 field blank sample
1 equipment blank sample
EMAX SDG 24I061 – Groundwater – September 10 to 11, 2024
16 samples
1 field duplicate sample
1 trip blank sample
1 equipment blank sample
EMAX SDG 24I062 – Groundwater – September 11, 2024
4 samples
EMAX SDG 24I077 – Groundwater – September 12 to 13, 2024
7 samples
1 trip blank sample
1 equipment blank sample
EMAX SDG 24J033– Groundwater – September 30 to October 2, 2024
9 samples
1 field duplicate sample
1 trip blank sample
EMAX SDG 24J055– Groundwater – October 2 to 3, 2024
17 samples
1 field duplicate sample
1 trip blank sample

SDG – sample delivery group

All samples were received intact with proper chain-of-custody (COC) documentation at EMAX laboratories. Sample identification was accurately documented by the laboratory.

Table 3-1 presents a list of the samples collected and the analyses performed. **Attachment 2** presents the completeness review checklists of the data packages. **Attachment 3** includes the analytical data packages.

Sample preparation and analyses were conducted within the method-specified holding times.

The QAPPs (CDM Smith 2020, 2023, 2024) defined the procedures to be followed and the data quality requirements for the field sampling events and associated analytical work.

QuantArray ® -Chlor analyses was performed on a subset of samples in order to evaluate the potential for biodegradation of a spectrum of common chlorinated contaminants through a multitude of anaerobic and aerobic metabolic pathways. Samples were analyzed by Microbial Insights laboratory in Knoxville, Tennessee. All samples were collected as planned. These samples did not require validation. These results are further discussed in the main report.

3.1 Deviations from Field Procedures

As discussed in the DSR, the following deviations were encountered during the sampling events:

Groundwater – September 2024

- The synoptic water-level event was not completed within 24 hours. This was due to several delays, including difficulty getting the water level meter to pass the ZIST pumps, vehicles parked over wells, frozen bolts, and difficulties opening rusted locks and otherwise obstructed well covers. The water levels were all measured within 128 hours, there may be some impact on data quality. However, the data are usable as intended.
- MW-01S was not sampled during this event. The drive line disconnected during purging and fell down the well and was not able to be fished out using fishing techniques nor a steel cable. As this location has been successfully sampled in the past, there is no significant impact on the groundwater plume delineation DQO.
- MW-12S was not sampled during this event. During the synoptic water level event the well was measured to be dry. As this location has been successfully measured in the past, there is no significant impact on the groundwater plume delineation DQO.
- MW-30C was not sampled during this event. The pump was pulled and the O-rings, check valves, and filter was replaced and redeployed. The team was unable to successfully rebuild the water column and collect a sample as this location has been successfully sampled in the past, there is no significant impact on the groundwater plume delineation DQO.
- MW-32C was not sampled during this event. The pump had been pulled during a previous event and could not be redeployed due to the pump catching in the well. As this location has been successfully sampled in the past, there is no significant impact on groundwater plume delineation DQO.

- The equipment blank collected for using the non-dedicated pump for MW-42S (Sample ID EB03-GW091324) was not collected during the same day. The pump was decontaminated and not used for another well location that day. The equipment blank was collected the following morning prior to any other work. This does not impact the data quality, and it can be used as intended.
- Eight total field duplicates were collected over 88 normal samples (not including QC samples), due to a miscommunication in the second mobilization. The final field duplicate was supposed to be collected from MW-30C, however pump issues prevented collection of a sample from this well on the last day of the first sampling mobilization. An alternate location was not communicated to the second mobilization team in October. This represents a 9.1 percent (%) collection rate instead of 10% in accordance with the UFP-QAPP. This does not impact the data quality, and it can be used as intended.
- The wells identified for collection of additional parameters (total organic carbon, dissolved gases, anions [sulfate and chloride], alkalinity, nitrate/nitrite, ferrous iron, and Quant Array) differed from those listed in the Treatability Study Work Plan (CDM Smith 2023), due to land access issues causing the location of the treatability study wells to be relocated as documented in the Supplemental Remedial Investigation (CDM Smith 2025). Instead of IW-01, MW-01S, MW-01D, MW02, MW42S, and MW42D samples for these analyses were collected at EW-01, IW-01, MW-03RA, MW-03RB, MW-42S and MW-42D. This does not impact the data quality, and it can be used as intended.

These deviations do not impact the DQOs and these well locations and analyses will be sampled during upcoming sampling activities.

3.2 Field Quality Assurance/Quality Control

Groundwater – September/October 2024

Eight field duplicate pairs were collected for 88 environmental groundwater samples. Seven matrix spike/matrix spike duplicate (MS/MSD) samples were analyzed for the groundwater samples. The QC sample collection frequency requirements in the QAPPs (CDM Smith 2020, 2023, 2024) of 10 percent (%) for field duplicates was not met. This is discussed in **Section 3.1**. The QC sample collection frequency requirements in the QAPP (CDM Smith 2020, 2023, 2024) of 5% for MS/MSD samples was met for the groundwater samples.

Trip blanks were submitted with each cooler sent to the laboratory, for a total of seven trip blank samples. **Table 3-2** presents the results for the 2024 trip blank sample results.

Three equipment blanks and one field blank were submitted for these sampling activities. **Table 3-2** presents the results for the 2024 equipment and field blank sample results.

3.3 Laboratory Quality Assurance/Quality Control

Analytical QA/QC was assessed by laboratory QC checks, method blanks, sample custody tracking, sample preservation, adherence to holding times, laboratory control samples (LCS), MS samples, calibration verifications, surrogates, and other applicable QC parameters. As presented in the

data validation reports in **Attachment 1** of this report, the laboratory QC samples met project criteria requirements with the appropriate qualifiers applied. All data are considered usable.

3.3.1 Laboratory Methods

Samples were analyzed using the following U.S. Environmental Protection Agency (EPA) methods:

- EPA Method SW8260C – Volatile Organic Compounds (VOC)
- EPA Method 300.0 – Chloride, Sulfate
- Standard Method (SM) 2320B – Total Alkalinity
- SM 4500 NO3E – Nitrate/Nitrite
- SM 9060 – Total Organic Carbon
- RSK-175 Dissolved Gases
- Microbial population by QuantArray-Chlor

The methods used met project objectives.

Table 3-1 Sample List and Analyses - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Matrix	Sample Date	Lab SDG	Method
EW01-GW091124	WG	9/11/2024	24I061	SW8260C
EW01-GW091124	WG	9/11/2024	24I062	A4500NE E300.0 RSK-175 SM2320B SW9060
FD02-GW090524	WG/Field Duplicate	9/5/2024	24I020	SW8260C
FD03-GW090724	WG/Field Duplicate	9/7/2024	24I028	SW8260C
FD04-GW090824	WG/Field Duplicate	9/8/2024	24I027	SW8260C
FD05-GW090724	WG/Field Duplicate	9/7/2024	24I028	SW8260C
FD06-GW090724	WG/Field Duplicate	9/7/2024	24I028	SW8260C
FD07-GW091024	WG/Field Duplicate	9/10/2024	24I061	SW8260C
FD09-GW100324	WG/Field Duplicate	10/3/2024	24J055	SW8260C
FD10-GW100224	WG/Field Duplicate	10/2/2024	24J033	A4500NE E300.0 RSK-175 SM2320B SW8260C
IW01-GW091124	WG	9/11/2024	24I061	SW8260C
IW01-GW091124	WG	9/11/2024	24I062	A4500NE E300.0 RSK-175 SM2320B SW9060
MW01D-GW090624	WG	9/6/2024	24I020	SW8260C
MW02-GW090524	WG	9/5/2024	24I020	SW8260C
MW03RA-GW091124	WG	9/11/2024	24I061	SW8260C
MW03RA-GW091124	WG	9/11/2024	24I062	A4500NE E300.0 RSK-175 SM2320B SW9060
MW03RB-GW091124	WG	9/11/2024	24I061	SW8260C
MW03RB-GW091124	WG	9/11/2024	24I062	A4500NE E300.0 RSK-175 SM2320B SW9060
MW03RC-GW091124	WG	9/11/2024	24I061	SW8260C
MW03RD-GW091124	WG	9/11/2024	24I061	SW8260C
MW04-GW090524	WG	9/5/2024	24I020	SW8260C
MW05R-GW090824	WG	9/8/2024	24I027	SW8260C
MW06-GW090524	WG	9/5/2024	24I020	SW8260C
MW08A-GW091024	WG	9/10/2024	24I061	SW8260C
MW08B-GW090624	WG	9/6/2024	24I020	SW8260C
MW08C-GW091324	WG	9/13/2024	24I077	SW8260C
MW12D-GW090524	WG	9/5/2024	24I020	SW8260C
MW13D-GW090724	WG	9/7/2024	24I028	SW8260C
MW13L-GW090724	WG	9/7/2024	24I028	SW8260C
MW13S-GW090724	WG	9/7/2024	24I028	SW8260C
MW14D-GW091024	WG	9/10/2024	24I061	SW8260C
MW14S-GW091024	WG	9/10/2024	24I061	SW8260C
MW15D-GW090824	WG	9/8/2024	24I027	SW8260C
MW15S-GW090824	WG	9/8/2024	24I027	SW8260C
MW16D-GW090824	WG	9/8/2024	24I027	SW8260C
MW16S-GW090824	WG	9/8/2024	24I027	SW8260C
MW17D-GW090524	WG	9/5/2024	24I020	SW8260C
MW17S-GW090524	WG	9/5/2024	24I020	SW8260C
MW18-GW090724	WG	9/7/2024	24I028	SW8260C
MW19-GW090724	WG	9/7/2024	24I028	SW8260C
MW20D-GW090724	WG	9/7/2024	24I028	SW8260C
MW20S-GW090724	WG	9/7/2024	24I028	SW8260C

Table 3-1 Sample List and Analyses - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Matrix	Sample Date	Lab SDG	Method
MW21-GW090824	WG	9/8/2024	24I027	SW8260C
MW22-GW090824	WG	9/8/2024	24I027	SW8260C
MW23A-GW091224	WG	9/12/2024	24I077	SW8260C
MW23B-GW091224	WG	9/12/2024	24I077	SW8260C
MW23C-GW091224	WG	9/12/2024	24I077	SW8260C
MW24-GW090824	WG	9/8/2024	24I027	SW8260C
MW25A-GW090724	WG	9/7/2024	24I028	SW8260C
MW25B-GW090724	WG	9/7/2024	24I028	SW8260C
MW25C-GW090724	WG	9/7/2024	24I028	SW8260C
MW26A-GW090824	WG	9/8/2024	24I027	SW8260C
MW26B-GW091324	WG	9/13/2024	24I077	SW8260C
MW26C-GW090724	WG	9/7/2024	24I028	SW8260C
MW26D-GW090824	WG	9/8/2024	24I027	SW8260C
MW27-GW091024	WG	9/10/2024	24I061	SW8260C
MW28-GW090724	WG	9/7/2024	24I028	SW8260C
MW29A-GW091024	WG	9/10/2024	24I061	SW8260C
MW29B-GW091024	WG	9/10/2024	24I061	SW8260C
MW29C-GW091024	WG	9/10/2024	24I061	SW8260C
MW30RA-GW090824	WG	9/8/2024	24I027	SW8260C
MW30RB-GW090824	WG	9/8/2024	24I027	SW8260C
MW31A-GW091024	WG	9/10/2024	24I061	SW8260C
MW31B-GW091024	WG	9/10/2024	24I061	SW8260C
MW31C-GW091024	WG	9/10/2024	24I061	SW8260C
MW32A-GW090824	WG	9/8/2024	24I027	SW8260C
MW32B-GW091224	WG	9/12/2024	24I077	SW8260C
MW34A-GW090624	WG	9/6/2024	24I020	SW8260C
MW34B-GW090524	WG	9/5/2024	24I020	SW8260C
MW34C-GW090524	WG	9/5/2024	24I020	SW8260C
MW34D-GW090624	WG	9/6/2024	24I020	SW8260C
MW36-GW090624	WG	9/6/2024	24I020	SW8260C
MW37D-GW090624	WG	9/6/2024	24I020	SW8260C
MW37S-GW090624	WG	9/6/2024	24I020	SW8260C
MW38D-GW090624	WG	9/6/2024	24I020	SW8260C
MW38S-GW090624	WG	9/6/2024	24I020	SW8260C
MW39D-GW100324	WG	10/3/2024	24J055	SW8260C
MW39S-GW100324	WG	10/3/2024	24J055	SW8260C
MW40D-GW093024	WG	9/30/2024	24J033	SW8260C
MW40S-GW093024	WG	9/30/2024	24J033	SW8260C
MW41D-GW100224	WG	10/2/2024	24J055	SW8260C
MW41S-GW100224	WG	10/2/2024	24J055	SW8260C
MW42D-GW100224	WG	10/2/2024	24J033	A4500NE E300.0 RSK-175 SM2320B SW8260C
MW42S-GW091224	WG	9/12/2024	24I077	A4500NE E300.0 RSK-175 SM2320B SW8260C
MW43D-GW100124	WG	10/1/2024	24J033	SW8260C
MW43S-GW100124	WG	10/1/2024	24J033	SW8260C
MW44D-GW100124	WG	10/1/2024	24J033	SW8260C
MW44S-GW100124	WG	10/1/2024	24J033	SW8260C
MW45-GW090724	WG	9/7/2024	24I028	SW8260C
RG01-GW100324	WG	10/3/2024	24J055	SW8260C
RG02-GW100324	WG	10/3/2024	24J055	SW8260C
RG03-GW100324	WG	10/3/2024	24J055	SW8260C
RG04-GW100324	WG	10/3/2024	24J055	SW8260C
RG05-GW100324	WG	10/3/2024	24J055	SW8260C
RG06-GW100324	WG	10/3/2024	24J055	SW8260C
RG07-GW100324	WG	10/3/2024	24J055	SW8260C

Table 3-1 Sample List and Analyses - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Matrix	Sample Date	Lab SDG	Method
RG08-GW100324	WG	10/3/2024	24J055	SW8260C
RG09-GW100324	WG	10/3/2024	24J055	SW8260C
RG10-GW100324	WG	10/3/2024	24J055	SW8260C
RG11-GW100324	WG	10/3/2024	24J055	SW8260C

Acronyms:
A4500NE - nitrogen, nitrate-nitrite
E300.0 - chloride, sulfate
ID - identification
SDG - sample delivery group
SM2320B - alkalinity
SM2540C - total dissoved solids
SW8260C - volatile organic compounds
SW9060 - total organic carbon
WG - groundwater

Table 3-2
Blank Sample Results - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

		SDG	24I028		24I061		24I077		24I028		24I020		24I028		24I027		24I061		24I077		24J033		24J055	
		Sample Name	EB01-GW090724		EB02-GW091124		EB03-GW091324		FB01-GW090724		TB01-GW090624		TB02-GW090924		TB03-GW090924		TB04-GW091124		TB05-GW091324		TB06-GW100224		TB07-GW100324	
		Sample Date	9/7/2024		9/11/2024		9/13/2024		9/7/2024		9/6/2024		9/9/2024		9/9/2024		9/11/2024		9/13/2024		10/2/2024		10/3/2024	
		Sample Type	EB		EB		EB		FB		TB		TB		TB		TB		TB		TB		TB	
Method	Analyte	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
SW8260C	1,1,1-Trichloroethane	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	1	U	1	UJ	1	U	1	U	1	UJ	1	U	1	U	1	UJ	1	UJ	1	U	1	U
SW8260C	1,1,2-Trichlorotrifluoroethane	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
SW8260C	1,1-Dichloroethene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	1	U	1	U	1	U	1	U	**0.45**	**J**	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U	1	U	1	U	1	U	**0.24**	**J**	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,2,4-Trimethylbenzene	ug/l	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U
SW8260C	1,2-Dibromo-3-Chloropropane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
SW8260C	1,2-Dibromoethane	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	1	U	1	UJ	1	UJ	1	U	1	UJ	1	U	1	U	1	UJ	1	UJ	1	UJ	1	U
SW8260C	1,3,5-Trimethylbenzene	ug/l	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	2-Butanone (MEK)	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
SW8260C	2-Hexanone	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
SW8260C	4-Methyl-2-Pentanone (MIBK)	ug/l	20	U	20	U	20	U	20	U	20	UJ	20	U	20	U	20	U	20	U	20	U	20	U
SW8260C	Acetone	ug/l	20	U	20	U	**4.6**	**J**	20	U	20	U	20	U	**3.2**	**J**	20	U	20	U	20	U	20	U
SW8260C	Benzene	ug/l	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U
SW8260C	Bromochloromethane	ug/l	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	UJ	1	U	1	U
SW8260C	Bromodichloromethane	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
SW8260C	Bromoform	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
SW8260C	Bromomethane	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Carbon Disulfide	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
SW8260C	Carbon Tetrachloride	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Chloroethane	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Chloroform	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
SW8260C	Chloromethane	ug/l	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U

Table 3-2
Blank Sample Results - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

		SDG	24I028		24I061		24I077		24I028		24I020		24I028		24I027		24I061		24I077		24J033		24J055	
		Sample Name	EB01-GW090724		EB02-GW091124		EB03-GW091324		FB01-GW090724		TB01-GW090624		TB02-GW090924		TB03-GW090924		TB04-GW091124		TB05-GW091324		TB06-GW100224		TB07-GW100324	
		Sample Date	9/7/2024		9/11/2024		9/13/2024		9/7/2024		9/6/2024		9/9/2024		9/9/2024		9/11/2024		9/13/2024		10/2/2024		10/3/2024	
		Sample Type	EB		EB		EB		FB		TB		TB		TB		TB		TB		TB		TB	
Method	Analyte	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
SW8260C	Cis-1,2-Dichloroethene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
SW8260C	Cis-1,3-Dichloropropene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
SW8260C	Dichlorodifluoromethane	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
SW8260C	Ethylbenzene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	M+P-Xylenes	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
SW8260C	Methyl Acetate	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
SW8260C	Methyl Tert-Butyl Ether	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U
SW8260C	Methylene Chloride	ug/l	2	U	2	U	2	U	2	U	**0.67**	**J**	2	U	2	U	2	U	2	U	2	U	2	U
SW8260C	O-Xylene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U
SW8260C	Styrene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
SW8260C	Tetrachloroethene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Toluene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U
SW8260C	Trans-1,2-Dichloroethene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Trans-1,3-Dichloropropene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
SW8260C	Trichloroethene	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Trichlorofluoromethane	ug/l	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	Vinyl Acetate	ug/l	2	UJ	2	U	2	UJ	2	UJ	2	U	2	UJ	2	U	2	U	2	UJ	2	U	2	U
SW8260C	Vinyl Chloride	ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U

Acronyms and Notes:
µg/L - micrograms per liter
EB - equipment blank
FB - field blank
J - estimated
Q - qualifier
SDG - sample delivery group
SW8260C - volatile organic compounds
TB - trip blank
U - nondetect
UJ - estimated nondetect
Highlighted and bolded results are detect.

Section 4
Data Validation Procedures

For this QCSR, there were eight laboratory SDGs. Qualified CDM Smith data validators not associated with project sampling activities validated the data reported in the SDGs. Data validation was performed in accordance with specified analytical methods and performance criteria outlined in the QAPPs (CDM Smith 2020, 2023, 2024) and in the EPA's *National Functional Guidelines for Organic Superfund Methods Data Review* (EPA 2020). Validation reports were prepared and are presented in **Attachment 1**. The following SDG data packages were validated:

Groundwater – September and October 2024

- EMAX – SDG 24I020
- EMAX – SDG 24I027
- EMAX – SDG 24I028
- EMAX – SDG 24I061
- EMAX – SDG 24I062
- EMAX – SDG 24I077
- EMAX – SDG 24J033
- EMAX – SDG 24J055

Table 4-1 present the results that were qualified and the reasons for the qualifications. Qualifiers applied are defined as follows:

- J → Result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J-→ Result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. Results are potentially biased low.
- U → Analyte was analyzed for but was not detected above the level of the sample method reporting limit (MRL).
- UJ → Analyte was analyzed for but was not detected above the level of the sample MRL. The MRL is approximate.

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
EB01-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
EB02-GW091124	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
EB02-GW091124	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
EB02-GW091124	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
EB02-GW091124	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
EB02-GW091124	24I061	SW8260C	Acetone	67-64-1	20	ug/L	U	U	EB
EB03-GW091324	24I077	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
EB03-GW091324	24I077	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
EB03-GW091324	24I077	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
EW01-GW091124	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
EW01-GW091124	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
EW01-GW091124	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
EW01-GW091124	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
EW01-GW091124	24I062	E300.0	Chloride	16887-00-6	214	mg/l	J-	J-	MS
EW01-GW091124	24I062	E300.0	Sulfate	14808-79-8	129	mg/l	J	J	LD
FB01-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
FD02-GW090524	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
FD02-GW090524	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
FD02-GW090524	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV
FD02-GW090524	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
FD02-GW090524	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
FD02-GW090524	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
FD02-GW090524	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
FD02-GW090524	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
FD02-GW090524	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
FD03-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
FD03-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
FD03-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
FD03-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
FD03-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.17	ug/l	J	J	CCV
FD03-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
FD03-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
FD03-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
FD05-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
FD05-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
FD05-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
FD05-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
FD05-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.23	ug/l	J	J	CCV
FD05-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
FD05-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
FD05-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
FD06-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
FD06-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
FD06-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
FD06-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
FD06-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.15	ug/l	J	J	CCV
FD06-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
FD06-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
FD06-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
FD07-GW091024	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
FD07-GW091024	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
FD07-GW091024	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
FD07-GW091024	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
FD10-GW100224	24J033	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
FD10-GW100224	24J033	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
FD10-GW100224	24J033	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
FD10-GW100224	24J033	SW8260C	Dichlorodifluoromethane	75-71-8	1	ug/L	UJ	UJ	CCV
FD10-GW100224	24J033	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	CCV
FD10-GW100224	24J033	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	CCV
FD10-GW100224	24J033	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	CCV
FD10-GW100224	24J033	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	CCV
FD10-GW100224	24J033	E300.0	Sulfate	14808-79-8	149	mg/l	J	J	FD
IW01-GW091124	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
IW01-GW091124	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
IW01-GW091124	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
IW01-GW091124	24I061	SW8260C	Cis-1,3-Dichloropropene	10061-01-5	1	ug/L	UJ	UJ	CCV
IW01-GW091124	24I062	E300.0	Chloride	16887-00-6	172	mg/l	J-	J-	MS
IW01-GW091124	24I062	E300.0	Sulfate	14808-79-8	117	mg/l	J	J	LD
MW01D-GW090624	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW01D-GW090624	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW01D-GW090624	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV
MW01D-GW090624	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
MW01D-GW090624	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
MW01D-GW090624	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW01D-GW090624	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW01D-GW090624	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW01D-GW090624	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW02-GW090524	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW02-GW090524	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW02-GW090524	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV
MW02-GW090524	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
MW02-GW090524	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
MW02-GW090524	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW02-GW090524	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW02-GW090524	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW02-GW090524	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW03RA-GW091124	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW03RA-GW091124	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	MS,LCS
MW03RA-GW091124	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW03RA-GW091124	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	MS,LCS,CCV
MW03RA-GW091124	24I062	E300.0	Sulfate	14808-79-8	91.4	mg/l	J	J	LD
MW03RA-GW091124	24I062	E300.0	Chloride	16887-00-6	443	mg/l	J-	J-	MS
MW03RB-GW091124	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW03RB-GW091124	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW03RB-GW091124	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW03RB-GW091124	24I061	SW8260C	Acetone	67-64-1	20	ug/L	U	U	EB
MW03RB-GW091124	24I061	SW8260C	Cis-1,3-Dichloropropene	10061-01-5	1	ug/L	UJ	UJ	CCV
MW03RB-GW091124	24I062	E300.0	Chloride	16887-00-6	200	mg/l	J-	J-	MS
MW03RB-GW091124	24I062	E300.0	Sulfate	14808-79-8	123	mg/l	J	J	LD
MW03RC-GW091124	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	MS,LCS
MW03RC-GW091124	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW03RC-GW091124	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	MS,LCS,CCV
MW03RC-GW091124	24I061	SW8260C	Cis-1,3-Dichloropropene	10061-01-5	1	ug/L	UJ	UJ	CCV
MW03RD-GW091124	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW03RD-GW091124	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW03RD-GW091124	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW03RD-GW091124	24I061	SW8260C	Cis-1,3-Dichloropropene	10061-01-5	1	ug/L	UJ	UJ	CCV
MW04-GW090524	24I020	SW8260C	4-Methyl-2-Pentanone (MIBK)	108-10-1	20	ug/L	UJ	UJ	CCV
MW04-GW090524	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW04-GW090524	24I020	SW8260C	Trichlorofluoromethane	75-69-4	1	ug/L	UJ	UJ	CCV
MW06-GW090524	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW06-GW090524	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW06-GW090524	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV
MW06-GW090524	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
MW06-GW090524	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
MW06-GW090524	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW06-GW090524	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW06-GW090524	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW06-GW090524	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW08A-GW091024	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW08A-GW091024	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW08A-GW091024	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW08A-GW091024	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW08B-GW090624	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW08B-GW090624	24I020	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW08B-GW090624	24I020	SW8260C	4-Methyl-2-Pentanone (MIBK)	108-10-1	20	ug/L	UJ	UJ	CCV

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW08B-GW090624	24I020	SW8260C	Bromochloromethane	74-97-5	1	ug/L	UJ	UJ	CCV
MW08B-GW090624	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW08B-GW090624	24I020	SW8260C	Trichlorofluoromethane	75-69-4	1	ug/L	UJ	UJ	LCS,CCV
MW08C-GW091324	24I077	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW08C-GW091324	24I077	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW08C-GW091324	24I077	SW8260C	O-Xylene	95-47-6	0.33	ug/l	J	J	LCS
MW08C-GW091324	24I077	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW12D-GW090524	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW12D-GW090524	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW12D-GW090524	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV
MW12D-GW090524	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
MW12D-GW090524	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
MW12D-GW090524	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW12D-GW090524	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW12D-GW090524	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW12D-GW090524	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW13D-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW13D-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW13D-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
MW13D-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW13D-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.17	ug/l	J	J	CCV
MW13D-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW13D-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW13D-GW090724	24I028	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	MS
MW13D-GW090724	24I028	SW8260C	Tetrachloroethene	127-18-4	50	ug/l	J	J	MS
MW13D-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW13L-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW13L-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW13L-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
MW13L-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW13L-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.19	ug/l	J	J	CCV
MW13L-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW13L-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW13L-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW13S-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW13S-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW13S-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
MW13S-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW13S-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	1	ug/L	UJ	UJ	CCV
MW13S-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW13S-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW13S-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW14D-GW091024	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW14D-GW091024	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW14D-GW091024	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW14D-GW091024	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW14S-GW091024	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW14S-GW091024	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW14S-GW091024	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW14S-GW091024	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW17D-GW090524	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW17D-GW090524	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW17D-GW090524	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV
MW17D-GW090524	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
MW17D-GW090524	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
MW17D-GW090524	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW17D-GW090524	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW17D-GW090524	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW17D-GW090524	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW17S-GW090524	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW17S-GW090524	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW17S-GW090524	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV
MW17S-GW090524	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
MW17S-GW090524	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
MW17S-GW090524	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW17S-GW090524	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW17S-GW090524	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW17S-GW090524	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW18-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW18-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW18-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
MW18-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW18-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.18	ug/l	J	J	CCV
MW18-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW18-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW18-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW19-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW19-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW19-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
MW19-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW19-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.15	ug/l	J	J	CCV
MW19-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW19-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW19-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW20D-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW20D-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW20D-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
MW20D-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW20D-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.13	ug/l	J	J	CCV
MW20D-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW20D-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW20D-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW20S-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW20S-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW20S-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
MW20S-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW20S-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	1	ug/L	UJ	UJ	CCV
MW20S-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW20S-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW20S-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW23A-GW091224	24I077	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW23A-GW091224	24I077	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW23A-GW091224	24I077	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW23B-GW091224	24I077	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW23B-GW091224	24I077	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW23B-GW091224	24I077	SW8260C	O-Xylene	95-47-6	1.7	ug/l	J	J	LCS
MW23B-GW091224	24I077	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	1,1-Dichloroethane	75-34-3	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Bromochloromethane	74-97-5	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Bromodichloromethane	75-27-4	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Carbon Disulfide	75-15-0	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Chloroform	67-66-3	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Cis-1,2-Dichloroethene	156-59-2	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Cis-1,3-Dichloropropene	10061-01-5	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Trans-1,3-Dichloropropene	10061-02-6	1	ug/L	UJ	UJ	CCV
MW23C-GW091224	24I077	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW25A-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW25A-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW25A-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
MW25A-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW25A-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.34	ug/l	J	J	CCV
MW25A-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW25A-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW25A-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW25B-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW25B-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW25B-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
MW25B-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW25B-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.37	ug/l	J	J	CCV
MW25B-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW25B-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW25B-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW25C-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW25C-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW25C-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
MW25C-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW25C-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.32	ug/l	J	J	CCV
MW25C-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW25C-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW25C-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW26B-GW091324	24I077	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW26B-GW091324	24I077	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW26B-GW091324	24I077	SW8260C	O-Xylene	95-47-6	0.62	ug/l	J	J	LCS
MW26B-GW091324	24I077	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW26C-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW26C-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW26C-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV
MW26C-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW26C-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.36	ug/l	J	J	CCV
MW26C-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW26C-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW26C-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW27-GW091024	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW27-GW091024	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW27-GW091024	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW27-GW091024	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW27-GW091024	24I061	SW8260C	Acetone	67-64-1	20	ug/L	U	U	EB
MW28-GW090724	24I028	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW28-GW090724	24I028	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW28-GW090724	24I028	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	CCV

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW28-GW090724	24I028	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW28-GW090724	24I028	SW8260C	Bromodichloromethane	75-27-4	0.24	ug/l	J	J	CCV
MW28-GW090724	24I028	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW28-GW090724	24I028	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW28-GW090724	24I028	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	MS
MW28-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW29A-GW091024	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW29A-GW091024	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW29A-GW091024	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW29A-GW091024	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW29B-GW091024	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW29B-GW091024	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW29B-GW091024	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW29B-GW091024	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW29C-GW091024	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW29C-GW091024	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW29C-GW091024	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW29C-GW091024	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW31A-GW091024	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW31A-GW091024	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW31A-GW091024	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW31A-GW091024	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW31B-GW091024	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW31B-GW091024	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW31B-GW091024	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW31B-GW091024	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW31C-GW091024	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW31C-GW091024	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
MW31C-GW091024	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW31C-GW091024	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
MW32B-GW091224	24I077	SW8260C	1,1,1-Trichloroethane	71-55-6	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,1,2-Trichlorotrifluoroethane	76-13-1	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,1-Dichloroethane	75-34-3	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,1-Dichloroethene	75-35-4	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,2,3-Trichlorobenzene	87-61-6	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,2,4-Trichlorobenzene	120-82-1	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,2-Dibromo-3-Chloropropane	96-12-8	2	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	HT

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW32B-GW091224	24I077	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV,HT
MW32B-GW091224	24I077	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	2-Butanone (MEK)	78-93-3	20	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	2-Hexanone	591-78-6	20	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	4-Methyl-2-Pentanone (MIBK)	108-10-1	20	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Acetone	67-64-1	20	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV,HT
MW32B-GW091224	24I077	SW8260C	Bromochloromethane	74-97-5	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Bromodichloromethane	75-27-4	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Bromomethane	74-83-9	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Carbon Disulfide	75-15-0	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Carbon Tetrachloride	56-23-5	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Chlorobenzene	108-90-7	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Chloroethane	75-00-3	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Chloroform	67-66-3	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Cis-1,2-Dichloroethene	156-59-2	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Cis-1,3-Dichloropropene	10061-01-5	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Dichlorodifluoromethane	75-71-8	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Ethylbenzene	100-41-4	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Isopropylbenzene	98-82-8	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	M+P-Xylenes	108-38-3/1	2	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Methyl Acetate	79-20-9	2	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Methylene Chloride	75-09-2	2	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Tetrachloroethene	127-18-4	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Trans-1,2-Dichloroethene	156-60-5	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Trans-1,3-Dichloropropene	10061-02-6	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Trichloroethene	79-01-6	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Trichlorofluoromethane	75-69-4	1	ug/L	UJ	UJ	HT
MW32B-GW091224	24I077	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV,HT
MW32B-GW091224	24I077	SW8260C	Vinyl Chloride	75-01-4	1	ug/L	UJ	UJ	HT
MW34A-GW090624	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW34A-GW090624	24I020	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW34A-GW090624	24I020	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW34A-GW090624	24I020	SW8260C	4-Methyl-2-Pentanone (MIBK)	108-10-1	20	ug/L	UJ	UJ	CCV
MW34A-GW090624	24I020	SW8260C	Bromochloromethane	74-97-5	1	ug/L	UJ	UJ	CCV
MW34A-GW090624	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW34A-GW090624	24I020	SW8260C	Trichlorofluoromethane	75-69-4	1	ug/L	UJ	UJ	LCS,CCV
MW34B-GW090524	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW34B-GW090524	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW34B-GW090524	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV
MW34B-GW090524	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
MW34B-GW090524	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
MW34B-GW090524	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW34B-GW090524	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW34B-GW090524	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW34B-GW090524	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW34C-GW090524	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW34C-GW090524	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW34C-GW090524	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV
MW34C-GW090524	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
MW34C-GW090524	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
MW34C-GW090524	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW34C-GW090524	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW34C-GW090524	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW34C-GW090524	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW34D-GW090624	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW34D-GW090624	24I020	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW34D-GW090624	24I020	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW34D-GW090624	24I020	SW8260C	4-Methyl-2-Pentanone (MIBK)	108-10-1	20	ug/L	UJ	UJ	CCV
MW34D-GW090624	24I020	SW8260C	Bromochloromethane	74-97-5	1	ug/L	UJ	UJ	CCV
MW34D-GW090624	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW34D-GW090624	24I020	SW8260C	Trichlorofluoromethane	75-69-4	1	ug/L	UJ	UJ	LCS,CCV
MW36-GW090624	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW36-GW090624	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW36-GW090624	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV
MW36-GW090624	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
MW36-GW090624	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
MW36-GW090624	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW36-GW090624	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW36-GW090624	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW36-GW090624	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW37D-GW090624	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW37D-GW090624	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW37D-GW090624	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW37D-GW090624	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
MW37D-GW090624	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
MW37D-GW090624	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW37D-GW090624	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW37D-GW090624	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW37D-GW090624	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW37S-GW090624	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW37S-GW090624	24I020	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
MW37S-GW090624	24I020	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	CCV
MW37S-GW090624	24I020	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	CCV
MW37S-GW090624	24I020	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	CCV
MW37S-GW090624	24I020	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW37S-GW090624	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW37S-GW090624	24I020	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
MW37S-GW090624	24I020	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
MW38D-GW090624	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW38D-GW090624	24I020	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW38D-GW090624	24I020	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW38D-GW090624	24I020	SW8260C	4-Methyl-2-Pentanone (MIBK)	108-10-1	20	ug/L	UJ	UJ	CCV
MW38D-GW090624	24I020	SW8260C	Bromochloromethane	74-97-5	1	ug/L	UJ	UJ	CCV
MW38D-GW090624	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW38D-GW090624	24I020	SW8260C	Trichlorofluoromethane	75-69-4	1	ug/L	UJ	UJ	LCS,CCV
MW38S-GW090624	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
MW38S-GW090624	24I020	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
MW38S-GW090624	24I020	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW38S-GW090624	24I020	SW8260C	4-Methyl-2-Pentanone (MIBK)	108-10-1	20	ug/L	UJ	UJ	CCV
MW38S-GW090624	24I020	SW8260C	Bromochloromethane	74-97-5	1	ug/L	UJ	UJ	CCV
MW38S-GW090624	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
MW38S-GW090624	24I020	SW8260C	Trichlorofluoromethane	75-69-4	1	ug/L	UJ	UJ	LCS,CCV
MW40D-GW093024	24J033	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW40D-GW093024	24J033	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW40D-GW093024	24J033	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW40D-GW093024	24J033	SW8260C	Dichlorodifluoromethane	75-71-8	1	ug/L	UJ	UJ	CCV
MW40D-GW093024	24J033	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	CCV
MW40D-GW093024	24J033	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	CCV
MW40D-GW093024	24J033	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	CCV
MW40D-GW093024	24J033	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	CCV
MW40S-GW093024	24J033	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW40S-GW093024	24J033	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW40S-GW093024	24J033	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW40S-GW093024	24J033	SW8260C	Dichlorodifluoromethane	75-71-8	1	ug/L	UJ	UJ	CCV
MW40S-GW093024	24J033	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	CCV

Table 4-1
Qualification Summary - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW40S-GW093024	24J033	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	CCV
MW40S-GW093024	24J033	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	CCV
MW40S-GW093024	24J033	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	CCV
MW42D-GW100224	24J033	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW42D-GW100224	24J033	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW42D-GW100224	24J033	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW42D-GW100224	24J033	SW8260C	Dichlorodifluoromethane	75-71-8	1	ug/L	UJ	UJ	CCV
MW42D-GW100224	24J033	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	CCV
MW42D-GW100224	24J033	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	CCV
MW42D-GW100224	24J033	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	CCV
MW42D-GW100224	24J033	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	CCV
MW42D-GW100224	24J033	E300.0	Sulfate	14808-79-8	215	mg/l	J	J	FD
MW42S-GW091224	24I077	SW8260C	1,1,1-Trichloroethane	71-55-6	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,1,2-Trichlorotrifluoroethane	76-13-1	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,1-Dichloroethane	75-34-3	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,1-Dichloroethene	75-35-4	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,2,3-Trichlorobenzene	87-61-6	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,2,4-Trichlorobenzene	120-82-1	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,2-Dibromo-3-Chloropropane	96-12-8	2	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,2-Dichlorobenzene	95-50-1	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,2-Dichloroethane	107-06-2	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV,HT
MW42S-GW091224	24I077	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,3-Dichlorobenzene	541-73-1	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	1,4-Dichlorobenzene	106-46-7	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	2-Butanone (MEK)	78-93-3	20	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	2-Hexanone	591-78-6	20	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	4-Methyl-2-Pentanone (MIBK)	108-10-1	20	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Acetone	67-64-1	20	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV,HT
MW42S-GW091224	24I077	SW8260C	Bromochloromethane	74-97-5	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Bromodichloromethane	75-27-4	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Bromomethane	74-83-9	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Carbon Disulfide	75-15-0	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Carbon Tetrachloride	56-23-5	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Chlorobenzene	108-90-7	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Chloroethane	75-00-3	1	ug/L	UJ	UJ	HT

Table 4-1
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Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW42S-GW091224	24I077	SW8260C	Chloroform	67-66-3	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Cis-1,2-Dichloroethene	156-59-2	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Cis-1,3-Dichloropropene	10061-01-5	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Dichlorodifluoromethane	75-71-8	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Ethylbenzene	100-41-4	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Isopropylbenzene	98-82-8	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	M+P-Xylenes	108-38-3/1	2	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Methyl Acetate	79-20-9	2	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Methylene Chloride	75-09-2	2	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Tetrachloroethene	127-18-4	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Trans-1,2-Dichloroethene	156-60-5	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Trans-1,3-Dichloropropene	10061-02-6	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Trichloroethene	79-01-6	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Trichlorofluoromethane	75-69-4	1	ug/L	UJ	UJ	HT
MW42S-GW091224	24I077	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV,HT
MW42S-GW091224	24I077	SW8260C	Vinyl Chloride	75-01-4	1	ug/L	UJ	UJ	HT
MW43D-GW100124	24J033	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW43D-GW100124	24J033	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW43D-GW100124	24J033	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW43D-GW100124	24J033	SW8260C	Dichlorodifluoromethane	75-71-8	1	ug/L	UJ	UJ	CCV
MW43D-GW100124	24J033	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	CCV
MW43D-GW100124	24J033	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	CCV
MW43D-GW100124	24J033	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	CCV
MW43D-GW100124	24J033	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	LCS,CCV
MW43S-GW100124	24J033	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW43S-GW100124	24J033	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW43S-GW100124	24J033	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW43S-GW100124	24J033	SW8260C	Dichlorodifluoromethane	75-71-8	1	ug/L	UJ	UJ	CCV
MW43S-GW100124	24J033	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	CCV
MW43S-GW100124	24J033	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	CCV
MW43S-GW100124	24J033	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	CCV
MW43S-GW100124	24J033	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	CCV
MW44D-GW100124	24J033	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW44D-GW100124	24J033	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW44D-GW100124	24J033	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW44D-GW100124	24J033	SW8260C	Dichlorodifluoromethane	75-71-8	1	ug/L	UJ	UJ	CCV

Table 4-1
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Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
MW44D-GW100124	24J033	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	CCV
MW44D-GW100124	24J033	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	CCV
MW44D-GW100124	24J033	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	CCV
MW44D-GW100124	24J033	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	CCV
MW44S-GW100124	24J033	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
MW44S-GW100124	24J033	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
MW44S-GW100124	24J033	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
MW44S-GW100124	24J033	SW8260C	Dichlorodifluoromethane	75-71-8	1	ug/L	UJ	UJ	CCV
MW44S-GW100124	24J033	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	CCV
MW44S-GW100124	24J033	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	CCV
MW44S-GW100124	24J033	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	CCV
MW44S-GW100124	24J033	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	CCV
MW45-GW090724	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
TB01-GW090624	24I020	SW8260C	1,1,2,2-Tetrachloroethane	79-34-5	1	ug/L	UJ	UJ	CCV
TB01-GW090624	24I020	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
TB01-GW090624	24I020	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
TB01-GW090624	24I020	SW8260C	4-Methyl-2-Pentanone (MIBK)	108-10-1	20	ug/L	UJ	UJ	CCV
TB01-GW090624	24I020	SW8260C	Bromochloromethane	74-97-5	1	ug/L	UJ	UJ	CCV
TB01-GW090624	24I020	SW8260C	Chloromethane	74-87-3	1	ug/L	UJ	UJ	ICV
TB01-GW090624	24I020	SW8260C	Trichlorofluoromethane	75-69-4	1	ug/L	UJ	UJ	LCS,CCV
TB02-GW090924	24I028	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV
TB04-GW091124	24I061	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
TB04-GW091124	24I061	SW8260C	1,2,4-Trimethylbenzene	95-63-6	1	ug/L	UJ	UJ	LCS
TB04-GW091124	24I061	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
TB04-GW091124	24I061	SW8260C	1,3,5-Trimethylbenzene	108-67-8	1	ug/L	UJ	UJ	LCS,CCV
TB05-GW091324	24I077	SW8260C	1,1,2-Trichloroethane	79-00-5	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	1,1-Dichloroethane	75-34-3	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	1,2-Dibromoethane	106-93-4	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Bromochloromethane	74-97-5	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Bromodichloromethane	75-27-4	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Carbon Disulfide	75-15-0	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Chloroform	67-66-3	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Cis-1,2-Dichloroethene	156-59-2	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Cis-1,3-Dichloropropene	10061-01-5	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Dibromochloromethane	124-48-1	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Trans-1,3-Dichloropropene	10061-02-6	1	ug/L	UJ	UJ	CCV
TB05-GW091324	24I077	SW8260C	Vinyl Acetate	108-05-4	2	ug/L	UJ	UJ	CCV

Table 4-1
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Field Sample ID	Laboratory SDG	Method	Analyte	CAS #	Final Result	Unit	Validation Qualifier	Interpreted Qualifier	Qualifier Reason
TB06-GW100224	24J033	SW8260C	1,2-Dichloropropane	78-87-5	1	ug/L	UJ	UJ	CCV
TB06-GW100224	24J033	SW8260C	Benzene	71-43-2	1	ug/L	UJ	UJ	CCV
TB06-GW100224	24J033	SW8260C	Bromoform	75-25-2	1	ug/L	UJ	UJ	CCV
TB06-GW100224	24J033	SW8260C	Dichlorodifluoromethane	75-71-8	1	ug/L	UJ	UJ	CCV
TB06-GW100224	24J033	SW8260C	Methyl Tert-Butyl Ether	1634-04-4	1	ug/L	UJ	UJ	CCV
TB06-GW100224	24J033	SW8260C	O-Xylene	95-47-6	1	ug/L	UJ	UJ	CCV
TB06-GW100224	24J033	SW8260C	Styrene	100-42-5	1	ug/L	UJ	UJ	CCV
TB06-GW100224	24J033	SW8260C	Toluene	108-88-3	1	ug/L	UJ	UJ	CCV

Acronyms:

µg/L - microgram per liter
CAS - Chemical Abstract Service
CCV - continuing calibration verification criteria
E300.0 - chloride, sulfate
EB - equipment blank criteria
FD - field duplicate
HT - holding time criteria
ICV - initial calibration verification criteria
ID - identification
J - estimated
J- - estimated value, biased low
LCS - laboratory control sample criteria
LD - laboratory duplicate criteria
mg/L - milligram per liter
MS - matrix spike criteria
RL - reporting limit
SDG - sample delivery group
SW8260C - volatile organic compounds
U - nondetect
UJ - estimated nondetect

Section 5
Data Quality Indicators

This section summarizes the validation performed and the overall quality of the data. The validation reports are provided in **Attachment 1**.

Achievement of the DQO regarding data usability was determined by the use of DQIs. These DQIs are expressed in terms of PARCCS. The DQIs provide a mechanism to evaluate and measure data quality throughout the project. These criteria are defined in **Table 5-1** and in the following subsections.

5.1 Precision

Precision is a quantitative term that estimates the reproducibility of a set of replicate measurements under a given set of conditions. It is defined as a measurement of mutual agreement between measurements of the same property and is expressed in terms of relative percent difference (RPD) between duplicate determinations.

RPD is calculated as follows:

$$\textbf{RPD} = \textbf{absolute value } [(C1 - C2)/\{(C1 + C2)/2)\}] \times 100\%$$

Where:

C1 = concentration of primary sample
C2 = concentration of duplicate sample

Field and analytical precision were determined from review of the field duplicate results, MS/MSDs, LCS/laboratory control sample duplicate (LCSD), and laboratory duplicate results. The duplicate sample results were compared after calculating their RPDs. Field duplicate samples were collected in the same manner as the original samples but collected in separate individual containers, given separate sample identifiers, and treated as unique samples by the laboratory.

Table 5-2 present the 2024 field duplicate sample results for groundwater. A control limit of 30% RPD was used for the groundwater field duplicate samples when both sample concentrations were greater than five times the MRL. If the sample concentrations were below five times the MRL, the absolute difference between the samples is calculated; if that value is below the MRL, no qualification is required. Laboratory RPDs are specific to the QC parameter. RPD and absolute difference results are summarized below:

Groundwater – September and October 2024

- Field duplicate RPDs or absolute criteria results were within control limits except for sulfate in field duplicate pair samples MW42D-GW100224/FD10-GW100225 in SDG 24J033, which had an absolute difference outside criteria. Associated sulfate results were qualified as estimated "J."

- LCS/LCSD RPDs were within control limits except for chloroethane, bromomethane, chloromethane, dichlorodifluoromethane, trichlorofluoromethane, and vinyl chloride in SDG 24I027. The RPDs of these analytes were: 23%, 25%, 32%, 23%, 23%, and 24% respectively. Qualification for LCS/LCSD RPDs outside of criteria is only required for detected results. Associated sample results for these analytes were nondetect and therefore did not require qualification. Chloroethane in SDG 24I028 had an RPD of 23%. Associated sample results were nondetect and therefore did not require qualification. Vinyl acetate in SDG 24J055 had an RPD of 51%. Associated sample results were nondetect and therefore did not require qualification.

- MS/MSD RPD results were within control limits except for chloroethane and trichlorotrifluoroethane in SDG 24I028. The RPDs of these analytes were both 31%. Qualification for MS/MSD RPDs outside of criteria is only required for detected results. Associated sample results for these analytes were nondetect and therefore did not require qualification.

- Laboratory duplicate RPDs were within control limits except for sulfate in SDG 24I062. The RPD for sulfate was 22%. Associated detect and nondetect sample results were qualified as estimated "J/UJ."

5.2 Accuracy

Accuracy is the degree of agreement of a measurement with an accepted reference or true value and is a measure of the bias in a system. Two different metrics are evaluated to assess result accuracy: calculation of percent recovery (%R) for spiked analytes with known concentrations and review of blank results for cross-contamination.

5.2.1 Percent Recovery

Accuracy of the data was assessed by comparing recoveries of LCSs, MSs, calibration standards, surrogates, and internal standards. Accuracy is expressed as %R, which is calculated as:

$$\textbf{Percent Recovery} = \frac{\textbf{(Total Analyte Found – Analyte Originally Present)} \times \textbf{100}}{\textbf{Analyte Added}}$$

Analytical accuracy for the entire data collection activity is difficult to measure because several sources of error exist. Errors can be introduced by any of the following:

- Sampling procedure and duration of sampling
- Field contamination
- Sample preservation and handling
- Sample matrix
- Sample preparation
- Analytical techniques

Accuracy is maintained by adhering to the laboratory method and approved field and analytical standard operating procedures.

The following is a summary of the accuracy parameters reviewed and the resulting qualifications for the data collected:

Groundwater – September and October 2024

SDG 24I020

- Surrogate results were within criteria.
- MS/MSD %Rs were within criteria except for those detailed in the SDG validation report in **Attachment 1**. Associated sample results were nondetect and did not require qualification.
- LCS/LCSD %Rs were within criteria except for those detailed in the SDG validation report in **Attachment 1**. Associated sample results were nondetect except for trichlorofluoromethane. Nondetect results do not require qualification. The trichlorofluoromethane LCSD %R recovery was below criteria at 64%. The associated detect and nondetect sample results were qualified as estimated "J/UJ."
- Initial and continuing calibration percent differences (%D) were within criteria except for those detailed in the SDG validation report in **Attachment 1.** Associated detect and nondetect sample results were qualified as "J/UJ."
- Organic tune results were within criteria.
- Internal standard results were within criteria.

SDG 24I027

- Surrogate results were within criteria.
- MS/MSD %Rs were within criteria.
- LCS/LCSD %Rs were within criteria.
- Initial and continuing calibration verifications were within criteria.
- Organic tune results were within criteria.
- Internal standard results were within criteria.

SDG 24I028

- Surrogate results were within criteria.
- MS/MSD %Rs were within criteria except for those detailed in the SDG validation report in **Attachment 1.** Associated detect and nondetect sample results were qualified as estimated "J/UJ."
- LCS/LCSD %Rs were within criteria.

- Initial and continuing calibration %Ds were within criteria except for those detailed in the SDG validation report in **Attachment 1.** Associated detect and nondetect sample results were qualified as estimated "J/UJ."
- Organic tune results were within criteria.
- Internal standard results were within criteria.

SDG 24I061

- Surrogate results were within criteria.
- MS/MSD %Rs were within criteria except for those detailed in the SDG validation report in **Attachment 1.** For MS/MSD recoveries that were above criteria, only detected sample results require qualification. Associated sample results were nondetect. No sample results were qualified. For MS/MSD recoveries that were below criteria, qualification is required for both detect and nondetect results**.** Associated detect and nondetect sample results were qualified as estimated "J/UJ."
- LCS/LCSD %Rs were within criteria except for those detailed in the SDG validation report in **Attachment 1.** For LCS/LCSD recoveries that were above criteria, only detected sample results require qualification. Associated sample results were nondetect. No sample results were qualified. For LCS/LCSD recoveries that were below criteria, qualification is required for both detect and nondetect results**.** Associated detect and nondetect sample results were qualified as estimated "J/UJ."
- Initial and continuing calibration %Ds were within criteria except for those detailed in the SDG validation report in **Attachment 1.** Associated detect and nondetect sample results were qualified as estimated "J/UJ."
- Organic tune results were within criteria.
- Internal standard results were within criteria.

SDG 24I062

- MS/MSD %Rs were within criteria except for chloride. Associated detect and nondetect sample results were qualified as estimated biased low and estimated nondetect "J-/UJ."
- LCS/LCSD %Rs were within criteria.
- Initial and continuing calibration verifications were within criteria.

SDG 24I077

- Surrogate results were within criteria.
- No MS/MSD %Rs are associated with this SDG.
- LCS/LCSD %Rs were within criteria except for those detailed in the SDG validation report in **Attachment 1.** For LCS/LCSD recoveries that were above criteria, only detected sample

results require qualification. Detected o-xylene results were qualified as estimated "J." The other associated sample results were nondetect and did not require qualification.

- Initial and continuing calibration %Ds were within criteria except for those detailed in the SDG validation report in **Attachment 1.** Associated detect and nondetect sample results were qualified as estimated "J/UJ."
- Organic tune results were within criteria.
- Internal standard results were within criteria.

SDG 24J033

- Surrogate results were within criteria.
- MS/MSD %Rs were within criteria.
- LCS/LCSD %Rs were within criteria except for those detailed in the SDG validation report in **Attachment 1.** For LCS/LCSD recoveries that were above criteria, only detected sample results require qualification. Detected toluene results were qualified as estimated "J." The other associated sample results were nondetect and did not require qualification.
- Initial and continuing calibration verifications were within criteria except for those detailed in the SDG validation report in **Attachment 1.** Associated detect and nondetect sample results were qualified as estimated "J/UJ."
- Organic tune results were within criteria.
- Internal standard results were within criteria.

SDG 24J055

- Surrogate results were within criteria.
- No MS/MSD %Rs are associated with this SDG.
- LCS/LCSD %Rs were within criteria.
- Initial and continuing calibration verifications were within criteria.
- Organic tune results were within criteria.
- Internal standard results were within criteria.

Sample preservation, sample handling, and holding times are additional measures of accuracy of the data. All cooler temperatures, sample handling information, and holding times were acceptable for the aqueous samples except for all the VOC analytes in SDG 24I077. The VOC technical holding time is 14 days, and samples were analyzed on the 15th day, therefore the associated VOC results were qualified as estimated "J/UJ."

5.2.2 Blank Contamination

Blanks are used to determine the level of laboratory and field contamination introduced into the samples, independent of the level of target analytes found in the sample source. Sources of sample contamination can include the containers and equipment used to collect the sample, preservatives added to the sample, other samples in transport coolers, laboratory sample storage refrigerators, standards and solutions used to calibrate instruments, glassware and reagents used to process samples, airborne contamination in the laboratory preparation area, and the analytical instrument sample introduction equipment. Each analyte group has its own particular suite of common laboratory contaminants. Active measures must be performed to continually measure the ambient contamination level, and steps must be taken to discover the source of the contamination to eliminate or minimize the levels. Random spot contamination can also occur from analytes that are not common laboratory problems but arise as a problem for a specific project or over a short period. Field blanks, equipment blanks, trip blanks, and laboratory method blanks are analyzed to identify possible sources of contamination.

Trip blanks were included to assess potential cooler transportation cross contamination. For this project, seven trip blank samples were sent with the coolers for the 2024 sampling activities. One field blank sample was analyzed to assess the water used for the decontamination of the sampling equipment. Three equipment blank samples were analyzed to assess the thoroughness and effectiveness of the decontamination procedures performed by the field teams. VOC results for the trip blank, field blank and equipment blank samples are presented in **Table 3-2.** The following text discusses validation actions required as a result of laboratory and/or field blank contamination.

Groundwater –2024

SDG 24I020

- Methylene chloride was detected in a method and trip blank sample. Associated sample results were nondetect and did not require qualification.
- 1,2,3-Trichlorobenzene, and 1,2,4-trichlorobenzene were detected in a trip blank sample. Associated sample results were nondetect and did not require qualification.

SDG 24I027

- Acetone was detected in the associated trip blank sample. Associated sample results were nondetect and did not require qualification.

SDG 24I028

- All blanks were nondetect.

SDG 24I061

- Acetone was detected in the associated field blank sample. Associated sample results were qualified as nondetect “U” at the MRL.

SDG 24I062

- All blanks were nondetect.

SDG 24I077

- Acetone was detected in the associated equipment blank sample. Associated sample results were nondetect and did not require qualification.

SDG 24J033

- All blanks were nondetect.

SDG 24I077

- All blanks were nondetect.

Ideally, no contaminants should be found in the blank samples. Blank samples are used to determine the validity of the analytical results by determining the existence and magnitude of contamination resulting from laboratory (or field) activities or baseline drift during analysis. As discussed above, analytes were detected in some of the field and trip blank samples. Concentrations were below the MRLs for all detected blank results. Analytes detected in laboratory blanks are common with laboratory analyses and are almost unavoidable.

Associated sample results for the field blank samples were qualified following the appropriate guidelines. Detected blank concentrations were below the MRLs and the resulting sample qualifications as nondetect or "U" does not falsely diminish identification of site-related contaminants.

5.3 Representativeness

Representativeness is a qualitative term that expresses the degree to which the sample data accurately and precisely represent the environmental conditions corresponding to the location and/or depth interval of sample collection. Requirements and procedures for sample collection were designed to maximize sample representativeness.

Representativeness can be monitored by reviewing field documentation and/or performing field audits. For this report, a detailed review was performed on the COC and field data collection forms. Appropriate laboratory QA/QC requirements were described in the QAPPs (CDM Smith 2020, 2023, 2024) and laboratory statement of work to confirm that the laboratory analytical results were representative of true field conditions.

Field sampling representativeness was attained through strict adherence to the sampling design and the approved QAPP (CDM Smith 2020, 2023, 2024) procedures and by using EPA-approved analytical methods for sample analyses. As a result, the data represent as near as possible the actual field conditions at the time of sampling.

Representativeness, as defined above, was met for the fieldwork and laboratory analyses. The data collected are suitable for project use.

5.4 Comparability

Comparability is a qualitative term that expresses the confidence with which a data set can be compared with another. Strict adherence to standard sample collection procedures, analytical detection limits, and analytical methods is necessary so that data from similar samples and sample conditions are comparable. This comparability is independent of laboratory personnel,

data reviewers, or sampling personnel. Comparability criteria are met for the project if, based on data review, the sample collection and analytical procedures used are similar and are determined to have been followed.

To achieve comparability of data generated for the Site, CDM Smith followed standard sample collection procedures and EPA-approved analytical methods during sampling activities. The sample analyses were performed by EMAX using approved standard operating procedures and reporting units. Using such procedures and methods enables the current data to be comparable to future data sets generated with similar methods and units.

5.5 Completeness

Completeness of the field program is defined as the percentage of samples planned for collection, as listed in the QAPPs (CDM Smith 2020, 2023, 2024), versus the actual number of samples collected during the field program (see equation A).

Completeness for acceptable data is defined as the percentage of acceptable data obtained judged to be valid versus the total quantity of data generated (see equation B). Acceptable data include both data that pass all the QC criteria (unqualified data) and data that may not pass all the QC criteria but had appropriate corrective actions taken (qualified but usable data).

A. $$\%Completeness = Cx\frac{100}{n}$$

Where:

C = actual number of samples collected
n = total number of samples planned

B. $$\%Completeness = Vx\frac{100}{n'}$$

Where:

V = number of measurements judged valid
n' = total number of measurements made

The overall completeness goal for this sampling event was 90% for all project data.

Groundwater - 2024

For the 2024 sampling round, samples outlined in the QAPPs (CDM Smith 2020, 2023, 2024) were collected as planned to meet specific sampling activity objectives with the exception of samples at locations MW-01S, MW-12S, MW-30C, and MW-32C. The completeness for the number of samples planned to be collected versus the number of samples collected was 95.6% thus exceeding the 90% goal. Samples that were not able to be collected will be sampled in future sampling events if possible.

Analyses for the sampling event exceeded the 90% completeness goal of acceptable data for the number of measurements judged to be valid versus the total number of measurements made in each of the sampling events.

One hundred percent of the data validated and reported are suitable for their intended use for site characterization. No results were rejected, and all data collected met the overall project objective for data usability. The completeness goals were met for both the number of samples collected for all sampling events and the number of measurements judged to be valid.

The data usability DQO was achieved; the data reported are suitable for their intended use as stated in the QAPPs (CDM Smith 2020, 2023, 2024). The achievement of the completeness goals for the data provides sufficient data for project decisions.

5.6 Sensitivity

Sensitivity is related to the ability to compare analytical results with project-specific levels of interest such as delineation levels or action levels. Analytical quantitation limits for the various sample analytes should be below the level of interest to allow an effective comparison.

The method detection limit (MDL) study attempts to answer the question, “What is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero?” The study is based upon repetitive analysis of an interference-free sample spiked with a known amount of the target analyte. The MDL is a measure of the ability of the test procedure to generate a positive response for the target analyte in the absence of any other interferences from the sample.

The MRL is generally defined as the lowest concentration at which an analyte can be confidently reported in a sample and its concentration reported with a reasonable degree of accuracy and precision. For samples that do not pose a particular matrix problem, the MRL is typically about three to five times higher than the MDL.

Laboratory results are reported according to rules that provide established certainty of detection. The result for an analyte is flagged with a "U" if that analyte was not detected and reported at the MRL value or qualified with a "J" flag if associated QC results fall outside the appropriate QC criteria. Additionally, if an analyte is present at a concentration between the MDL and the MRL, the analytical result is flagged with a "J," indicating an estimated quantity. Qualifying the result as an estimated concentration reflects uncertainty in the reported value.

When required, dilutions were performed and accounted for in the reported MRLs. All MRLs were met as specified in the QAPPs (CDM Smith 2020, 2023, 2024).

All MRLs were met as specified in the QAPPs (CDM Smith 2020, 2023, 2024), but due to the low groundwater screening levels for 1,2-dibromo-3-chloropropane, 1,2-dibromoethane, 1,1,2,2-tetrachloroethane, trans-1,3-dichloropropene and cis-1,3-dichloropropene the MRL is greater than the screening level. Results detected between the MDL and MRL were reported as detect with an estimated “J” qualifier. The MDLs were all less than the screening levels except for 1,1,2,2-tetrachloroethane, 1,2-dibromo-3-chloropropane and 1,2-dibromoethane. However, these analytes are not a known constituent of potential concern for the site and the elevated MDL/MRLs are not considered to affect project objectives. For the remaining analytes, laboratory MDLs/MRLs were low enough to compare with the project criteria stated in the laboratory statement of work and the QAPPs (CDM Smith 2020, 2023, 2024).

DOD

Table 5-1 DQIs and Corresponding QC Parameters

Data Quality Indicators	QC Parameters Evaluation in Data Review/Validation
Precision	RPD values of: 1) Field duplicates 2) MS/MSD 3) LCS/LCSD 4) Laboratory Duplicates Relative standard deviation (RSD) values of: 1) Initial calibration verifications
Accuracy/Bias	%R or %D values of: 1) LCS/LCSD %R 2) MS/MSD %R 3) Initial calibration verification/continuing calibration verification %R 4) ICP-mass spectrometry (MS) tune percent RSD 5) Surrogates 6) Internal standards Results of: 1) Method (preparation) blanks 2) Initial and continuing calibration blanks (inorganic analysis) 3) Field blanks 4) Trip blanks
Representativeness	Results of all blanks Adherence to field standard operating procedures Sample integrity (COC and sample receipt forms) Holding times
Comparability	Similar reporting limits and units Similar sample collection methods Similar laboratory analytical methods
Completeness	Data qualifiers Laboratory deliverables Requested/Reported valid results Field sample collection (primary and QC samples) Contract compliance (i.e., method and instrument QC within limits)
Sensitivity	Sample method reporting limits meet QAPP criteria Adequacy of sample dilution

Table 5-2
Summary of Field Duplicate Sampling Results - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

		Location	MW-02		MW-02			MW-13L		MW-13L			MW-16S		MW-16S		
		Sample Name	MW02-GW090524		FD02-GW090524			MW13L-GW090724		FD03-GW090724			MW16S-GW090824		FD04-GW090824		
		Parent Sample Name			MW02-GW090524					MW13L-GW090724					MW16S-GW090824		
		Sample Date	9/5/2024		9/5/2024			9/7/2024		9/7/2024			9/8/2024		9/8/2024		
		Sample Type	N		FD			N		FD			N		FD		
Method	Analyte	Unit	Result	Q	Result	Q	RPD (%)	Result	Q	Result	Q	RPD (%)	Result	Q	Result	Q	RPD (%)
A4500NE	Nitrate/Nitrite	mg/l					----					----					----
E300.0	Chloride	mg/l					----					----					----
E300.0	Sulfate	mg/l					----					----					----
RSK-175	Ethane	ug/L					----					----					----
RSK-175	Ethene	ug/L					----					----					----
RSK-175	Methane	ug/l					----					----					----
SM2320B	Alkalinity	mg/l					----					----					----
SW9060	Total Organic Carbon	mg/l					----					----					----
SW8260C	1,1,1-Trichloroethane	ug/L	1	U	1	U	NC	0.39	J	0.35	J	ABS Criteria	0.16	J	0.14	J	ABS Criteria
SW8260C	1,1,2,2-Tetrachloroethane	ug/L	1	UJ	1	UJ	NC	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	1,1,2-Trichloroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,1,2-Trichlorotrifluoroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,1-Dichloroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,1-Dichloroethene	ug/L	1	U	1	U	NC	0.19	J	0.15	J	ABS Criteria	1	U	1	U	NC
SW8260C	1,2,3-Trichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2,4-Trichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2,4-Trimethylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2-Dibromo-3-Chloropropane	ug/L	2	U	2	U	NC	2	U	2	U	NC	2	U	2	U	NC
SW8260C	1,2-Dibromoethane	ug/L	1	UJ	1	UJ	NC	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	1,2-Dichlorobenzene	ug/L	1	UJ	1	UJ	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2-Dichloroethane	ug/L	1	U	1	U	NC	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	1,2-Dichloropropane	ug/L	1	U	1	U	NC	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	1,3,5-Trimethylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,3-Dichlorobenzene	ug/L	1	UJ	1	UJ	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,4-Dichlorobenzene	ug/L	1	UJ	1	UJ	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	2-Butanone (MEK)	ug/L	20	U	20	U	NC	20	U	20	U	NC	20	U	20	U	NC
SW8260C	2-Hexanone	ug/L	20	U	20	U	NC	20	U	20	U	NC	20	U	20	U	NC
SW8260C	4-Methyl-2-Pentanone (MIBK)	ug/L	20	U	20	U	NC	20	U	20	U	NC	20	U	20	U	NC
SW8260C	Acetone	ug/L	20	U	20	U	NC	20	U	20	U	NC	20	U	20	U	NC
SW8260C	Benzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Bromochloromethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Bromodichloromethane	ug/l	0.3	J	0.29	J	ABS Criteria	0.19	J	0.17	J	ABS Criteria	1	U	1	U	NC
SW8260C	Bromoform	ug/L	1	UJ	1	UJ	NC	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	Bromomethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Carbon Disulfide	ug/L	1	U	1	U	NC	0.25	J	1	U	ABS Criteria	1	U	1	U	NC
SW8260C	Carbon Tetrachloride	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Chlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Chloroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Chloroform	ug/l	3.4		3.4		ABS Criteria	1.9		1.8		ABS Criteria	3.1		3.2		ABS Criteria
SW8260C	Chloromethane	ug/L	1	UJ	1	UJ	NC	1	U	1	U	NC	1	U	1	U	NC

Table 5-2
Summary of Field Duplicate Sampling Results - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

		Location	MW-02		MW-02		RPD (%)	MW-13L		MW-13L		RPD (%)	MW-16S		MW-16S		RPD (%)
		Sample Name	MW02-GW090524		FD02-GW090524			MW13L-GW090724		FD03-GW090724			MW16S-GW090824		FD04-GW090824		
		Parent Sample Name			MW02-GW090524					MW13L-GW090724					MW16S-GW090824		
		Sample Date	9/5/2024		9/5/2024			9/7/2024		9/7/2024			9/8/2024		9/8/2024		
		Sample Type	N		FD			N		FD			N		FD		
Method	Analyte	Unit	Result	Q	Result	Q		Result	Q	Result	Q		Result	Q	Result	Q	
SW8260C	Cis-1,2-Dichloroethene	ug/l	1		0.45	J	ABS Criteria	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Cis-1,3-Dichloropropene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Dibromochloromethane	ug/L	1	UJ	1	UJ	NC	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	Dichlorodifluoromethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Ethylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Isopropylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	M+P-Xylenes	ug/L	2	U	2	U	NC	2	U	2	U	NC	2	U	2	U	NC
SW8260C	Methyl Acetate	ug/L	2	U	2	U	NC	2	U	2	U	NC	2	U	2	U	NC
SW8260C	Methyl Tert-Butyl Ether	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Methylene Chloride	ug/L	2	U	2	U	NC	2	U	2	U	NC	2	U	2	U	NC
SW8260C	O-Xylene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Styrene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Tetrachloroethene	ug/l	210		200		4.88%	63		59		6.56%	21		21		0.00%
SW8260C	Toluene	ug/l	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Trans-1,2-Dichloroethene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Trans-1,3-Dichloropropene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Trichloroethene	ug/l	0.55	J	0.58	J	ABS Criteria	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Trichlorofluoromethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Vinyl Acetate	ug/L	2	UJ	2	UJ	NC	2	UJ	2	UJ	NC	2	U	2	U	NC
SW8260C	Vinyl Chloride	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC

Acronyms and Notes:
µg/L - microgram per liter
ABS - absolute difference
FD - Field Duplicate
J - estimated value
mg/l - milligrams per liter
N - Normal Sample
NC - not calculated
Q - Qualifier
RPD - Relative Percent Difference
U - nondetect
UJ - estimated nondetect
ABS Criteria - One or both of the sample results are less than 5 times the reporting limit. The absolute value between the two results is within acceptable criteria.
Yellow highlighting - RPD value is outside of the 30% criteria and/or the ABS Criteria is outside of control limits.

Table 5-2
Summary of Field Duplicate Sampling Results - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

		Location	MW-18		MW-18			MW-19		MW-19			MW-29A		MW-29A		
		Sample Name	MW18-GW090724		FD05-GW090724		RPD (%)	MW19-GW090724		FD06-GW090724		RPD (%)	MW29A-GW091024		FD07-GW091024		RPD (%)
		Parent Sample Name			MW18-GW090724					MW19-GW090724					MW29A-GW091024		
		Sample Date	9/7/2024		9/7/2024			9/7/2024		9/7/2024			9/10/2024		9/10/2024		
		Sample Type	N		FD			N		FD			N		FD		
Method	Analyte	Unit	Result	Q	Result	Q		Result	Q	Result	Q		Result	Q	Result	Q	
A4500NE	Nitrate/Nitrite	mg/l					----					----					----
E300.0	Chloride	mg/l					----					----					----
E300.0	Sulfate	mg/l					----					----					----
RSK-175	Ethane	ug/L					----					----					----
RSK-175	Ethene	ug/L					----					----					----
RSK-175	Methane	ug/l					----					----					----
SM2320B	Alkalinity	mg/l					----					----					----
SW9060	Total Organic Carbon	mg/l					----					----					----
SW8260C	1,1,1-Trichloroethane	ug/L	0.38	J	0.4	J	ABS Criteria	0.31	J	0.31	J	ABS Criteria	1	U	1	U	NC
SW8260C	1,1,2,2-Tetrachloroethane	ug/L	1	UJ	1	UJ	NC	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	1,1,2-Trichloroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	UJ	1	UJ	NC
SW8260C	1,1,2-Trichlorotrifluoroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,1-Dichloroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,1-Dichloroethene	ug/L	0.1	J	1	U	ABS Criteria	0.13	J	1	U	ABS Criteria	1	U	1	U	NC
SW8260C	1,2,3-Trichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2,4-Trichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2,4-Trimethylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	UJ	1	UJ	NC
SW8260C	1,2-Dibromo-3-Chloropropane	ug/L	2	U	2	U	NC	2	U	2	U	NC	2	U	2	U	NC
SW8260C	1,2-Dibromoethane	ug/L	1	UJ	1	UJ	NC	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	1,2-Dichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2-Dichloroethane	ug/L	1	UJ	1	UJ	NC	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	1,2-Dichloropropane	ug/L	1	UJ	1	UJ	NC	1	UJ	1	UJ	NC	1	UJ	1	UJ	NC
SW8260C	1,3,5-Trimethylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	UJ	1	UJ	NC
SW8260C	1,3-Dichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,4-Dichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	2-Butanone (MEK)	ug/L	20	U	20	U	NC	20	U	20	U	NC	20	U	20	U	NC
SW8260C	2-Hexanone	ug/L	20	U	20	U	NC	20	U	20	U	NC	20	U	20	U	NC
SW8260C	4-Methyl-2-Pentanone (MIBK)	ug/L	20	U	20	U	NC	20	U	20	U	NC	20	U	20	U	NC
SW8260C	Acetone	ug/L	20	U	20	U	NC	20	U	20	U	NC	20	U	20	U	NC
SW8260C	Benzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Bromochloromethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Bromodichloromethane	ug/l	0.18	J	0.23	J	ABS Criteria	0.15	J	0.15	J	NC	0.27	J	0.29	J	ABS Criteria
SW8260C	Bromoform	ug/L	1	UJ	1	UJ	NC	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	Bromomethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Carbon Disulfide	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Carbon Tetrachloride	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Chlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Chloroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Chloroform	ug/l	2.8		2.9		ABS Criteria	2.1		2		ABS Criteria	5.3		5.5		3.70%
SW8260C	Chloromethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC

Table 5-2
Summary of Field Duplicate Sampling Results - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

		Location	MW-18		MW-18			MW-19		MW-19			MW-29A		MW-29A		
		Sample Name	MW18-GW090724		FD05-GW090724			MW19-GW090724		FD06-GW090724			MW29A-GW091024		FD07-GW091024		
		Parent Sample Name			MW18-GW090724					MW19-GW090724					MW29A-GW091024		
		Sample Date	9/7/2024		9/7/2024			9/7/2024		9/7/2024			9/10/2024		9/10/2024		
		Sample Type	N		FD			N		FD			N		FD		
Method	Analyte	Unit	Result	Q	Result	Q	RPD (%)	Result	Q	Result	Q	RPD (%)	Result	Q	Result	Q	RPD (%)
SW8260C	Cis-1,2-Dichloroethene	ug/l	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Cis-1,3-Dichloropropene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Dibromochloromethane	ug/L	1	UJ	1	UJ	NC	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	Dichlorodifluoromethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Ethylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Isopropylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	M+P-Xylenes	ug/L	2	U	2	U	NC	2	U	2	U	NC	2	U	2	U	NC
SW8260C	Methyl Acetate	ug/L	2	U	2	U	NC	2	U	2	U	NC	2	U	2	U	NC
SW8260C	Methyl Tert-Butyl Ether	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Methylene Chloride	ug/L	2	U	2	U	NC	2	U	2	U	NC	2	U	2	U	NC
SW8260C	O-Xylene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Styrene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Tetrachloroethene	ug/l	56		59		5.22%	46		44		4.44%	8.3		8.5		2.38%
SW8260C	Toluene	ug/l	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Trans-1,2-Dichloroethene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Trans-1,3-Dichloropropene	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Trichloroethene	ug/l	1	U	1	U	NC	1	U	1	U	NC	0.17	J	0.15	J	ABS Criteria
SW8260C	Trichlorofluoromethane	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Vinyl Acetate	ug/L	2	UJ	2	UJ	NC	2	UJ	2	UJ	NC	2	U	2	U	NC
SW8260C	Vinyl Chloride	ug/L	1	U	1	U	NC	1	U	1	U	NC	1	U	1	U	NC

Acronyms and Notes:
µg/L - microgram per liter
ABS - absolute difference
FD - Field Duplicate
J - estimated value
mg/l - milligrams per liter
N - Normal Sample
NC - not calculated
Q - Qualifier
RPD - Relative Percent Difference
U - nondetect
UJ - estimated nondetect
ABS Criteria - One or both of the sample results are less than 5 times the reporting limit. The absolute value between the two results is within acceptable criteria.
Yellow highlighting - RPD value is outside of the 30% criteria and/or the ABS Criteria is outside of control limits.

Table 5-2
Summary of Field Duplicate Sampling Results - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

		Location	MW-42D		MW-42D			RG-05		RG-05		
		Sample Name	MW42D-GW100224		FD10-GW100224		RPD (%)	RG05-GW100324		FD09-GW100324		RPD (%)
		Parent Sample Name			MW42D-GW100224					RG05-GW100324		
		Sample Date	10/2/2024		10/2/2024			10/3/2024		10/3/2024		
		Sample Type	N		FD			N		FD		
Method	Analyte	Unit	Result	Q	Result	Q		Result	Q	Result	Q	
A4500NE	Nitrate/Nitrite	mg/l	2.54		2.58		1.56%					----
E300.0	Chloride	mg/l	176		152		14.63%					----
E300.0	Sulfate	mg/l	215		149		ABS Criteria					----
RSK-175	Ethane	ug/L	0.39	J	2	U	ABS Criteria					----
RSK-175	Ethene	ug/L	2	U	2	U	NC					----
RSK-175	Methane	ug/l	2.1		1.9	J	ABS Criteria					----
SM2320B	Alkalinity	mg/l	228		233		2.17%					----
SW9060	Total Organic Carbon	mg/l	0.731	J	0.673	J	ABS Criteria					----
SW8260C	1,1,1-Trichloroethane	ug/L	1	U	1	U	NC	1	U	0.18	J	ABS Criteria
SW8260C	1,1,2,2-Tetrachloroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,1,2-Trichloroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,1,2-Trichlorotrifluoroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,1-Dichloroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,1-Dichloroethene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2,3-Trichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2,4-Trichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2,4-Trimethylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2-Dibromo-3-Chloropropane	ug/L	2	U	2	U	NC	2	U	2	U	NC
SW8260C	1,2-Dibromoethane	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2-Dichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2-Dichloroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,2-Dichloropropane	ug/L	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	1,3,5-Trimethylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,3-Dichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	1,4-Dichlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	2-Butanone (MEK)	ug/L	20	U	20	U	NC	20	U	20	U	NC
SW8260C	2-Hexanone	ug/L	20	U	20	U	NC	20	U	20	U	NC
SW8260C	4-Methyl-2-Pentanone (MIBK)	ug/L	20	U	20	U	NC	20	U	20	U	NC
SW8260C	Acetone	ug/L	5.6	J	20	U	ABS Criteria	20	U	20	U	NC
SW8260C	Benzene	ug/L	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	Bromochloromethane	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Bromodichloromethane	ug/l	0.42	J	0.41	J	ABS Criteria	1	U	1	U	NC
SW8260C	Bromoform	ug/L	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	Bromomethane	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Carbon Disulfide	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Carbon Tetrachloride	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Chlorobenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Chloroethane	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Chloroform	ug/l	3.8		3.9		ABS Criteria	3.1		3.1		ABS Criteria
SW8260C	Chloromethane	ug/L	1	U	1	U	NC	1	U	1	U	NC

Table 5-2
Summary of Field Duplicate Sampling Results - Groundwater 2024
Operable Unit 1 Remedial Investigation
700 South 1600 East PCE Plume,
Salt Lake City, Utah

		Location	MW-42D		MW-42D			RG-05		RG-05		
		Sample Name	MW42D-GW100224		FD10-GW100224		RPD (%)	RG05-GW100324		FD09-GW100324		RPD (%)
		Parent Sample Name			MW42D-GW100224					RG05-GW100324		
		Sample Date	10/2/2024		10/2/2024			10/3/2024		10/3/2024		
		Sample Type	N		FD			N		FD		
Method	Analyte	Unit	Result	Q	Result	Q		Result	Q	Result	Q	
SW8260C	Cis-1,2-Dichloroethene	ug/l	0.59	J	0.62	J	ABS Criteria	1	U	1	U	NC
SW8260C	Cis-1,3-Dichloropropene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Dibromochloromethane	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Dichlorodifluoromethane	ug/L	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	Ethylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Isopropylbenzene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	M+P-Xylenes	ug/L	2	U	2	U	NC	2	U	2	U	NC
SW8260C	Methyl Acetate	ug/L	2	U	2	U	NC	2	U	2	U	NC
SW8260C	Methyl Tert-Butyl Ether	ug/L	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	Methylene Chloride	ug/L	2	U	2	U	NC	2	U	2	U	NC
SW8260C	O-Xylene	ug/L	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	Styrene	ug/L	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	Tetrachloroethene	ug/l	87		93		6.67%	8.9		9		1.12%
SW8260C	Toluene	ug/l	1	UJ	1	UJ	NC	1	U	1	U	NC
SW8260C	Trans-1,2-Dichloroethene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Trans-1,3-Dichloropropene	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Trichloroethene	ug/l	0.67	J	0.67	J	ABS Criteria	0.14	J	0.15	J	ABS Criteria
SW8260C	Trichlorofluoromethane	ug/L	1	U	1	U	NC	1	U	1	U	NC
SW8260C	Vinyl Acetate	ug/L	2	U	2	U	NC	2	U	2	U	NC
SW8260C	Vinyl Chloride	ug/L	1	U	1	U	NC	1	U	1	U	NC

Acronyms and Notes:
µg/L - microgram per liter
ABS - absolute difference
FD - Field Duplicate
J - estimated value
mg/l - milligrams per liter
N - Normal Sample
NC - not calculated
Q - Qualifier
RPD - Relative Percent Difference
U - nondetect
UJ - estimated nondetect
ABS Criteria - One or both of the sample results are less than 5 times the reporting limit. The absolute value between the two results is within acceptable criteria.
Yellow highlighting - RPD value is outside of the 30% criteria and/or the ABS Criteria is outside of control limits.

Section 6

Data Usability Assessment

One hundred percent of the data reported and validated in this QCSR are suitable for their intended use as stated in the QAPPs (CDM Smith 2020, 2023, 2024). No sample results were rejected.

The achievement of the completeness goals for the number of samples collected and the number of sample results acceptable for use provides sufficient quality data to support project decisions and DQOs. Sample results that were qualified as estimated are usable for project decisions.

Section 7
References

CDM Smith. 2020. *Quality Assurance Project Plan Remedial Investigation Phase 2, 700 South 1600 East PCE Plume, Salt Lake City, Utah.* Prepared for the U.S. Army Corps of Engineers, Kansas City District. April 2020.

CDM Smith, 2023. *Final Treatability Study Work Plan, 700 South 1600 East PCE Plume Site Operable Unit 1, Salt Lake City, Utah. CONTRACT NO.: W912DQ-21-D-3004 DELIVERY ORDER: W912DQ22F3063.* September.

CDM Smith. 2024. *Final Quality Assurance Project Plan, Feasibility Study, 700 South 1600 East PCE Plume Site, Operable Unit 1, Salt Lake City, Utah. CONTRACT NO.: W912DQ-21-D-3004, DELIVERY ORDER NO.: W912DQ22F3063*. June.

CDM Smith 2025. *Supplemental Remedial Investigation 2024, 700 South 1600 East PCE Plume Site, Salt Lake City, Utah*. Prepared for the U.S. Army Corps of Engineers - Kansas City District. May.

EPA. 2020. *National Functional Guidelines for Organic Superfund Methods Data Review*, EPA-540-R-20-005. November 2020.

Attachment 1

Data Validation Reports

VA Salt Lake City
Salt Lake City, Utah
Groundwater Validation Report

Sample Delivery Group (SDG) Number: 24I020
Laboratory: EMAX Laboratories, Inc.

Matrix: Groundwater
Collection date: 09/5/2024 09/6/2024
Analysis/Methods:

Volatile Organic Compounds SW 846 8260C

Samples in SDG:

Lab ID	Sample Number	Lab ID	Sample Number
24I020-01	MW02-GW090524	24I020-11	MW36-GW090624
24I020-02	FD02-GW090524	24I020-12	MW01D-GW090624
24I020-03	MW12D-GW090524	24I020-13	MW08B-GW090624
24I020-04	MW34B-GW090524	24I020-14	MW34D-GW090624
24I020-05	MW17S-GW090524	24I020-15	MW34A-GW090624
24I020-06	MW17D-GW090524	24I020-16	MW38S-GW090624
24I020-07	MW34C-GW090524	24I020-17	MW38D-GW090624
24I020-08	MW06-GW090524	24I020-18	MW04-GW090524
24I020-09	MW37S-GW090624	24I020-19	TB01-GW090624
24I020-10	MW37D-GW090624		

Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA 2020).

Volatile Organic Compounds 8260C

Precision:	**Yes**	**No**	**N/A**
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?			**Yes**
Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)			**Yes**
Laboratory Control Spike Duplicates RPD within limits?			**Yes**

Comments (note deviations):

Field Duplicates	**8260C**	**Sample MW02-GW090524**	**Duplicate FD02-GW090524**	**%RPD**	**Qualifiers**	**Associated Samples**
				Acceptable		

MS/MSD	**8260C**	**%RPD**	**Limit**	**Qualifiers**	**Associated Samples**
MW38S-GW090624MS / MSD (24I020-16)		Acceptable			

LCS/LCSD	**8260C**	**%RPD**	**Limits**	**Qualifiers**	**Associated Samples**
LCS1W / LCSD1W		Acceptable			
LCS2W / LCSD2W		Acceptable			
LCS3W / LCSD3W		Acceptable			

Accuracy:	**Yes**	**No**	**N/A**
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)			**No**
Laboratory Control Sample criteria met?			**No**
Were the Laboratory Method Blank results all < RL?			**No**
Were the Field Blanks results all < RL?			**No**
Was the ICAL criteria met?			**Yes**
Was the CCV criteria met?			**No**
Was the Tuning criteria met?			**Yes**
Were the Surrogate % recoveries within laboratory determined control limits?			**Yes**
Were the Internal Standard areas within ± 50 - 150%?			**Yes**

Comments (note deviations):

Blanks	**8260C**	**Concentration**	**MDL /RL**	**Qualifiers**	**Associated Samples**
MBLK1W		Nondetect			
MBLK2W		Nondetect			
MBLK3W	Methylene Chloride	1.4 J	0.50 / 2.0	None	Sample results nondetect

Field Blank	8260C	Concentration	MDL /RL	Qualifiers	Associated Samples
TB01-GW090624	1,2,3-Trichlorobenzene	0.45	0.15 / 1.0	None	Sample results nondetect
	1,2,4-Trichlorobenzene	0.24	0.15 / 1.0	None	Sample results nondetect
	Methylene Chloride	0.67	0.5 / 2.0	None	Sample results nondetect

Surrogates	8260C	%R	Limit	Qualifiers	Associated Samples
		Acceptable			

MS/MSD	8260C	%R	Limit	Qualifiers	Associated Samples
MW38S-GW090624MS / MSD					
(24I020-16)	1,1,2,2-Tetrachloroethane	138 / 136	71-121	**J****	**24I020-16**
	1,1,2-Trichloroethane	134 / 131	80-119	**J****	
	1,2-Dichloropropane	136 / 138	78-122	**J****	
	2-Butanone	162 /151	56-143	**J****	
	2-Hexanone	173 / 161	57-139	**J****	
	Bromochloromethane	138 / 134	78-120	**J****	
	4-Methyl-2-pentanone	177 / 165	67-130	**J****	
	tert-Butyl Methyl Ether	125 / 121	71-124	**J****	
	Methyl Acetate	146 / 132	50-136	**J****	**24I020-16**

**Qualification required for detected results only - associated results nondetect - no qualification required

LCS/LCSD	8260C	%R	Limits	Qualifiers	Associated Samples
Associated samples: 24I020-1 through 24I020-12					
LCS1W / LCSD1W		Acceptable			
Associated samples:24I020-18, 24I020-1 (Tetrachloroethene only), 24I020-2 (Tetrachloroethene only).					
LCS2W / LCSD2W	1,1,2,2-Tetrachloroethane	123 / 124	71-121	**J^{xx}**	
	1,2-Dichloropropane	124 / 120	78-122	**J^{xx}**	**24I020-18**
	4-Methyl-2-Petanone	144 / 146	67-130	**J^{xx}**	
Associated samples: 24I020-14 through 24I020-17, 24I020-19, 24I020-13					
LCS3W / LCSD3W	1,1,2,2-Tetrachloroethane	131 / 122	71-121	**J^{xx}**	
	1,1,2-Trichloroethane	124 / 117	80-119	**J^{xx}**	
	1,2-Dichloropropane	125 / 123	78-122	**J^{xx}**	**24I020-14 through 24I020-17, 24I020-19,**
	2-Hexanone	142 / 133	57-139	**J^{xx}**	**24I020-13**
	4-Methyl-2-pentanone	147 / 139	67-130	**J^{xx}**	
	Trichlorofluoromethane	76 / 64	65-141	**J / UJ**	

xx Qualification required for detected results only - associated results nondetect - no qualification required
* For samples 24I020-1 and 24I020-2 - LCS/LCSD %Rs are applicable to tetrachloroethene only.

ICAL	8260C	RRF	%RSD	Limit	Qualifiers	Associated Samples
9/4/2024 13:12	Chloromethane	Acceptable	29.05	20	**J****	**All samples**
8/9/2024 17:28		Acceptable	Acceptable			

** Qualification required for detected results only - associated results nondetect - no qualification required.

CCV	8260C	RRF	%D	Limits	Qualifiers	Associated Samples
Associated samples: 24I020-1 through 24I020-12						
09/14/24 4:24	Vinyl Acetate	Acceptable	29.3	20	**J / UJ**	**24I020-1 through 24I020-12**
	Dibromochloromethane	Acceptable	26.8	20	**J / UJ**	
	1,2-Dibromoethane	Acceptable	23.4	20	**J / UJ**	
	Bromoform	Acceptable	31.8	25	**J / UJ**	
	1,1,2,2-Tetrachloroethane	Acceptable	26.5	25	**J / UJ**	
	1,3-Dichlorobenzene	Acceptable	20.8	20	**J / UJ**	
	1,4-Dichlorobenzene	Acceptable	21.4	20	**J / UJ**	
	1,2-Dichlorobenzene	Acceptable	21.3	20	**J / UJ**	**24I020-1 through 24I020-12**
Associated samples: 24I020-18, 24I020-1 (Tetrachloroethene only), 24I020-2 (Tetrachloroethene only).						
09/19/24 10:21	Trichlorofluoromethane	Acceptable	33.6	30	**J / UJ**	**24I020-18**
	Vinyl Acetate	Acceptable	23.2	20	**J / UJ**	
	4-Methyl-2-pentanone	Acceptable	33.8	30	**J / UJ**	**24I020-18**

Associated samples: 24I020-14 through 24I020-17, 24I020-19, 24I020-13

09/20/24 12:12	Trichlorofluoromethane	Acceptable	31.5	30	**J / UJ**	
	Bromochloromethane	Acceptable	21.4	20	**J / UJ**	
	1,2-Dichloropropane	Acceptable	28.8	20	**J / UJ**	**24I020-14 through 24I020-17, 24I020-19, 24I020-13**
	4-Methyl-2-pentanone	Acceptable	48.5	30	**J / UJ**	
	1,1,2-Trichloroethane	Acceptable	21.6	20	**J / UJ**	
	1,1,2,2-Tetrachloroethane	Acceptable	25.7	25	**J / UJ**	

Tune **8260C**
Acceptable

Internal Standards	**8260C**	**Area**	**Area Lower / Upper Limit**	**Qualifiers**	**Associated Samples**
		Acceptable			

Representativeness:

	Yes	No	N/A
Were sampling procedures and design criteria met?	**Yes**		
Were holding times met?	**Yes**		
Was preservation criteria met? (0° C - 6° C)	**Yes**		
Were Chain-of-Custody records complete and provided in data package?	**Yes**		

Comments (note
The cooler temperature was 4.3°C

Preservation	**Cooler Temperature (Degrees C)**	**Preservation Criteria**	**Qualifier**	**Associated Samples**
	Acceptable			

Holding Times	**Analyte**	**Days to Extraction**	**HT Criteria**	**Qualifier**	**Associated Samples**
		Acceptable			

Comparability:

	Yes	No	N/A
Were analytical procedures and methods followed as defined in the QAPP or field change documentation?	**Yes**		

Comments (note deviations):

Completeness (90%):

	Yes	No	N/A
Are all data in this SDG usable?	**Yes**		

Comments (note deviations):

Sensitivity:

	Yes	No	N/A
Are MDLs present and reported?	**Yes**		
Do the reporting limits meet project requirements?	**Yes**		

Comments (note deviations):

Comment:

Sample results for tetrachloroethene for samples 24I020-01 and 24I020-02 were run at a dilution. The diluted results should be used for these analytes in place of the initial results.

Data is usable with appropriate qualifiers applied.

Data Validator: *Kristine Molloy* Date: *1/7/2025*

Data Reviewer: Cherie Zakowski Date: 1/10/2025

VA Salt Lake City
Salt Lake City, Utah
Groundwater Validation Report

Sample Delivery Group (SDG) Number: 24I027
Laboratory: EMAX Laboratories, Inc.

Matrix: Groundwater
Collection date: 09/8/2024 09/9/2024
Analysis/Methods:

Volatile Organic Compounds SW 846 8260C

Samples in SDG:

Lab ID	Sample Number	Lab ID	Sample Number
24I027-01	MW05R-GW090824	24I027-09	MW24-GW090824
24I027-02	MW15D-GW090824	24I027-10	MW26A-GW090824
24I027-03	MW15S-GW090824	24I027-11	MW26D-GW090824
24I027-04	MW16D-GW090824	24I027-12	MW30RA-GW090824
24I027-05	MW16S-GW090824	24I027-13	MW30RB-GW090824
24I027-06	FD04-GW090824	24I027-14	MW32A-GW090824
24I027-07	MW21-GW090824	24I027-15	TB03-GW090924
24I027-08	MW22-GW090824		

Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA 2020).

Volatile Organic Compounds 8260C

Precision:	**Yes**	**No**	**N/A**
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?	**Yes**		
Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)			**N/A**
Laboratory Control Spike Duplicates RPD within limits?	**Yes**		

Comments (note deviations):

Field Duplicates	**8260C**	**Sample**	**Duplicate**	**%RPD**	**Qualifiers**	**Associated Samples**
		MW16S-GW090824	**FD04-GW090824**	Acceptable		

MS/MSD	**8260C**	**RPD**	**Limit**	**Qualifiers**	**Associated Samples**
N/A					

LCS/LCSD	**8260C**	**RPD**	**Limits**	**Qualifiers**	**Associated Samples**
Associated samples: 24I027-04 through 24I027-15, 24I027-01					
LCS1W / LCSD1W	Chloroethane	23	20	**J****	**24I027-01, 24I027-04 through 24I027-15**
Associated samples: 24I027-02 and 24I027-03					
LCS2W / LCSD2W					
	Bromomethane	25	20	**J****	**24I027-02, 24I027-03**
	Chloromethane	32	20	**J****	
	Dichlorodifluoromethane	23	20	**J****	
	Trichlorofluoromethane	23	20	**J****	
	Vinyl Chloride	24	20	**J****	**24I027-02, 24I027-03**

**Qualification required for detected results only - associated results nondetect - no qualification required.

Accuracy:	**Yes**	**No**	**N/A**
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)			**N/A**
Laboratory Control Sample criteria met?	**Yes**		
Were the Laboratory Method Blank results all < RL?	**Yes**		
Were the Field Blanks results all < RL?		**No**	
Was the ICAL criteria met?	**Yes**		
Was the CCV criteria met?	**Yes**		
Was the Tuning criteria met?	**Yes**		
Were the Surrogate % recoveries within laboratory determined control limits?	**Yes**		
Were the Internal Standard areas within ± 50 - 150%?	**Yes**		

Comments (note deviations):

Blanks	**8260C**	**Concentration**	**MDL /RL**	**Qualifiers**	**Associated Samples**
MBLK1W		Nondetect			
MBLK2W		Nondetect			

Field Blank	**8260C**	**Concentration**	**MDL /RL**	**Qualifiers**	**Associated Samples**
TB03-GW090924	Acetone	3.2 J	2.5 / 20	None	Sample results nondetect

Surrogates	**8260C**	**%R**	**Limit**	**Qualifiers**	**Associated Samples**
		Acceptable			

MS/MSD	**8260C**	**%R**	**Limit**	**Qualifiers**	**Associated Samples**
N/A					

LCS/LCSD	**8260C**	**%R**	**Limits**	**Qualifiers**	**Associated Samples**
LCS1W / LCSD1W		Acceptable	Acceptable		
LCS2W / LCSD2W		Acceptable	Acceptable		

ICAL	**8260C**	**RRF**	**%RSD**	**Limit**	**Qualifiers**	**Associated Samples**
9/19/2024 11:07		Acceptable	Acceptable			

CCV	**8260C**	**RRF**	**%D**	**Limits**	**Qualifiers**	**Associated Samples**
Associated samples: 24I027-04 through 24I027-15, 24I027-01						
09/21/24 8:05		Acceptable	Acceptable			
Associated samples: 24I027-02 and 24I027-03						
09/22/24 12:45		Acceptable	Acceptable			

Tune	**8260C**
	Acceptable

Internal Standards	**8260C**	**Area**	**Area Lower / Upper Limit**	**Qualifiers**	**Associated Samples**
		Acceptable			

Representativeness:	**Yes**	**No**	**N/A**
Were sampling procedures and design criteria met?	**Yes**		
Were holding times met?	**Yes**		
Was preservation criteria met? (0° C - 6° C)	**Yes**		
Were Chain-of-Custody records complete and provided in data package?	**Yes**		

Comments (note

The cooler temperatures were 3.2 °C, 1.9 °C.

Preservation	**Cooler Temperature (Degrees C)**	**Preservation Criteria**	**Qualifier**	**Associated Samples**
	Acceptable			

Holding Times	**Analyte**	**Days to Extraction**	**HT Criteria**	**Qualifier**	**Associated Samples**
		Acceptable			

Comparability:	**Yes**	**No**	**N/A**
Were analytical procedures and methods followed as defined in the QAPP or field change documentation?	**Yes**		

Comments (note deviations):

Completeness (90%):	**Yes**	**No**	**N/A**
Are all data in this SDG usable?	**Yes**		

Comments (note deviations):

Sensitivity:

	Yes	No	N/A
Are MDLs present and reported?	**Yes**		
Do the reporting limits meet project requirements?	**Yes**		

Comments (note deviations):

Comment:

Data is usable as reported.

Data Validator: *Kristine Molloy* Date: *1/7/2025*

Data Reviewer: Cherie Zakowski Date: 1/9/2025

VA Salt Lake City
Salt Lake City, Utah
Groundwater Validation Report

Sample Delivery Group (SDG) Number: 24I028
Laboratory: EMAX Laboratories, Inc.

Matrix: Groundwater
Collection date: 09/7/2024 09/9/2024
Analysis/Methods:

Volatile Organic Compounds SW 846 8260C

Samples in SDG:

Lab ID	Sample Number	Lab ID	Sample Number
24I028-01	MW13D-GW090724	24I028-11	MW25A-GW090724
24I028-02	MW13L-GW090724	24I028-12	MW25B-GW090724
24I028-03	MW13S-GW090724	24I028-13	MW25C-GW090724
24I028-04	MW18-GW090724	24I028-14	MW26C-GW090724
24I028-05	FD03-GW090724	24I028-15	MW28-GW090724
24I028-06	MW19-GW090724	24I028-16	MW45-GW090724
24I028-07	MW20D-GW090724	24I028-17	FB01-GW090724
24I028-08	FD05-GW090724	24I028-18	EB01-GW090724
24I028-09	FD06-GW090724	24I028-19	TB02-GW090924
24I028-10	MW20S-GW090724		

Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA 2020).

Volatile Organic Compounds 8260C

Precision:

	Yes	No	N/A
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?	**Yes**		
Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)	**Yes**		
Laboratory Control Spike Duplicates RPD within limits?		**No**	

Comments (note deviations):

Field Duplicates	8260C	Sample	Duplicate	%RPD	Qualifiers	Associated Samples
		MW13L-GW090724	**FD03-GW090724**	Acceptable		
		MW18-GW090724	**FD05-GW090724**	Acceptable		
		MW19-GW090724	**FD06-GW090724**	Acceptable		

MS/MSD	8260C	RPD	Limit	Qualifiers	Associated Samples
MW31D-GW090724MS/ MSD (24I028-01)		Acceptable			
MW28-GW090724MS/ MSD (24I028-15)					
	Chloroethane	31	20	**J****	**24I028-15**
	Trichlorotrifluoroethane	31	20	**J****	**24I028-15**

** Qualification required for detected results only - associated results nondetect - no qualification required.

LCS/LCSD	8260C	RPD	Limits	Qualifiers	Associated Samples
LCS1W / LCSD1W		Acceptable			
Associated samples: 24I028-16 through 24I028-19					
LCS2W / LCSD2W					
	Chloroethane	23	20	**J****	**24I028-16 through 24I028-19**

** Qualification required for detected results only - associated results nondetect - no qualification required.

Accuracy:	Yes	No	N/A
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)		**No**	
Laboratory Control Sample criteria met?	**Yes**		
Were the Laboratory Method Blank results all < RL?	**Yes**		
Were the Field Blanks results all < RL?	**Yes**		
Was the ICAL criteria met?	**Yes**		
Was the CCV criteria met?		**No**	
Was the Tuning criteria met?	**Yes**		
Were the Surrogate % recoveries within laboratory determined control limits?	**Yes**		
Were the Internal Standard areas within ± 50 - 150%?	**Yes**		

Comments (note deviations):

Blanks	**8260C**	**Concentration**	**MDL /RL**	**Qualifiers**	**Associated Samples**
MBLK1W		Nondetect			
MBLK2W		Nondetect			

Field Blank	**8260C**	**Concentration**	**MDL /RL**	**Qualifiers**	**Associated Samples**
FB01-GW090724		Nondetect			
EB01-GW090724		Nondetect			
TB02-GW090924		Nondetect			

Surrogates	**8260C**	**%R**	**Limit**	**Qualifiers**	**Associated Samples**
		Acceptable			

MS/MSD	**8260C**	**%R**	**Limit**	**Qualifiers**	**Associated Samples**
MW31D-GW090724MS/ MSD (24I028-01)					
	Styrene	74 / 72	78-122	**J / UJ**	**24I028-01**
	Tetrachloroethene	73 / 72	74-129	**J / UJ**	**24I028-01**
MW28-GW090724MS/ MSD (24I028-15)					
	Styrene	84 / 77	78-123	**J / UJ**	**24I028-15**

LCS/LCSD	**8260C**	**%R**	**Limits**	**Qualifiers**	**Associated Samples**
LCS1W / LCSD1W		Acceptable	Acceptable		
LCS2W / LCSD2W		Acceptable	Acceptable		

ICAL	**8260C**	**RRF**	**%RSD**	**Limit**	**Qualifiers**	**Associated Samples**
9/19/2024 11:07		Acceptable	Acceptable			

3
120
4

CCV	**8260C**	**RRF**	**%D**	**Limits**	**Qualifiers**	**Associated Samples**
Associated samples: 24I028-01 through 24I028-15						
09/20/24 13:56	Vinyl Acetate	Acceptable	37.2	20	**J / UJ**	**24I028-01 through 24I028-15**
	1,2-Dichloroethane	Acceptable	25.5	20		
	1,2-Dichloropropane	Acceptable	20.3	20		
	Bromodichloromethane	Acceptable	23	20		
	Dibromochloromethane	Acceptable	20.5	20		
	1,2-Dibromoethane	Acceptable	21.4	20		
	Bromoform	Acceptable	33.6	25		
	1,1,2,2-Tetrachloroethane	Acceptable	26	25	**J / UJ**	**24I028-01 through 24I028-15**
Associated samples: 24I028-16 through 24I028-19						
09/21/24 8:05	Vinyl Acetate	Acceptable	20.1	20	**J / UJ**	**24I028-16 through 24I028-19**

Tune	**8260C**
	Acceptable

Internal Standards	**8260C**	**Area**	**Area Lower / Upper Limit**	**Qualifiers**	**Associated Samples**
		Acceptable			

Representativeness:	**Yes**	**No**	**N/A**
Were sampling procedures and design criteria met?	**Yes**		
Were holding times met?	**Yes**		
Was preservation criteria met? (0° C - 6° C)	**Yes**		
Were Chain-of-Custody records complete and provided in data package?	**Yes**		

Comments (note

The cooler temperature was 1.9 °C

Preservation	**Cooler Temperature (Degrees C)**	**Preservation Criteria**	**Qualifier**	**Associated Samples**
	Acceptable			

Holding Times	**Analyte**	**Days to Extraction**	**HT Criteria**	**Qualifier**	**Associated Samples**
		Acceptable			

Comparability:	**Yes**	**No**	**N/A**
Were analytical procedures and methods followed as defined in the QAPP or field change documentation?	**Yes**		

Comments (note deviations):

Completeness (90%):	**Yes**	**No**	**N/A**
Are all data in this SDG usable?	**Yes**		

Comments (note deviations):

Sensitivity:	**Yes**	**No**	**N/A**
Are MDLs present and reported?	**Yes**		
Do the reporting limits meet project requirements?	**Yes**		

Comments (note deviations):

Comment:

Data is usable with appropriate qualifiers applied.

Data Validator: *Kristine Molloy* Date: *1/7/2025*

Data Reviewer: Cherie Zakowski Date: 1/11/2025

VA Salt Lake City
Salt Lake City, Utah
Groundwater Validation Report

Sample Delivery Group (SDG) Number: 24I061
Laboratory: EMAX Laboratories, Inc.

Matrix: Groundwater
Collection date: 09/10/2024 09/11/2024
Analysis/Methods:

Volatile Organic Compounds SW 846 8260C

Samples in SDG:

Lab ID	Sample Number	Lab ID	Sample Number
24I061-01	MW14D-GW091024	24I061-11	MW03RA-GW091124
24I061-02	MW14S-GW091024	24I061-12	MW03RB-GW091124
24I061-03	MW27-GW091024	24I061-13	IW01-GW091124
24I061-04	MW29A-GW091024	24I061-14	MW03RC-GW091124
24I061-05	FD07-GW091024	24I061-15	EW01-GW091124
24I061-06	MW29B-GW091024	24I061-16	EB02-GW091124
24I061-07	MW29C-GW091024	24I061-17	TB04-GW091124
24I061-08	MW31A-GW091024	24I061-18	MW08A-GW091024
24I061-09	MW31B-GW091024	24I061-19	MW03RD-GW091124
24I061-10	MW31C-GW091024		

Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA 2020).

Volatile Organic Compounds 8260C

Precision:	**Yes**	**No**	**N/A**
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?		**Yes**	
Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)		**Yes**	
Laboratory Control Spike Duplicates RPD within limits?		**No**	

Comments (note deviations):

Field Duplicates	**8260C**	**Sample**	**Duplicate**	**%RPD**	**Qualifiers**	**Associated Samples**
		MW29A-GW091024	**FD07-GW091024**			
				Acceptable		

MS/MSD	**8260C**	**RPD**	**Limit**	**Qualifiers**	**Associated Samples**
MW03RA-GW091124 MS / MSD (24I061-11)		Acceptable			
MW03RC-GW091124 MS / MSD (24I061-14)		Acceptable			

LCS/LCSD	**8260C**	**RPD**	**Limits**	**Qualifiers**	**Associated Samples**
LCS1W / LCSD1W		Acceptable			
LCS2W / LCSD2W		Acceptable			
LCS3W / LCSD3W		Acceptable			

Accuracy:	**Yes**	**No**	**N/A**
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)		**No**	
Laboratory Control Sample criteria met?		**No**	
Were the Laboratory Method Blank results all < RL?		**Yes**	
Were the Field Blanks results all < RL?		**No**	
Was the ICAL criteria met?		**Yes**	
Was the CCV criteria met?		**No**	
Was the Tuning criteria met?		**Yes**	
Were the Surrogate % recoveries within laboratory determined control limits?		**Yes**	
Were the Internal Standard areas within ± 50 - 150%?		**Yes**	

Comments (note deviations):

Blanks	8260C	Concentration	MDL /RL	Qualifiers	Associated Samples
MBLK1W		Nondetect			
MBLK2W		Nondetect			
MBLK3W		Nondetect			

Field Blank	8260C	Concentration	MDL /RL	Qualifiers	Associated Samples
EB02-GW091124	Acetone	2.9 J	2.5 / 20	U-RL	24I061-03, 24I061-12, 24I061-16
TB04-GW091124		Nondetect			

Surrogates	8260C	%R	Limit	Qualifiers	Associated Samples
		Acceptable			

MS/MSD	8260C	%R	Limit	Qualifiers	Associated Samples
MW03RA-GW091124 MS / MSD					
(24I061-11)	1,1,2-Trichloroethane	122 / 124	80-119	J**	24I061-11
	1,2,4-Trimethylbenzene	66 / 67	76-124	J / UJ	24I061-11
	1,2-Dichloropropane	125 / 125	78-122	J**	24I061-11
	1,3,5-Trimethylbenzene	65 / 64	75-124	J / UJ	24I061-11
MW03RC-GW091124 MS / MSD					
(24I061-14)	1,2,4-Trimethylbenzene	67 / 72	76-124	J / UJ	24I061-14
	1,2-Dichloropropane	119 / 123	78-122	J**	24I061-14
	1,3,5-Trimethylbenzene	64 / 65	75-124	J / UJ	24I061-14

**Qualification required for detected results only - associated results nondetect - no qualification required

LCS/LCSD	8260C	%R	Limits	Qualifiers	Associated Samples
Associated samples: 24I061-01 through 24I061-11, 24I061-15 through 24I061-18					
LCS1W / LCSD1W	1,1,2-Trichloroethane	123 / 121	80-119	J**	24I061-01 through 24I061-11, 24I061-15 through 24I061-18
	1,2,4-Trimethylbenzene	74 / 73	76-124	J / UJ	
	1,2-Dichloropropane	125 / 127	78-122	J**	
	1,3,5-Trimethylbenzene	66 / 70	75-124	J / UJ	
	tert-Butyl Methyl Ether	123 / 127	71-124	J**	
Associated samples: 24I061-12 through 24I061-14, 24I061-19					
LCS2W / LCSD2W	1,1,2-Trichloroethane	116 / 122	80-119	J**	24I061-12 through 24I061-14, 24I061-19
	1,2,4-Trimethylbenzene	76 / 74	76-124	J / UJ	
	1,2-Dichloropropane	125 / 125	78-122	J**	
	1,3,5-Trimethylbenzene	71 / 72	75-124	J / UJ	
	tert-Butyl Methyl Ether	120 / 125	71-124	J**	
	Styrene	119 / 124	78-123	J**	
Associated samples: 24I061-12 (Tetrachloroethane only)					
LCS3W / LCSD3W		Acceptable			

** Qualification required for detected results only - associated results nondetect - no qualification required

ICAL	8260C	RRF	%RSD	Limit	Qualifiers	Associated Samples
8/9/2024 17:28		Acceptable	Acceptable			

CCV	8260C	RRF	%D	Limits	Qualifiers	Associated Samples
Associated samples: 24I061-01 through 24I061-11, 24I061-15 through 24I061-18						
09/24/24 1:33	1,2-Dichloropropane	Acceptable	26.8	20	J / UJ	24I061-01 through 24I061-11, 24I061-15 through 24I061-18
	1,1,2-Trichloroethane	Acceptable	23.6	20	J / UJ	
	1,3,5-Trimethylbenzene	Acceptable	31.3	30	J / UJ	
Associated samples: 24I061-12 through 24I061-14, 24I061-19						
09/24/24 13:24	1,2-Dichloropropane	Acceptable	21.0	20	J / UJ	24I061-12 through 24I061-14, 24I061-19
	cis-1,3-Dichloropropene	Acceptable	20.3	20	J / UJ	
	1,3,5-Trimethylbenzene	Acceptable	31.1	30	J / UJ	
Associated samples: 24I061-12 (Tetrachloroethane only)						
09/25/24 4:48		Acceptable	Acceptable			

Tune	**8260C**				
	Acceptable				

Internal Standards	**8260C**	**Area**	**Area Lower / Upper Limit**	**Qualifiers**	**Associated Samples**
		Acceptable			

Representativeness:	**Yes**	**No**	**N/A**
Were sampling procedures and design criteria met?	**Yes**		
Were holding times met?	**Yes**		
Was preservation criteria met? (0° C - 6° C)	**Yes**		
Were Chain-of-Custody records complete and provided in data package?	**Yes**		

Comments (note

The cooler temperature was 3.1°C

Preservation	**Cooler Temperature (Degrees C)**	**Preservation Criteria**	**Qualifier**	**Associated Samples**
	Acceptable			

Holding Times	**Analyte**	**Days to Extraction**	**HT Criteria**	**Qualifier**	**Associated Samples**
		Acceptable			

Comparability:	**Yes**	**No**	**N/A**
Were analytical procedures and methods followed as defined in the QAPP or field change documentation?	**Yes**		

Comments (note deviations):

Completeness (90%):	**Yes**	**No**	**N/A**
Are all data in this SDG usable?	**Yes**		

Comments (note deviations):

Sensitivity:	**Yes**	**No**	**N/A**
Are MDLs present and reported?	**Yes**		
Do the reporting limits meet project requirements?	**Yes**		

Comments (note deviations):

Comment:

Sample results for tetrachloroethene for sample 24I061-12 were run at a dilution. The diluted results should be used for these analytes in place of the initial results.

Data is usable with appropriate qualifiers applied.

Data Validator: *Kristine Molloy* Date: *1/8/2025*

Data Reviewer: Cherie Zakowski Date: 1/11/2025

VA Salt Lake City
Salt Lake City, Utah
Groundwater Validation Report

Sample Delivery Group (SDG) Number: 24I062
Laboratory: EMAX Laboratories, Inc.

Matrix: Groundwater
Collection date: 09/11/24
Analysis/Methods:

Dissolved Gases - RSK 175
Wet Chemistry
Chloride E300.0
Sulfate E300.0
Alkalinity SM2320B
Nitrate / Nitrite SM 4500
TOC SW 9060

Samples in SDG:

Lab ID	Sample Number	Lab ID	Sample Number
I062-01	MW03RA-GW091124	I062-03	MW03RB-GW091124
I062-02	IW01-GW091124	I062-04	EW01-GW091124

Data validation was performed in accordance with the specific analytical methods, the National Functional Guidelines for Organic Superfund Methods Data Review (EPA 2020), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA 2020).

Dissolved Gases RSK175

Precision:

	Yes	No	N/A
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?			**N/A**
Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)			**Yes**
Laboratory Control Spike Duplicates RPD within limits?			**Yes**

Comments (note deviations):

Field Duplicates	RSK-175	Sample	Duplicate	%RPD	Qualifiers	Associated Samples
N/A						

MS/MSD	RSK-175	RPD	Limit	Qualifiers	Associated Samples
MW03RA-GW091124 (I062-01J)		Acceptable			

LCS/LCSD	RSK-175	RPD	Limits	Qualifiers	Associated Samples
LCS1W / LCSD1W		Acceptable			

Accuracy:

	Yes	No	N/A
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)			**Yes**
Laboratory Control Sample criteria met?			**Yes**
Were the Laboratory Method Blank results all < RL?			**Yes**
Were the Field Blanks results all < RL?			**N/A**
Was the ICAL criteria met?			**Yes**
Was the CCV criteria met?			**Yes**
Was the Tuning criteria met?			**N/A**
Were the Surrogate % recoveries within laboratory determined control limits?			**N/A**
Were the Internal Standard areas within ± 50 - 150%?			**N/A**

Comments (note deviations):

Blanks	RSK-175	Concentration	MDL /RL	Qualifiers	Associated Samples
MBLK1W		Nondetect			

Field Blank	RSK-175	Concentration	MDL /RL	Qualifiers	Associated Samples
N/A					

Surrogates	RSK-175	%R	Limit	Qualifiers	Associated Samples
N/A					

MS/MSD	RSK-175	%R	Limit	Qualifiers	Associated Samples
MW03RA-GW091124 (I062-01J)		Acceptable			

LCS/LCSD	RSK-175	%R	Limits	Qualifiers	Associated Samples
LCS1W / LCSD1W		Acceptable			

ICAL	RSK-175	RRF	%RSD	Limit	Qualifiers	Associated Samples
8/10/2023 11:25		Acceptable	Acceptable			

CCV	RSK-175	RRF	%D	Limits	Qualifiers	Associated Samples
08/10/23 12:03		Acceptable	Acceptable			

Tune	RSK-175
N/A	

Internal Standards	RSK-175	Area	Area Lower / Upper Limit	Qualifiers	Associated Samples
N/A					

Wet Chemistry (Chloride EPA 300.0 / Sulfate EPA 300.0 / Alkalinity SM 2320B)

Precision:	Yes	No	N/A
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?			N/A
Are the matrix spike duplicates RPD ≤ 20%?			Yes
Are the laboratory control spike duplicates RPD ≤ 20%?			Yes

Comments (note deviations):

Field Duplicates	Analyte	Sample	Duplicate	RPD %	Qualifiers	Associated Samples
N/A						

MS / MSD	Analyte	RPD %	Qualifiers	Associated Samples
MW03RA-GW091124 (I062-01J)		Acceptable		

LCS / LCSD	Analyte	RPD %	Qualifiers	Associated Samples
		Acceptable		

Laboratory Duplicates	Analyte	Sample	Duplicate	RPD %	Qualifiers	Associated Samples
	Sulfate	91.4	114	22	**J/UJ**	**All samples**

Accuracy:	Yes	No	N/A
Were serial dilutions analyzed and within control limits of ±20% for waters (± for 25% for soils) or initial sample result less than 50x MDL?			N/A
Was matrix spike criteria met (frequency 20% and % recovery 75-125%)?			No
Was post digestion spike criteria met (if applicable)?			N/A
Was laboratory control sample criteria met?			Yes
Was laboratory blank criteria met (within control limits)?			Yes
Were ICV/CCV % recoveries within 90-110%?			Yes
Were the Detection Limit PQL Standards within 70-130?			N/A
Was the %D on form 15-IN for the initial calibration instrument response and concentration data <30%?			N/A
Were ICSA/ICSAB % recoveries acceptable or within CRQL criteria?			N/A
Was the tune %RSD <5% ?			N/A
Was internal standard criteria met?			N/A

Comments (note deviations):

Serial Dilution	Analyte	Initial Sample Result	%D	50 x MDL	Qualifiers	Associated Samples
N/A						

MS / MSD	Analyte	%R	Limits	Post Digestion % R	Qualifiers	Associated Samples
MW03RA-GW091124 (I062-01J)	Chloride	83	87-111	NR	J- / UJ	All samples

LCS / LCSD**	Analyte	%R	Limits	Qualifiers	Associated Samples
		Acceptable			

** Several LCS/LCSDs were analyzed - sample results were nondetect unless noted above.

ICV/CCV	%R	Limits	Qualifiers	Associated Samples
	Acceptable			

Blanks Note: ICBs and Prep blanks are associated with all samples. Individual CCBs are associated with specific samples.

Prep Blank	Analyte	Result	MDL/RL	Qualifiers	Associated Samples
MBLK1W**		Nondetect			

** Several MBs were analyzed - sample results were nondetect unless noted above.

ICB / CCB**	Result
	Nondetect

** Several ICBs / CCBs were analyzed - sample results were nondetect unless noted above.

Field Blank	Analyte	Result	RL	Qualifiers	Associated Samples
N/A					

ICSA/AB

Analyte - Solution A / AB	%R	Found Sol. A / True A	MDL/RL	Qualifiers	Associated Samples
N/A					

PQL Standard Check	%R	Limits	Qualifiers	Associated Samples
N/A				

Tune	Analyte	%RSD	Limits	Qualifiers	Associated Samples
N/A					

Internal Standard (IS) Standard / Element	Analyte	%R	Affected Analyte	Limits	Qualifiers	Associated Samples
N/A						

Initial Calibration %D (Form 15)	Analyte	%D	Limits	Qualifiers	Associated Samples
N/A					

Representativeness:	Yes	No	N/A
Were sampling procedures and design criteria met?	Yes		
Were holding times met?	Yes		
Was preservation criteria met? (0° C - 6° C)	Yes		
Were Chain-of-Custody records complete and provided in data package?	Yes		

Comments (note deviations):

The cooler temperature was 1.1 °C

Preservation	Cooler Temperature (Degrees C)	Preservation Criteria	Qualifier	Associated Samples
	Acceptable			

Holding Times	Analyte	Days to Analysis	HT Criteria	Qualifier	Associated Samples
		Acceptable			

Comparability: Yes No N/A

Were analytical procedures and methods followed as defined in the QAPP or field change documentation? **Yes**

Comments (note deviations):

Completeness (90%): Yes No N/A

Are all data in this SDG usable? **Yes**

Comments (note deviations):

Sensitivity: Yes No N/A

Are MDLs present and reported? **Yes**

Do the reporting limits meet project requirements? **Yes**

Comments (note deviations):

Comment:

Data is usable with appropriate qualifiers applied.

Data Validator: Kristine Molloy Date: 1/11/2025

Data Reviewer: Cherie Zakowski Date: 1/12/2025

VA Salt Lake City
Salt Lake City, Utah
Groundwater Validation Report

Sample Delivery Group (SDG) Number: 24I077
Laboratory: EMAX Laboratories, Inc.

Matrix: Groundwater
Collection date: 09/12/2024 09/13/2024
Analysis/Methods:

Volatile Organic Compounds SW 846 8260C
Dissolved Gases - RSK 175
Wet Chemistry
Chloride E300.0
Sulfate E300.0
Alkalinity SM2320B
Nitrate / Nitrite SM 4500
TOC SW 9060

Samples in SDG:

Lab ID	Sample Number	Lab ID	Sample Number
24I077-01	MW23A-GW091224	24I077-06	EB03-GW091324
24I077-02	MW23B-GW091224	24I077-07	MW42S-GW091224
24I077-03	MW23C-GW091224	24I077-08	MW08C-GW091324
24I077-04	MW32B-GW091224	24I077-09	MW26B-GW091324
24I077-05	TB05-GW091324		

Data validation was performed in accordance with the specific analytical methods, the National Functional Guidelines for Organic Superfund Methods Data Review (EPA 2020), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA 2020).

Volatile Organic Compounds 8260C

Precision:	**Yes**	**No**	**N/A**
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?			**N/A**
Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)			**N/A**
Laboratory Control Spike Duplicates RPD within limits?	**Yes**		

Comments (note deviations):

Field Duplicates	**8260C**	**Sample**	**Duplicate**	**%RPD**	**Qualifiers**	**Associated Samples**
N/A						

MS/MSD	**8260C**	**RPD**	**Limit**	**Qualifiers**	**Associated Samples**
N/A					

LCS/LCSD	**8260C**	**RPD**	**Limits**	**Qualifiers**	**Associated Samples**
LCS1W / LCSD1W		Acceptable			
LCS2W / LCSD2W		Acceptable			

Accuracy:	**Yes**	**No**	**N/A**
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)			**N/A**
Laboratory Control Sample criteria met?		**No**	
Were the Laboratory Method Blank results all < RL?	**Yes**		
Were the Field Blanks results all < RL?		**No**	
Was the ICAL criteria met?	**Yes**		
Was the CCV criteria met?	**Yes**		
Was the Tuning criteria met?	**Yes**		
Were the Surrogate % recoveries within laboratory determined control limits?	**Yes**		
Were the Internal Standard areas within ± 50 - 150%?	**Yes**		

Comments (note deviations):

Blanks	**8260C**	**Concentration**	**MDL /RL**	**Qualifiers**	**Associated Samples**
MBLK1W		Nondetect			
MBLK2W		Nondetect			

Field Blank	8260C	Concentration	MDL /RL	Qualifiers	Associated Samples
EB03-GW091324	Acetone	4.6 J	2.5 / 20	None	Sample results nondetect
TB05-GW091324		Nondetect			

Surrogates	8260C	%R	Limit	Qualifiers	Associated Samples
		Acceptable			

MS/MSD	8260C	%R	Limit	Qualifiers	Associated Samples
N/A					

LCS/LCSD	8260C	%R	Limits	Qualifiers	Associated Samples
Associated samples: 24I077-05, 24I077-03					
LCS1W / LCSD1W	1,1,2-Trichloroethane	134 / 135	80-119	J**	24I077-05, 24I077-03
	1,2-Dichloropropane	139 / 136	78-122	J**	
	Benzene	126 / 125	79-120	J**	
	Bromochloromethane	125 / 122	78-120	J**	
	Dibromochloromethane	130 / 129	74-126	J**	
	4-Methyl-2-pentanone	130 / 131	67-130	J**	
	tert-Butyl-methyl ether	138 / 134	71-124	J**	
	o-Xylene	127 / 123	78-122	J**	
	Styrene	126 / 123	78-123	J**	
	cis-1,3-Dichloropropene	125 / 124	75-124	J**	
	1,2-Dibromomethane	124 / 120	77-121	J**	24I077-05, 24I077-03
Associated samples: 24I077-01, 24I077-02, 24I077-04, 24I077-06 through 24I077-09					
LCS2W / LCSD2W	1,1,2-Trichloroethane	127 / 126	80-119	J**	
	1,2-Dichloropropane	132 / 122	78-122	J**	
	Benzene	125 / 118	79-120	J**	
	tert-Butyl-methyl ether	132 / 118	71-124	J**	24I077-01, 24I077-02, 24I077-04, 24I077-06, through, 24I077-09
	o-Xylene	124 / 120	78-122	J	
	Styrene	125 / 121	78-123	J**	
	cis-1,3-Dichloropropene	128 / 118	75-124	J**	

**Qualification required for detected results only - associated results nondetect - no qualification required.

ICAL	8260C	RRF	%RSD	Limit	Qualifiers	Associated Samples
8/9/2024 17:28		Acceptable	Acceptable			

CCV	8260C	RRF	%D	Limits	Qualifiers	Associated Samples
Associated samples: 24I077-05, 24I077-03						
09/26/24 7:08	Carbon Disulfide	Acceptable	28.1	25	J / UJ	24I077-05, 24I077-03
	tert-Butyl Methyl Ether	Acceptable	34.6	25		
	Vinyl Acetate	Acceptable	28.6	20		
	1,1-Dichloroethane	Acceptable	26.1	20		
	cis-1,2-Dichloroethene	Acceptable	23.4	20		
	Chloroform	Acceptable	25.5	20		
	Bromochloromethane	Acceptable	24.9	20		
	Benzene	Acceptable	30.2	20		
	1,2-Dichloropropane	Acceptable	38.7	20		
	Bromodichloromethane	Acceptable	27.8	20		
	cis-1,3-Dichloropropene	Acceptable	29.0	20		
	Toluene	Acceptable	25.1	20		
	trans-1,3-Dichloropropene	Acceptable	24.6	20		
	1,1,2-Trichloroethane	Acceptable	34.6	20		
	Dibromochloromethane	Acceptable	30.0	20		
	1,2-Dibromomethane	Acceptable	21.1	20		
	o-Xylene	Acceptable	26.6	25	J / UJ	24I077-05, 24I077-03
Associated samples: 24I077-01, 24I077-02, 24I077-04, 24I077-06 through 24I077-09						
09/26/24 7:44	Vinyl Acetate	Acceptable	39.8	20	J / UJ	24I077-01, 24I077-02, 24I077-04, 24I077-06, through 24I077-09
	Benzene	Acceptable	20.9	20	J / UJ	
	1,2-Dichloropropane	Acceptable	21.6	20	J / UJ	

Tune	**8260C**	
	Acceptable	

Internal Standards	**8260C**	**Area**	**Area Lower / Upper Limit**	**Qualifiers**	**Associated Samples**
		Acceptable			

Dissolved Gases RSK175

Precision:	**Yes**	**No**	**N/A**
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?			**N/A**
Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)			**N/A**
Laboratory Control Spike Duplicates RPD within limits?	**Yes**		

Comments (note deviations):

Field Duplicates	**RSK-175**	**Sample**	**Duplicate**	**%RPD**	**Qualifiers**	**Associated Samples**
N/A						

MS/MSD	**RSK-175**	**RPD**	**Limit**	**Qualifiers**	**Associated Samples**
N/A					

LCS/LCSD	**RSK-175**	**RPD**	**Limits**	**Qualifiers**	**Associated Samples**
LCS1W / LCSD1W		Acceptable			

Accuracy:	**Yes**	**No**	**N/A**
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)			**N/A**
Laboratory Control Sample criteria met?	**Yes**		
Were the Laboratory Method Blank results all < RL?	**Yes**		
Were the Field Blanks results all < RL?	**Yes**		
Was the ICAL criteria met?	**Yes**		
Was the CCV criteria met?	**Yes**		
Was the Tuning criteria met?			**N/A**
Were the Surrogate % recoveries within laboratory determined control limits?			**N/A**
Were the Internal Standard areas within ± 50 - 150%?			**N/A**

Comments (note deviations):

Blanks	**RSK-175**	**Concentration**	**MDL /RL**	**Qualifiers**	**Associated Samples**
MBLK1W		Nondetect			

Field Blank	**RSK-175**	**Concentration**	**MDL /RL**	**Qualifiers**	**Associated Samples**
N/A					

Surrogates	**RSK-175**	**%R**	**Limit**	**Qualifiers**	**Associated Samples**
N/A					

MS/MSD	**RSK-175**	**%R**	**Limit**	**Qualifiers**	**Associated Samples**
N/A					

LCS/LCSD	**RSK-175**	**%R**	**Limits**	**Qualifiers**	**Associated Samples**
LCS1W / LCSD1W		Acceptable			

ICAL	**RSK-175**	**RRF**	**%RSD**	**Limit**	**Qualifiers**	**Associated Samples**	
8/10/2023 11:25		Acceptable	Acceptable				

CCV	**RSK-175**	**RRF**	**%D**	**Limits**	**Qualifiers**	**Associated Samples**
08/10/23 12:03		Acceptable	Acceptable			

Tune	RSK-175
N/A	

Internal Standards	RSK-175	Area	Area Lower / Upper Limit	Qualifiers	Associated Samples
N/A					

Wet Chemistry (Chloride EPA 300.0 / Sulfate EPA 300.0 / Alkalinity SM 2320B)

Precision:	Yes	No	N/A
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?			N/A
Are the matrix spike duplicates RPD ≤ 20%?			N/A
Are the laboratory control spike duplicates RPD ≤ 20%?	Yes		

Comments (note deviations):

Field Duplicates	Analyte	Sample	Duplicate	RPD %	Qualifiers	Associated Samples
N/A						

MS / MSD	Analyte	RPD %	Qualifiers	Associated Samples
N/A				

LCS / LCSD	Analyte	RPD %	Qualifiers	Associated Samples
		Acceptable		

Accuracy:	Yes	No	N/A
Were serial dilutions analyzed and within control limits of ±20% for waters (± for 25% for soils) or initial sample result less than 50x MDL?			N/A
Was matrix spike criteria met (frequency 20% and % recovery 75-125%)?			N/A
Was post digestion spike criteria met (if applicable)?			N/A
Was laboratory control sample criteria met?	Yes		
Was laboratory blank criteria met (within control limits)?	Yes		
Were ICV/CCV % recoveries within 90-110%?	Yes		
Were the Detection Limit PQL Standards within 70-130?			N/A
Was the %D on form 15-IN for the initial calibration instrument response and concentration data <30%?			N/A
Were ICSA/ICSAB % recoveries acceptable or within CRQL criteria?			N/A
Was the tune %RSD <5% ?			N/A
Was internal standard criteria met?			N/A

Comments (note deviations):

Serial Dilution	Analyte	Initial Sample Result	%D	50 x MDL	Qualifiers	Associated Samples
N/A						

MS / MSD	Analyte	%R	Limits	Post Digestion % R	Qualifiers	Associated Samples
N/A						

LCS / LCSD**	Analyte	%R	Limits	Qualifiers	Associated Samples
		Acceptable			

** Several LCS/LCSDs were analyzed - sample results were nondetect unless noted above.

ICV/CCV	%R	Limits	Qualifiers	Associated Samples
	Acceptable			

Blanks **Note: ICBs and Prep blanks are associated with all samples. Individual CCBs are associated with specific samples.**

Prep Blank	Analyte	Result	MDL/RL	Qualifiers	Associated Samples
MBLK1W**		Nondetect			

** Several MBs were analyzed - sample results were nondetect unless noted above.

ICB / CCB**	Result
	Nondetect

** Several ICBs / CCBs were analyzed - sample results were nondetect unless noted above.

Field Blank	Analyte	Result	RL	Qualifiers	Associated Samples
N/A					

ICSA/AB Analyte - Solution A / AB	%R	Found Sol. A / True A	MDL/RL	Qualifiers	Associated Samples
N/A					

PQL Standard Check	%R	Limits	Qualifiers	Associated Samples
N/A				

Tune	Analyte	%RSD	Limits	Qualifiers	Associated Samples
N/A					

Internal Standard (IS) Standard / Element	Analyte	%R	Affected Analyte	Limits	Qualifiers	Associated Samples
N/A						

Initial Calibration %D (Form 15)	Analyte	%D	Limits	Qualifiers	Associated Samples
N/A					

Representativeness:	Yes	No	N/A
Were sampling procedures and design criteria met?	Yes		
Were holding times met?	Yes		
Was preservation criteria met? (0° C - 6° C)	Yes		
Were Chain-of-Custody records complete and provided in data package?	Yes		

Comments (note deviations):

The cooler temperature was 3.6 °C

Preservation	Cooler Temperature (Degrees C)	Preservation Criteria	Qualifier	Associated Samples
	Acceptable			

Holding Times	Analyte	Days to Analysis	HT Criteria	Qualifier J / UJ	Associated Samples
	All VOC Analytes	15	14 days		24I077-04 (Reanal.), 24I077-07 (Reanal.)

Comparability:	Yes	No	N/A
Were analytical procedures and methods followed as defined in the QAPP or field change documentation?	Yes		

Comments (note deviations):

Completeness (90%):	Yes	No	N/A
Are all data in this SDG usable?	Yes		

Comments (note deviations):

Sensitivity:	Yes	No	N/A
Are MDLs present and reported?	Yes		
Do the reporting limits meet project requirements?	Yes		

Comments (note deviations):

Comment:

Data is usable with appropriate qualifiers applied.

Data Validator: Kristine Molloy Date: 1/9/2025

Data Reviewer: Cherie Zakowski Date: 1/13/2025

VA Salt Lake City
Salt Lake City, Utah
Groundwater Validation Report

Sample Delivery Group (SDG) Number: 24J033
Laboratory: EMAX Laboratories, Inc.

Matrix: Groundwater
Collection date: 09/30/2024 10/1/2024 10/2/2024
Analysis/Methods:

Volatile Organic Compounds SW 846 8260C
Dissolved Gases - RSK 175
Wet Chemistry
Chloride E300.0
Sulfate E300.0
Alkalinity SM2320B
Nitrate / Nitrite SM 4500
TOC SW 9060

Samples in SDG:

Lab ID	Sample Number	Lab ID	Sample Number
24J033-01	MW40S-GW093024	24J033-06	MW44S-GW100124
24J033-02	MW40D-GW093024	24J033-07	MW42D-GW100224
24J033-03	MW43S-GW100124	24J033-08	FD10-GW100224 **
24J033-04	MW43D-GW100124	24J033-09	TB06-GW100224
24J033-05	MW44D-GW100124		

** The laboratory incorrectly identified the sample as FB10-GW100224 - the correct sample ID is FD10-GW100224 as indicated on the COC.

Data validation was performed in accordance with the specific analytical methods, the National Functional Guidelines for Organic Superfund Methods Data Review (EPA 2020), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA 2020).

Volatile Organic Compounds 8260C

Precision:	**Yes**	**No**	**N/A**
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?	**Yes**		
Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)	**Yes**		
Laboratory Control Spike Duplicates RPD within limits?	**Yes**		

Comments (note deviations):

Field Duplicates	**8260C**	**Sample**	**Duplicate**	**%RPD**	**Qualifiers**	**Associated Samples**
		MW42D-GW100224	**FD10-GW100224**	Acceptable		

MS/MSD	**8260C**	**RPD**	**Limit**	**Qualifiers**	**Associated Samples**
FD10-GW100224 MS/MSD		Acceptable			

LCS/LCSD	**8260C**	**RPD**	**Limits**	**Qualifiers**	**Associated Samples**
LCS1W / LCSD1W		Acceptable			
LCS2W		Acceptable			

Accuracy:	**Yes**	**No**	**N/A**
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)	**Yes**		
Laboratory Control Sample criteria met?		**No**	
Were the Laboratory Method Blank results all < RL?	**Yes**		
Were the Field Blanks results all < RL?			**N/A**
Was the ICAL criteria met?	**Yes**		
Was the CCV criteria met?	**Yes**		
Was the Tuning criteria met?	**Yes**		
Were the Surrogate % recoveries within laboratory determined control limits?	**Yes**		
Were the Internal Standard areas within ± 50 - 150%?	**Yes**		

Comments (note deviations):

Blanks	**8260C**	**Concentration**	**MDL /RL**	**Qualifiers**	**Associated Samples**
MBLK1W		Nondetect			
MBLK2W		Nondetect			

Field Blank	8260C	Concentration	MDL /RL	Qualifiers	Associated Samples
TB06-GW100224		Nondetect			

Surrogates	8260C	%R	Limit	Qualifiers	Associated Samples
		Acceptable			

MS/MSD	8260C	%R	Limit	Qualifiers	Associated Samples
FD10-GW100224 MS/MSD		Acceptable			

LCS/LCSD	8260C	%R	Limits	Qualifiers	Associated Samples
Associated samples: All samples					
LCS1W / LCSD1W	1,1,2-Trichloroethane	121 / 123	80-119	J**	All samples
	1,2-Dichloropropane	128 / 129	78-122	J**	
	Benzene	127 / 129	79-120	J**	
	Bromochloromethane	119 / 122	78-120	J**	
	Methylene Chloride	125 / 127	74-124	J**	
	tert-Butyl-methyl ether	137 / 140	71-124	J**	
	o-Xylene	129 / 136	78-122	J**	
	Styrene	135 / 143	78-123	J**	
	Toluene	126 / 128	75-124	J	All samples
Associated samples: 24J033-04 (Tetrachloroethene only)					
LCS2W		Acceptable			

**Qualification required for detected results only - associated results nondetect - no qualification required.

ICAL	8260C	RRF	%RSD	Limit	Qualifiers	Associated Samples
8/9/2024 17:28		Acceptable	Acceptable			
Associated samples: 24J033-04 (Tetrachloroethene only)						
9/19/2024 11:07		Acceptable	Acceptable			

CCV	8260C	RRF	%D	Limits	Qualifiers	Associated Samples
Associated samples: All samples						
10/09/24 16:34	Benzene	Acceptable	23.0	20	J / UJ	All samples
	1,2-Dichloropropane	Acceptable	20.4	20	J / UJ	All samples
	Toluene	Acceptable	21.9	20	J / UJ	All samples
	o-Xylene	Acceptable	30.3	25	J / UJ	All samples
	Styrene	Acceptable	37.6	25	J / UJ	All samples
	Bromoform	Acceptable	28.3	25	J / UJ	All samples
	tert-Butyl-methyl ether	Acceptable	27.6	25	J / UJ	All samples
	Dichlorofluoromethane	Acceptable	70.1	40	J / UJ	All samples
Associated samples: 24J033-04 (Tetrachloroethene only)						
10/11/24 15:48		Acceptable	Acceptable			

Tune	8260C
	Acceptable

Internal Standards	8260C	Area	Area Lower / Upper Limit	Qualifiers	Associated Samples
		Acceptable			

Dissolved Gases RSK175

Precision:	Yes	No	N/A
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?			N/A
Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)			N/A
Laboratory Control Spike Duplicates RPD within limits?	Yes		

Comments (note deviations):

Field Duplicates	RSK-175	Sample	Duplicate	%RPD	Qualifiers	Associated Samples
N/A						

MS/MSD	RSK-175	RPD	Limit	Qualifiers	Associated Samples
N/A					

LCS/LCSD	RSK-175	RPD	Limits	Qualifiers	Associated Samples
LCS1W / LCSD1W		Acceptable			

Accuracy:	Yes	No	N/A
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)			N/A
Laboratory Control Sample criteria met?			Yes
Were the Laboratory Method Blank results all < RL?			Yes
Were the Field Blanks results all < RL?			N/A
Was the ICAL criteria met?			Yes
Was the CCV criteria met?			Yes
Was the Tuning criteria met?			N/A
Were the Surrogate % recoveries within laboratory determined control limits?			N/A
Were the Internal Standard areas within ± 50 - 150%?			N/A

Comments (note deviations):

Blanks	RSK-175	Concentration	MDL /RL	Qualifiers	Associated Samples
MBLK1W		Nondetect			

Field Blank	RSK-175	Concentration	MDL /RL	Qualifiers	Associated Samples
N/A					

Surrogates	RSK-175	%R	Limit	Qualifiers	Associated Samples
N/A					

MS/MSD	RSK-175	%R	Limit	Qualifiers	Associated Samples
N/A					

LCS/LCSD	RSK-175	%R	Limits	Qualifiers	Associated Samples
LCS1W / LCSD1W		Acceptable			

ICAL	RSK-175	RRF	%RSD	Limit	Qualifiers	Associated Samples
8/10/2023 11:25		Acceptable	Acceptable			

CCV	RSK-175	RRF	%D	Limits	Qualifiers	Associated Samples
08/10/23 12:03		Acceptable	Acceptable			

Tune	RSK-175
N/A	

Internal Standards	RSK-175	Area	Area Lower / Upper Limit	Qualifiers	Associated Samples
N/A					

Wet Chemistry (Chloride EPA 300.0 / Sulfate EPA 300.0 / Alkalinity SM 2320B)

Precision:	Yes	No	N/A
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?		No	
Are the matrix spike duplicates RPD ≤ 20%?		Yes	
Are the laboratory control spike duplicates RPD ≤ 20%?		Yes	

Comments (note deviations):

Field Duplicates	Analyte	Sample	Duplicate	RPD %	Qualifiers	Associated Samples
	Sulfate	215	149	NC	J**	24J033-07 & 24J033-08

** Abs Diff. > RL

MS / MSD	Analyte	RPD %	Qualifiers	Associated Samples
FD10-GW100224 (24J033-08)		Acceptable		

LCS / LCSD	Analyte	RPD %	Qualifiers	Associated Samples
		Acceptable		

Accuracy:	Yes	No	N/A
Were serial dilutions analyzed and within control limits of ±20% for waters (± for 25% for soils) or initial sample result less than 50x MDL?			N/A
Was matrix spike criteria met (frequency 20% and % recovery 75-125%)?	Yes		
Was post digestion spike criteria met (if applicable)?			N/A
Was laboratory control sample criteria met?	Yes		
Was laboratory blank criteria met (within control limits)?	Yes		
Were ICV/CCV % recoveries within 90-110%?	Yes		
Were the Detection Limit PQL Standards within 70-130?			N/A
Was the %D on form 15-IN for the initial calibration instrument response and concentration data <30%?			N/A
Were ICSA/ICSAB % recoveries acceptable or within CRQL criteria?			N/A
Was the tune %RSD <5% ?			N/A
Was internal standard criteria met?			N/A

Comments (note deviations):

Serial Dilution	Analyte	Initial Sample Result	%D	50 x MDL	Qualifiers	Associated Samples
N/A						

MS / MSD	Analyte	%R	Limits	Post Digestion % R	Qualifiers	Associated Samples
FD10-GW100224 (24J033-08)		Acceptable				

LCS / LCSD**	Analyte	%R	Limits	Qualifiers	Associated Samples
		Acceptable			

** Several LCS/LCSDs were analyzed - sample results were nondetect unless noted above.

ICV/CCV	%R	Limits	Qualifiers	Associated Samples
	Acceptable			

Blanks **Note: ICBs and Prep blanks are associated with all samples. Individual CCBs are associated with specific samples.**

Prep Blank	Analyte	Result	MDL/RL	Qualifiers	Associated Samples
MBLK1W**		Nondetect			

** Several MBs were analyzed - sample results were nondetect unless noted above.

ICB / CCB**	Result
	Nondetect

** Several ICBs / CCBs were analyzed - sample results were nondetect unless noted above.

Field Blank	Analyte	Result	RL	Qualifiers	Associated Samples
N/A					

ICSA/AB

Analyte - Solution A / AB	%R	Found Sol. A / True A	MDL/RL	Qualifiers	Associated Samples
N/A					

PQL Standard Check	%R	Limits	Qualifiers	Associated Samples
N/A				

Tune	Analyte	%RSD	Limits	Qualifiers	Associated Samples
N/A					

Internal Standard (IS) Standard / Element	Analyte	%R	Affected Analyte	Limits	Qualifiers	Associated Samples
N/A						

Initial Calibration %D (Form 15)	Analyte	%D	Limits	Qualifiers	Associated Samples
N/A					

Representativeness:	Yes	No	N/A
Were sampling procedures and design criteria met?	Yes		
Were holding times met?	Yes		
Was preservation criteria met? (0° C - 6° C)	Yes		
Were Chain-of-Custody records complete and provided in data package?	Yes		

Comments (note deviations):

The cooler temperature was 4.6 °C

Preservation	Cooler Temperature (Degrees C)	Preservation Criteria	Qualifier	Associated Samples
	Acceptable			

Holding Times	Analyte	Days to Analysis	HT Criteria	Qualifier	Associated Samples
		Acceptable			

Comparability:	Yes	No	N/A
Were analytical procedures and methods followed as defined in the QAPP or field change documentation?	Yes		

Comments (note deviations):

Completeness (90%):	Yes	No	N/A
Are all data in this SDG usable?	Yes		

Comments (note deviations):

Sensitivity:	Yes	No	N/A
Are MDLs present and reported?	Yes		
Do the reporting limits meet project requirements?	Yes		

Comments (note deviations):

Comment:

Sample results for tetrachloroethene for samples 24J033-04 were run at a dilution. The diluted results should be used for these analytes in place of the initial results.

Data is usable with appropriate qualifiers applied.

Data Validator: Kristine Molloy Date: 1/12/2025

Data Reviewer: Cherie Zakowski Date: 1/14/2025

VA Salt Lake City
Salt Lake City, Utah
Groundwater Validation Report

Sample Delivery Group (SDG) Number: 24J055
Laboratory: EMAX Laboratories, Inc.

Matrix: Groundwater
Collection date: 10/2/2024 10/3/2024
Analysis/Methods:

Volatile Organic Compounds SW 846 8260C

Samples in SDG:

Lab ID	Sample Number	Lab ID	Sample Number
24J055-01	MW41S-GW100224	24J055-10	RG09-GW100324
24J055-02	MW41D-GW100224	24J055-11	RG08-GW100324
24J055-03	MW39D-GW100324	24J055-12	RG07-GW100324
24J055-04	TB07-GW100324	24J055-13	RG06-GW100324
24J055-05	RG01-GW100324	24J055-14	RG10-GW100324
24J055-06	RG02-GW100324	24J055-15	RG11-GW100324
24J055-07	RG03-GW100324	24J055-16	FD09-GW100324
24J055-08	RG04-GW100324	24J055-17	MW39S-GW100324
24J055-09	RG05-GW100324		

Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA 2020).

Volatile Organic Compounds 8260C

Precision:	**Yes**	**No**	**N/A**
Are the field duplicate relative percent differences (RPD) ≤50% (soils), <30% (water) or within CRQL criteria?	**Yes**		
Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)			**N/A**
Laboratory Control Spike Duplicates RPD within limits?		**No**	

Comments (note deviations):

Field Duplicates	**8260C**	**Sample RG05-GW100324**	**Duplicate FD09-GW100324**	**%RPD**	**Qualifiers**	**Associated Samples**
	1,1,1-Trichloroethane	1.0 U	0.18 J	NC	None**	**24J055-09, 24J055-16**

**ABS Dif. < RL - no qualification required

MS/MSD	**8260C**	**RPD**	**Limit**	**Qualifiers**	**Associated Samples**
N/A					

LCS/LCSD	**8260C**	**RPD**	**Limits**	**Qualifiers**	**Associated Samples**
Associated samples: 24J055-01 through 24J055-03, 24J055-05 through 24J055-11					
LCS1W / LCSD1W	Vinyl Acetate	51	20	**J****	**24J055-01 through 24J055-03, 24J055-05 through 24J055-11**
LCS2W / LCSD2W		Acceptable			

** Qualification required for detected results only - associated results nondetect - no qualification required.

Accuracy:	**Yes**	**No**	**N/A**
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)			**N/A**
Laboratory Control Sample criteria met?	**Yes**		
Were the Laboratory Method Blank results all < RL?	**Yes**		
Were the Field Blanks results all < RL?	**Yes**		
Was the ICAL criteria met?	**Yes**		
Was the CCV criteria met?	**Yes**		
Was the Tuning criteria met?	**Yes**		
Were the Surrogate % recoveries within laboratory determined control limits?	**Yes**		
Were the Internal Standard areas within ± 50 - 150%?	**Yes**		

Comments (note deviations):

Blanks	8260C	Concentration	MDL /RL	Qualifiers	Associated Samples
MBLK1W		Nondetect			
MBLK2W		Nondetect			

Field Blank	8260C	Concentration	MDL /RL	Qualifiers	Associated Samples
TB07-GW100324		Nondetect			

Surrogates	8260C	%R	Limit	Qualifiers	Associated Samples
		Acceptable			

MS/MSD	8260C	%R	Limit	Qualifiers	Associated Samples
N/A					

LCS/LCSD	8260C	%R	Limits	Qualifiers	Associated Samples
LCS1W / LCSD1W		Acceptable			
LCS2W / LCSD2W		Acceptable			

ICAL	8260C	RRF	%RSD	Limit	Qualifiers	Associated Samples
10/12/2024 13:38		Acceptable	Acceptable			

CCV	8260C	RRF	%D	Limits	Qualifiers	Associated Samples
Associated samples: 24J055-01 through 24J055-03, 24J055-05 through 24J055-11						
10/16/24 7:07		Acceptable	Acceptable			
Associated samples: 24J055-04, 24J055-12 through 24J055-17						
10/17/24 12:06		Acceptable	Acceptable			

Tune	8260C
	Acceptable

Internal Standards	8260C	Area	Area Lower / Upper Limit	Qualifiers	Associated Samples
		Acceptable			

Representativeness:	Yes	No	N/A
Were sampling procedures and design criteria met?	Yes		
Were holding times met?	Yes		
Was preservation criteria met? (0° C - 6° C)	Yes		
Were Chain-of-Custody records complete and provided in data package?	Yes		

Comments (note

The cooler temperature was 5.1 °C

Preservation	Cooler Temperature (Degrees C)	Preservation Criteria	Qualifier	Associated Samples
	Acceptable			

Holding Times	Analyte	Days to Extraction	HT Criteria	Qualifier	Associated Samples
		Acceptable			

Comparability:	Yes	No	N/A
Were analytical procedures and methods followed as defined in the QAPP or field change documentation?	Yes		

Comments (note deviations):

Completeness (90%):	Yes	No	N/A
Are all data in this SDG usable?	Yes		

Comments (note deviations):

Sensitivity:

	Yes	No	N/A
Are MDLs present and reported?	**Yes**		
Do the reporting limits meet project requirements?	**Yes**		

Comments (note deviations):

Comment:

As noted on the sample request form samples 24J055-14 through 24J055-16 were received at the laboratory with limited volume.

Data is usable as reported.

Data Validator: *Kristine Molloy* Date: *1/9/2025*

Data Reviewer: Cherie Zakowski Date: 1/10/2025

Attachment 2

Data Package Completeness Review Checklists

VA SLC OU-1
Data Package Completeness Review Checklist

SDG: 24I020

Required Documentation	Yes	No	Comments
1. Cover letter complete with the following information:	X		
▪ Title of report and laboratory unique report identification (sample delivery group number)	X		
▪ Project name, site location	X		
▪ Name and location of laboratory and second-site or subcontracted laboratory	X		
▪ Client name and address	X		
▪ Statement of authenticity and official signature and title of person authorizing report release	X		
2. Summary of samples received that correlates field sample IDs with the laboratory IDs	X		
3. Laboratory qualifier flags and definitions	X		
4. Preparation and/or analytical methods	X		
5. Sample results for each analyte (dry weight basis for soils)			
▪ Date received	X		
▪ Date analyzed (and time of analysis if the holding time is less than or equal to 48 hours)	X		
▪ Percent solids results for soil samples			Not Applicable
▪ Dilution factor (provide both diluted and undiluted results when available)	X		
▪ Sample-specific reporting limit adjusted for sample size, dilution/concentration	X		
▪ Sample-specific MDL adjusted for sample size, dilution/concentration	X		
▪ Units	X		
6. Case Narrative that addresses the following information at a minimum:	X		
▪ Sample receipt discrepancies	X		
▪ Descriptions of all nonconformances in the sample receipt, handling, preparation, analytical and reporting processes and the corrective action taken in each occurrence	X		
▪ Identification and justification for sample dilution	X		
▪ Sample cooler temperature at time of receipt	X		4.3°C
▪ Final residual vacuum of each sample canister immediately prior to analysis, or upon receipt (Air analyses only)			Not Applicable
7. Surrogate percent recoveries (surrogate result, target concentration, percent recovery)	X		

Required Documentation	Yes	No	Comments
8. MS/MSD and LCS spike concentrations, native sample results, spiked sample results, percent recoveries, and RPDs between the MS and MSD results (associated QC limits must also be provided)	X		
9. Method blank results	X		
10. Analytical batch reference number that cross references samples to QC sample analyses	X		
11. Executed COC and sample receipt checklist	X		
12. Analytical sequence or laboratory run log that contains sufficient information to correlate samples reported in the summary results to the associated method QC information, such as initial and continuing calibration analyses	X		
13. Calibration blank results for inorganic analyses (required in hardcopy format only)			Not Applicable.
14. Inductively coupled plasma (ICP) interference check sample for inorganic analyses, true and measured concentrations and percent recoveries (required in hardcopy format only)			Not Applicable.
15. Reporting Limit Check Standard for metals analyses, true and measured concentrations and percent recoveries (if applicable, required in hardcopy format only)			Not Applicable.
16. Post-digestion spike recoveries for metals analyses, (if applicable; required in hardcopy format only)			Not Applicable.
17. Internal Standard recovery and retention time information, as applicable	X		
18. Initial calibration summary, including standard concentrations, response factors, average response factors, RSDs or correlation coefficients, and calibration plots or equations, if applicable (required in hardcopy format only)	X		
19. Continuing calibration verification summary, including expected and recovered concentrations and percent differences (required in hardcopy format only)	X		
20. Instrument tuning and mass calibration information for ICP /mass spectrometry analyses			Not Applicable.
21. All associated instrument printouts for all samples, standards, and QC samples (e.g., raw data) necessary to re-calculate results as well as all manual integrations (if performed)	X		
22. Sample preparation logs that include the following information	X		
▪ Preparation start and end times (as applicable)	X		
▪ Beginning and ending temperatures of water baths and digestion blocks			Not Applicable.

Data package complete and ready for Validation

Joseph Borgerding

Signature

Date: 2/7/25

VA SLC OU-1
Data Package Completeness Review Checklist

SDG: 24I027

Required Documentation	Yes	No	Comments
1. Cover letter complete with the following information:	X		
▪ Title of report and laboratory unique report identification (sample delivery group number)	X		
▪ Project name, site location	X		
▪ Name and location of laboratory and second-site or subcontracted laboratory	X		
▪ Client name and address	X		
▪ Statement of authenticity and official signature and title of person authorizing report release	X		
2. Summary of samples received that correlates field sample IDs with the laboratory IDs	X		
3. Laboratory qualifier flags and definitions	X		
4. Preparation and/or analytical methods	X		
5. Sample results for each analyte (dry weight basis for soils)			
▪ Date received	X		
▪ Date analyzed (and time of analysis if the holding time is less than or equal to 48 hours)	X		
▪ Percent solids results for soil samples			Not Applicable
▪ Dilution factor (provide both diluted and undiluted results when available)	X		
▪ Sample-specific reporting limit adjusted for sample size, dilution/concentration	X		
▪ Sample-specific MDL adjusted for sample size, dilution/concentration	X		
▪ Units	X		
6. Case Narrative that addresses the following information at a minimum:	X		
▪ Sample receipt discrepancies	X		
▪ Descriptions of all nonconformances in the sample receipt, handling, preparation, analytical and reporting processes and the corrective action taken in each occurrence	X		
▪ Identification and justification for sample dilution	X		
▪ Sample cooler temperature at time of receipt	X		3.2°C
▪ Final residual vacuum of each sample canister immediately prior to analysis, or upon receipt (Air analyses only)			Not Applicable
7. Surrogate percent recoveries (surrogate result, target concentration, percent recovery)	X		

Required Documentation	Yes	No	Comments
8. MS/MSD and LCS spike concentrations, native sample results, spiked sample results, percent recoveries, and RPDs between the MS and MSD results (associated QC limits must also be provided)	X		
9. Method blank results	X		
10. Analytical batch reference number that cross references samples to QC sample analyses	X		
11. Executed COC and sample receipt checklist	X		
12. Analytical sequence or laboratory run log that contains sufficient information to correlate samples reported in the summary results to the associated method QC information, such as initial and continuing calibration analyses	X		
13. Calibration blank results for inorganic analyses (required in hardcopy format only)			Not Applicable.
14. Inductively coupled plasma (ICP) interference check sample for inorganic analyses, true and measured concentrations and percent recoveries (required in hardcopy format only)			Not Applicable.
15. Reporting Limit Check Standard for metals analyses, true and measured concentrations and percent recoveries (if applicable, required in hardcopy format only)			Not Applicable.
16. Post-digestion spike recoveries for metals analyses, (if applicable; required in hardcopy format only)			Not Applicable.
17. Internal Standard recovery and retention time information, as applicable	X		
18. Initial calibration summary, including standard concentrations, response factors, average response factors, RSDs or correlation coefficients, and calibration plots or equations, if applicable (required in hardcopy format only)	X		
19. Continuing calibration verification summary, including expected and recovered concentrations and percent differences (required in hardcopy format only)	X		
20. Instrument tuning and mass calibration information for ICP /mass spectrometry analyses			Not Applicable.
21. All associated instrument printouts for all samples, standards, and QC samples (e.g., raw data) necessary to re-calculate results as well as all manual integrations (if performed)	X		
22. Sample preparation logs that include the following information	X		
▪ Preparation start and end times (as applicable)	X		
▪ Beginning and ending temperatures of water baths and digestion blocks			Not Applicable.

Data package complete and ready for Validation

Joseph Borgerding

Signature

Date: 2/7/25

VA SLC OU-1
Data Package Completeness Review Checklist

SDG: 24I028

Required Documentation	Yes	No	Comments
1. Cover letter complete with the following information:	X		
▪ Title of report and laboratory unique report identification (sample delivery group number)	X		
▪ Project name, site location	X		
▪ Name and location of laboratory and second-site or subcontracted laboratory	X		
▪ Client name and address	X		
▪ Statement of authenticity and official signature and title of person authorizing report release	X		
2. Summary of samples received that correlates field sample IDs with the laboratory IDs	X		
3. Laboratory qualifier flags and definitions	X		
4. Preparation and/or analytical methods	X		
5. Sample results for each analyte (dry weight basis for soils)			
▪ Date received	X		
▪ Date analyzed (and time of analysis if the holding time is less than or equal to 48 hours)	X		
▪ Percent solids results for soil samples			Not Applicable
▪ Dilution factor (provide both diluted and undiluted results when available)	X		
▪ Sample-specific reporting limit adjusted for sample size, dilution/concentration	X		
▪ Sample-specific MDL adjusted for sample size, dilution/concentration	X		
▪ Units	X		
6. Case Narrative that addresses the following information at a minimum:	X		
▪ Sample receipt discrepancies	X		
▪ Descriptions of all nonconformances in the sample receipt, handling, preparation, analytical and reporting processes and the corrective action taken in each occurrence	X		
▪ Identification and justification for sample dilution	X		
▪ Sample cooler temperature at time of receipt	X		1.9°C
▪ Final residual vacuum of each sample canister immediately prior to analysis, or upon receipt (Air analyses only)			Not Applicable
7. Surrogate percent recoveries (surrogate result, target concentration, percent recovery)	X		

Required Documentation	Yes	No	Comments
8. MS/MSD and LCS spike concentrations, native sample results, spiked sample results, percent recoveries, and RPDs between the MS and MSD results (associated QC limits must also be provided)	X		
9. Method blank results	X		
10. Analytical batch reference number that cross references samples to QC sample analyses	X		
11. Executed COC and sample receipt checklist	X		
12. Analytical sequence or laboratory run log that contains sufficient information to correlate samples reported in the summary results to the associated method QC information, such as initial and continuing calibration analyses	X		
13. Calibration blank results for inorganic analyses (required in hardcopy format only)			Not Applicable.
14. Inductively coupled plasma (ICP) interference check sample for inorganic analyses, true and measured concentrations and percent recoveries (required in hardcopy format only)			Not Applicable.
15. Reporting Limit Check Standard for metals analyses, true and measured concentrations and percent recoveries (if applicable, required in hardcopy format only)			Not Applicable.
16. Post-digestion spike recoveries for metals analyses, (if applicable; required in hardcopy format only)			Not Applicable.
17. Internal Standard recovery and retention time information, as applicable	X		
18. Initial calibration summary, including standard concentrations, response factors, average response factors, RSDs or correlation coefficients, and calibration plots or equations, if applicable (required in hardcopy format only)	X		
19. Continuing calibration verification summary, including expected and recovered concentrations and percent differences (required in hardcopy format only)	X		
20. Instrument tuning and mass calibration information for ICP /mass spectrometry analyses			Not Applicable.
21. All associated instrument printouts for all samples, standards, and QC samples (e.g., raw data) necessary to re-calculate results as well as all manual integrations (if performed)	X		
22. Sample preparation logs that include the following information	X		
▪ Preparation start and end times (as applicable)	X		
▪ Beginning and ending temperatures of water baths and digestion blocks			Not Applicable.

Data package complete and ready for Validation

Joseph Borgerding

Signature

Date: 2/7/25

VA SLC OU-1
Data Package Completeness Review Checklist

SDG: 24I061

Required Documentation	Yes	No	Comments
1. Cover letter complete with the following information:	X		
▪ Title of report and laboratory unique report identification (sample delivery group number)	X		
▪ Project name, site location	X		
▪ Name and location of laboratory and second-site or subcontracted laboratory	X		
▪ Client name and address	X		
▪ Statement of authenticity and official signature and title of person authorizing report release	X		
2. Summary of samples received that correlates field sample IDs with the laboratory IDs	X		
3. Laboratory qualifier flags and definitions	X		
4. Preparation and/or analytical methods	X		
5. Sample results for each analyte (dry weight basis for soils)			
▪ Date received	X		
▪ Date analyzed (and time of analysis if the holding time is less than or equal to 48 hours)	X		
▪ Percent solids results for soil samples			Not Applicable
▪ Dilution factor (provide both diluted and undiluted results when available)	X		
▪ Sample-specific reporting limit adjusted for sample size, dilution/concentration	X		
▪ Sample-specific MDL adjusted for sample size, dilution/concentration	X		
▪ Units	X		
6. Case Narrative that addresses the following information at a minimum:	X		
▪ Sample receipt discrepancies	X		
▪ Descriptions of all nonconformances in the sample receipt, handling, preparation, analytical and reporting processes and the corrective action taken in each occurrence	X		
▪ Identification and justification for sample dilution	X		
▪ Sample cooler temperature at time of receipt	X		3.1°C
▪ Final residual vacuum of each sample canister immediately prior to analysis, or upon receipt (Air analyses only)			Not Applicable
7. Surrogate percent recoveries (surrogate result, target concentration, percent recovery)	X		

Required Documentation	Yes	No	Comments
8. MS/MSD and LCS spike concentrations, native sample results, spiked sample results, percent recoveries, and RPDs between the MS and MSD results (associated QC limits must also be provided)	X		
9. Method blank results	X		
10. Analytical batch reference number that cross references samples to QC sample analyses	X		
11. Executed COC and sample receipt checklist	X		
12. Analytical sequence or laboratory run log that contains sufficient information to correlate samples reported in the summary results to the associated method QC information, such as initial and continuing calibration analyses	X		
13. Calibration blank results for inorganic analyses (required in hardcopy format only)			Not Applicable.
14. Inductively coupled plasma (ICP) interference check sample for inorganic analyses, true and measured concentrations and percent recoveries (required in hardcopy format only)			Not Applicable.
15. Reporting Limit Check Standard for metals analyses, true and measured concentrations and percent recoveries (if applicable, required in hardcopy format only)			Not Applicable.
16. Post-digestion spike recoveries for metals analyses, (if applicable; required in hardcopy format only)			Not Applicable.
17. Internal Standard recovery and retention time information, as applicable	X		
18. Initial calibration summary, including standard concentrations, response factors, average response factors, RSDs or correlation coefficients, and calibration plots or equations, if applicable (required in hardcopy format only)	X		
19. Continuing calibration verification summary, including expected and recovered concentrations and percent differences (required in hardcopy format only)	X		
20. Instrument tuning and mass calibration information for ICP /mass spectrometry analyses			Not Applicable.
21. All associated instrument printouts for all samples, standards, and QC samples (e.g., raw data) necessary to re-calculate results as well as all manual integrations (if performed)	X		
22. Sample preparation logs that include the following information	X		
▪ Preparation start and end times (as applicable)	X		
▪ Beginning and ending temperatures of water baths and digestion blocks			Not Applicable.

Data package complete and ready for Validation

Joseph Borgerding

Signature

Date: 2/7/25

VA SLC OU-1
Data Package Completeness Review Checklist

SDG: 24I062

Required Documentation	Yes	No	Comments
1. Cover letter complete with the following information:	X		
▪ Title of report and laboratory unique report identification (sample delivery group number)	X		
▪ Project name, site location	X		
▪ Name and location of laboratory and second-site or subcontracted laboratory	X		
▪ Client name and address	X		
▪ Statement of authenticity and official signature and title of person authorizing report release	X		
2. Summary of samples received that correlates field sample IDs with the laboratory IDs	X		
3. Laboratory qualifier flags and definitions	X		
4. Preparation and/or analytical methods	X		
5. Sample results for each analyte (dry weight basis for soils)			
▪ Date received	X		
▪ Date analyzed (and time of analysis if the holding time is less than or equal to 48 hours)	X		
▪ Percent solids results for soil samples			Not Applicable
▪ Dilution factor (provide both diluted and undiluted results when available)	X		
▪ Sample-specific reporting limit adjusted for sample size, dilution/concentration	X		
▪ Sample-specific MDL adjusted for sample size, dilution/concentration	X		
▪ Units	X		
6. Case Narrative that addresses the following information at a minimum:	X		
▪ Sample receipt discrepancies	X		
▪ Descriptions of all nonconformances in the sample receipt, handling, preparation, analytical and reporting processes and the corrective action taken in each occurrence	X		
▪ Identification and justification for sample dilution	X		
▪ Sample cooler temperature at time of receipt	X		1.1°C
▪ Final residual vacuum of each sample canister immediately prior to analysis, or upon receipt (Air analyses only)			Not Applicable
7. Surrogate percent recoveries (surrogate result, target concentration, percent recovery)			Not Applicable

Required Documentation	Yes	No	Comments
8. MS/MSD and LCS spike concentrations, native sample results, spiked sample results, percent recoveries, and RPDs between the MS and MSD results (associated QC limits must also be provided)	X		
9. Method blank results	X		
10. Analytical batch reference number that cross references samples to QC sample analyses	X		
11. Executed COC and sample receipt checklist	X		
12. Analytical sequence or laboratory run log that contains sufficient information to correlate samples reported in the summary results to the associated method QC information, such as initial and continuing calibration analyses	X		
13. Calibration blank results for inorganic analyses (required in hardcopy format only)			Not Applicable.
14. Inductively coupled plasma (ICP) interference check sample for inorganic analyses, true and measured concentrations and percent recoveries (required in hardcopy format only)			Not Applicable.
15. Reporting Limit Check Standard for metals analyses, true and measured concentrations and percent recoveries (if applicable, required in hardcopy format only)			Not Applicable.
16. Post-digestion spike recoveries for metals analyses, (if applicable; required in hardcopy format only)			Not Applicable.
17. Internal Standard recovery and retention time information, as applicable			Not Applicable.
18. Initial calibration summary, including standard concentrations, response factors, average response factors, RSDs or correlation coefficients, and calibration plots or equations, if applicable (required in hardcopy format only)	X		
19. Continuing calibration verification summary, including expected and recovered concentrations and percent differences (required in hardcopy format only)	X		
20. Instrument tuning and mass calibration information for ICP /mass spectrometry analyses			Not Applicable.
21. All associated instrument printouts for all samples, standards, and QC samples (e.g., raw data) necessary to re-calculate results as well as all manual integrations (if performed)	X		
22. Sample preparation logs that include the following information	X		
▪ Preparation start and end times (as applicable)	X		
▪ Beginning and ending temperatures of water baths and digestion blocks			Not Applicable.

Data package complete and ready for Validation

Joseph Borgerding

Signature

Date: 2/7/25

VA SLC OU-1
Data Package Completeness Review Checklist

SDG: 24I077

Required Documentation	Yes	No	Comments
1. Cover letter complete with the following information:	X		
▪ Title of report and laboratory unique report identification (sample delivery group number)	X		
▪ Project name, site location	X		
▪ Name and location of laboratory and second-site or subcontracted laboratory	X		
▪ Client name and address	X		
▪ Statement of authenticity and official signature and title of person authorizing report release	X		
2. Summary of samples received that correlates field sample IDs with the laboratory IDs	X		
3. Laboratory qualifier flags and definitions	X		
4. Preparation and/or analytical methods	X		
5. Sample results for each analyte (dry weight basis for soils)			
▪ Date received	X		
▪ Date analyzed (and time of analysis if the holding time is less than or equal to 48 hours)	X		
▪ Percent solids results for soil samples			Not Applicable
▪ Dilution factor (provide both diluted and undiluted results when available)	X		
▪ Sample-specific reporting limit adjusted for sample size, dilution/concentration	X		
▪ Sample-specific MDL adjusted for sample size, dilution/concentration	X		
▪ Units	X		
6. Case Narrative that addresses the following information at a minimum:	X		
▪ Sample receipt discrepancies	X		
▪ Descriptions of all nonconformances in the sample receipt, handling, preparation, analytical and reporting processes and the corrective action taken in each occurrence	X		
▪ Identification and justification for sample dilution	X		
▪ Sample cooler temperature at time of receipt	X		3.6°C
▪ Final residual vacuum of each sample canister immediately prior to analysis, or upon receipt (Air analyses only)			Not Applicable
7. Surrogate percent recoveries (surrogate result, target concentration, percent recovery)	X		

Required Documentation	Yes	No	Comments
8. MS/MSD and LCS spike concentrations, native sample results, spiked sample results, percent recoveries, and RPDs between the MS and MSD results (associated QC limits must also be provided)	X		
9. Method blank results	X		
10. Analytical batch reference number that cross references samples to QC sample analyses	X		
11. Executed COC and sample receipt checklist	X		
12. Analytical sequence or laboratory run log that contains sufficient information to correlate samples reported in the summary results to the associated method QC information, such as initial and continuing calibration analyses	X		
13. Calibration blank results for inorganic analyses (required in hardcopy format only)	X		
14. Inductively coupled plasma (ICP) interference check sample for inorganic analyses, true and measured concentrations and percent recoveries (required in hardcopy format only)			Not Applicable.
15. Reporting Limit Check Standard for metals analyses, true and measured concentrations and percent recoveries (if applicable, required in hardcopy format only)			Not Applicable.
16. Post-digestion spike recoveries for metals analyses, (if applicable; required in hardcopy format only)			Not Applicable.
17. Internal Standard recovery and retention time information, as applicable			Not Applicable.
18. Initial calibration summary, including standard concentrations, response factors, average response factors, RSDs or correlation coefficients, and calibration plots or equations, if applicable (required in hardcopy format only)	X		
19. Continuing calibration verification summary, including expected and recovered concentrations and percent differences (required in hardcopy format only)	X		
20. Instrument tuning and mass calibration information for ICP /mass spectrometry analyses			Not Applicable.
21. All associated instrument printouts for all samples, standards, and QC samples (e.g., raw data) necessary to re-calculate results as well as all manual integrations (if performed)	X		
22. Sample preparation logs that include the following information	X		
▪ Preparation start and end times (as applicable)	X		
▪ Beginning and ending temperatures of water baths and digestion blocks			Not Applicable.

Data package complete and ready for Validation

Joseph Borgerding

Signature

Date: 2/10/25

VA SLC OU-1
Data Package Completeness Review Checklist

SDG: 24J033

Required Documentation	Yes	No	Comments
1. Cover letter complete with the following information:	X		
▪ Title of report and laboratory unique report identification (sample delivery group number)	X		
▪ Project name, site location	X		
▪ Name and location of laboratory and second-site or subcontracted laboratory	X		
▪ Client name and address	X		
▪ Statement of authenticity and official signature and title of person authorizing report release	X		
2. Summary of samples received that correlates field sample IDs with the laboratory IDs	X		
3. Laboratory qualifier flags and definitions	X		
4. Preparation and/or analytical methods	X		
5. Sample results for each analyte (dry weight basis for soils)			
▪ Date received	X		
▪ Date analyzed (and time of analysis if the holding time is less than or equal to 48 hours)	X		
▪ Percent solids results for soil samples			Not Applicable
▪ Dilution factor (provide both diluted and undiluted results when available)	X		
▪ Sample-specific reporting limit adjusted for sample size, dilution/concentration	X		
▪ Sample-specific MDL adjusted for sample size, dilution/concentration	X		
▪ Units	X		
6. Case Narrative that addresses the following information at a minimum:	X		
▪ Sample receipt discrepancies	X		
▪ Descriptions of all nonconformances in the sample receipt, handling, preparation, analytical and reporting processes and the corrective action taken in each occurrence	X		
▪ Identification and justification for sample dilution	X		
▪ Sample cooler temperature at time of receipt	X		4.6°C
▪ Final residual vacuum of each sample canister immediately prior to analysis, or upon receipt (Air analyses only)			Not Applicable
7. Surrogate percent recoveries (surrogate result, target concentration, percent recovery)	X		

Required Documentation	Yes	No	Comments
8. MS/MSD and LCS spike concentrations, native sample results, spiked sample results, percent recoveries, and RPDs between the MS and MSD results (associated QC limits must also be provided)	X		
9. Method blank results	X		
10. Analytical batch reference number that cross references samples to QC sample analyses	X		
11. Executed COC and sample receipt checklist	X		
12. Analytical sequence or laboratory run log that contains sufficient information to correlate samples reported in the summary results to the associated method QC information, such as initial and continuing calibration analyses	X		
13. Calibration blank results for inorganic analyses (required in hardcopy format only)	X		
14. Inductively coupled plasma (ICP) interference check sample for inorganic analyses, true and measured concentrations and percent recoveries (required in hardcopy format only)			Not Applicable.
15. Reporting Limit Check Standard for metals analyses, true and measured concentrations and percent recoveries (if applicable, required in hardcopy format only)			Not Applicable.
16. Post-digestion spike recoveries for metals analyses, (if applicable; required in hardcopy format only)			Not Applicable.
17. Internal Standard recovery and retention time information, as applicable			Not Applicable.
18. Initial calibration summary, including standard concentrations, response factors, average response factors, RSDs or correlation coefficients, and calibration plots or equations, if applicable (required in hardcopy format only)	X		
19. Continuing calibration verification summary, including expected and recovered concentrations and percent differences (required in hardcopy format only)	X		
20. Instrument tuning and mass calibration information for ICP /mass spectrometry analyses			Not Applicable.
21. All associated instrument printouts for all samples, standards, and QC samples (e.g., raw data) necessary to re-calculate results as well as all manual integrations (if performed)	X		
22. Sample preparation logs that include the following information	X		
▪ Preparation start and end times (as applicable)	X		
▪ Beginning and ending temperatures of water baths and digestion blocks			Not Applicable.

Data package complete and ready for Validation

Joseph Borgerding

Signature

Date: 2/10/25

VA SLC OU-1
Data Package Completeness Review Checklist

SDG: 24J055

Required Documentation	Yes	No	Comments
1. Cover letter complete with the following information:	X		
▪ Title of report and laboratory unique report identification (sample delivery group number)	X		
▪ Project name, site location	X		
▪ Name and location of laboratory and second-site or subcontracted laboratory	X		
▪ Client name and address	X		
▪ Statement of authenticity and official signature and title of person authorizing report release	X		
2. Summary of samples received that correlates field sample IDs with the laboratory IDs	X		
3. Laboratory qualifier flags and definitions	X		
4. Preparation and/or analytical methods	X		
5. Sample results for each analyte (dry weight basis for soils)			
▪ Date received	X		
▪ Date analyzed (and time of analysis if the holding time is less than or equal to 48 hours)	X		
▪ Percent solids results for soil samples			Not Applicable
▪ Dilution factor (provide both diluted and undiluted results when available)	X		
▪ Sample-specific reporting limit adjusted for sample size, dilution/concentration	X		
▪ Sample-specific MDL adjusted for sample size, dilution/concentration	X		
▪ Units	X		
6. Case Narrative that addresses the following information at a minimum:	X		
▪ Sample receipt discrepancies	X		
▪ Descriptions of all nonconformances in the sample receipt, handling, preparation, analytical and reporting processes and the corrective action taken in each occurrence	X		
▪ Identification and justification for sample dilution	X		
▪ Sample cooler temperature at time of receipt	X		5.1°C
▪ Final residual vacuum of each sample canister immediately prior to analysis, or upon receipt (Air analyses only)			Not Applicable
7. Surrogate percent recoveries (surrogate result, target concentration, percent recovery)	X		

Required Documentation	Yes	No	Comments
8. MS/MSD and LCS spike concentrations, native sample results, spiked sample results, percent recoveries, and RPDs between the MS and MSD results (associated QC limits must also be provided)	X		
9. Method blank results	X		
10. Analytical batch reference number that cross references samples to QC sample analyses	X		
11. Executed COC and sample receipt checklist	X		
12. Analytical sequence or laboratory run log that contains sufficient information to correlate samples reported in the summary results to the associated method QC information, such as initial and continuing calibration analyses	X		
13. Calibration blank results for inorganic analyses (required in hardcopy format only)			Not Applicable.
14. Inductively coupled plasma (ICP) interference check sample for inorganic analyses, true and measured concentrations and percent recoveries (required in hardcopy format only)			Not Applicable.
15. Reporting Limit Check Standard for metals analyses, true and measured concentrations and percent recoveries (if applicable, required in hardcopy format only)			Not Applicable.
16. Post-digestion spike recoveries for metals analyses, (if applicable; required in hardcopy format only)			Not Applicable.
17. Internal Standard recovery and retention time information, as applicable			Not Applicable.
18. Initial calibration summary, including standard concentrations, response factors, average response factors, RSDs or correlation coefficients, and calibration plots or equations, if applicable (required in hardcopy format only)	X		
19. Continuing calibration verification summary, including expected and recovered concentrations and percent differences (required in hardcopy format only)	X		
20. Instrument tuning and mass calibration information for ICP /mass spectrometry analyses			Not Applicable.
21. All associated instrument printouts for all samples, standards, and QC samples (e.g., raw data) necessary to re-calculate results as well as all manual integrations (if performed)	X		
22. Sample preparation logs that include the following information	X		
▪ Preparation start and end times (as applicable)	X		
▪ Beginning and ending temperatures of water baths and digestion blocks			Not Applicable.

Data package complete and ready for Validation

Joseph Borgerding

Signature

Date: 2/10/25

Attachment 3

Analytical Data Packages

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 10-09-2024
EMAX Batch No.: 24I020

Attn: Cherie Zakowski

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202

Subject: Laboratory Report
Project: VA SALT LAKE CITY

Enclosed is the Laboratory report for samples received on 09/07/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
MW02-GW090524	I020-01	09/05/24	WATER	VOCS BY 8260C
FD02-GW090524	I020-02	09/05/24	WATER	VOCS BY 8260C
MW12D-GW090524	I020-03	09/05/24	WATER	VOCS BY 8260C
MW348-GW090524	I020-04	09/05/24	WATER	VOCS BY 8260C
MW17S-GW090524	I020-05	09/05/24	WATER	VOCS 8Y 8260C
MW17D-GW090524	I020-06	09/05/24	WATER	VOCS 8Y 8260C
MW34C-GW090524	I020-07	09/05/24	WATER	VOCS 8Y 8260C
MW06-GW090524	I020-08	09/05/24	WATER	VOCS BY 8260C
MW37S-GW090624	I020-09	09/06/24	WATER	VOCS BY 8260C
MW37D-GW090624	I020-10	09/06/24	WATER	VOCS BY 8260C
MW36-GW090624	I020-11	09/06/24	WATER	VOCS BY 8260C
MW01D-GW090624	I020-12	09/06/24	WATER	VOCS BY 8260C
MW088-GW090624	I020-13	09/06/24	WATER	VOCS BY 8260C
MW34D-GW090624	I020-14	09/06/24	WATER	VOCS BY 8260C
MW34A-GW090624	I020-15	09/06/24	WATER	VOCS BY 8260C
MW38S-GW090624	I020-16	09/06/24	WATER	VOCS 8Y 8260C
MW38D-GW090624	I020-17	09/06/24	WATER	VOCS BY 8260C
MW04-GW090524	I020-18	09/05/24	WATER	VOCS BY 8260C
TB01-GW090624	I020-19	09/06/24	WATER	VOCS BY 8260C
MW38S-GW090624MS	I020-16M	09/06/24	WATER	VOCS BY 8260C
MW38S-GW090624MSD	I020-16S	09/06/24	WATER	VOCS 8Y 8260C

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912023-25
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

CHAIN OF CUSTODY

EMAX Laboratories, Inc.
3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE
EMAX CONTROL NO. 24I020
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEL 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE: DW=Drinking Water; GW=Ground Water; WW=Waste Water; SD=Solid Waste SL=Sl; SS=Soil/ Sediment; WP=Wipes PP=Pure P; AR=Air; O=Blanks (trip/rinse/fie

PRESERVATIVE: IC = Ice; HC = HCl; HN=HNO3; SH=NaO3; ST=Na2S2O3; ZA=Zinc Acetate; HS=H2SO4

TAT
- ☐ Rush __24__hrs.
- ☐ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☑ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	VOCs (8260C)	Anions (Cl, SO4)	Nitrate/Nitrite (SM4500-NO3E)	Alkalinity (SM2320B)	TOC (SW9060)	TDS (SM 2540C)	Dissolved Gases (RSK-175)	PRESERVATIVE CODE	COMMENTS
										HCl	IC	HS	IC	HS	IC	HCl		
1	MW02-GW090524	MW02	9/5/24	1546	3	40mL	VOA	GW		X								
2	FD02-GW090524	—	9/5/24	1546	3			GW	X	X								
3	MW12D-GW090524	MW12D	9/5/24	1048	3			GW		X								
4	MW34B-GW090524	MW34B	9/5/24	1650	3			GW		X								
5	MW17S-GW090524	MW17S	9/5/24	1401	3			GW		X								
6	MW17D-GW090524	MW17D	9/5/24	1545	3			GW		X								
7	MW34C-GW090524	MW34C	9/5/24	1705	3			GW		X								
8	MW06-GW090524	MW06	9/5/24	1141	3			GW		X								
9	MW37S-GW090624	MW37S	9/6/24	0855	3			GW		X								

Instructions
Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s
1	4.3	

SAMPLER
COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Emma Foldberg	9/6/24	1630	
	9/7/24	10:15	Maria

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

CHAIN OF CUSTODY

EMAX Laboratories, Inc.	3051 Fujita St, Torrance, CA 90505 Tel # : 310-618-8889 FAX#: 310-618-0818 Email: info@emaxlabs.com	PO NUMBER: SAMPLE STORAGE	EMAX CONTROL NO. 24I020 PROJECT CODE: 275859

CLIENT : CDM SMITH

PROJECT : 700 S 1600 E PCE Plume

COORDINATOR Cherie Zakowski

TEL 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com

SEND REPORT TO

COMPANY CDM Smith

ADDRESS 555 17th St Ste 500

Denver, CO 80201

EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sl	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

ANALYSIS REQUIRED: VOCs (8260C); Anions (Cl, SO4); Nitrate/Nitrite (SM4500-NO3E); Alkalinity (SM2320B); TOC (SW9060); TDS (SM 2540C); Dissolved Gases (RSK-175)

TAT
- ☐ Rush __24__hrs.
- ☐ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☑ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	PRESERVATIVE CODE	COMMENTS
10	1 MW37D-GW090624	MW37D EB9/6/24	9/6/24	0922	3	40mL	VOA	GW		HCl X	
11	2 MW36-GW090624	MW-36	9/6/24	1570	3			GW		HCl X	
12	3 MW01D-GW090624	MW-01D	9/6/24	0900	3			GW		HCl X	
13	4 MW08B-GW090624	MW08B	9/6/24	1516	3			GW		HCl X	
14	5 MW34D-GW090624	MW34D	9/6/24	1021	3			GW		HCl X	
15	6 MW34A-GW090624	MW34A	9/6/24	1535	3			GW		HCl X	
16	7 MW38S-GW090624	MW38S	9/6/24	1222	9			GW	X	HCl X	MS/MSD 9 bottles
17	8 MW38D-GW090624	MW38D	9/6/24	1330	3			GW		HCl X	
18	9 MW04-GW090524	MW04	9/5/24	1355	3			GW		HCl X	

Instructions	Cooler #	Temp. (oC)	Sample #s
Please CC Maria Day at daymi@cdmsmith.com w/ lab acknowledgement			

SAMPLER

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Emma Fordney	9/6/24	1630	
	9/7/24	10:15	Maria Zin

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

CHAIN OF CUSTODY

EMAX Laboratories, Inc.	3051 Fujita St, Torrance, CA 90505 Tel # : 310-618-8889 FAX#: 310-618-0818 Email: info@emaxlabs.com	PO NUMBER: SAMPLE STORAGE	EMAX CONTROL NO. 24I020 PROJECT CODE: 275859

CLIENT : CDM SMITH

PROJECT : 700 S 1600 E PCE Plume

COORDINATOR Cherie Zakowski

TEI 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com

SEND REPORT TO

COMPANY CDM Smith

ADDRESS 555 17th St Ste 500

Denver, CO 80201

EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sl	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

ANALYSIS REQUIRED: VOCs (8260C); Anions (Cl, SO4); Nitrate/Nitrite (SM4500-NO3E); Alkalinity (SM2320B); TOC (SW9060); TDS (SM 2540C); Dissolved Gases (RSK-175)

TAT
- ☐ Rush __24__hrs.
- ☐ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☑ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	PRESERVATIVE CODE HCl	IC	HS	IC	HS	IC	HCl	COMMENTS
1	TB01-GW090624		9/6/24	1610	3	40mL	VOA	O		X							Trip blanks
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	

Instructions

Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s

SAMPLER

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Emma Holsey	9/6/24	1630	
	9/9/24	10:15	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

EMAX LABORATORIES, INC.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 241020
☑ Fedex ☐ UPS ☐ GSO ☐ Others	2792 1087 0837	Recipient Maria Rivera
☐ EMAX Courier ☐ Client Delivery		Date 09/07/24 Time 10:15

COC INSPECTION

☑ Client Name	☑ Client PM/FC	☐ Sampler Name	☑ Sampling Date/Time	☑ Sample ID	☑ Matrix
☑ Address	☑ Tel # / Fax #	☐ Courier Signature	☑ Analysis Required	☑ Preservative (if any)	☑ TAT
Safety Issues (if any)	☐ High concentrations expected	☐ From Superfund Site	☐ Rad screening required		

Note: _____

PACKAGING INSPECTION

Container	☑ Cooler	☐ Box	☐ Other			
Condition	☑ Custody Seal	☐ Intact	☐ Damaged			
Packaging	☑ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☐ _____	
Temperatures (Cool, ≤6 °C but not frozen) MK	☑ Cooler 1 4.3 °C	☐ Cooler 2_____ °C	☐ Cooler 3_____ °C	☐ Cooler 4_____ °C	☐ Cooler 5_____ °C	
	☐ Cooler 6_____ °C	☐ Cooler 7_____ °C	☐ Cooler 8_____ °C	☐ Cooler 9_____ °C	☐ Cooler 10_____ °C	

Thermometer: 08/14/24 (A - S/N ~~21670272~~ 24041222) B - S/N 230044860 C - S/N 230044897 D - S/N 230044857

Comments: ☐ Temperature is out of range. PM was informed IMMEDIATELY.

Note: _____

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

NOTES/OBSERVATIONS:

SAMPLE MATRIX IS DRINKING WATER? ☐ YES ☐ NO

LEGEND:

☐ Continue to next page.

Code	Description- Sample Management
D1	Analysis is not indicated in _____
D2	Analysis mismatch COC vs label
D3	Sample ID mismatch COC vs label
D4	Sample ID is not indicated in _____
D5	Container -[improper] [leaking] [broken]
D6	Date/Time is not indicated in _____
D7	Date/Time mismatch COC vs label
D8	Sample listed in COC is not received
D9	Sample received is not listed in COC
D10	No initial/date on corrections in COC/label
D11	Container count mismatch COC vs received
D12	Container size mismatch COC vs received

Code	Description-Sample Management
D13	Out of Holding Time
D14	Bubble is >6mm
D15	No trip blank in cooler
D16	Preservation not indicated in _____
D17	Preservation mismatch COC vs label
D18	Insufficient chemical preservative
D19	Insufficient Sample
D20	No filtration info for dissolved analysis
D21	No sample for moisture determination
D22	_____
D23	_____
D24	_____

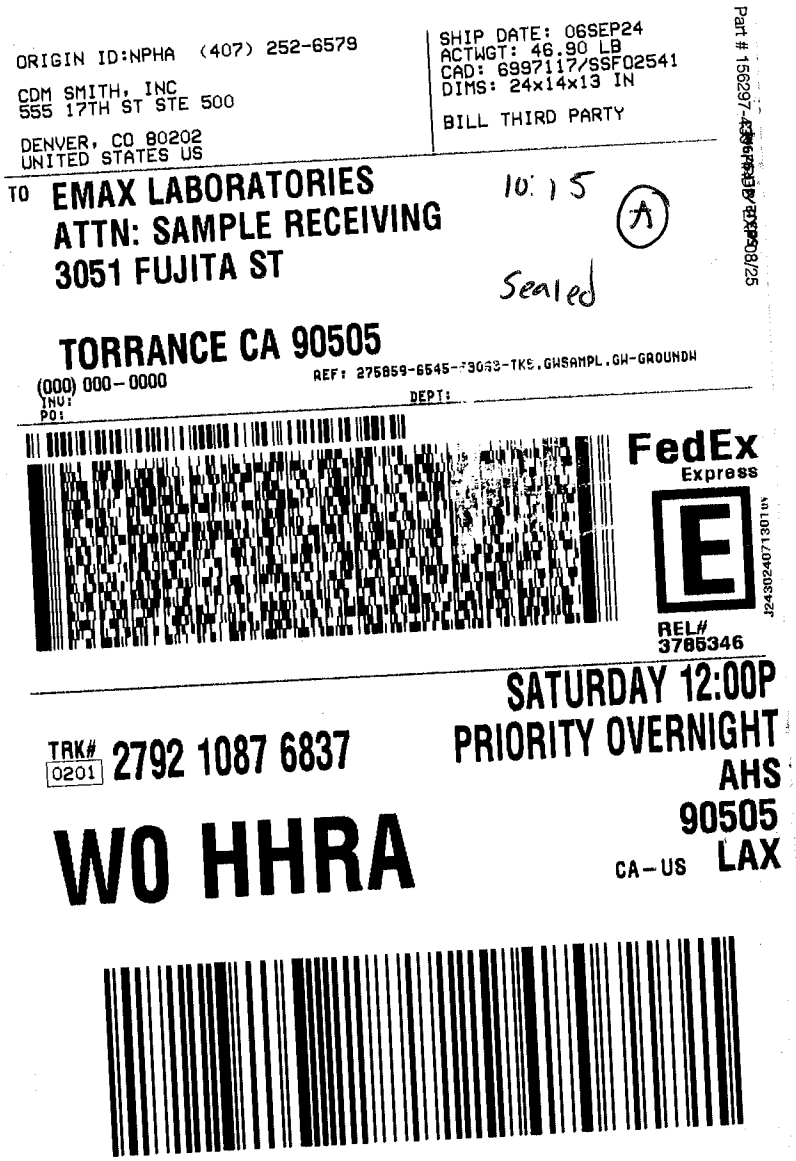
Code	Description-Sample Management
R1	Proceed as indicated in ☐ COC ☐ Label
R2	Refer to attached instruction
R3	Cancel the analysis
R4	Use vial with smallest bubble first
R5	Log-in with latest sampling date and time+1 min
R6	Adjust pH as necessary
R7	Filter and preserved as necessary
R8	_____
R9	_____
R10	_____
R11	_____
R12	_____

REVIEWS:

Sample Labeling Nahdeen / Maria Nacana / Rivera Date 09/09/24 / 09/09/24

SRF _____ Date 9/10/24

PM _____ Date 09/10/24



ORIGIN ID:NPHA (407) 252-6579

CDM SMITH, INC
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHIP DATE: 06SEP24
ACTWGT: 46.90 LB
CAD: 6997117/SSF02541
DIMS: 24x14x13 IN

BILL THIRD PARTY

Part # 156297-4[illegible] 08/25

TO **EMAX LABORATORIES**
ATTN: SAMPLE RECEIVING
3051 FUJITA ST

10:15

(A)

Sealed

TORRANCE CA 90505

(000) 000-0000
INV:
PO:

REF: 275859-6545-[illegible]3063-TKS.GWSAMPL.GW-GROUNDW
DEPT:

FedEx
Express

E

REL#
3785346

J243024071301

SATURDAY 12:00P
PRIORITY OVERNIGHT
AHS
90505
CA-US **LAX**

TRK# 0201 **2792 1087 6837**

W0 HHRA

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than LOQ/RL but greater than LOD/MDL/DL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range or estimated value.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

SDG#: 24I020

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I020

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of nineteen(19) water samples were received on 09/07/24 to be analyzed for Volatile Organics by GC/MS in accordance with Method SW5030B/8260C and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Instrument Performance and Calibration
Instrument tune check was performed prior to calibration. Result was within acceptance criteria. Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using secondary source (ICV). Continuing calibration (CCV) was carried out at a frequency required by the project. All project calibration requirements. Note that" Minimum Response Factor" for all analytes were within method recommended response factors with the exception of Acetone and 2-Butanone. However, percent recoveries for all target analytes were within 70-130% on all calibration points. Refer to calibration summary forms of ICAL, ICV and CCV for details

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, three(3) method blanks were analyzed. VO01I15B - result was compliant to project requirement. Methylene Chloride(1.4J < RL) was detected at trace level in VO01I16B and VOE2I07B - result was compliant to project requirement. Refer to sample result summary forms for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, three(3) sets of LCS/LCD were analyzed. All analytes were within LCS in VO01I15L/VO01I15C, in VO01I16X/VO01I16C and VOE2I07X/VOE2I07C , except for results qualified with with [*]. Refer to LCS summary forms for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD (24I020-16M/24I020-16S) was analyzed. All analytes were within project QC limits except for results qualified with [*]. No reanalysis was performed because same result was observed in MS/MSD, which is indicative that sample reanalysis will provide similar results. All RPD's were within limits. Sample matrix interference was suspected. Refer to Matrix QC summary form for details.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met with the exception of those that were discussed within the associated QC parameter.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24I020
Instrument ID : E2

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	VOE2I07X	1	NA	09/14/2417:37	09/14/2417:37	RIG073	RIG007	VOE2I07	Lab Control Sample (LCS)
LCD1W	VOE2I07C	1	NA	09/14/2418:02	09/14/2418:02	RIG074	RIG007	VOE2I07	LCS Duplicate
MBLK1W	VOE2I07B	1	NA	09/14/2418:51	09/14/2418:51	RIG076	RIG007	VOE2I07	Method Blank
MW02-GW090524	24I020-01	1	NA	09/14/2422:58	09/14/2422:58	RIG086	RIG007	VOE2I07	Field Sample
FD02-GW090524	24I020-02	1	NA	09/14/2423:23	09/14/2423:23	RIG087	RIG007	VOE2I07	Field Sample
MW12D-GW090524	24I020-03	1	NA	09/14/2423:47	09/14/2423:47	RIG088	RIG007	VOE2I07	Field Sample
MW34B-GW090524	24I020-04	1	NA	09/15/2400:12	09/15/2400:12	RIG089	RIG007	VOE2I07	Field Sample
MW17S-GW090524	24I020-05	1	NA	09/15/2400:36	09/15/2400:36	RIG090	RIG007	VOE2I07	Field Sample
MW17D-GW090524	24I020-06	1	NA	09/15/2401:01	09/15/2401:01	RIG091	RIG007	VOE2I07	Field Sample
MW34C-GW090524	24I020-07	1	NA	09/15/2401:25	09/15/2401:25	RIG092	RIG007	VOE2I07	Field Sample
MW06-GW090524	24I020-08	1	NA	09/15/2401:50	09/15/2401:50	RIG093	RIG007	VOE2I07	Field Sample
MW37S-GW090624	24I020-09	1	NA	09/15/2402:15	09/15/2402:15	RIG094	RIG007	VOE2I07	Field Sample
MW37D-GW090624	24I020-10	1	NA	09/15/2402:39	09/15/2402:39	RIG095	RIG007	VOE2I07	Field Sample
MW36-GW090624	24I020-11	1	NA	09/15/2403:04	09/15/2403:04	RIG096	RIG007	VOE2I07	Field Sample
MW01D-GW090624	24I020-12	1	NA	09/15/2403:28	09/15/2403:28	RIG097	RIG007	VOE2I07	Field Sample
LCS2W!	VO01I15L	1	NA	09/19/2410:50	09/19/2410:50	RIV397	RHV134	VO01I15	Lab Control Sample (LCS)
LCD2W!	VO01I15C	1	NA	09/19/2411:21	09/19/2411:21	RIV398	RHV134	VO01I15	LCS Duplicate
MBLK2W!	VO01I15B	1	NA	09/19/2412:20	09/19/2412:20	RIV400	RHV134	VO01I15	Method Blank
MW04-GW090524!	24I020-18	1	NA	09/19/2416:51	09/19/2416:51	RIV409	RHV134	VO01I15	Field Sample
MW02-GW090524!	24I020-01I	10	NA	09/19/2417:20	09/19/2417:20	RIV410	RHV134	VO01I15	Diluted Sample
FD02-GW090524!	24I020-02I	10	NA	09/19/2417:50	09/19/2417:50	RIV411	RHV134	VO01I15	Diluted Sample
LCD3W!	VO01I16C	1	NA	09/20/2413:12	09/20/2413:12	RIV425	RHV134	VO01I16	LCS Duplicate
MBLK3W!	VO01I16B	1	NA	09/20/2414:12	09/20/2414:12	RIV427	RHV134	VO01I16	Method Blank
LCS3W!	VO01I16X	1	NA	09/20/2414:42	09/20/2414:42	RIV428	RHV134	VO01I16	Lab Control Sample (LCS)
TB01-GW090624!	24I020-19	1	NA	09/20/2415:12	09/20/2415:12	RIV429	RHV134	VO01I16	Field Sample
MW38S-GW090624!	24I020-16	1	NA	09/20/2415:42	09/20/2415:42	RIV430	RHV134	VO01I16	Field Sample
MW08B-GW090624!	24I020-13N	1	NA	09/20/2417:43	09/20/2417:43	RIV434	RHV134	VO01I16	Field Sample
MW34D-GW090624!	24I020-14	1	NA	09/20/2418:13	09/20/2418:13	RIV435	RHV134	VO01I16	Field Sample
MW34A-GW090624!	24I020-15	1	NA	09/20/2418:43	09/20/2418:43	RIV436	RHV134	VO01I16	Field Sample
MW38D-GW090624!	24I020-17	1	NA	09/20/2419:13	09/20/2419:13	RIV437	RHV134	VO01I16	Field Sample
MW38S-GW090624MS!	24I020-16M	1	NA	09/20/2419:42	09/20/2419:42	RIV438	RHV134	VO01I16	Matrix Spike Sample (MS)
MW38S-GW090624MSD!	24I020-16S	1	NA	09/20/2420:12	09/20/2420:12	RIV439	RHV134	VO01I16	MS Duplicate (MSD)

! Instrument ID : 01
FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24I020
Sample ID : MW02-GW090524
Lab Samp ID: I020-01 #I020-01I
Lab File ID: RIG086 #RIV410
Ext Btch ID: VOE2I07 #V001I15
Calib. Ref.: RIG007 #RHV134

Date Collected: 09/05/24 15:46
Date Received: 09/07/24
Date Extracted: 09/14/24 22:58 # 09/19/24 17:20
Date Analyzed: 09/14/24 22:58 # 09/19/24 17:20
Dilution Factor: 1 # 10
Matrix: WATER
% Moisture: NA
Instrument ID: E2 # 01

	PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
	1,1,1-Trichloroethane	ND	1.0	0.10
	1,1,2,2-Tetrachloroethane	ND	1.0	0.11
	1,1,2-Trichloroethane	ND	1.0	0.10
	1,1-Dichloroethane	ND	1.0	0.10
	1,1-Dichloroethene	ND	1.0	0.10
	1,2,3-Trichlorobenzene	ND	1.0	0.15
	1,2,4-Trichlorobenzene	ND	1.0	0.15
	1,2,4-Trimethylbenzene	ND	1.0	0.11
	1,2-Dibromo-3-chloropropane	ND	2.0	0.25
	1,2-Dichlorobenzene	ND	1.0	0.10
	1,2-Dichloroethane	ND	1.0	0.10
	1,2-Dichloropropane	ND	1.0	0.10
	1,3,5-Trimethylbenzene	ND	1.0	0.12
	1,3-Dichlorobenzene	ND	1.0	0.11
	1,4-Dichlorobenzene	ND	1.0	0.10
	2-Butanone	ND	20	2.5
	2-Hexanone	ND	20	2.5
	Acetone	ND	20	2.5
	Benzene	ND	1.0	0.10
	Bromochloromethane	ND	1.0	0.11
	Bromodichloromethane	0.30J	1.0	0.10
	Bromoform	ND	1.0	0.15
	Bromomethane	ND	1.0	0.16
	Carbon Disulfide	ND	1.0	0.25
	Carbon Tetrachloride	ND	1.0	0.10
	Chlorobenzene	ND	1.0	0.10
	Chloroethane	ND	1.0	0.27
	Chloroform	3.4	1.0	0.10
	Chloromethane	ND	1.0	0.15
	cis-1,2-Dichloroethylene	1.0	1.0	0.10
	Dibromochloromethane	ND	1.0	0.10
	Dichlorodifluoromethane	ND	1.0	0.15
	Ethylbenzene	ND	1.0	0.10
	Isopropylbenzene	ND	1.0	0.10
	m,p-Xylene	ND	2.0	0.21
	4-Methyl-2-Pentanone	ND	20	2.5
	Methylene Chloride	ND	2.0	0.50
	tert-Butyl Methyl Ether	ND	1.0	0.13
	o-Xylene	ND	1.0	0.10
	Styrene	ND	1.0	0.25
#	Tetrachloroethene	210	10	1.5
	Toluene	ND	1.0	0.10
	Trans-1,2-DCE	ND	1.0	0.10
	cis-1,3-Dichloropropene	ND	1.0	0.10
	Trans-1,3-Dichloropropene	ND	1.0	0.11
	TCE	0.55J	1.0	0.10
	Trichlorofluoromethane	ND	1.0	0.15
	Vinyl Chloride	ND	1.0	0.12
	1,2-Dibromoethane	ND	1.0	0.10
	Vinyl Acetate	ND	2.0	0.25
	Trichlorotrifluoroethane	ND	1.0	0.15
	Methyl Acetate	ND	2.0	0.25

	SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
	1,2-Dichloroethane-d4	10.7	10.0	107	70-130
	Bromofluorobenzene	10.3	10.0	103	70-130
	Toluene-d8	10.1	10.0	101	70-130
	Dibromofluoromethane	10.4	10.0	104	70-130
#	1,2-Dichloroethane-d4	85.2	100	85	70-130
#	Bromofluorobenzene	97.2	100	97	70-130
#	Toluene-d8	110	100	110	70-130
#	Dibromofluoromethane	94.0	100	94	70-130

Result(s) associated as marked on the header

Notes:
Sample Amount : 10ml
Prepared by : DNguye
Final Volume : 10ml
Analyzed by : DNguye
Sample Amount : 1.0ml
Prepared by : DNguye
Final Volume : 10ml
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 15:46
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/14/24 22:58
Sample ID	: MW02-GW090524	Date Analyzed:	09/14/24 22:58
Lab Samp ID:	24I020-01	Dilution Factor:	1
Lab File ID:	RIG0B6	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.30J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.4	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	1.0	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	210E	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.55J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURRDGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.7	10.0	107	70-130
Bromofluorobenzene	10.3	10.0	103	70-130
Toluene-dB	10.1	10.0	101	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 10ml Final Volume : 10ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG086.D
Acq On : 14 Sep 2024 10:58 pm
Operator : DNguye
Sample : 24I020-01
Misc : 10.0mL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 03 09:08:46 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

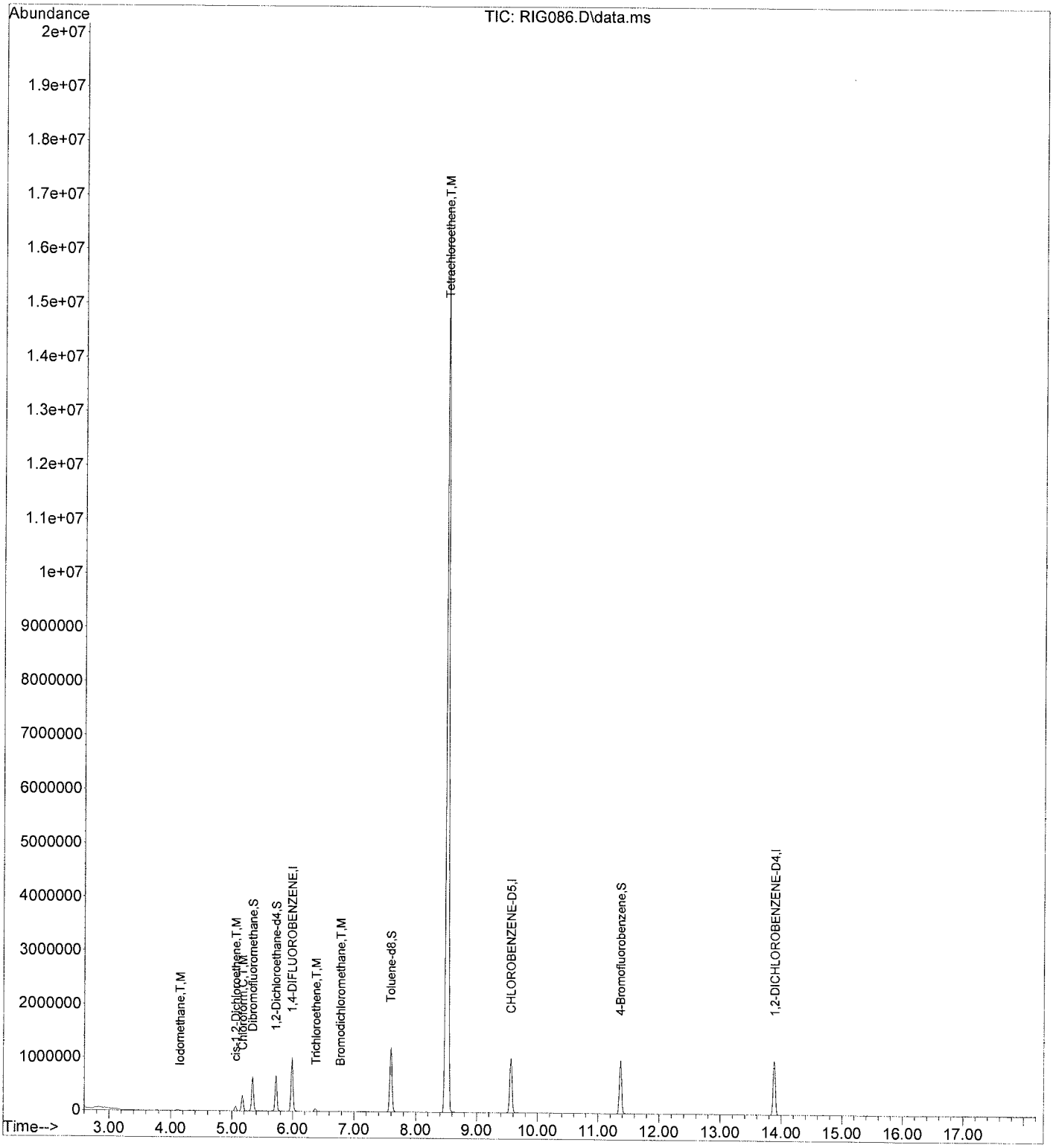
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.988	114	901696	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	764614	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	406076	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	411725	10.43	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.30%			
41) 1,2-Dichloroethane-d4	5.723	65	604476	10.69	ug/L	0.00
Spiked Amount 10.000			Recovery = 106.90%			
56) Toluene-d8	7.594	98	1101216	10.12	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.20%			
77) 4-Bromofluorobenzene	11.369	95	451971	10.25	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.50%			
Target Compounds						Qvalue
16) Iodomethane	4.150	142	3385	0.29	ug/l	76
32) cis-1,2-Dichloroethene	5.063	96	34901	1.03	ug/l	98
33) Chloroform	5.173	83	253322	3.36	ug/l	98
45) Trichloroethene	6.384	130	16887	0.55	ug/L	90
50) Bromodichloromethane	6.780	83	18055	0.30	ug/L	92
63) Tetrachloroethene	8.508	164	5743087	209.78	ug/l	98

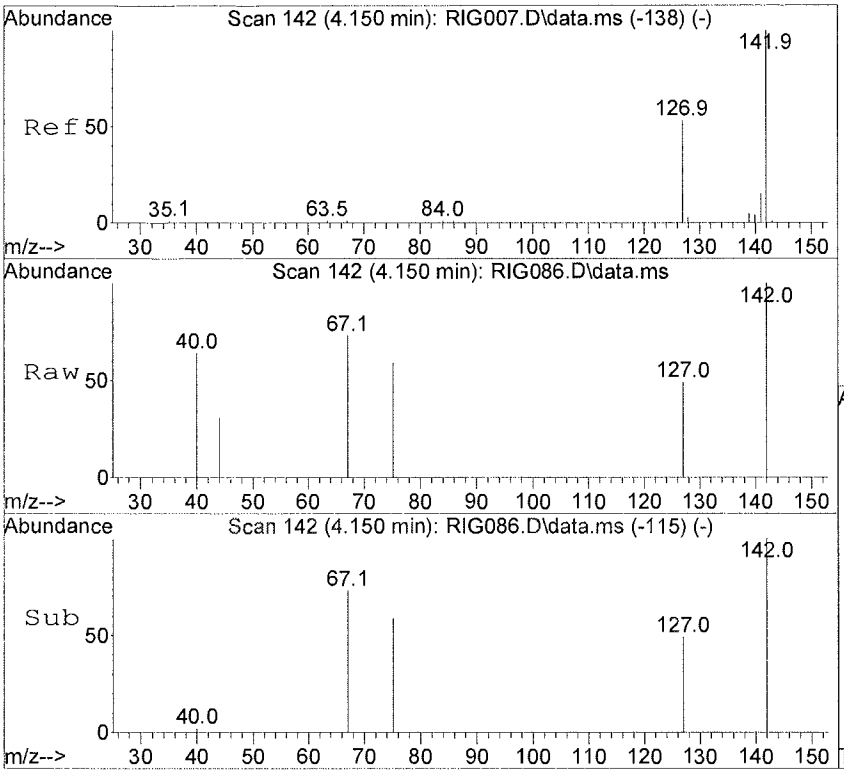
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG086.D
Acq On : 14 Sep 2024 10:58 pm
Operator : DNguye
Sample : 24I020-01
Misc : 10.0mL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 03 09:08:46 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

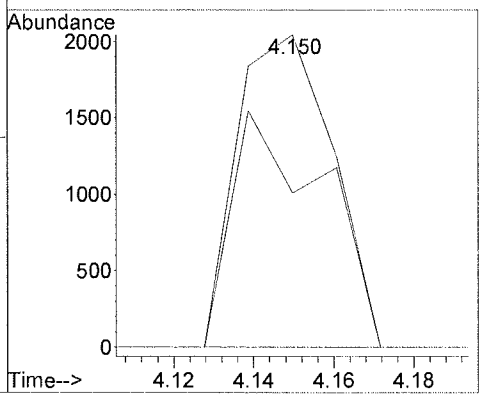


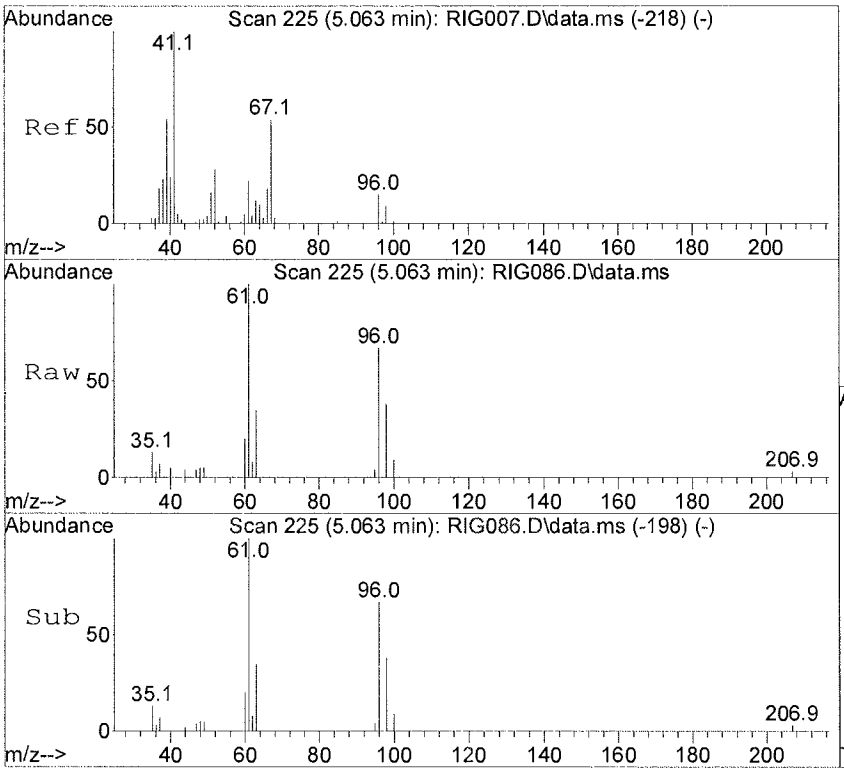


#16
Iodomethane
Concen: 0.29 ug/l
RT: 4.150 min Scan# 142
Delta R.T. 0.000 min
Lab File: RIG086.D
Acq: 14 Sep 2024 10:58 pm

Tgt Ion:142 Resp: 3385

Ion	Ratio	Lower	Upper
142	100		
127	72.7	25.1	85.1

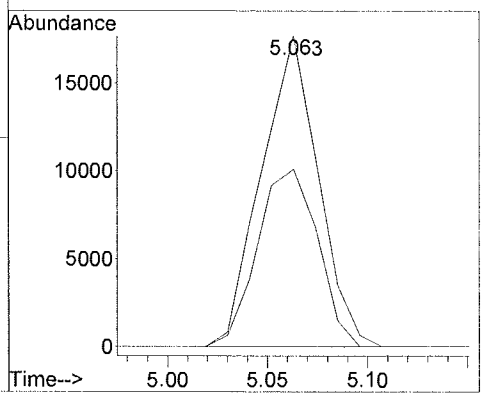


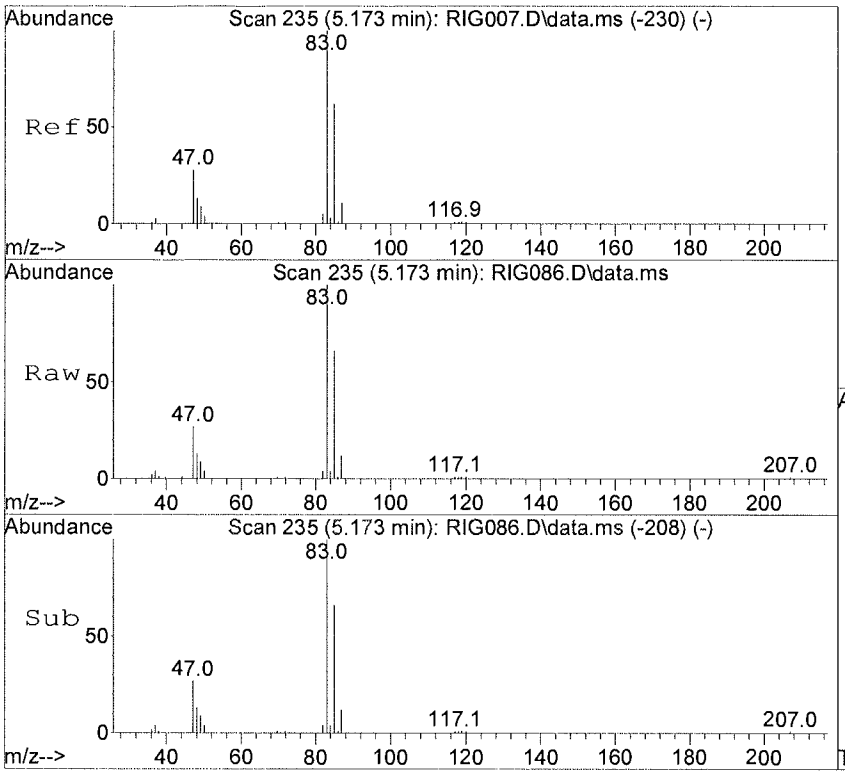


#32
cis-1,2-Dichloroethene
Concen: 1.03 ug/l
RT: 5.063 min Scan# 225
Delta R.T. 0.000 min
Lab File: RIG086.D
Acq: 14 Sep 2024 10:58 pm

Tgt Ion: 96 Resp: 34901

Ion	Ratio	Lower	Upper
96	100		
98	60.6	32.2	92.2

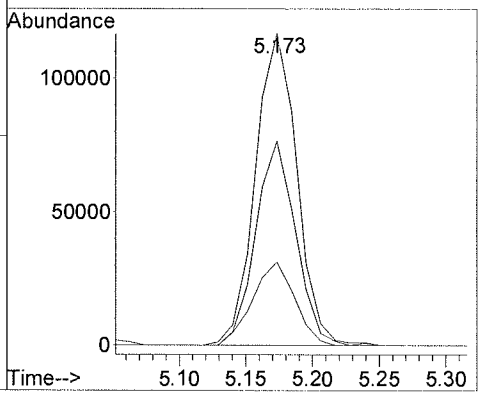


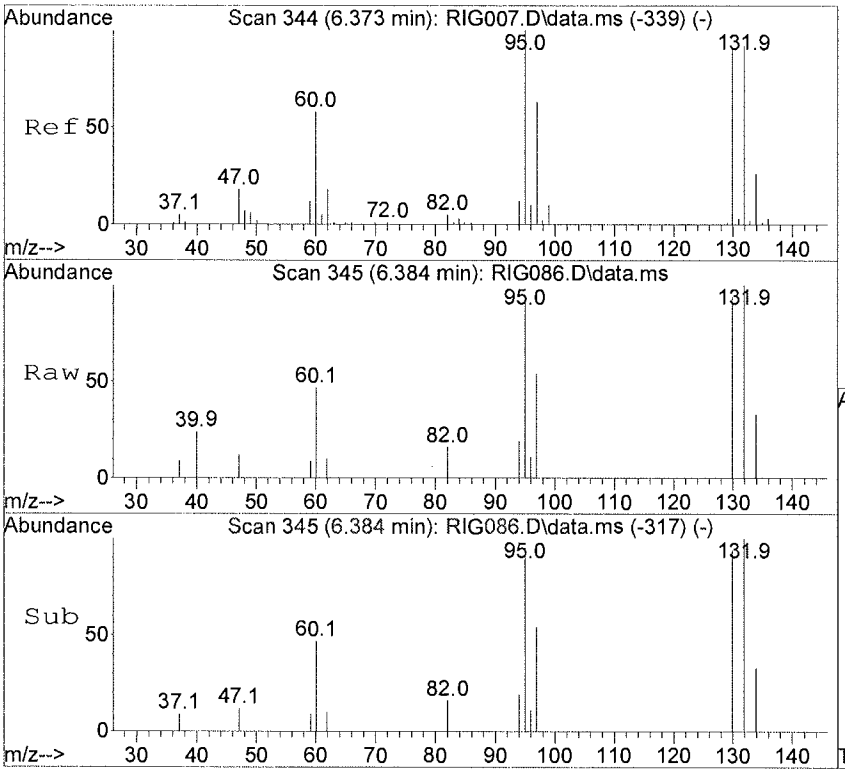


#33
Chloroform
Concen: 3.36 ug/l
RT: 5.173 min Scan# 235
Delta R.T. 0.000 min
Lab File: RIG086.D
Acq: 14 Sep 2024 10:58 pm

Tgt Ion: 83 Resp: 253322

Ion	Ratio	Lower	Upper
83	100		
85	63.1	35.1	95.1
47	27.2	0.0	58.4

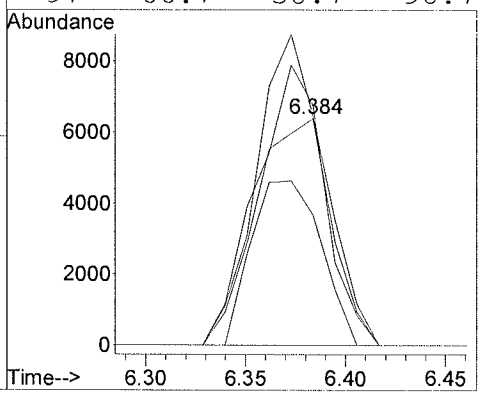


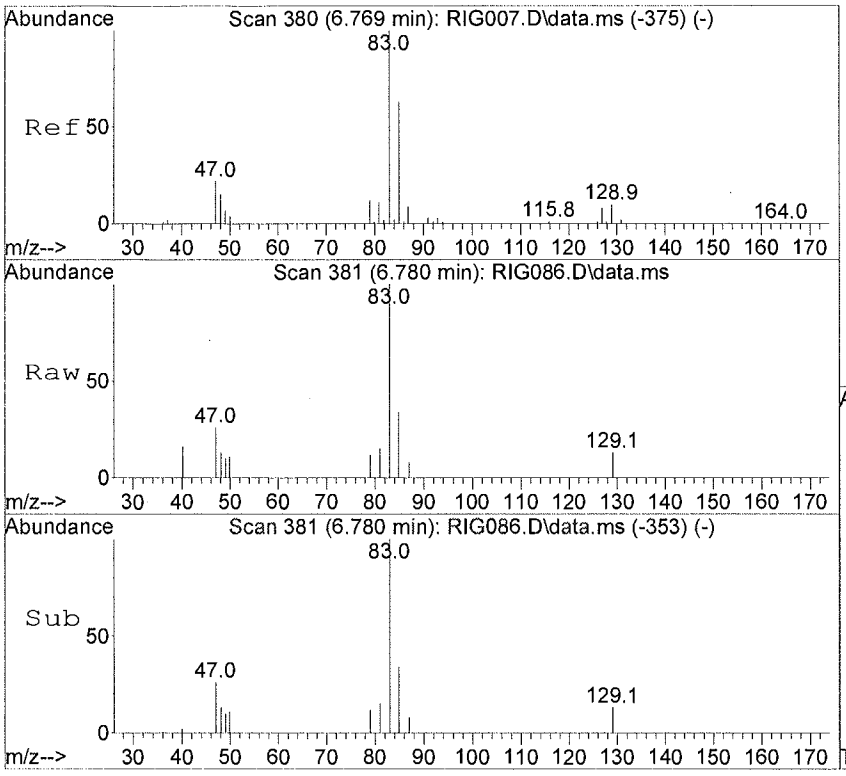


#45
Trichloroethene
Concen: 0.55 ug/L
RT: 6.384 min Scan# 345
Delta R.T. 0.011 min
Lab File: RIG086.D
Acq: 14 Sep 2024 10:58 pm

Tgt Ion:130 Resp: 16887

Ion	Ratio	Lower	Upper
130	100		
132	110.8	68.9	128.9
95	122.9	79.4	139.4
97	66.7	38.7	98.7

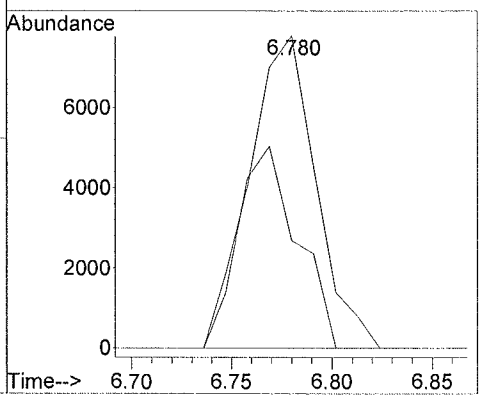


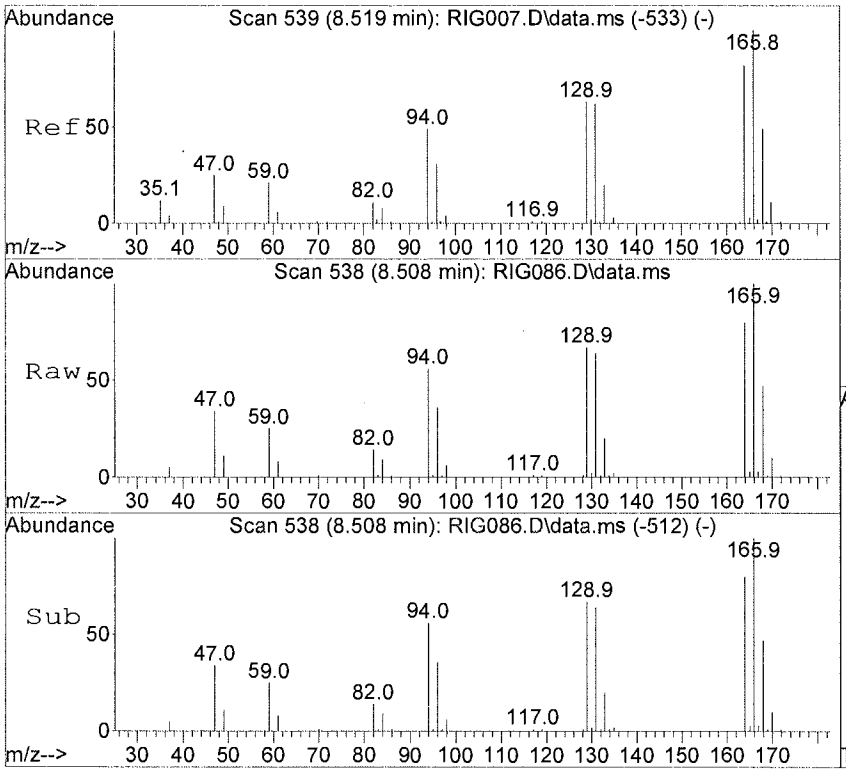


#50
Bromodichloromethane
Concen: 0.30 ug/L
RT: 6.780 min Scan# 381
Delta R.T. 0.011 min
Lab File: RIG086.D
Acq: 14 Sep 2024 10:58 pm

Tgt Ion: 83 Resp: 18055

Ion	Ratio	Lower	Upper
83	100		
85	57.4	33.7	93.7

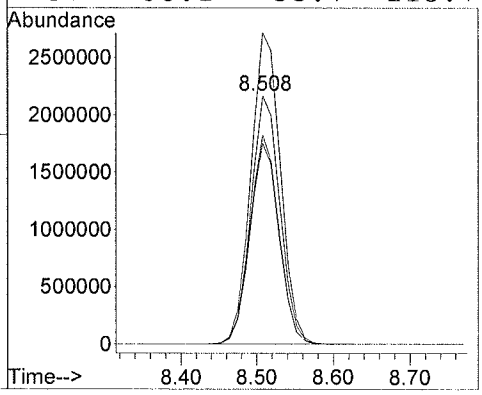




#63
Tetrachloroethene
Concen: 209.78 ug/l
RT: 8.508 min Scan# 538
Delta R.T. -0.011 min
Lab File: RIG086.D
Acq: 14 Sep 2024 10:58 pm

Tgt Ion:164 Resp: 5743087

Ion	Ratio	Lower	Upper
164	100		
166	127.3	97.2	157.2
129	83.3	54.4	114.4
131	80.1	55.7	115.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 15:46
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/19/24 17:20
Sample ID	: MW02-GW090524	Date Analyzed:	09/19/24 17:20
Lab Samp ID	: 24I020-01I	Dilution Factor:	10
Lab File ID	: RIV410	Matrix:	WATER
Ext Btch ID	: V001I15	% Moisture:	NA
Calib. Ref.	: RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	10	1.0
1,1,2,2-Tetrachloroethane	ND	10	1.1
1,1,2-Trichloroethane	ND	10	1.0
1,1-Dichloroethane	ND	10	1.0
1,1-Dichloroethene	ND	10	1.0
1,2,3-Trichlorobenzene	ND	10	1.5
1,2,4-Trichlorobenzene	ND	10	1.5
1,2,4-Trimethylbenzene	ND	10	1.1
1,2-Dibromo-3-chloropropane	ND	20	2.5
1,2-Dichlorobenzene	ND	10	1.0
1,2-Dichloroethane	ND	10	1.0
1,2-Dichloropropane	ND	10	1.0
1,3,5-Trimethylbenzene	ND	10	1.2
1,3-Dichlorobenzene	ND	10	1.1
1,4-Dichlorobenzene	ND	10	1.0
2-Butanone	ND	200	25
2-Hexanone	ND	200	25
Acetone	ND	200	25
Benzene	ND	10	1.0
Bromochloromethane	ND	10	1.1
Bromodichloromethane	ND	10	1.0
Bromoform	ND	10	1.5
Bromomethane	ND	10	1.6
Carbon Disulfide	ND	10	2.5
Carbon Tetrachloride	ND	10	1.0
Chlorobenzene	ND	10	1.0
Chloroethane	ND	10	2.7
Chloroform	3.7J	10	1.0
Chloromethane	ND	10	1.5
cis-1,2-Dichloroethylene	ND	10	1.0
Dibromochloromethane	ND	10	1.0
Dichlorodifluoromethane	ND	10	1.5
Ethylbenzene	ND	10	1.0
Isopropylbenzene	ND	10	1.0
m,p-Xylene	ND	20	2.1
4-Methyl-2-Pentanone	ND	200	25
Methylene Chloride	13J	20	5.0
tert-Butyl Methyl Ether	ND	10	1.3
o-Xylene	ND	10	1.0
Styrene	ND	10	2.5
Tetrachloroethene	210	10	1.5
Toluene	ND	10	1.0
Trans-1,2-DCE	ND	10	1.0
cis-1,3-Dichloropropene	ND	10	1.0
Trans-1,3-Dichloropropene	ND	10	1.1
TCE	ND	10	1.0
Trichlorofluoromethane	ND	10	1.5
Vinyl Chloride	ND	10	1.2
1,2-Dibromoethane	ND	10	1.0
Vinyl Acetate	ND	20	2.5
Trichlorotrifluoroethane	ND	10	1.5
Methyl Acetate	ND	20	2.5

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	85.2	100	85	70-130
Bromofluorobenzene	97.2	100	97	70-130
Toluene-d8	110	100	110	70-130
Dibromofluoromethane	94.0	100	94	70-130

Notes:
Sample Amount : 1.0ml
Final Volume : 10ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIV410.D Vial: 16
Acq On : 19 Sep 2024 5:20 pm Operator: DNguye/CLingl
Sample : 24I020-01I 10X Inst : 01
Misc : 2.5mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 27 16:05 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

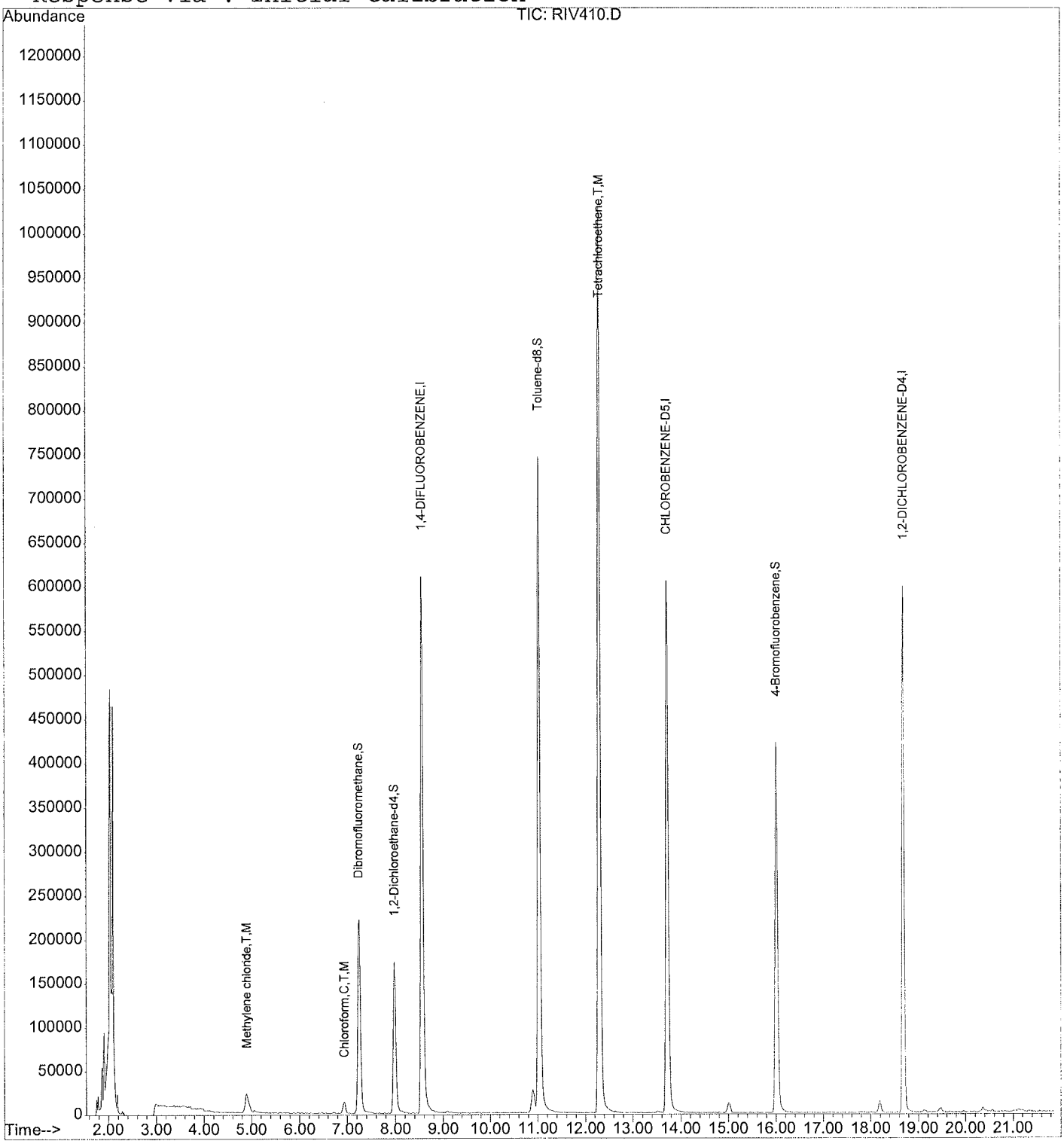
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	990728	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	747392	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	286124	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	283138	9.40	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.00%		
41) 1,2-Dichloroethane-d4	7.98	65	228300	8.52	ug/l	0.00
Spiked Amount 10.000			Recovery =	85.20%		
54) Toluene-d8	11.03	98	1008735	11.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.40%		
76) 4-Bromofluorobenzene	16.01	95	352984	9.72	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.20%		
Target Compounds						Qvalue
18) Methylene chloride	4.90	49	42333	1.27	ug/l	90
31) Chloroform	6.95	83	22125	0.37	ug/l	94
61) Tetrachloroethene	12.31	164	529409	20.81	ug/l	94

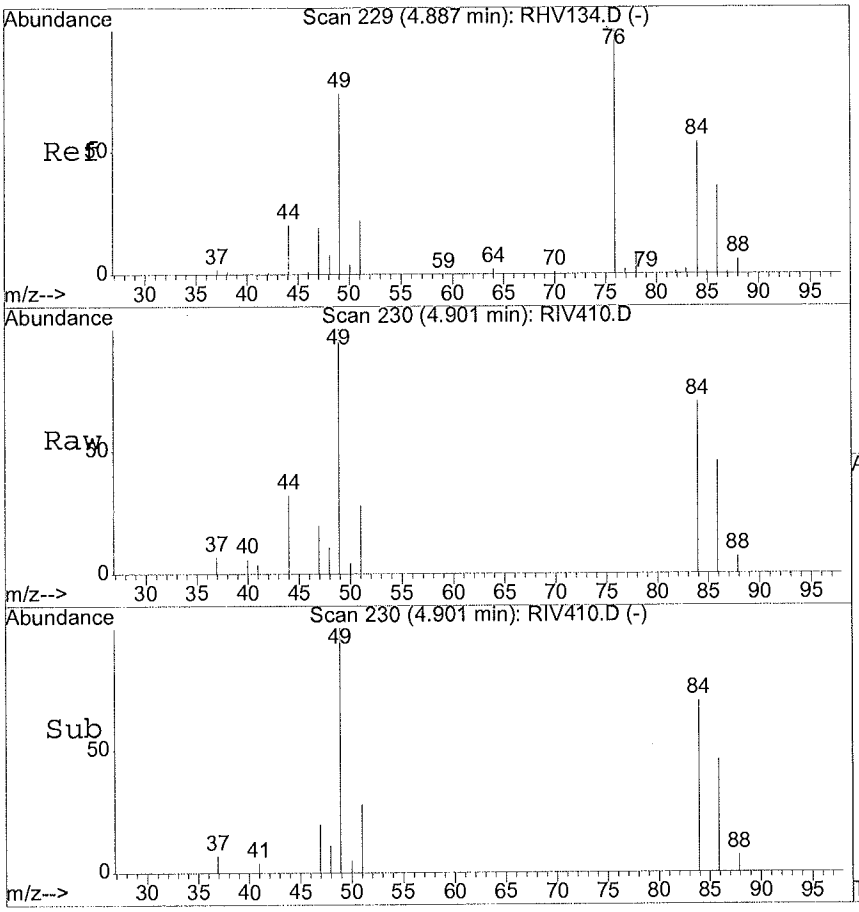
(#) = qualifier out of range (m) = manual integration
RIV410.D VO01H09.M Fri Sep 27 16:05:40 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIV410.D Vial: 16
Acq On : 19 Sep 2024 5:20 pm Operator: DNguye/CLing
Sample : 24I020-01I 10X Inst : 01
Misc : 2.5mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 27 16:05 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

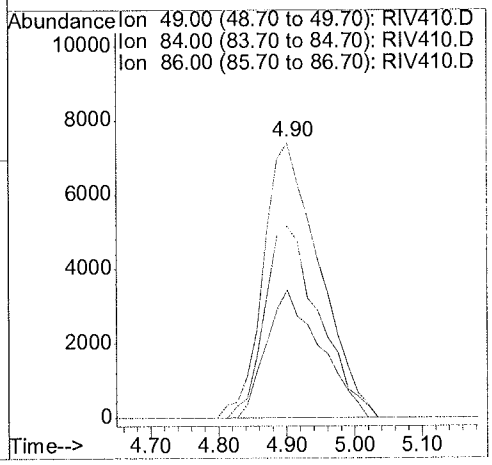


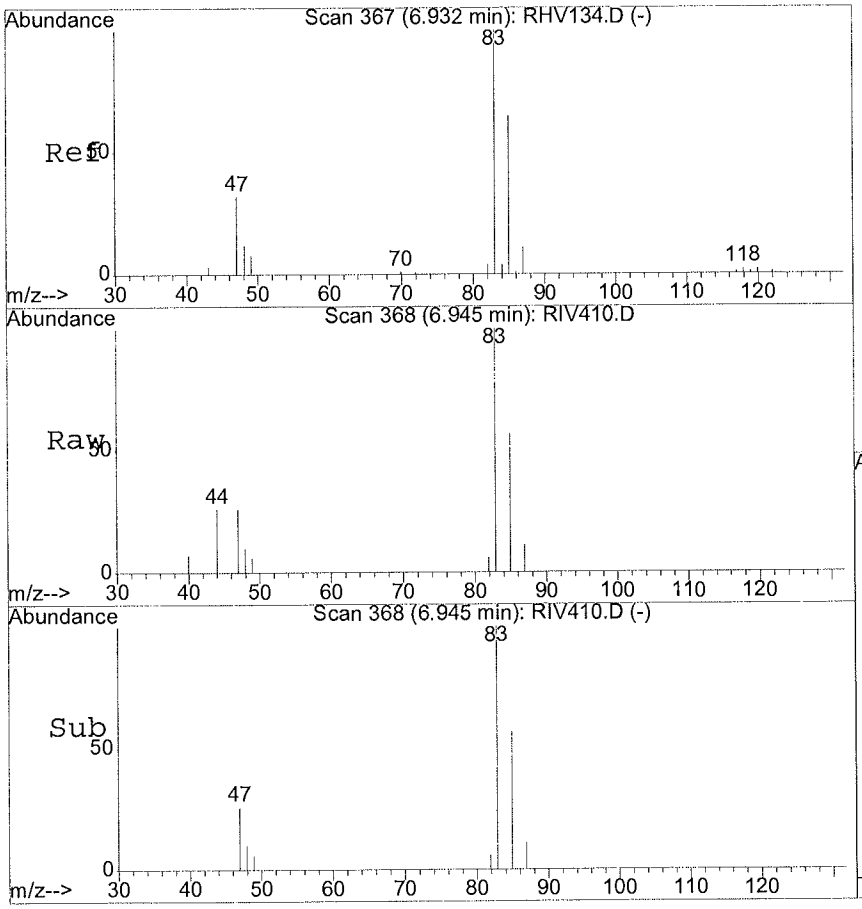


#18
Methylene chloride
Concen: 1.27 ug/l
RT: 4.90 min Scan# 230
Delta R.T. 0.01 min
Lab File: RIV410.D
Acq: 19 Sep 2024 5:20 pm

Tgt Ion: 49 Resp: 42333

Ion	Ratio	Lower	Upper
49	100		
84	67.8	45.8	105.8
86	44.5	21.5	81.5

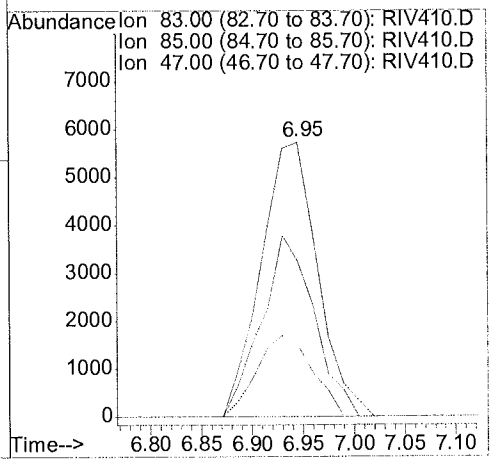


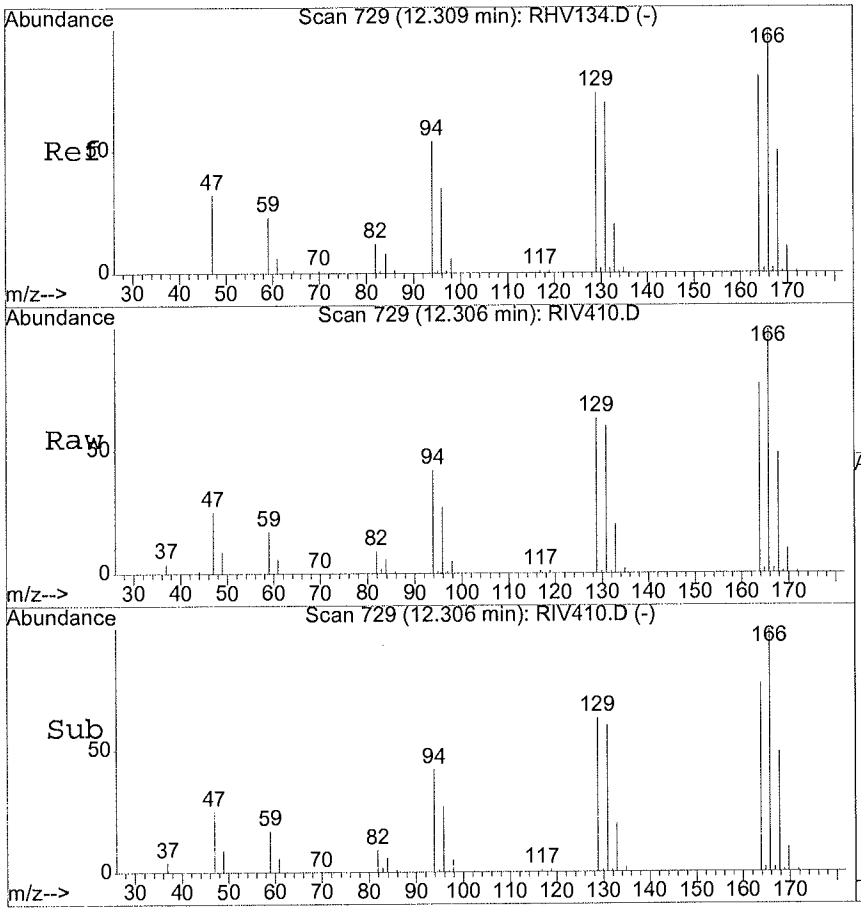


#31
Chloroform
Concen: 0.37 ug/l
RT: 6.95 min Scan# 368
Delta R.T. 0.01 min
Lab File: RIV410.D
Acq: 19 Sep 2024 5:20 pm

Tgt Ion: 83 Resp: 22125

Ion	Ratio	Lower	Upper
83	100		
85	61.3	38.4	98.4
47	29.0	0.0	59.6

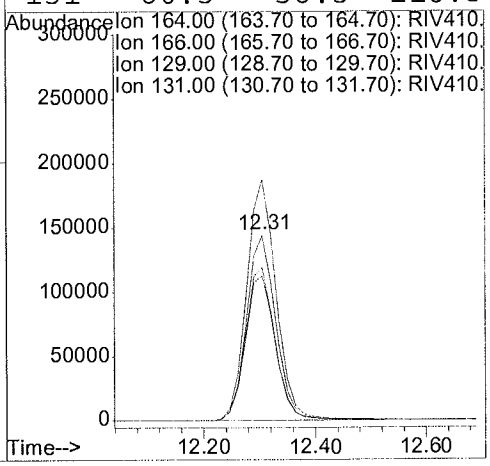




#61
Tetrachloroethene
Concen: 20.81 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV410.D
Acq: 19 Sep 2024 5:20 pm

Tgt Ion:164 Resp: 529409

Ion	Ratio	Lower	Upper
164	100		
166	130.8	98.2	158.2
129	83.6	62.8	122.8
131	80.3	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 15:46
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/14/24 23:23 # 09/19/24 17:50
Sample ID	: FD02-GW090524	Date Analyzed:	09/14/24 23:23 # 09/19/24 17:50
Lab Samp ID:	I020-02 #I020-02I	Dilution Factor:	1 # 10
Lab File ID:	RIG087 #RIV411	Matrix:	WATER
Ext Btch ID:	VOE2I07 #V001I15	% Moisture:	NA
Calib. Ref.:	RIG007 #RHV134	Instrument ID:	E2 # 01

	PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
	1,1,1-Trichloroethane	ND	1.0	0.10
	1,1,2,2-Tetrachloroethane	ND	1.0	0.11
	1,1,2-Trichloroethane	ND	1.0	0.10
	1,1-Dichloroethane	ND	1.0	0.10
	1,1-Dichloroethene	ND	1.0	0.10
	1,2,3-Trichlorobenzene	ND	1.0	0.15
	1,2,4-Trichlorobenzene	ND	1.0	0.15
	1,2,4-Trimethylbenzene	ND	1.0	0.11
	1,2-Dibromo-3-chloropropane	ND	2.0	0.25
	1,2-Dichlorobenzene	ND	1.0	0.10
	1,2-Dichloroethane	ND	1.0	0.10
	1,2-Dichloropropane	ND	1.0	0.10
	1,3,5-Trimethylbenzene	ND	1.0	0.12
	1,3-Dichlorobenzene	ND	1.0	0.11
	1,4-Dichlorobenzene	ND	1.0	0.10
	2-Butanone	ND	20	2.5
	2-Hexanone	ND	20	2.5
	Acetone	ND	20	2.5
	Benzene	ND	1.0	0.10
	Bromochloromethane	ND	1.0	0.11
	Bromodichloromethane	0.29J	1.0	0.10
	Bromoform	ND	1.0	0.15
	Bromomethane	ND	1.0	0.16
	Carbon Disulfide	ND	1.0	0.25
	Carbon Tetrachloride	ND	1.0	0.10
	Chlorobenzene	ND	1.0	0.10
	Chloroethane	ND	1.0	0.27
	Chloroform	3.4	1.0	0.10
	Chloromethane	ND	1.0	0.15
	cis-1,2-Dichloroethylene	0.45J	1.0	0.10
	Dibromochloromethane	ND	1.0	0.10
	Dichlorodifluoromethane	ND	1.0	0.15
	Ethylbenzene	ND	1.0	0.10
	Isopropylbenzene	ND	1.0	0.10
	m,p-Xylene	ND	2.0	0.21
	4-Methyl-2-Pentanone	ND	20	2.5
	Methylene Chloride	ND	2.0	0.50
	tert-Butyl Methyl Ether	ND	1.0	0.13
	o-Xylene	ND	1.0	0.10
	Styrene	ND	1.0	0.25
#	Tetrachloroethene	200	10	1.5
	Toluene	ND	1.0	0.10
	Trans-1,2-DCE	ND	1.0	0.10
	cis-1,3-Dichloropropene	ND	1.0	0.10
	Trans-1,3-Dichloropropene	ND	1.0	0.11
	TCE	0.58J	1.0	0.10
	Trichlorofluoromethane	ND	1.0	0.15
	Vinyl Chloride	ND	1.0	0.12
	1,2-Dibromoethane	ND	1.0	0.10
	Vinyl Acetate	ND	2.0	0.25
	Trichlorotrifluoroethane	ND	1.0	0.15
	Methyl Acetate	ND	2.0	0.25

	SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
	1,2-Dichloroethane-d4	11.1	10.0	111	70-130
	Bromofluorobenzene	9.82	10.0	98	70-130
	Toluene-d8	10.1	10.0	101	70-130
	Dibromofluoromethane	10.9	10.0	109	70-130
#	1,2-Dichloroethane-d4	86.0	100	86	70-130
#	Bromofluorobenzene	97.5	100	97	70-130
#	Toluene-d8	110	100	110	70-130
#	Dibromofluoromethane	95.7	100	96	70-130

Result(s) associated as marked on the header

Notes:
Sample Amount : 10ml — Final Volume : 10ml
Prepared by : DNguye — Analyzed by : DNguye
Sample Amount : 1.0ml — Final Volume : 10ml
Prepared by : DNguye — Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 15:46
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/14/24 23:23
Sample ID	: FD02-GW090524	Date Analyzed:	09/14/24 23:23
Lab Samp ID:	24I020-02	Dilution Factor:	1
Lab File ID:	RIG087	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.29J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.4	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.45J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	210E	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.58J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.1	10.0	111	70-130
Bromofluorobenzene	9.82	10.0	98	70-130
Toluene-dB	10.1	10.0	101	70-130
Dibromofluoromethane	10.9	10.0	109	70-130

Notes:
Sample Amount : 10ml
Final Volume : 10ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG087.D
Acq On : 14 Sep 2024 11:23 pm
Operator : DNguye
Sample : 24I020-02
Misc : 10.0mL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 03 09:09:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

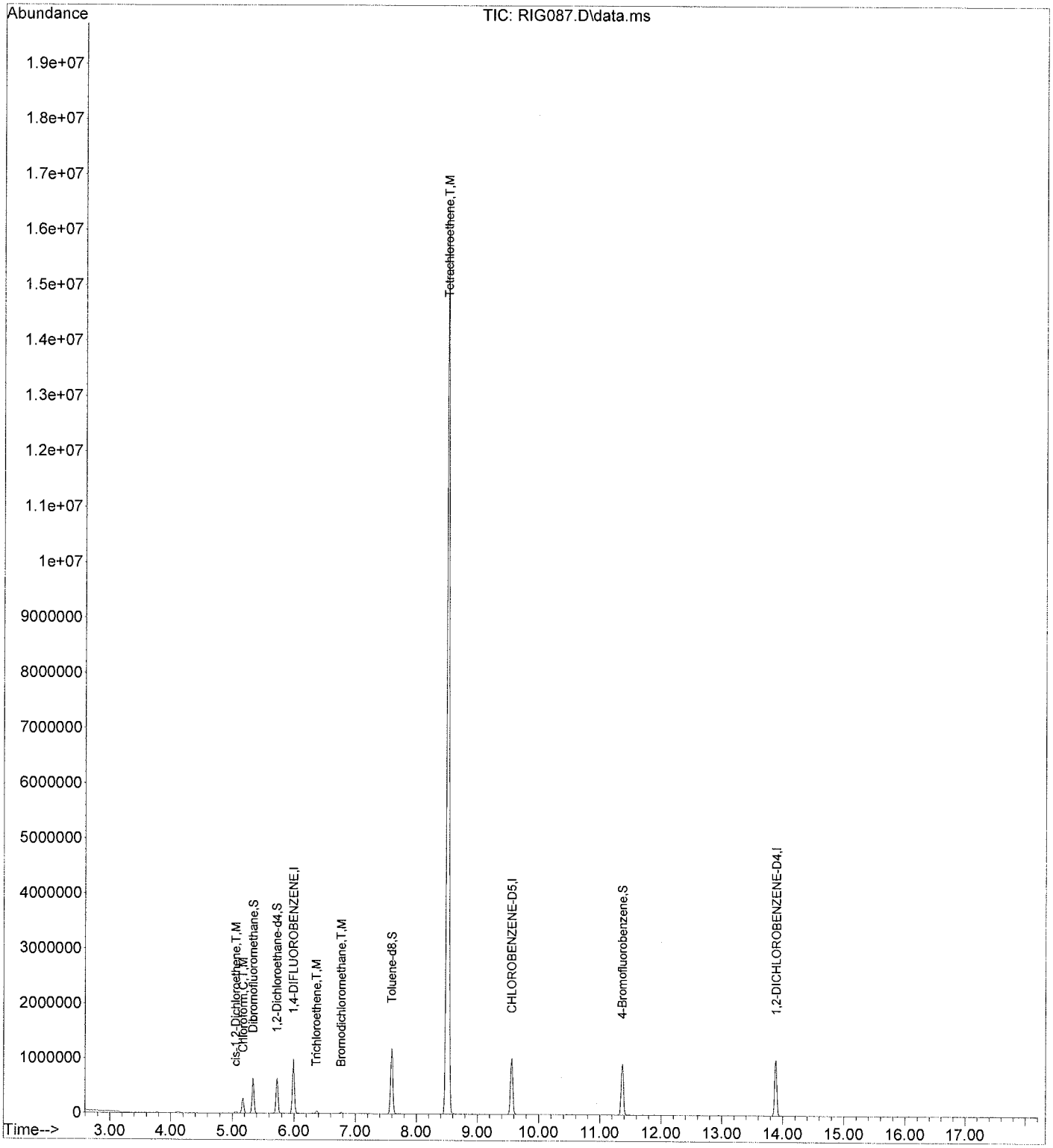
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	844035	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	752439	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	405116	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	400520	10.86	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.60%		
41) 1,2-Dichloroethane-d4	5.723	65	588620	11.12	ug/L	0.00
Spiked Amount 10.000			Recovery =	111.20%		
56) Toluene-d8	7.594	98	1081951	10.11	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.10%		
77) 4-Bromofluorobenzene	11.369	95	432053	9.82	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.20%		
Target Compounds						Qvalue
32) cis-1,2-Dichloroethene	5.052	96	14275	0.45	ug/l	98
33) Chloroform	5.173	83	242037	3.43	ug/l	95
45) Trichloroethene	6.361	130	16572	0.58	ug/L	98
50) Bromodichloromethane	6.769	83	16437	0.29	ug/L	82
63) Tetrachloroethene	8.507	164	5582716	207.22	ug/l	98

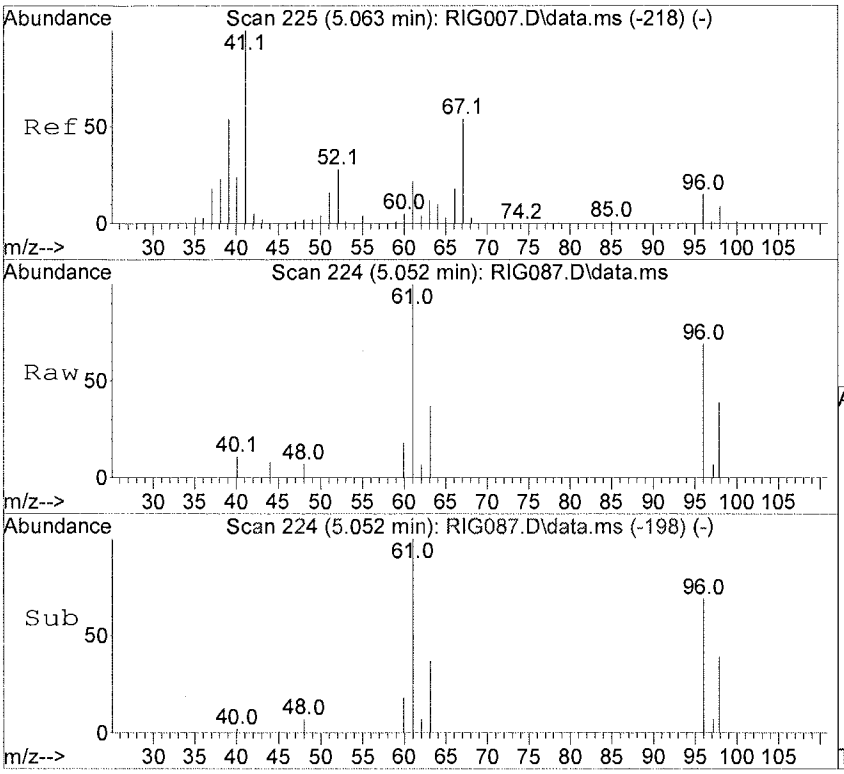
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG087.D
Acq On : 14 Sep 2024 11:23 pm
Operator : DNguye
Sample : 24I020-02
Misc : 10.0mL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 03 09:09:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

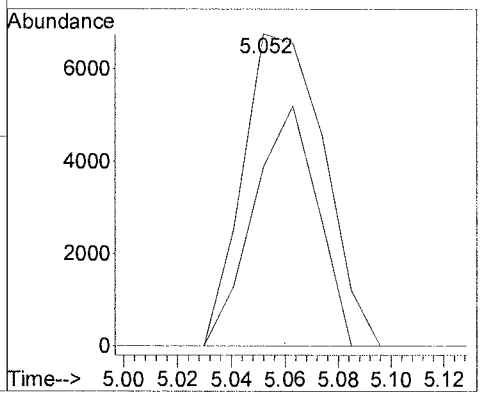


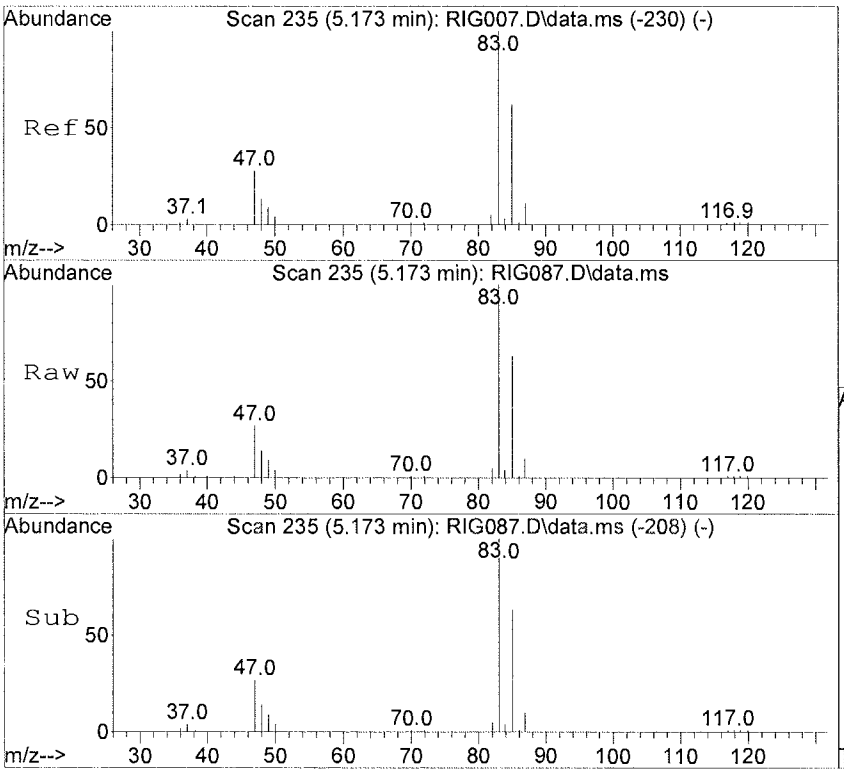


#32
cis-1,2-Dichloroethene
Concen: 0.45 ug/l
RT: 5.052 min Scan# 224
Delta R.T. -0.011 min
Lab File: RIG087.D
Acq: 14 Sep 2024 11:23 pm

Tgt Ion: 96 Resp: 14275

Ion	Ratio	Lower	Upper
96	100		
98	60.4	32.2	92.2

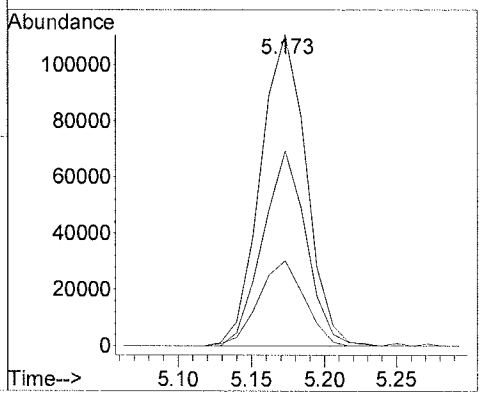


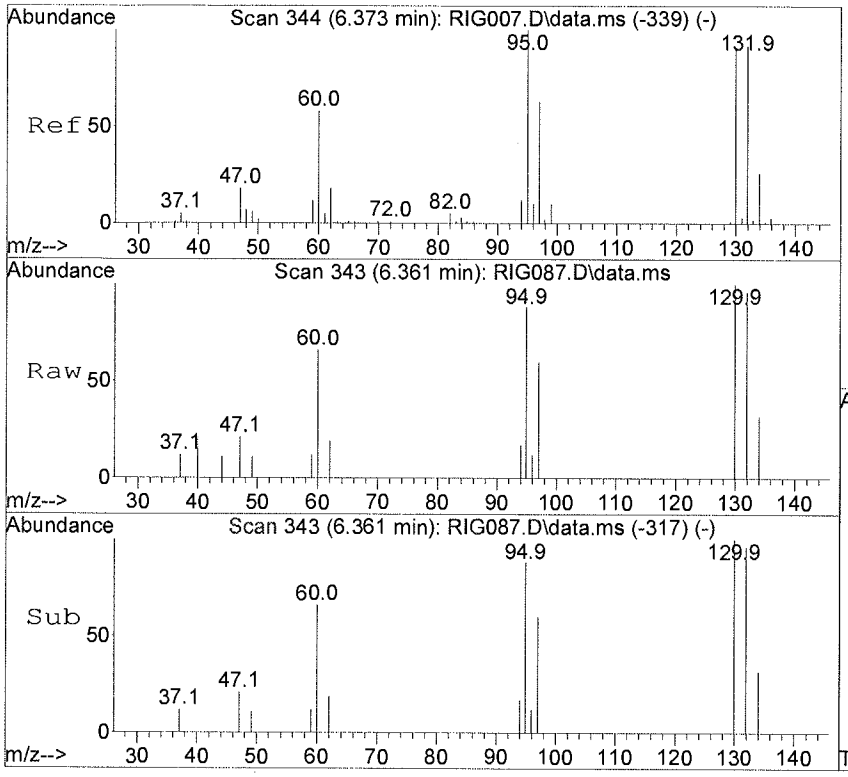


#33
Chloroform
Concen: 3.43 ug/l
RT: 5.173 min Scan# 235
Delta R.T. -0.000 min
Lab File: RIG087.D
Acq: 14 Sep 2024 11:23 pm

Tgt Ion: 83 Resp: 242037

Ion	Ratio	Lower	Upper
83	100		
85	59.6	35.1	95.1
47	27.4	0.0	58.4

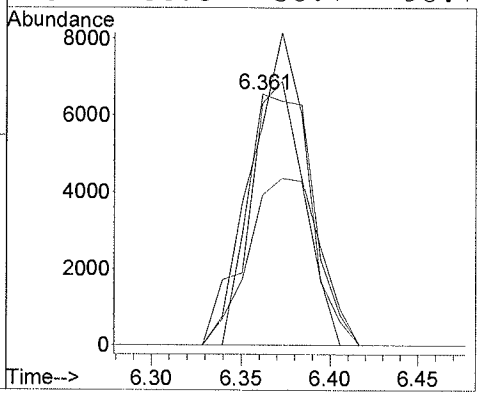


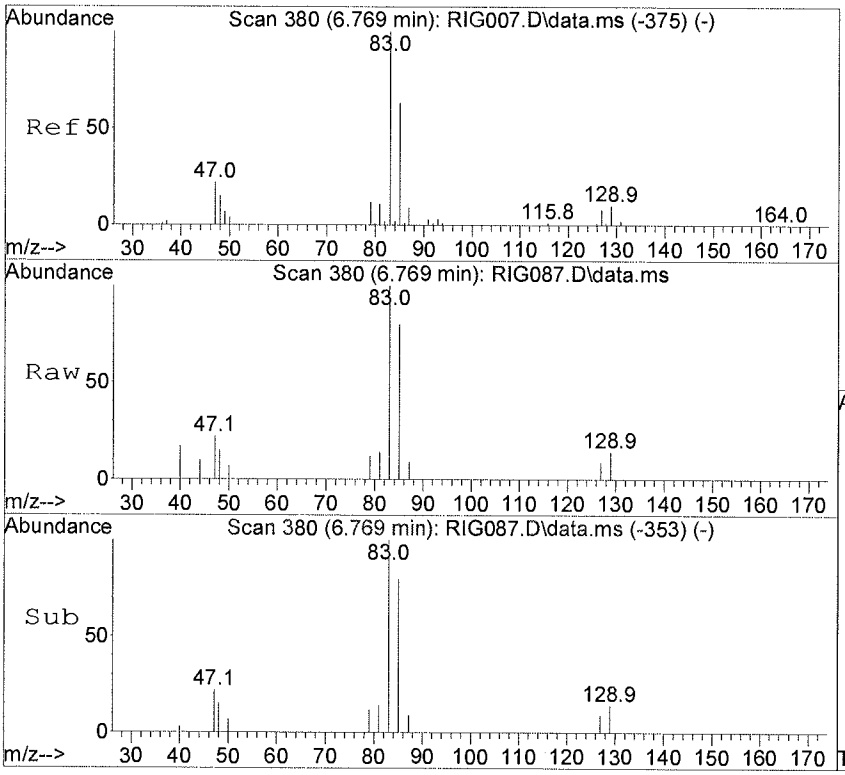


#45
Trichloroethene
Concen: 0.58 ug/L
RT: 6.361 min Scan# 343
Delta R.T. -0.011 min
Lab File: RIG087.D
Acq: 14 Sep 2024 11:23 pm

Tgt Ion:130 Resp: 16572

Ion	Ratio	Lower	Upper
130	100		
132	98.2	68.9	128.9
95	106.4	79.4	139.4
97	66.5	38.7	98.7

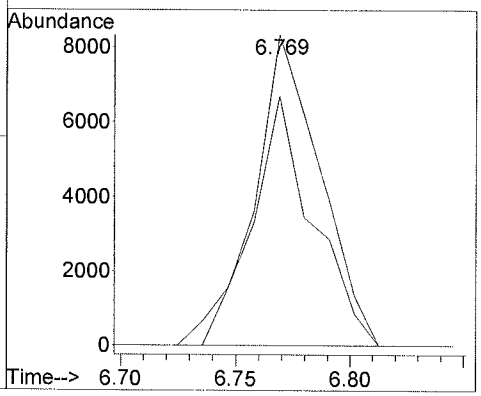


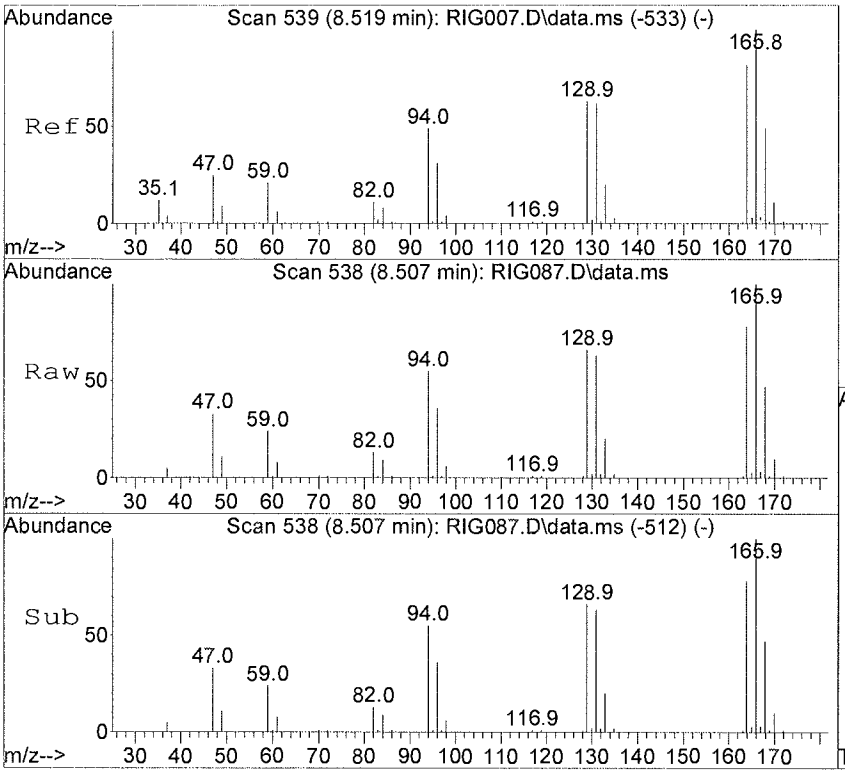


#50
Bromodichloromethane
Concen: 0.29 ug/L
RT: 6.769 min Scan# 380
Delta R.T. -0.000 min
Lab File: RIG087.D
Acq: 14 Sep 2024 11:23 pm

Tgt Ion: 83 Resp: 16437

Ion	Ratio	Lower	Upper
83	100		
85	77.8	33.7	93.7

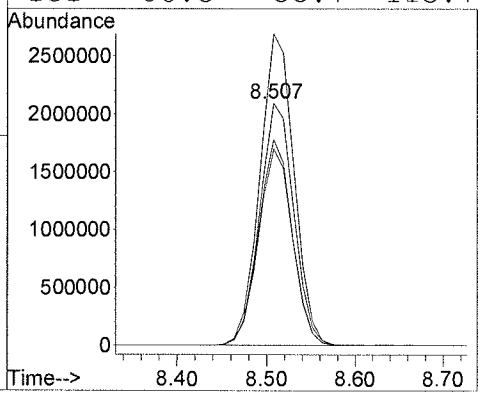




#63
Tetrachloroethene
Concen: 207.22 ug/l
RT: 8.507 min Scan# 538
Delta R.T. -0.011 min
Lab File: RIG087.D
Acq: 14 Sep 2024 11:23 pm

Tgt Ion:164 Resp: 5582716

Ion	Ratio	Lower	Upper
164	100		
166	128.5	97.2	157.2
129	83.5	54.4	114.4
131	80.5	55.7	115.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 15:46
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/19/24 17:50
Sample ID	: FD02-GW090524	Date Analyzed:	09/19/24 17:50
Lab Samp ID:	24I020-02I	Dilution Factor:	10
Lab File ID:	RIV411	Matrix:	WATER
Ext Btch ID:	VO01I15	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	10	1.0
1,1,2,2-Tetrachloroethane	ND	10	1.1
1,1,2-Trichloroethane	ND	10	1.0
1,1-Dichloroethane	ND	10	1.0
1,1-Dichloroethene	ND	10	1.0
1,2,3-Trichlorobenzene	ND	10	1.5
1,2,4-Trichlorobenzene	ND	10	1.5
1,2,4-Trimethylbenzene	ND	10	1.1
1,2-Dibromo-3-chloropropane	ND	20	2.5
1,2-Dichlorobenzene	ND	10	1.0
1,2-Dichloroethane	ND	10	1.0
1,2-Dichloropropane	ND	10	1.0
1,3,5-Trimethylbenzene	ND	10	1.2
1,3-Dichlorobenzene	ND	10	1.1
1,4-Dichlorobenzene	ND	10	1.0
2-Butanone	ND	200	25
2-Hexanone	ND	200	25
Acetone	ND	200	25
Benzene	ND	10	1.0
Bromochloromethane	ND	10	1.1
Bromodichloromethane	ND	10	1.0
Bromoform	ND	10	1.5
Bromomethane	ND	10	1.6
Carbon Disulfide	ND	10	2.5
Carbon Tetrachloride	ND	10	1.0
Chlorobenzene	ND	10	1.0
Chloroethane	ND	10	2.7
Chloroform	3.5J	10	1.0
Chloromethane	ND	10	1.5
cis-1,2-Dichloroethylene	ND	10	1.0
Dibromochloromethane	ND	10	1.0
Dichlorodifluoromethane	ND	10	1.5
Ethylbenzene	ND	10	1.0
Isopropylbenzene	ND	10	1.0
m,p-Xylene	ND	20	2.1
4-Methyl-2-Pentanone	ND	200	25
Methylene Chloride	13J	20	5.0
tert-Butyl Methyl Ether	ND	10	1.3
o-Xylene	ND	10	1.0
Styrene	ND	10	2.5
Tetrachloroethene	200	10	1.5
Toluene	ND	10	1.0
Trans-1,2-DCE	ND	10	1.0
cis-1,3-Dichloropropene	ND	10	1.0
Trans-1,3-Dichloropropene	ND	10	1.1
TCE	ND	10	1.0
Trichlorofluoromethane	ND	10	1.5
Vinyl Chloride	ND	10	1.2
1,2-Dibromoethane	ND	10	1.0
Vinyl Acetate	ND	20	2.5
Trichlorotrifluoroethane	ND	10	1.5
Methyl Acetate	ND	20	2.5

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	86.0	100	B6	70-130
Bromofluorobenzene	97.5	100	97	70-130
Toluene-dB	110	100	110	70-130
Dibromofluoromethane	95.7	100	96	70-130

Notes:
Sample Amount : 1.0ml Final Volume : 10ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIV411.D Vial: 17
Acq On : 19 Sep 2024 5:50 pm Operator: DNguye/CLingl
Sample : 24I020-02I 10X Inst : 01
Misc : 2.5mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 27 16:06 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

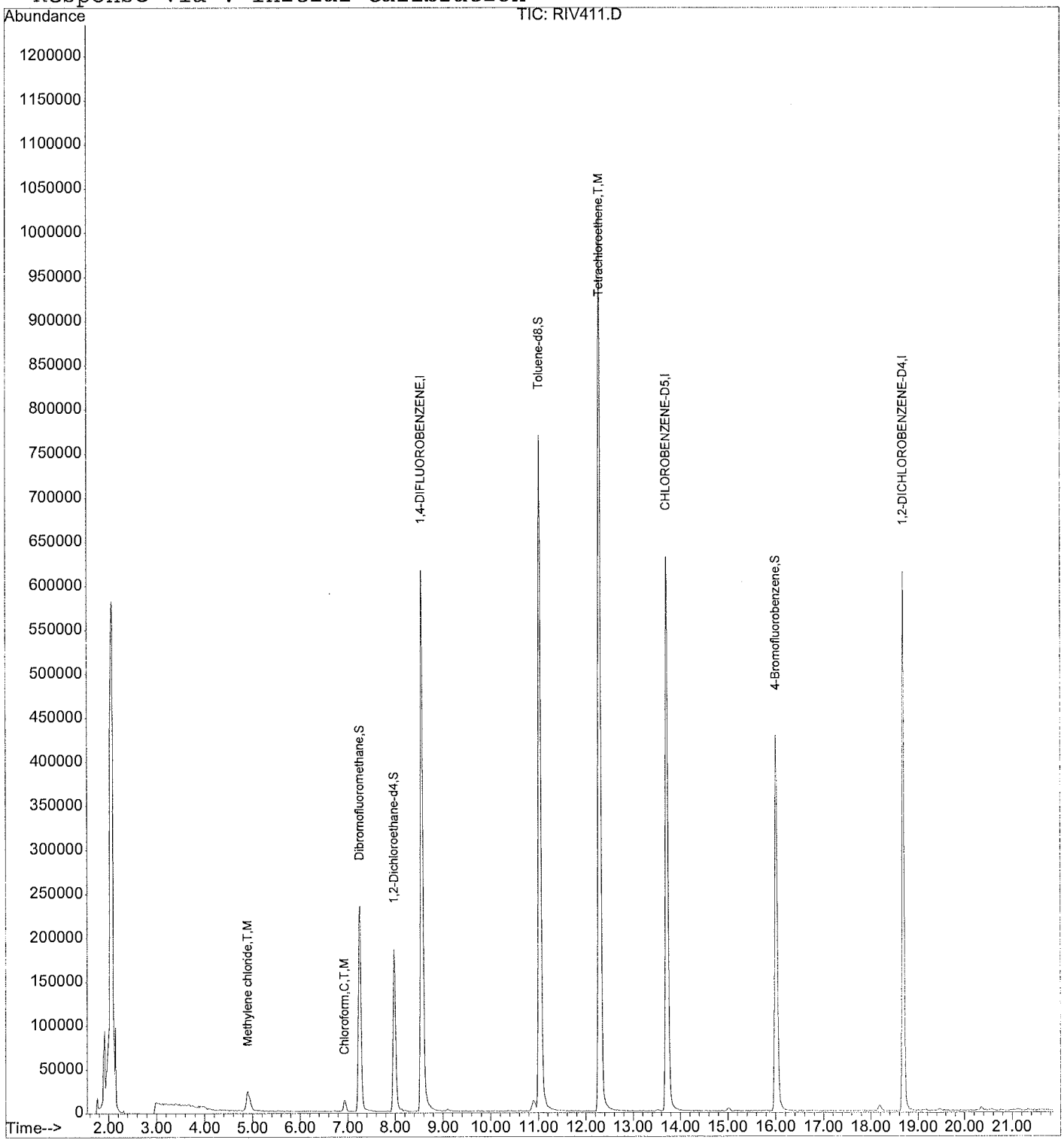
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1003636	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	782732	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	295887	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	292213	9.57	ug/l	0.01
Spiked Amount 10.000			Recovery = 95.70%			
41) 1,2-Dichloroethane-d4	7.98	65	233270	8.60	ug/l	0.00
Spiked Amount 10.000			Recovery = 86.00%			
54) Toluene-d8	11.03	98	1051938	11.00	ug/l	0.00
Spiked Amount 10.000			Recovery = 110.00%			
76) 4-Bromofluorobenzene	16.01	95	365838	9.75	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.50%			
Target Compounds						Qvalue
18) Methylene chloride	4.90	49	43258	1.28	ug/l	92
31) Chloroform	6.93	83	21494	0.35	ug/l	97
61) Tetrachloroethene	12.31	164	520860	19.55	ug/l	93

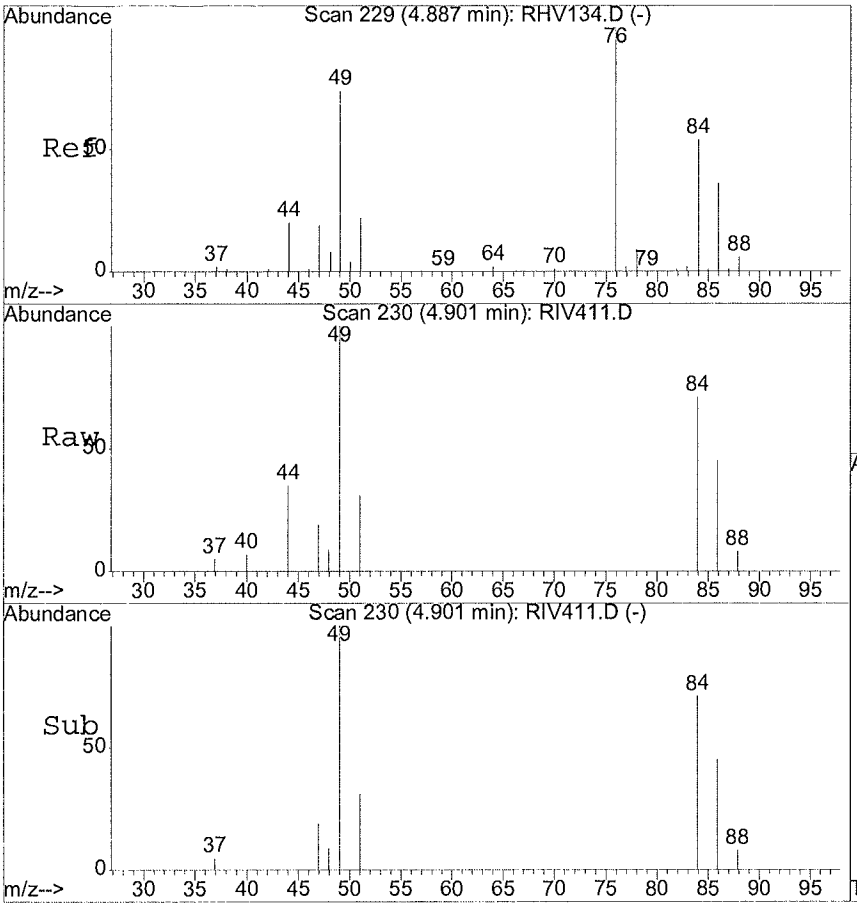
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIV411.D Vial: 17
Acq On : 19 Sep 2024 5:50 pm Operator: DNguye/CLing
Sample : 24I020-02I 10X Inst : 01
Misc : 2.5mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 27 16:06 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

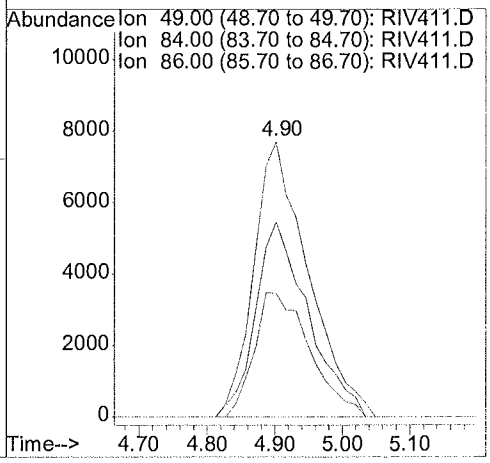


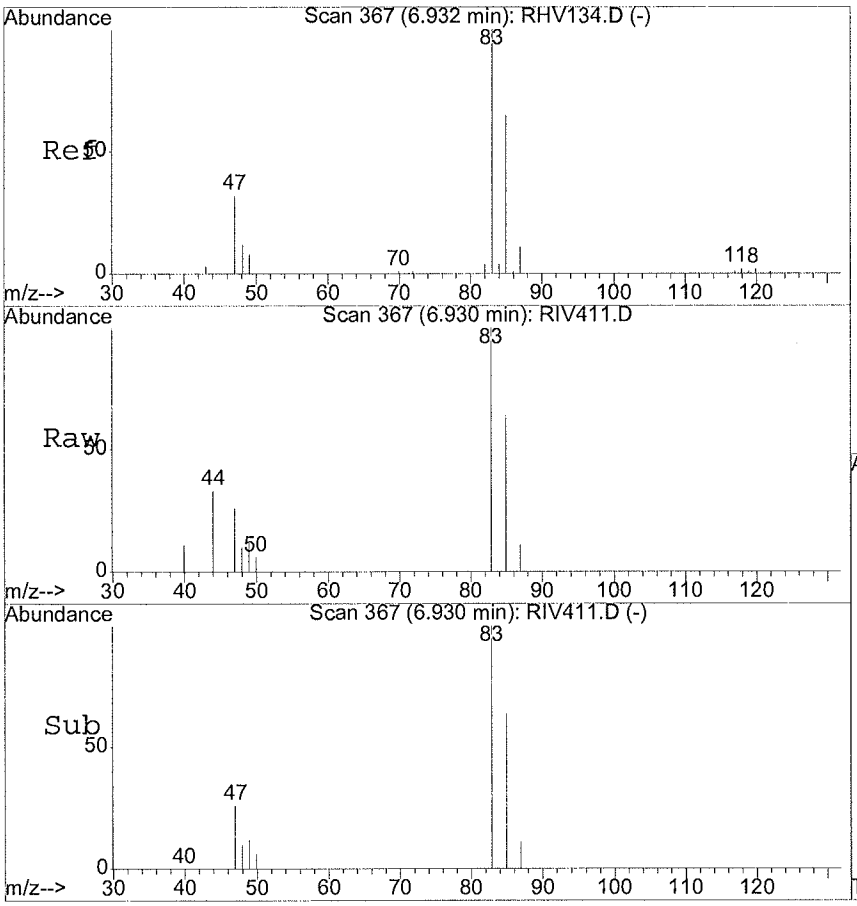


#18
Methylene chloride
Concen: 1.28 ug/l
RT: 4.90 min Scan# 230
Delta R.T. 0.01 min
Lab File: RIV411.D
Acq: 19 Sep 2024 5:50 pm

Tgt Ion: 49 Resp: 43258

Ion	Ratio	Lower	Upper
49	100		
84	68.4	45.8	105.8
86	46.1	21.5	81.5

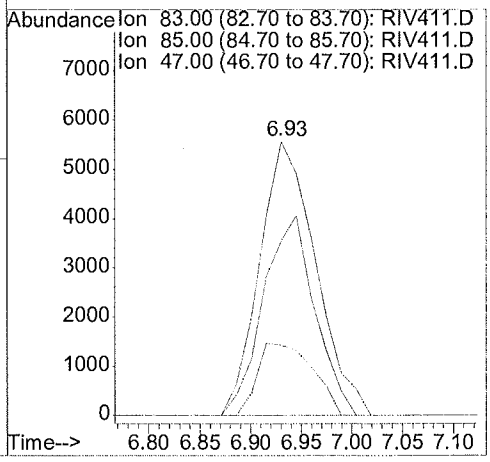


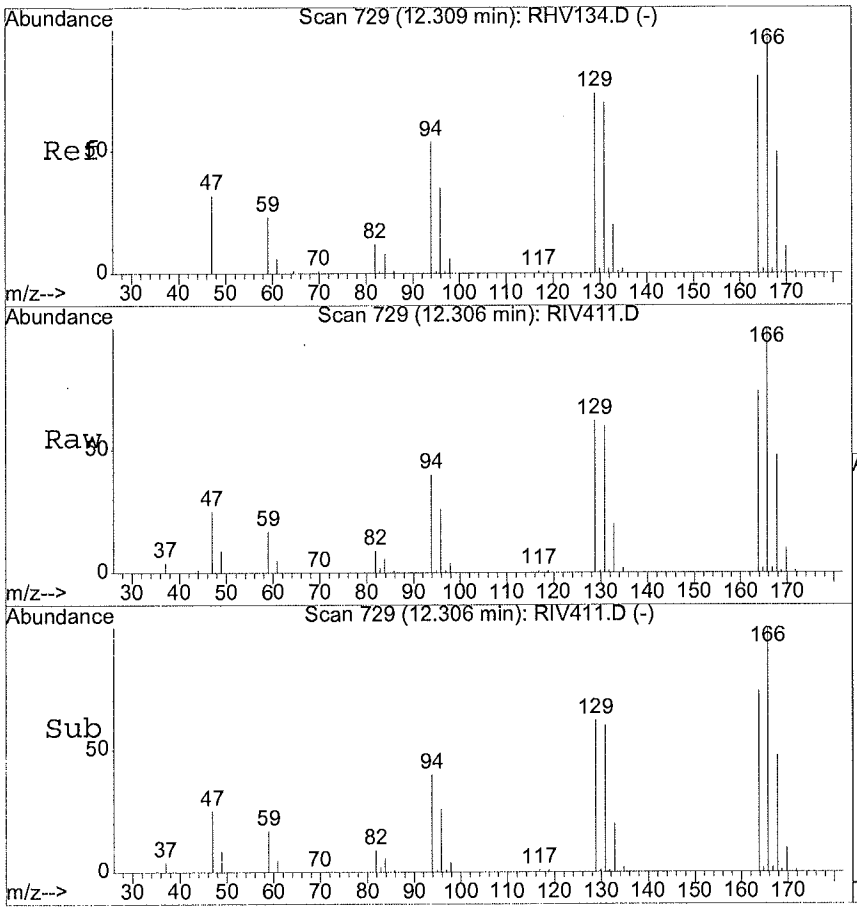


#31
Chloroform
Concen: 0.35 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV411.D
Acq: 19 Sep 2024 5:50 pm

Tgt Ion: 83 Resp: 21494

Ion	Ratio	Lower	Upper
83	100		
85	66.9	38.4	98.4
47	25.9	0.0	59.6

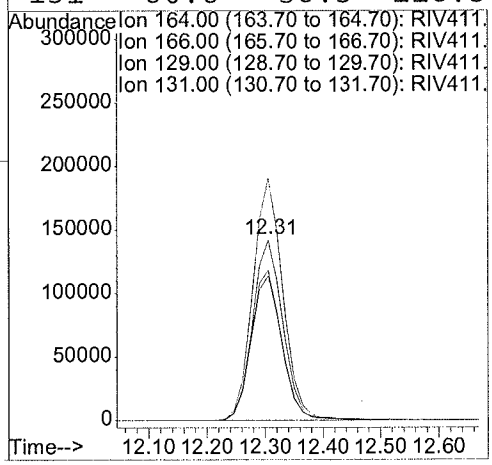




#61
Tetrachloroethene
Concen: 19.55 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV411.D
Acq: 19 Sep 2024 5:50 pm

Tgt Ion:164 Resp: 520860

Ion	Ratio	Lower	Upper
164	100		
166	132.2	98.2	158.2
129	83.6	62.8	122.8
131	80.8	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 10:48
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/14/24 23:47
Sample ID	: MW12D-GW090524	Date Analyzed:	09/14/24 23:47
Lab Samp ID:	24I020-03	Dilution Factor:	1
Lab File ID:	RIG088	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.24J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.1	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.11J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	1.1	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.8	10.0	108	70-130
Bromofluorobenzene	10.0	10.0	100	70-130
Toluene-d8	10.2	10.0	102	70-130
Dibromofluoromethane	10.8	10.0	108	70-130

Notes:
Sample Amount : 10ml
Final Volume : 10ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG088.D
Acq On : 14 Sep 2024 11:47 pm
Operator : DNguye
Sample : 24I020-03
Misc : 10.0mL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 03 09:09:32 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

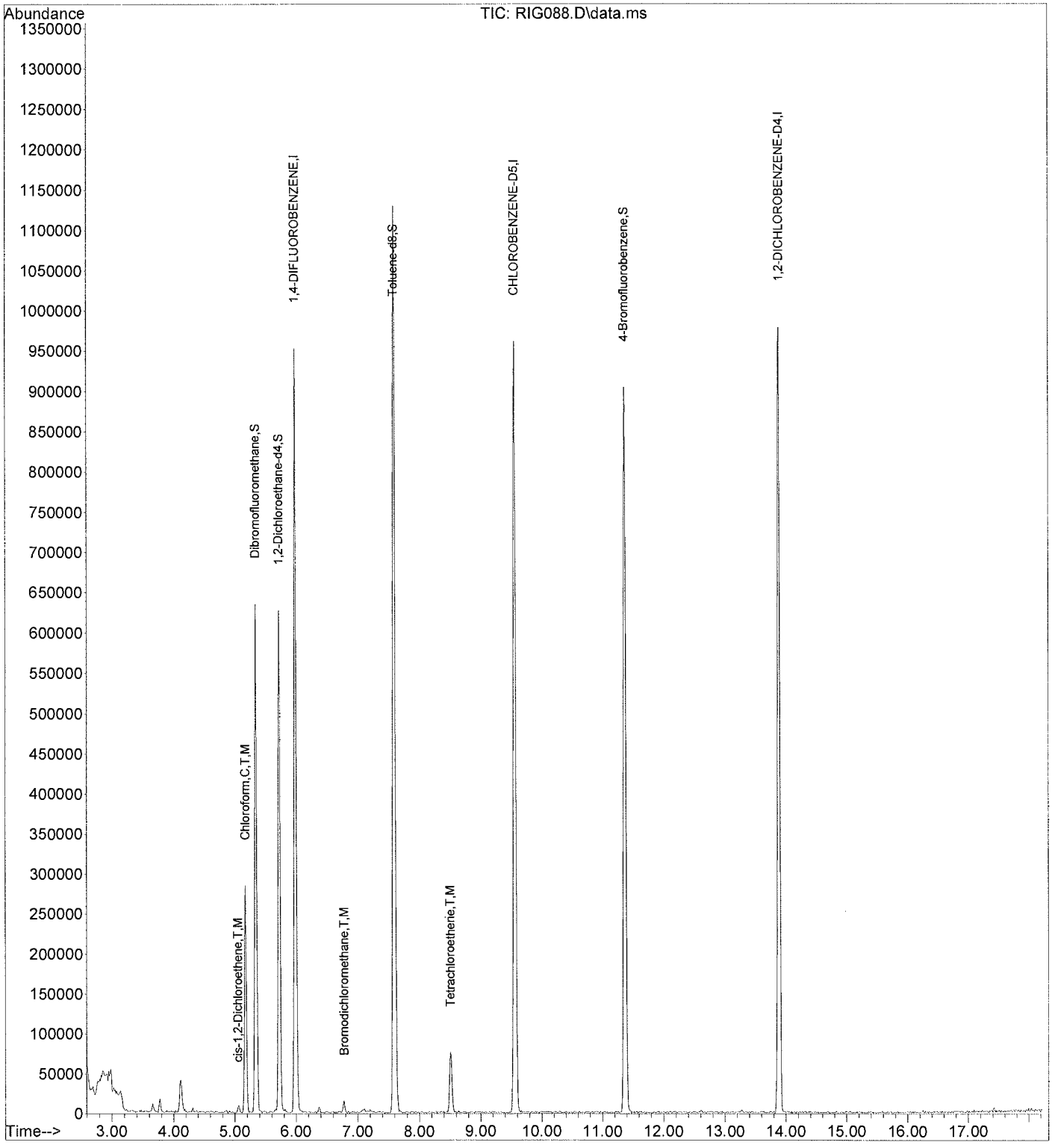
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	849728	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	725990	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	385710	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	402162	10.83	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.30%		
41) 1,2-Dichloroethane-d4	5.723	65	575945	10.81	ug/L	0.00
Spiked Amount 10.000			Recovery =	108.10%		
56) Toluene-d8	7.594	98	1056740	10.23	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.30%		
77) 4-Bromofluorobenzene	11.369	95	420757	10.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.50%		
Target Compounds						Qvalue
32) cis-1,2-Dichloroethene	5.052	96	3610	0.11	ug/l	79
33) Chloroform	5.173	83	221045	3.11	ug/l	99
50) Bromodichloromethane	6.780	83	13549	0.24	ug/L	90
63) Tetrachloroethene	8.508	164	28411	1.09	ug/l	94

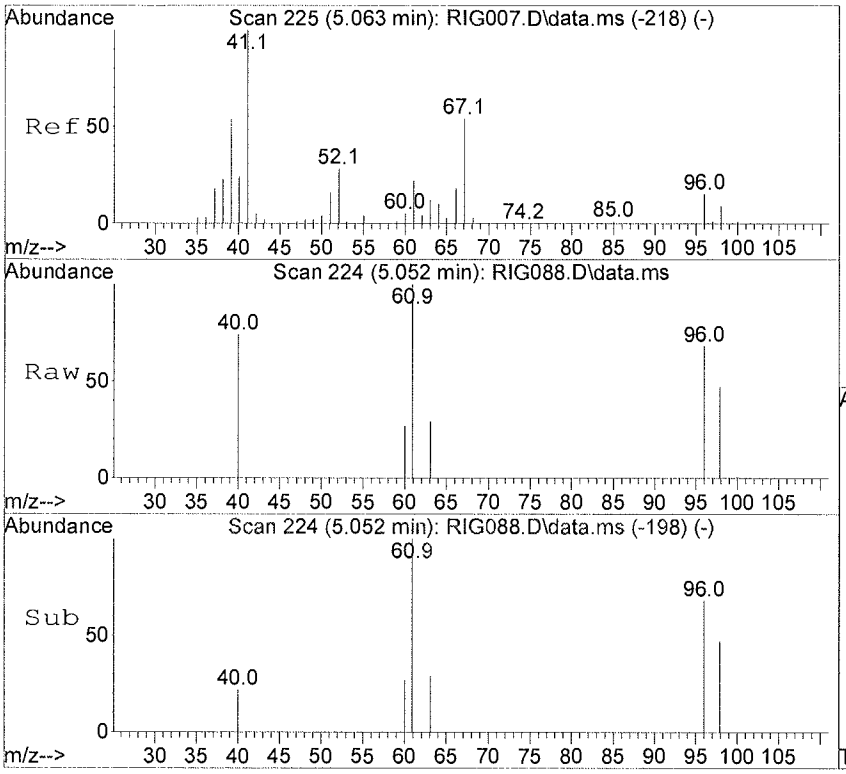
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG088.D
Acq On : 14 Sep 2024 11:47 pm
Operator : DNguye
Sample : 24I020-03
Misc : 10.0mL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 03 09:09:32 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

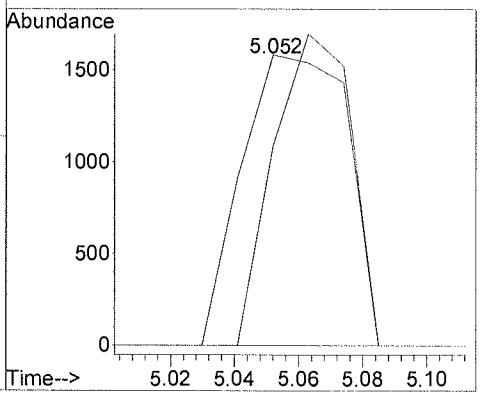


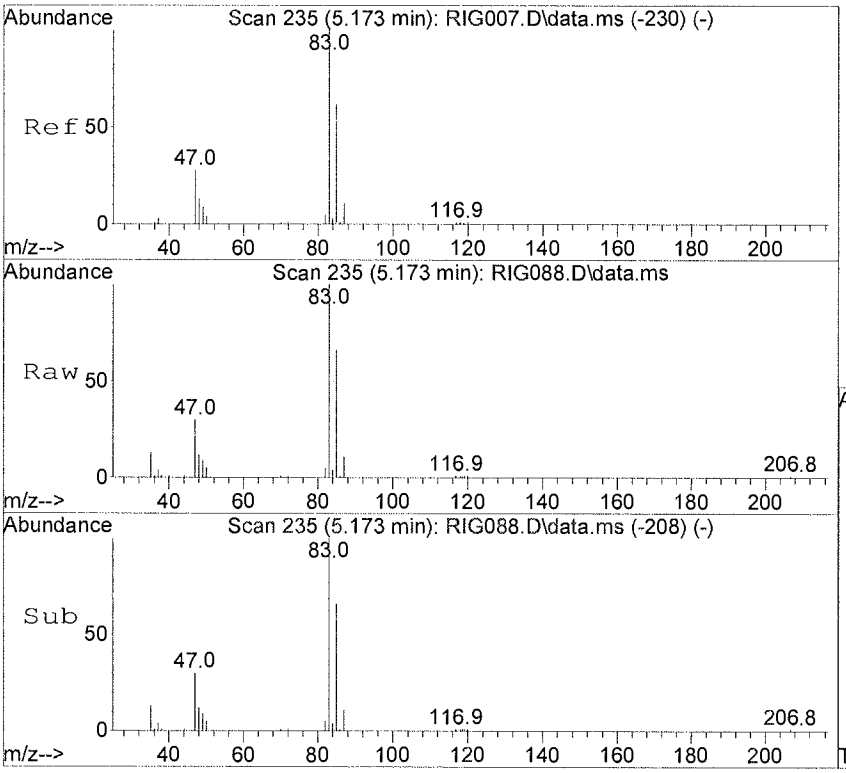


#32
cis-1,2-Dichloroethene
Concen: 0.11 ug/l
RT: 5.052 min Scan# 224
Delta R.T. -0.011 min
Lab File: RIG088.D
Acq: 14 Sep 2024 11:47 pm

Tgt Ion: 96 Resp: 3610

Ion	Ratio	Lower	Upper
96	100		
98	78.8	32.2	92.2

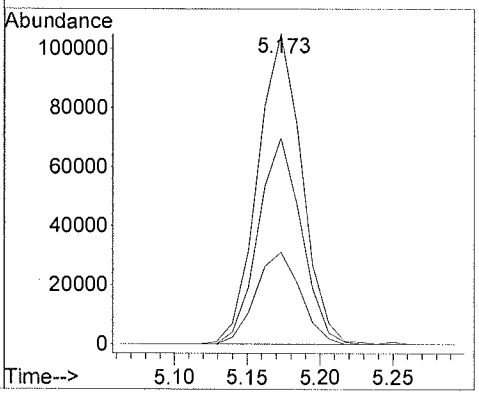


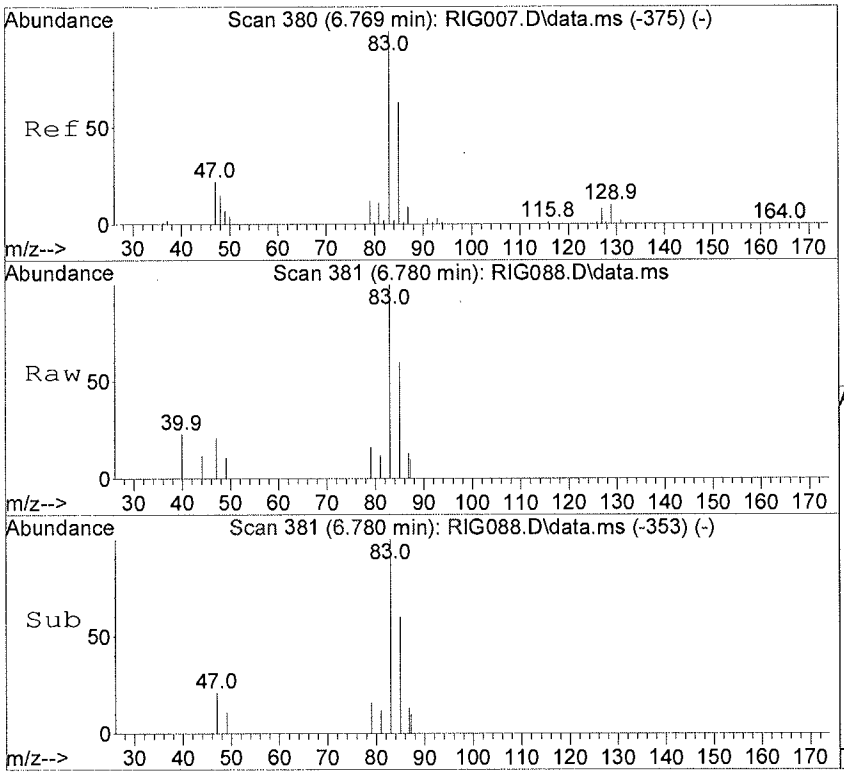


#33
Chloroform
Concen: 3.11 ug/l
RT: 5.173 min Scan# 235
Delta R.T. 0.000 min
Lab File: RIG088.D
Acq: 14 Sep 2024 11:47 pm

Tgt Ion: 83 Resp: 221045

Ion	Ratio	Lower	Upper
83	100		
85	64.9	35.1	95.1
47	30.0	0.0	58.4

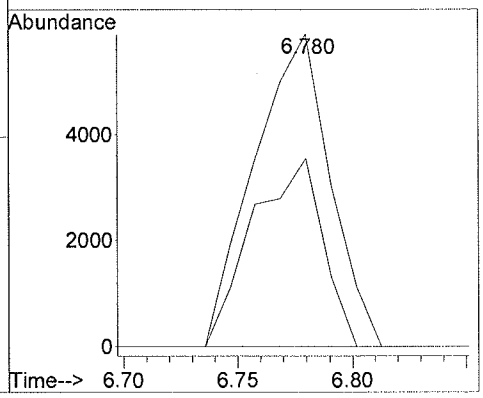


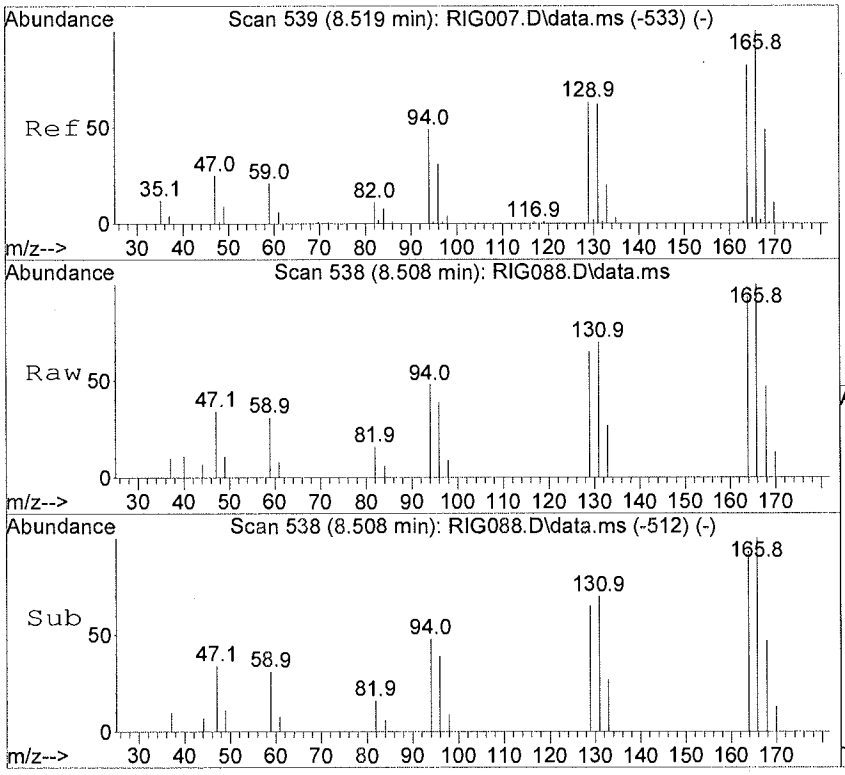


#50
Bromodichloromethane
Concen: 0.24 ug/L
RT: 6.780 min Scan# 381
Delta R.T. 0.011 min
Lab File: RIG088.D
Acq: 14 Sep 2024 11:47 pm

Tgt Ion: 83 Resp: 13549

Ion	Ratio	Lower	Upper
83	100		
85	55.8	33.7	93.7

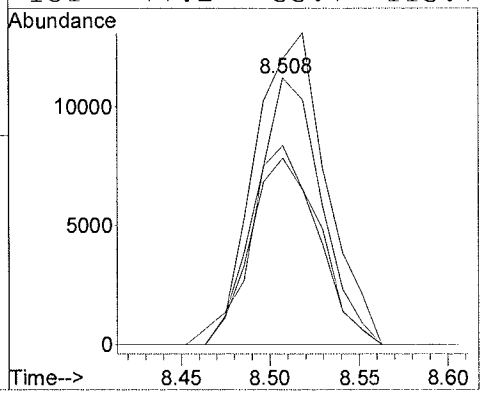




#63
Tetrachloroethene
Concen: 1.09 ug/l
RT: 8.508 min Scan# 538
Delta R.T. -0.011 min
Lab File: RIG088.D
Acq: 14 Sep 2024 11:47 pm

Tgt Ion:164 Resp: 28411

Ion	Ratio	Lower	Upper
164	100		
166	128.0	97.2	157.2
129	75.4	54.4	114.4
131	77.2	55.7	115.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 16:50
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/15/24 00:12
Sample ID	: MW34B-GW090524	Date Analyzed:	09/15/24 00:12
Lab Samp ID:	24I020-04	Dilution Factor:	1
Lab File ID:	RIG089	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.25J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.1	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.51J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.45J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	2.4	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	1.8	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	20	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.55J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.2	10.0	112	70-130
Bromofluorobenzene	10.3	10.0	103	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	11.0	10.0	110	70-130

Notes:
Sample Amount : 10ml
Final Volume : 10ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG089.D
Acq On : 15 Sep 2024 12:12 am
Operator : DNguye
Sample : 24I020-04
Misc : 10.0mL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 03 09:10:05 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

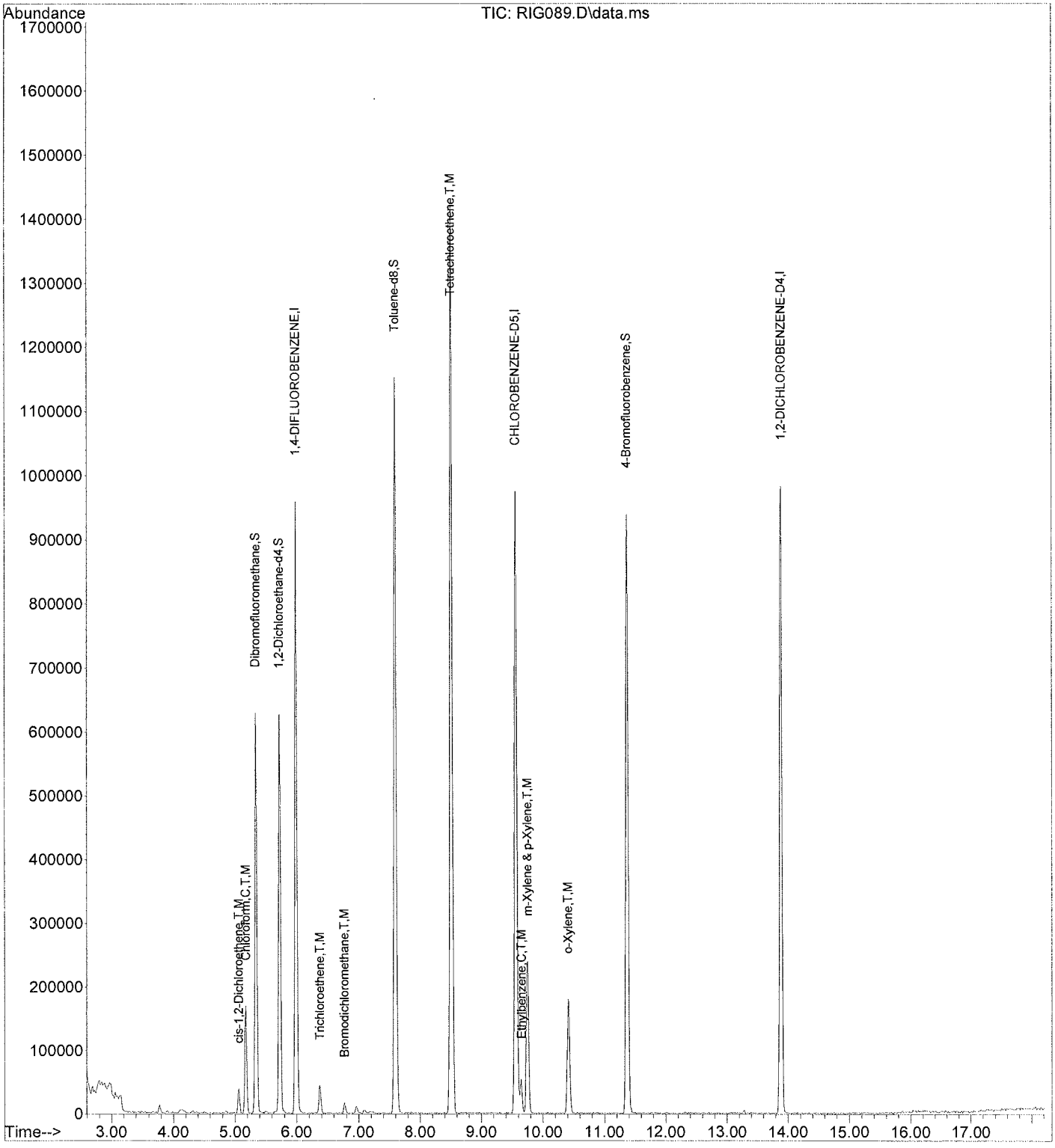
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	829908	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	723094	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	384994	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	399934	11.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.30%		
41) 1,2-Dichloroethane-d4	5.723	65	581570	11.17	ug/L	0.00
Spiked Amount 10.000			Recovery =	111.70%		
56) Toluene-d8	7.594	98	1057384	10.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.80%		
77) 4-Bromofluorobenzene	11.369	95	430718	10.31	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.10%		
Target Compounds						Qvalue
32) cis-1,2-Dichloroethene	5.063	96	15833	0.51	ug/l	86
33) Chloroform	5.173	83	144358	2.08	ug/l	97
45) Trichloroethene	6.373	130	15366	0.55	ug/L	82
50) Bromodichloromethane	6.769	83	13583	0.25	ug/L	100
63) Tetrachloroethene	8.508	164	506707	19.57	ug/l	95
69) Ethylbenzene	9.652	91	58048	0.45	ug/l	97
70) m-Xylene & p-Xylene	9.751	91	238353	2.38	ug/l	96
71) o-Xylene	10.411	91	181697	1.84	ug/l	97

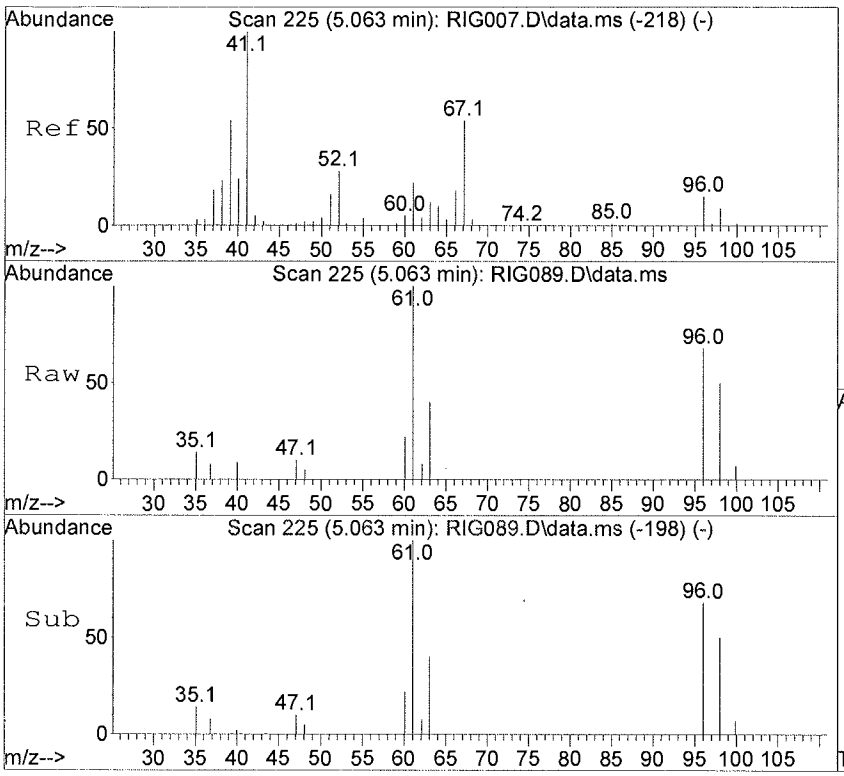
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG089.D
Acq On : 15 Sep 2024 12:12 am
Operator : DNguye
Sample : 24I020-04
Misc : 10.0mL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 03 09:10:05 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

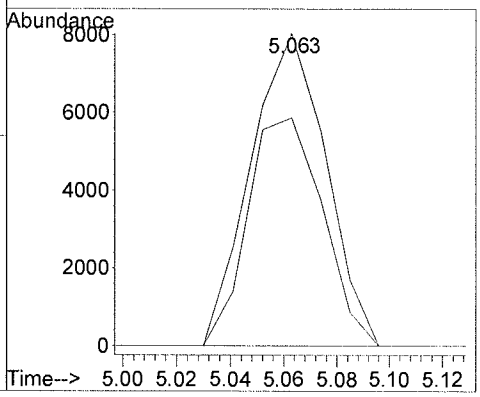


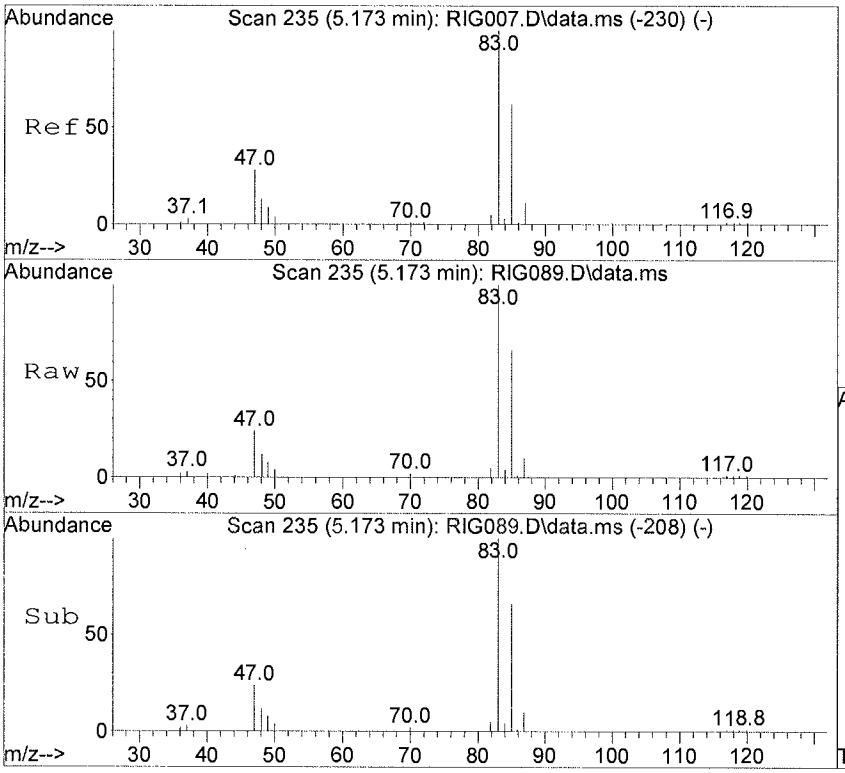


#32
cis-1,2-Dichloroethene
Concen: 0.51 ug/l
RT: 5.063 min Scan# 225
Delta R.T. -0.000 min
Lab File: RIG089.D
Acq: 15 Sep 2024 12:12 am

Tgt Ion: 96 Resp: 15833

Ion	Ratio	Lower	Upper
96	100		
98	72.7	32.2	92.2

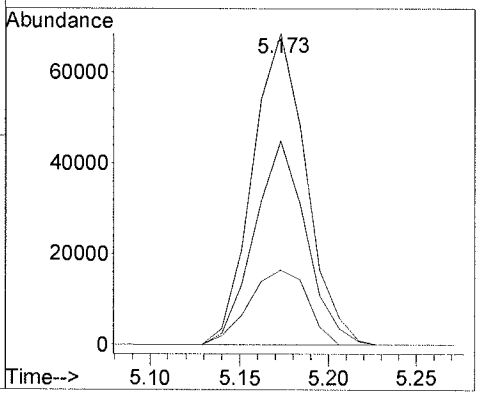


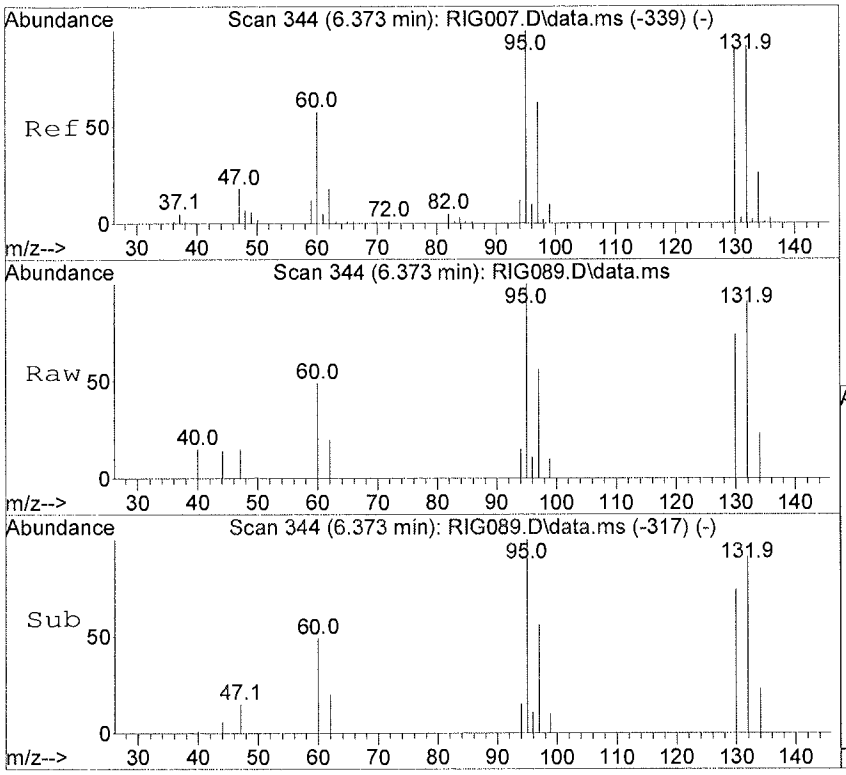


#33
Chloroform
Concen: 2.08 ug/l
RT: 5.173 min Scan# 235
Delta R.T. -0.000 min
Lab File: RIG089.D
Acq: 15 Sep 2024 12:12 am

Tgt Ion: 83 Resp: 144358

Ion	Ratio	Lower	Upper
83	100		
85	63.3	35.1	95.1
47	26.1	0.0	58.4

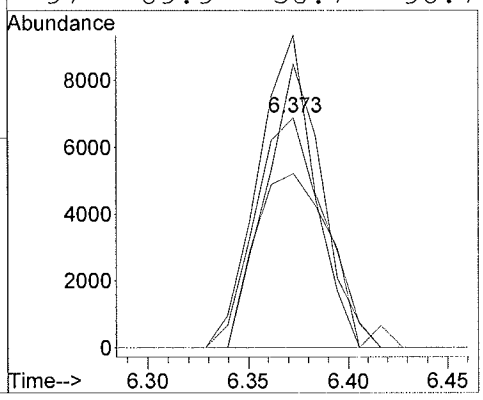


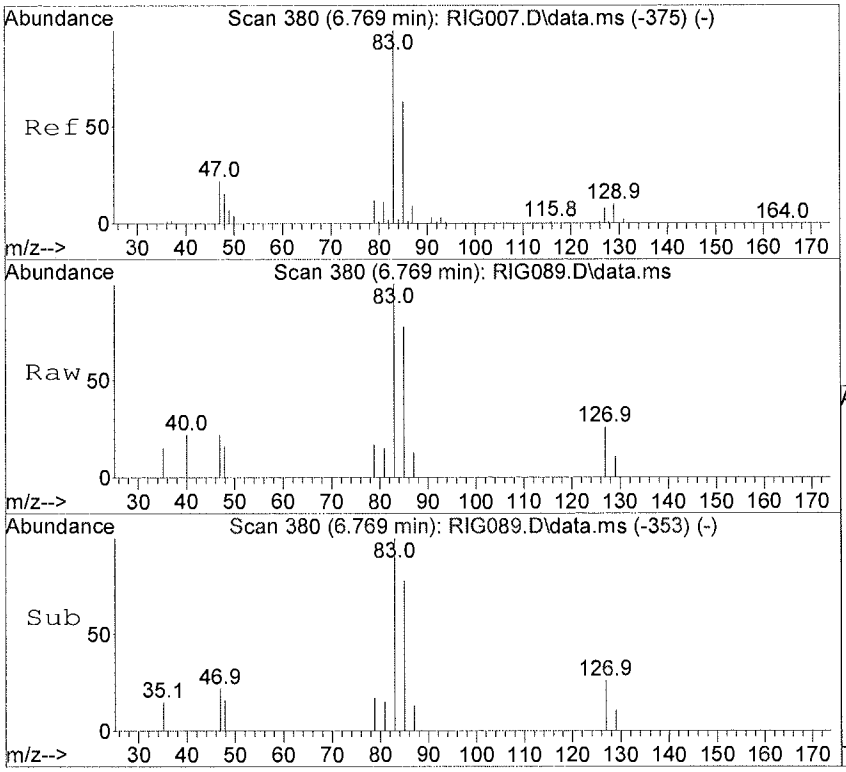


#45
Trichloroethene
Concen: 0.55 ug/L
RT: 6.373 min Scan# 344
Delta R.T. -0.000 min
Lab File: RIG089.D
Acq: 15 Sep 2024 12:12 am

Tgt Ion:130 Resp: 15366

Ion	Ratio	Lower	Upper
130	100		
132	110.8	68.9	128.9
95	128.3	79.4	139.4
97	89.9	38.7	98.7

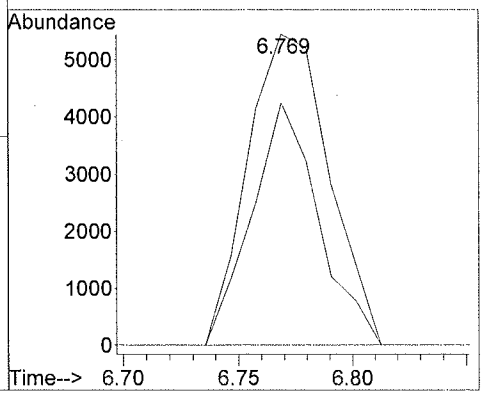


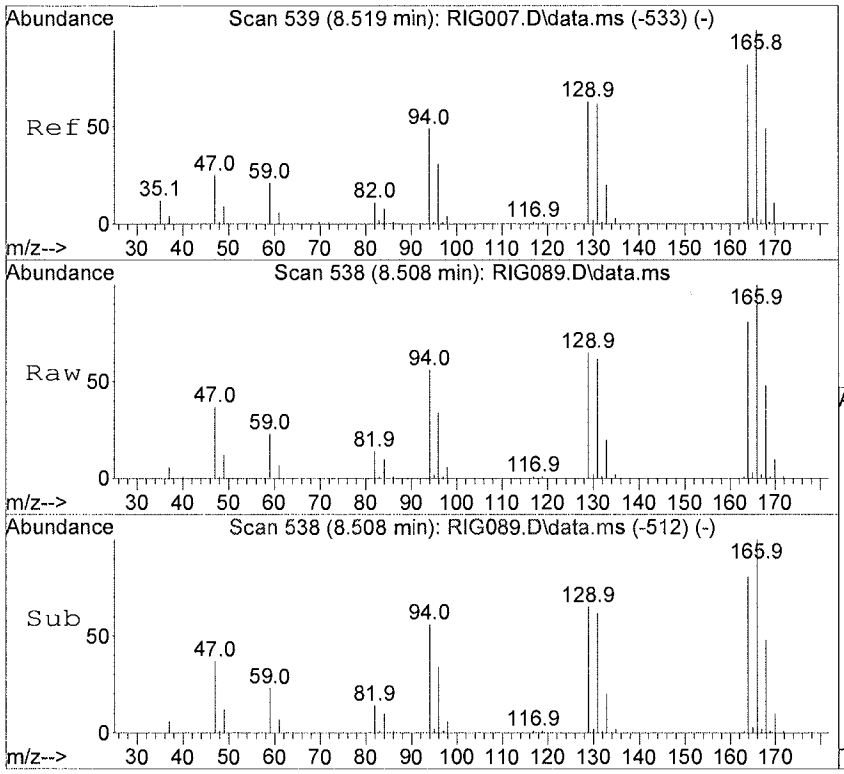


#50
Bromodichloromethane
Concen: 0.25 ug/L
RT: 6.769 min Scan# 380
Delta R.T. -0.000 min
Lab File: RIG089.D
Acq: 15 Sep 2024 12:12 am

Tgt Ion: 83 Resp: 13583

Ion	Ratio	Lower	Upper
83	100		
85	63.8	33.7	93.7

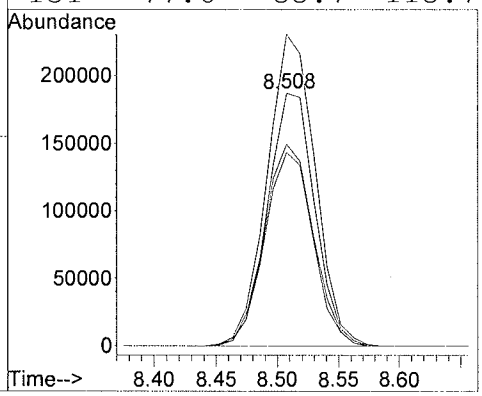


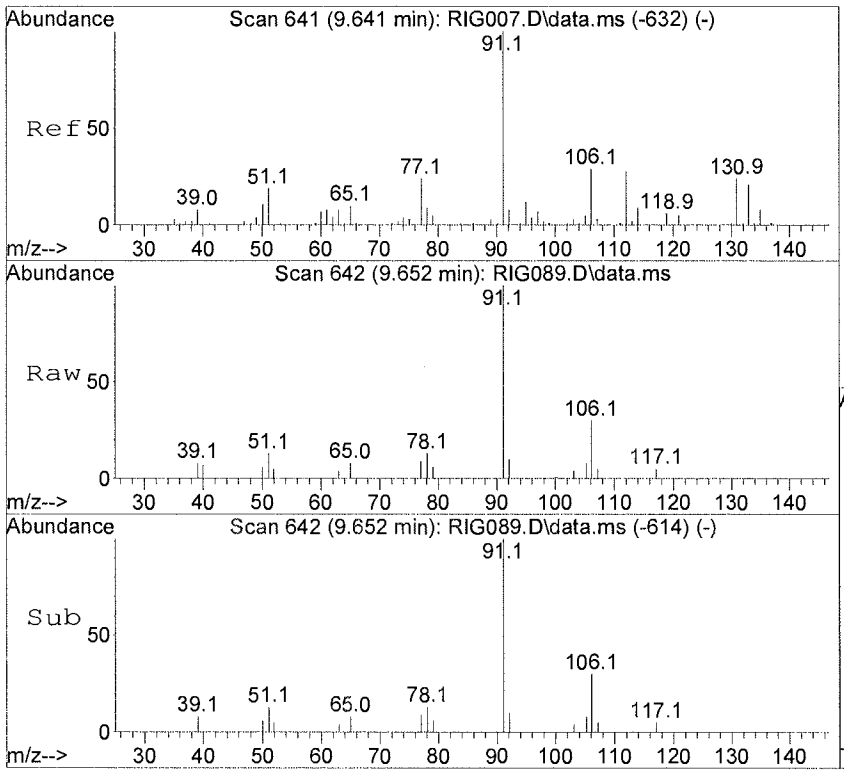


#63
Tetrachloroethene
Concen: 19.57 ug/l
RT: 8.508 min Scan# 538
Delta R.T. -0.011 min
Lab File: RIG089.D
Acq: 15 Sep 2024 12:12 am

Tgt Ion:164 Resp: 506707

Ion	Ratio	Lower	Upper
164	100		
166	123.8	97.2	157.2
129	81.5	54.4	114.4
131	77.6	55.7	115.7

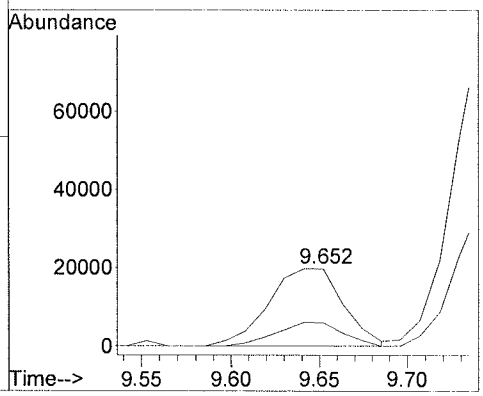


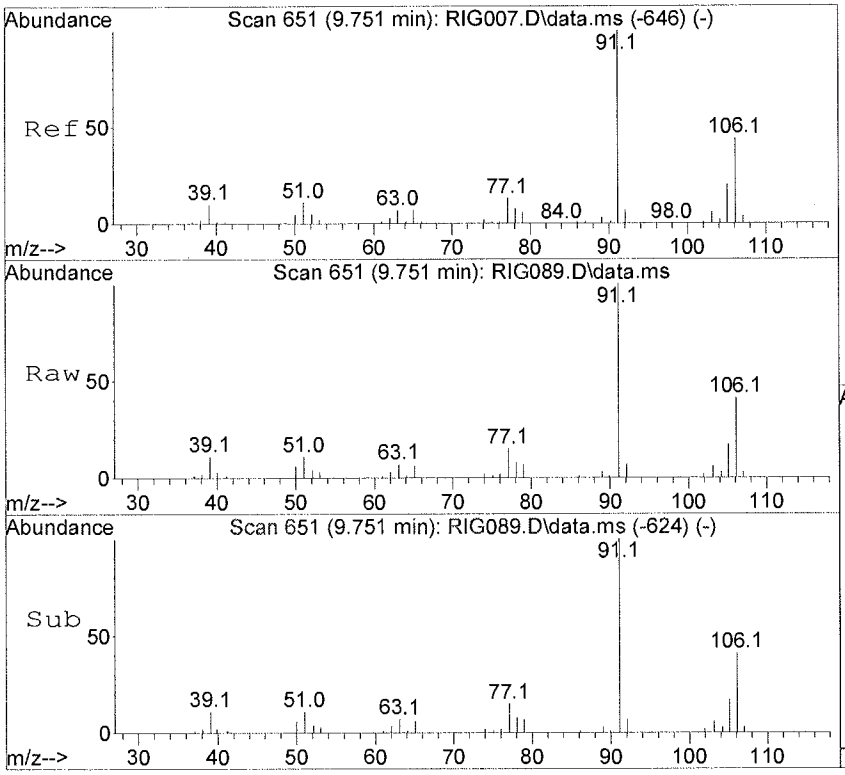


#69
Ethylbenzene
Concen: 0.45 ug/l
RT: 9.652 min Scan# 642
Delta R.T. 0.011 min
Lab File: RIG089.D
Acq: 15 Sep 2024 12:12 am

Tgt Ion: 91 Resp: 58048

Ion	Ratio	Lower	Upper
91	100		
106	27.3	0.0	58.7

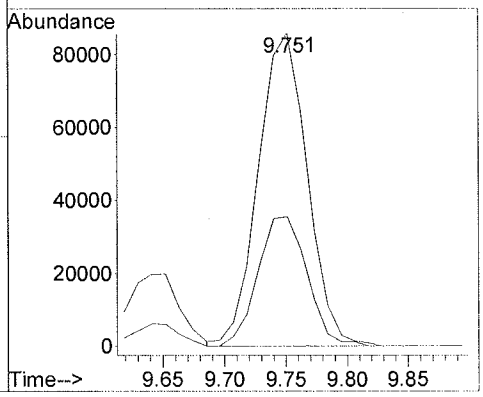


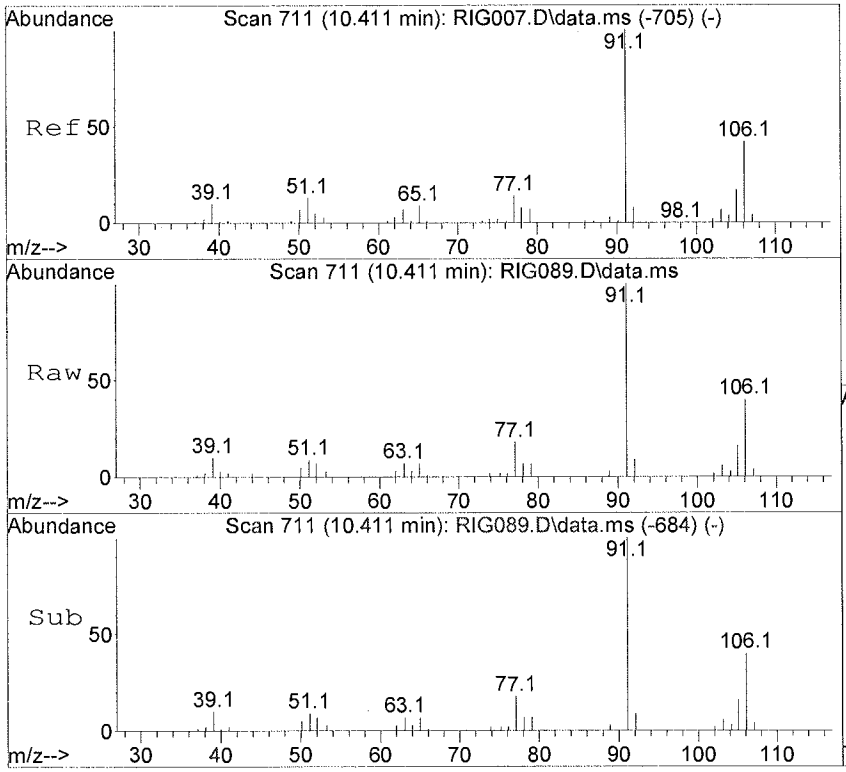


#70
m-Xylene & p-Xylene
Concen: 2.38 ug/l
RT: 9.751 min Scan# 651
Delta R.T. -0.000 min
Lab File: RIG089.D
Acq: 15 Sep 2024 12:12 am

Tgt Ion: 91 Resp: 238353

Ion	Ratio	Lower	Upper
91	100		
106	41.5	14.2	74.2

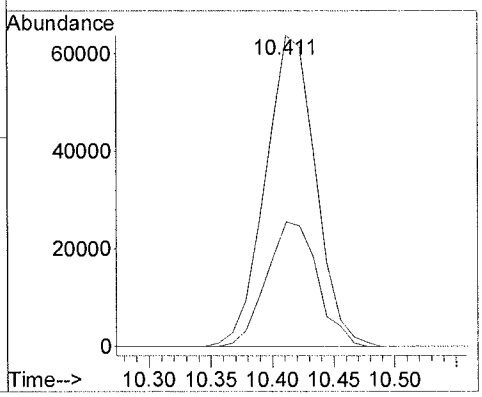




#71
o-Xylene
Concen: 1.84 ug/l
RT: 10.411 min Scan# 711
Delta R.T. -0.000 min
Lab File: RIG089.D
Acq: 15 Sep 2024 12:12 am

Tgt Ion: 91 Resp: 181697

Ion	Ratio	Lower	Upper
91	100		
106	40.6	12.4	72.4



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 14:01
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/15/24 00:36
Sample ID	: MW17S-GW090524	Date Analyzed:	09/15/24 00:36
Lab Samp ID:	24I020-05	Dilution Factor:	1
Lab File ID:	RIG090	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.5	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	1.5	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.2	10.0	112	70-130
Bromofluorobenzene	9.87	10.0	99	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	11.1	10.0	111	70-130

Notes:
Sample Amount : 10ml
Final Volume : 10ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG090.D
Acq On : 15 Sep 2024 12:36 am
Operator : DNguye
Sample : 24I020-05
Misc : 10.0mL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 03 09:10:31 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

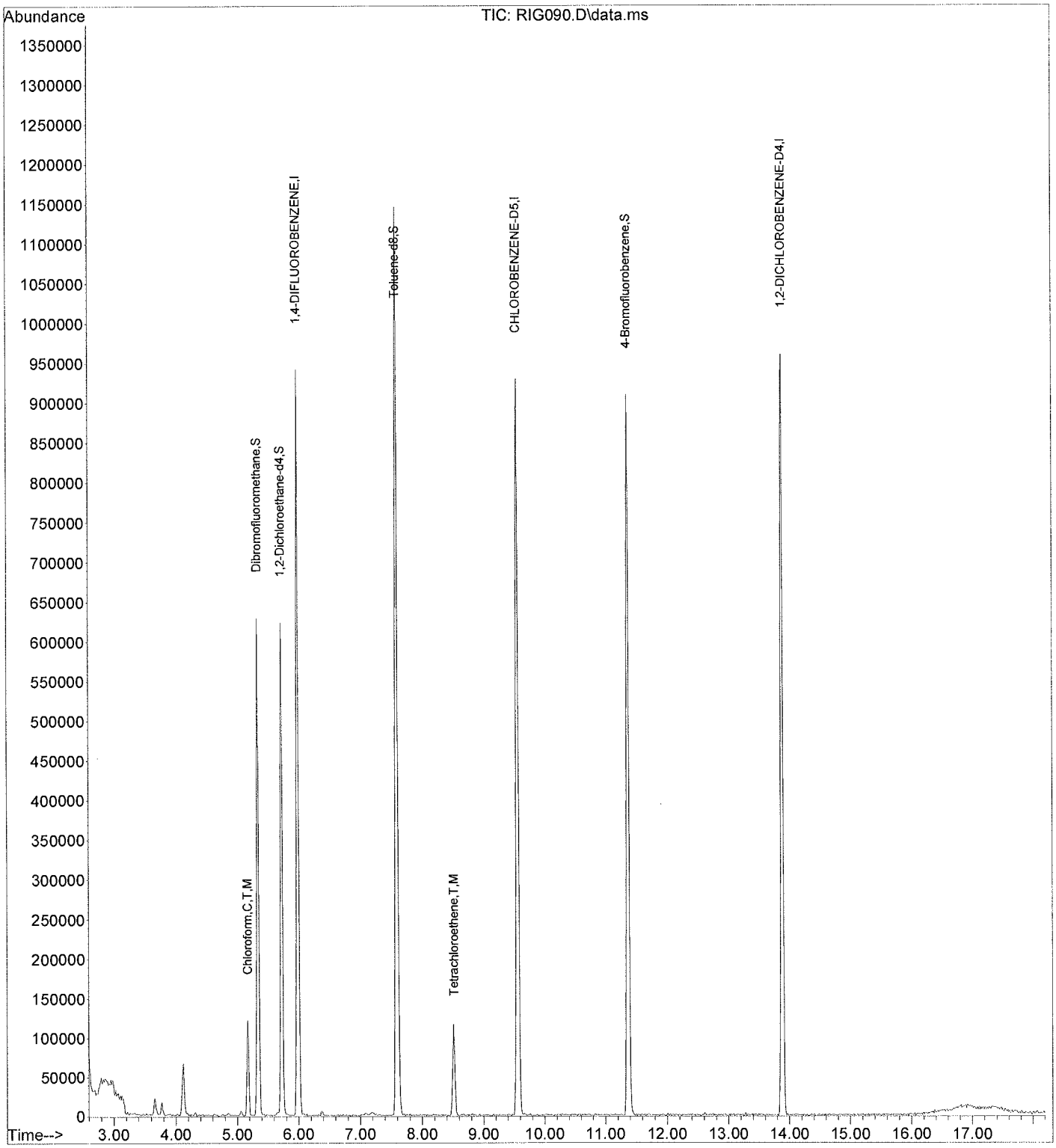
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	818438	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	704350	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	386192	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	396855	11.10	ug/l	0.00
Spiked Amount 10.000			Recovery =	111.00%		
41) 1,2-Dichloroethane-d4	5.723	65	573749	11.18	ug/L	0.00
Spiked Amount 10.000			Recovery =	111.80%		
56) Toluene-d8	7.594	98	1034817	10.33	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.30%		
77) 4-Bromofluorobenzene	11.369	95	413609	9.87	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.70%		
Target Compounds						Qvalue
33) Chloroform	5.173	83	100585	1.47	ug/l	96
63) Tetrachloroethene	8.519	164	38899	1.54	ug/l	96

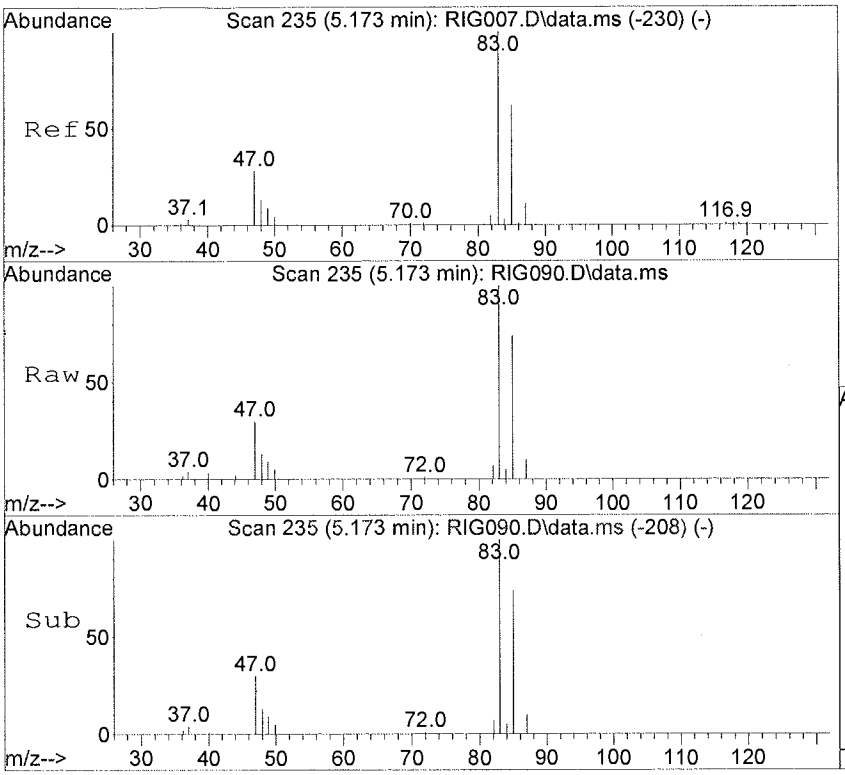
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG090.D
Acq On : 15 Sep 2024 12:36 am
Operator : DNguye
Sample : 24I020-05
Misc : 10.0mL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 03 09:10:31 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

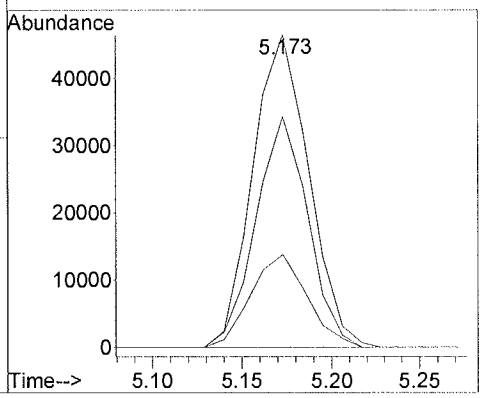


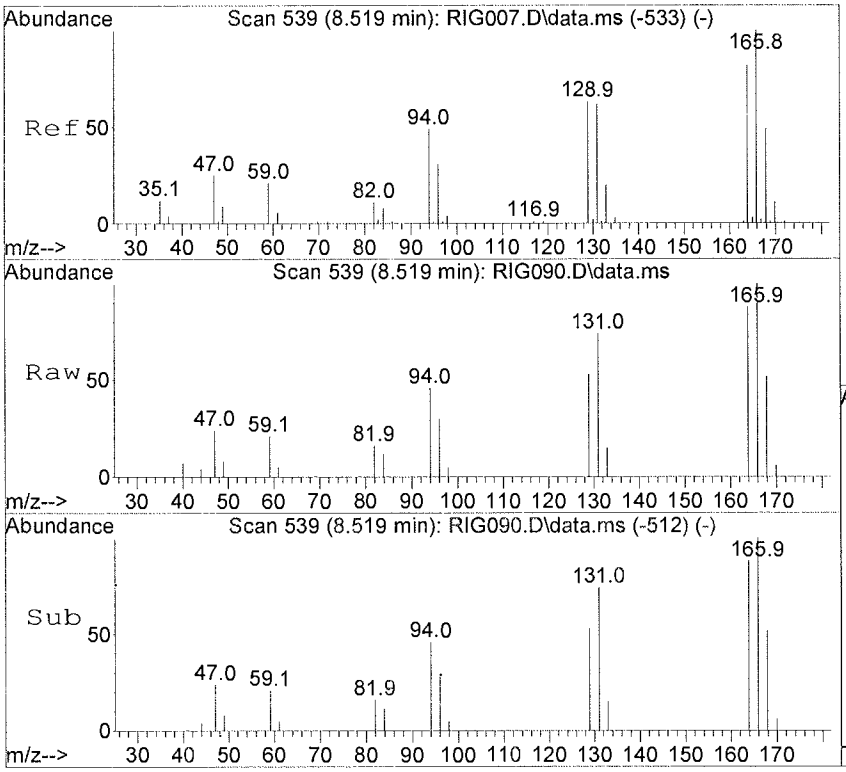


#33
Chloroform
Concen: 1.47 ug/l
RT: 5.173 min Scan# 235
Delta R.T. -0.000 min
Lab File: RIG090.D
Acq: 15 Sep 2024 12:36 am

Tgt Ion: 83 Resp: 100585

Ion	Ratio	Lower	Upper
83	100		
85	68.5	35.1	95.1
47	29.8	0.0	58.4

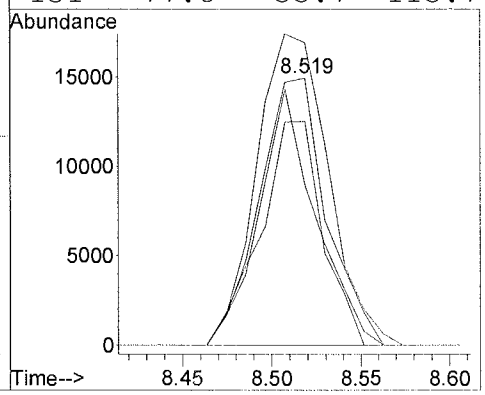




#63
Tetrachloroethene
Concen: 1.54 ug/l
RT: 8.519 min Scan# 539
Delta R.T. -0.000 min
Lab File: RIG090.D
Acq: 15 Sep 2024 12:36 am

Tgt Ion:164 Resp: 38899

Ion	Ratio	Lower	Upper
164	100		
166	125.2	97.2	157.2
129	80.7	54.4	114.4
131	77.8	55.7	115.7



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 15:45
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/15/24 01:01
Sample ID	: MW17D-GW090524	Date Analyzed:	09/15/24 01:01
Lab Samp ID:	24I020-06	Dilution Factor:	1
Lab File ID:	RIG091	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.16J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.2	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	3.2	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.15J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.0	10.0	110	70-130
Bromofluorobenzene	10.2	10.0	102	70-130
Toluene-dB	10.3	10.0	103	70-130
Dibromofluoromethane	10.8	10.0	108	70-130

Notes:
Sample Amount : 10ml
Final Volume : 10ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG091.D
Acq On : 15 Sep 2024 1:01 am
Operator : DNguye
Sample : 24I020-06
Misc : 10.0mL
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 03 09:10:50 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

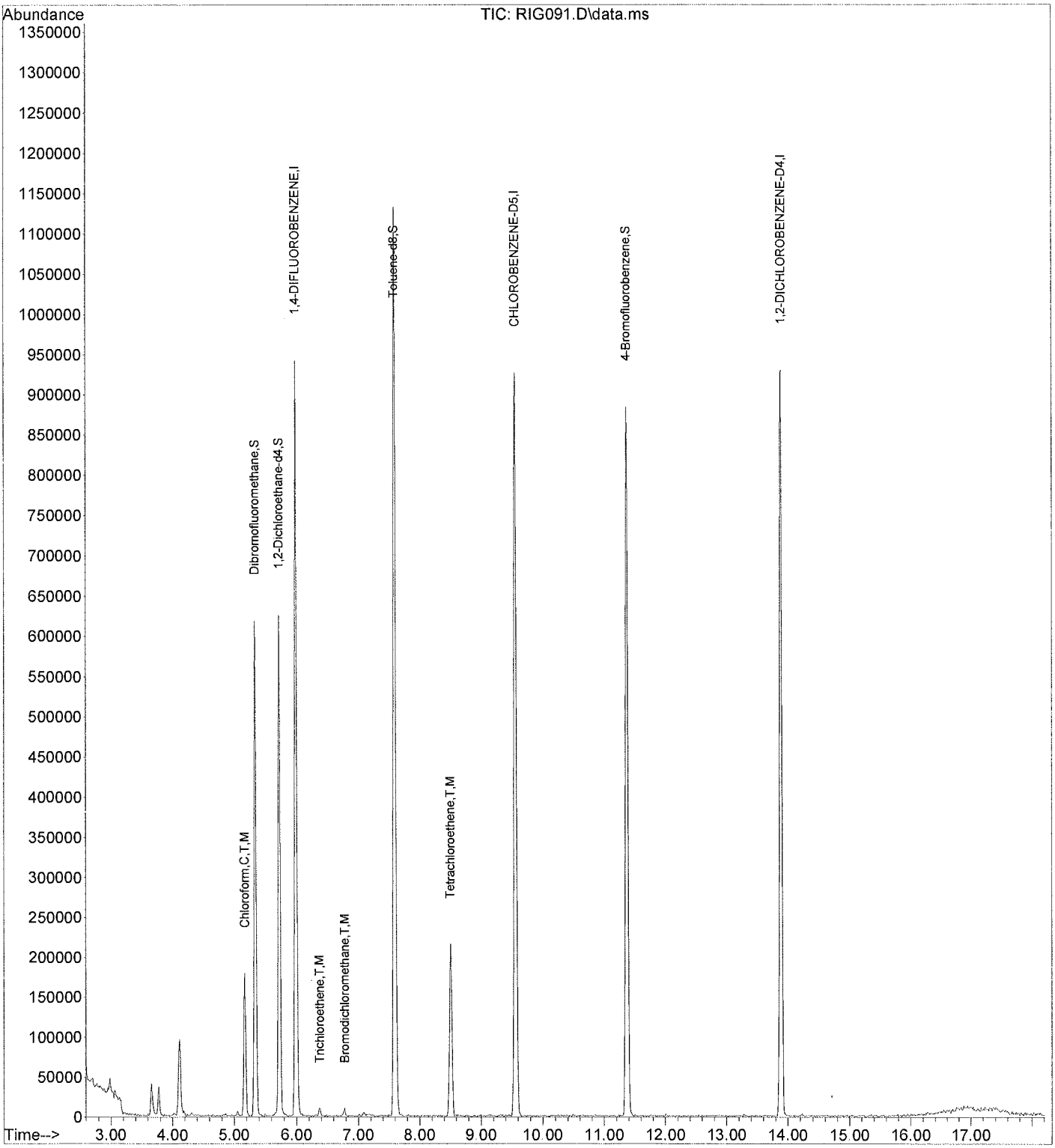
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	816304	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	695426	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	377207	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	385991	10.82	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.20%		
41) 1,2-Dichloroethane-d4	5.723	65	562550	10.99	ug/L	0.00
Spiked Amount 10.000			Recovery =	109.90%		
56) Toluene-d8	7.594	98	1017663	10.29	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.90%		
77) 4-Bromofluorobenzene	11.369	95	418858	10.23	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.30%		
Target Compounds						Qvalue
33) Chloroform	5.173	83	146880	2.15	ug/l	96
45) Trichloroethene	6.373	130	4040	0.15	ug/L	98
50) Bromodichloromethane	6.780	83	8986	0.16	ug/L	98
63) Tetrachloroethene	8.508	164	78465	3.15	ug/l	96

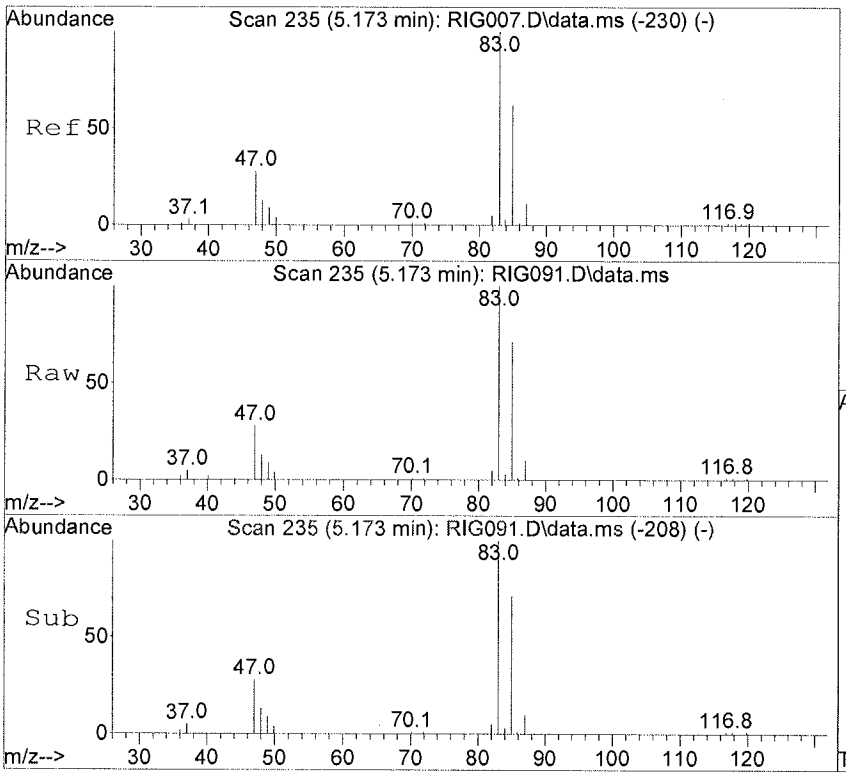
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG091.D
Acq On : 15 Sep 2024 1:01 am
Operator : DNguye
Sample : 24I020-06
Misc : 10.0mL
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 03 09:10:50 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

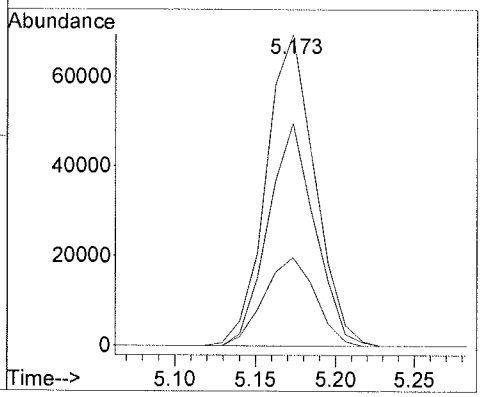


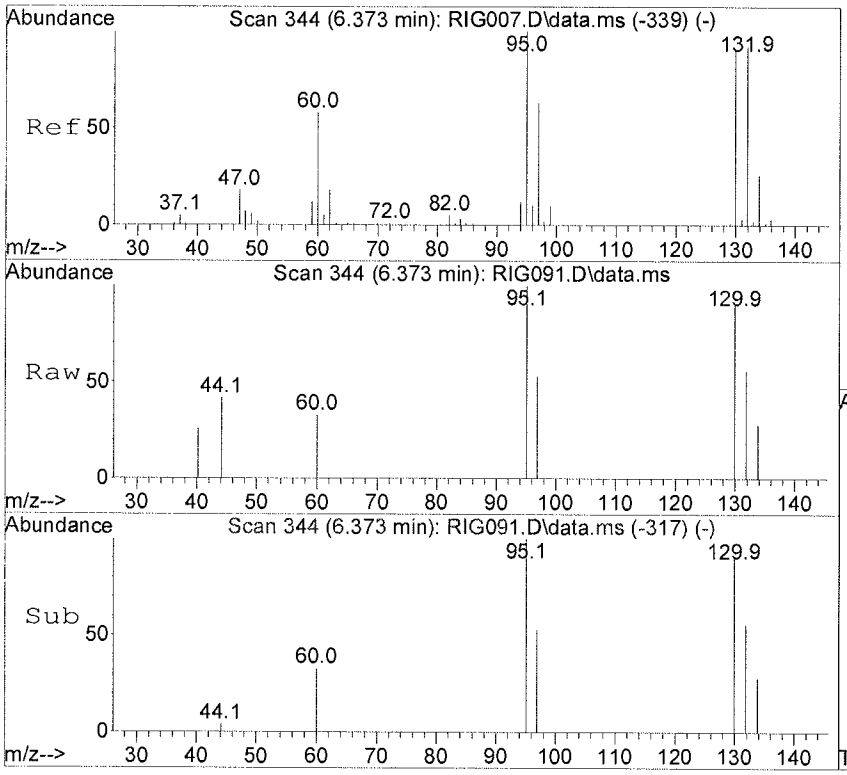


#33
Chloroform
Concen: 2.15 ug/l
RT: 5.173 min Scan# 235
Delta R.T. 0.000 min
Lab File: RIG091.D
Acq: 15 Sep 2024 1:01 am

Tgt Ion: 83 Resp: 146880

Ion	Ratio	Lower	Upper
83	100		
85	68.6	35.1	95.1
47	29.8	0.0	58.4

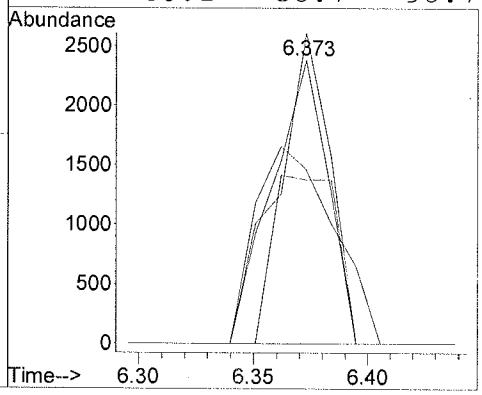


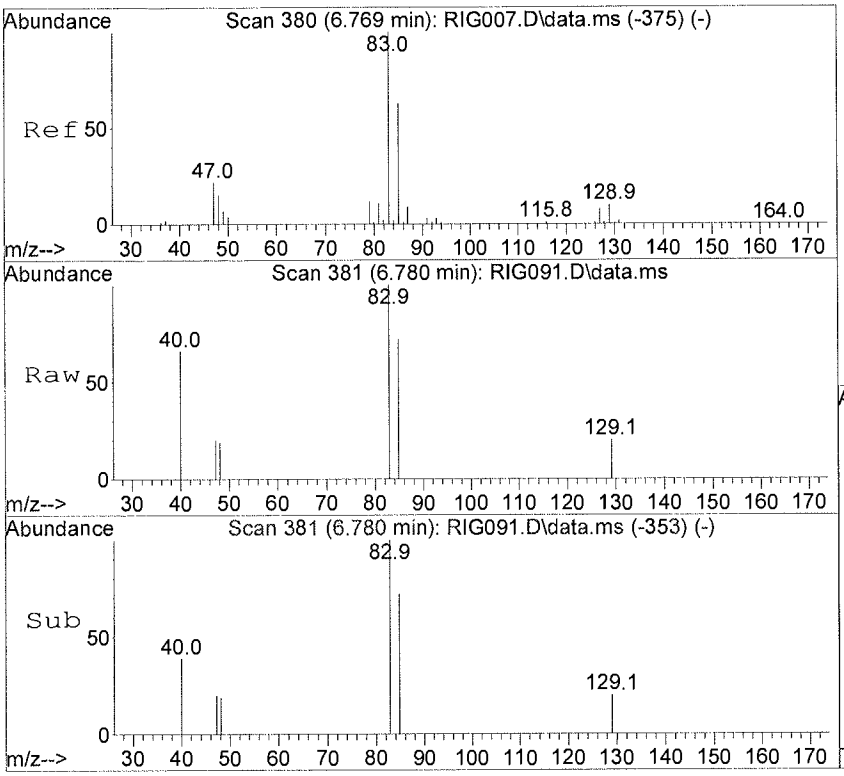


#45
Trichloroethene
Concen: 0.15 ug/L
RT: 6.373 min Scan# 344
Delta R.T. 0.000 min
Lab File: RIG091.D
Acq: 15 Sep 2024 1:01 am

Tgt Ion:130 Resp: 4040

Ion	Ratio	Lower	Upper
130	100		
132	97.5	68.9	128.9
95	105.4	79.4	139.4
97	68.1	38.7	98.7

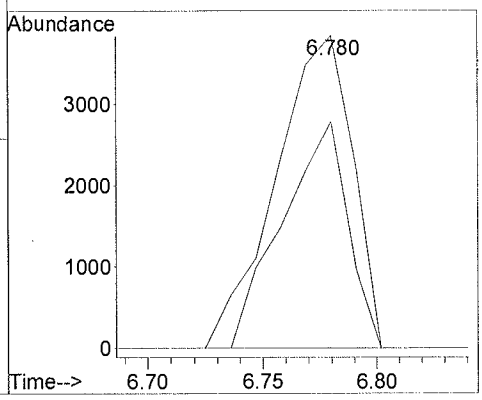


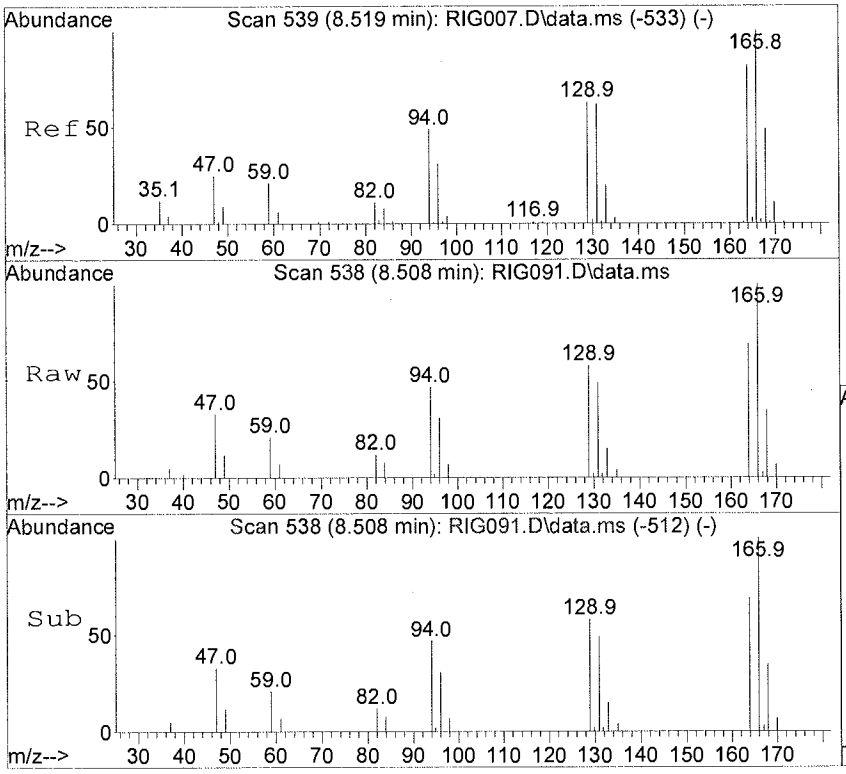


#50
Bromodichloromethane
Concen: 0.16 ug/L
RT: 6.780 min Scan# 381
Delta R.T. 0.011 min
Lab File: RIG091.D
Acq: 15 Sep 2024 1:01 am

Tgt Ion: 83 Resp: 8986

Ion	Ratio	Lower	Upper
83	100		
85	61.8	33.7	93.7

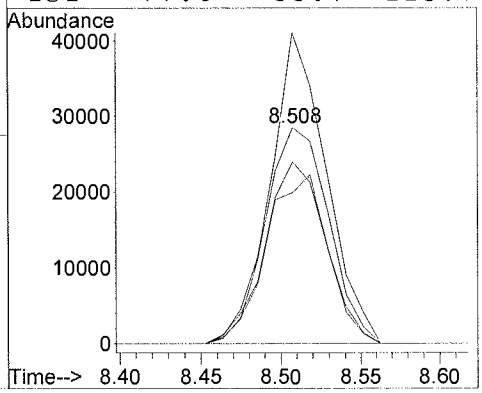




#63
Tetrachloroethene
Concen: 3.15 ug/l
RT: 8.508 min Scan# 538
Delta R.T. -0.011 min
Lab File: RIG091.D
Acq: 15 Sep 2024 1:01 am

Tgt Ion:164 Resp: 78465

Ion	Ratio	Lower	Upper
164	100		
166	127.7	97.2	157.2
129	80.4	54.4	114.4
131	77.0	55.7	115.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 17:05
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/15/24 01:25
Sample ID	: MW34C-GW090524	Date Analyzed:	09/15/24 01:25
Lab Samp ID:	24I020-07	Dilution Factor:	1
Lab File ID:	RIG092	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.32J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	1.8J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	1.4	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.1	10.0	111	70-130
Bromofluorobenzene	10.4	10.0	104	70-130
Toluene-d8	10.1	10.0	101	70-130
Dibromofluoromethane	11.0	10.0	110	70-130

Notes:
Sample Amount : 10ml
Final Volume : 10ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG092.D
Acq On : 15 Sep 2024 1:25 am
Operator : DNguye
Sample : 24I020-07
Misc : 10.0mL
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 03 09:11:12 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

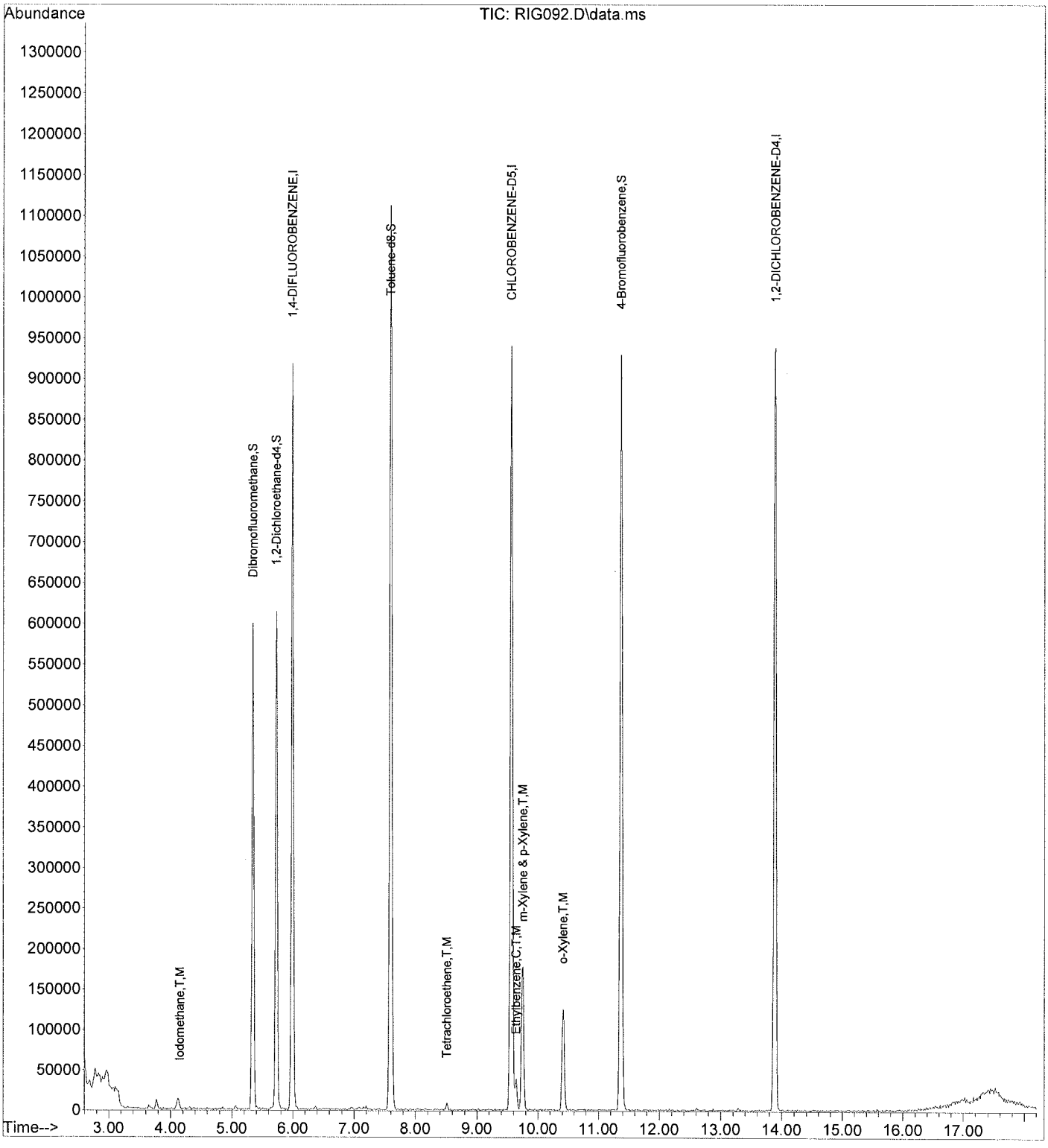
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	808619	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	700329	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	374140	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	387578	10.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.70%		
41) 1,2-Dichloroethane-d4	5.723	65	564743	11.14	ug/L	0.00
Spiked Amount 10.000			Recovery =	111.40%		
56) Toluene-d8	7.594	98	1008511	10.12	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.20%		
77) 4-Bromofluorobenzene	11.369	95	422029	10.39	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.90%		
Target Compounds						Qvalue
16) Iodomethane	4.150	142	2895	0.29	ug/l	100
63) Tetrachloroethene	8.508	164	3108	0.12	ug/l	83
69) Ethylbenzene	9.641	91	40249	0.32	ug/l	99
70) m-Xylene & p-Xylene	9.751	91	173862	1.79	ug/l	98
71) o-Xylene	10.412	91	134664	1.41	ug/l	91

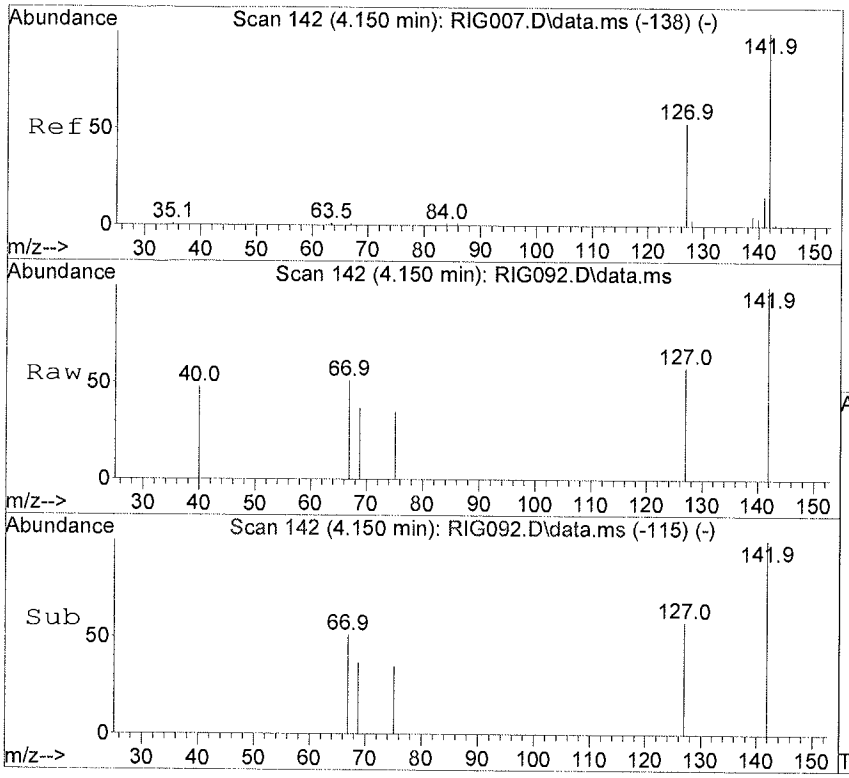
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG092.D
Acq On : 15 Sep 2024 1:25 am
Operator : DNguye
Sample : 24I020-07
Misc : 10.0mL
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 03 09:11:12 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

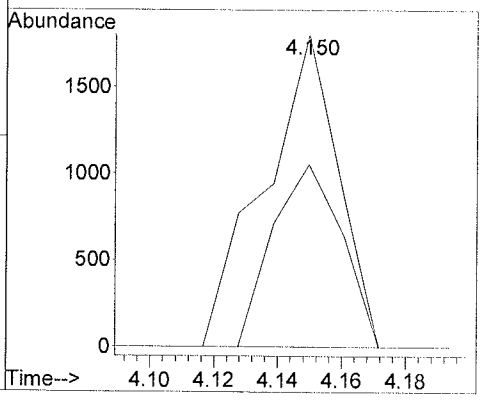


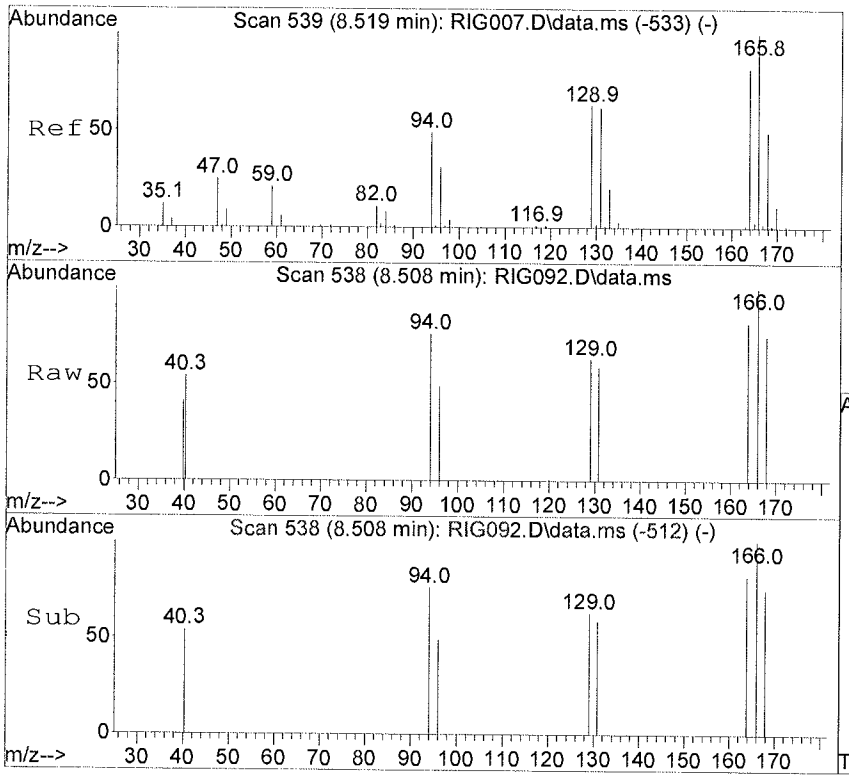


#16
Iodomethane
Concen: 0.29 ug/l
RT: 4.150 min Scan# 142
Delta R.T. 0.000 min
Lab File: RIG092.D
Acq: 15 Sep 2024 1:25 am

Tgt Ion:142 Resp: 2895

Ion	Ratio	Lower	Upper
142	100		
127	54.9	25.1	85.1

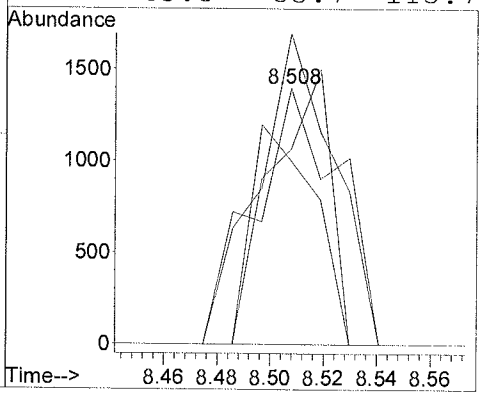


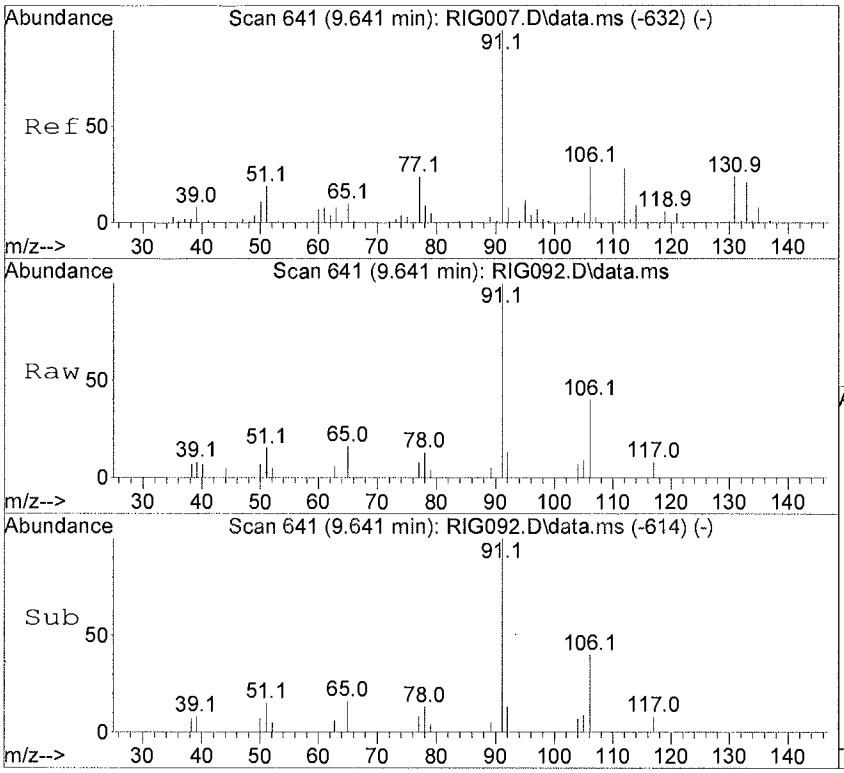


#63
Tetrachloroethene
Concen: 0.12 ug/l
RT: 8.508 min Scan# 538
Delta R.T. -0.011 min
Lab File: RIG092.D
Acq: 15 Sep 2024 1:25 am

Tgt Ion:164 Resp: 3108

Ion	Ratio	Lower	Upper
164	100		
166	109.9	97.2	157.2
129	73.7	54.4	114.4
131	63.5	55.7	115.7

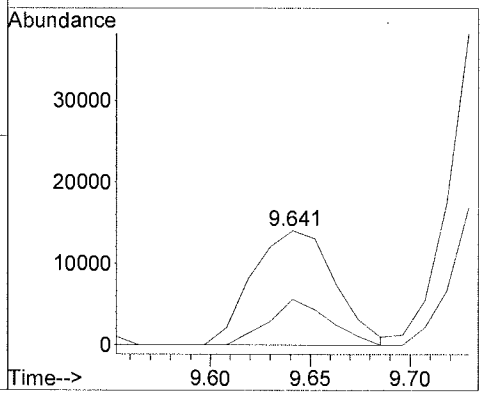


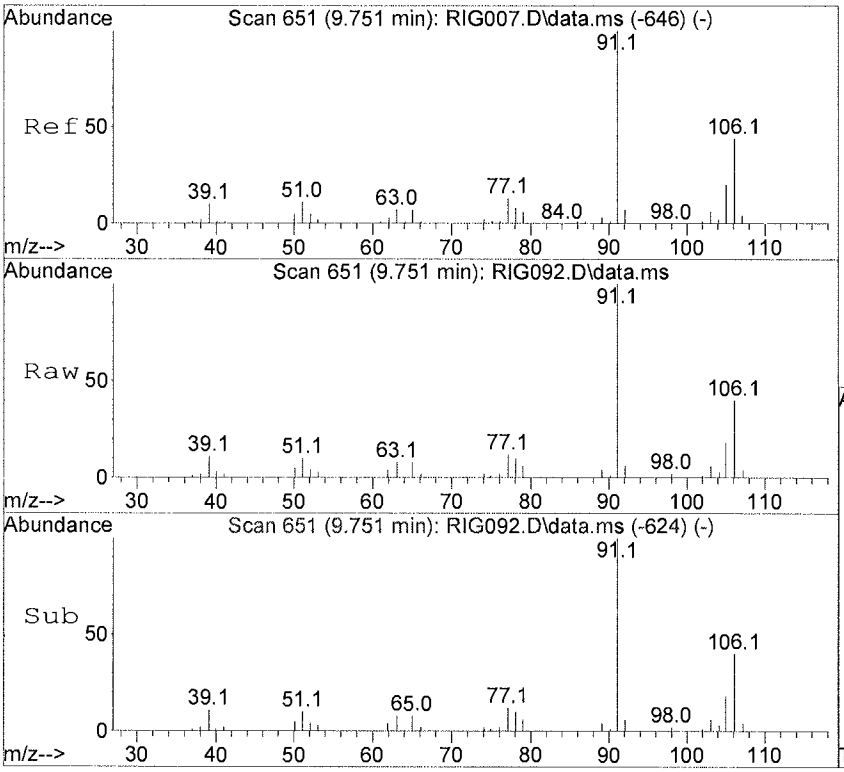


#69
Ethylbenzene
Concen: 0.32 ug/l
RT: 9.641 min Scan# 641
Delta R.T. 0.000 min
Lab File: RIG092.D
Acq: 15 Sep 2024 1:25 am

Tgt Ion: 91 Resp: 40249

Ion	Ratio	Lower	Upper
91	100		
106	29.1	0.0	58.7

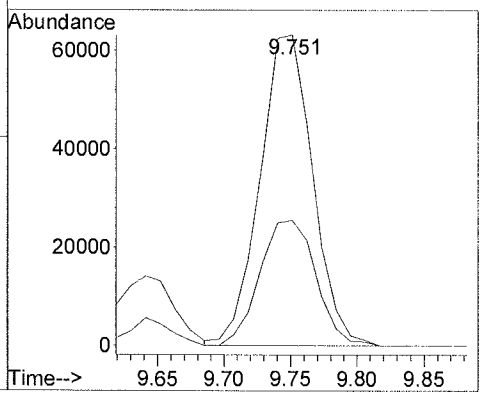


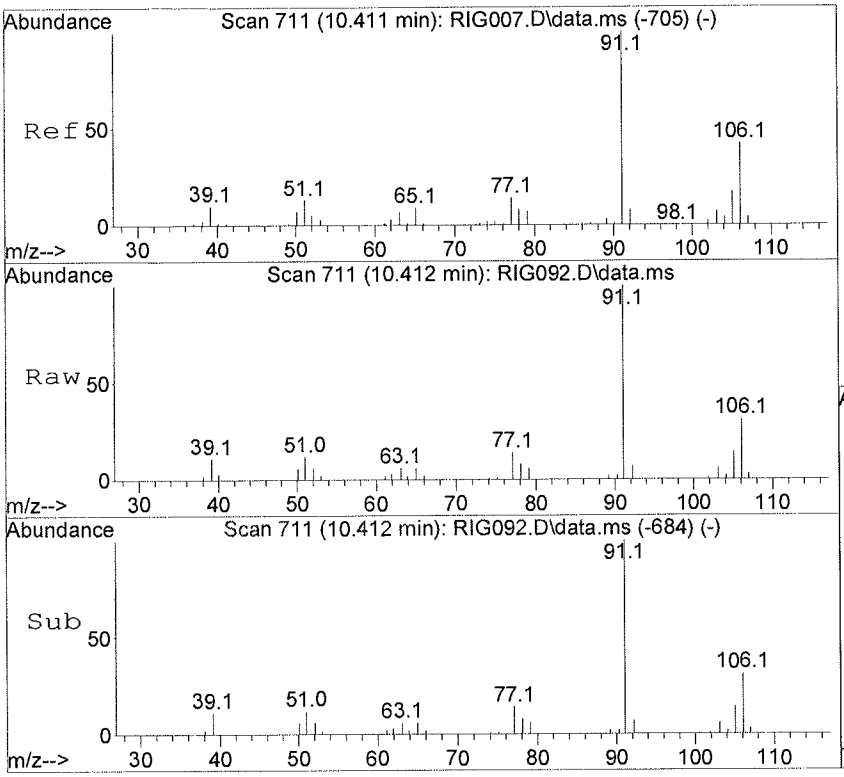


#70
m-Xylene & p-Xylene
Concen: 1.79 ug/l
RT: 9.751 min Scan# 651
Delta R.T. 0.000 min
Lab File: RIG092.D
Acq: 15 Sep 2024 1:25 am

Tgt Ion: 91 Resp: 173862

Ion	Ratio	Lower	Upper
91	100		
106	42.7	14.2	74.2

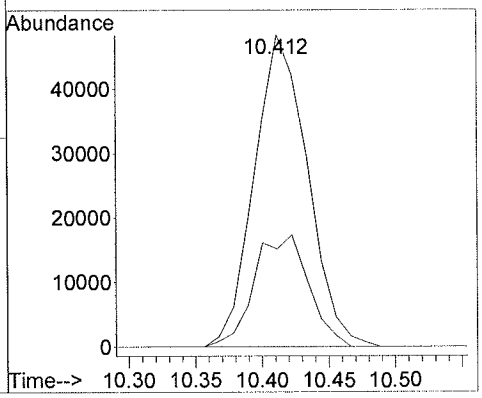




#71
o-Xylene
Concen: 1.41 ug/l
RT: 10.412 min Scan# 711
Delta R.T. 0.000 min
Lab File: RIG092.D
Acq: 15 Sep 2024 1:25 am

Tgt Ion: 91 Resp: 134664

Ion	Ratio	Lower	Upper
91	100		
106	36.6	12.4	72.4



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 11:41
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/15/24 01:50
Sample ID	: MW06-GW090524	Date Analyzed:	09/15/24 01:50
Lab Samp ID:	24I020-08	Dilution Factor:	1
Lab File ID:	RIG093	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.22J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.1	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.34J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.2	10.0	112	70-130
Bromofluorobenzene	9.92	10.0	99	70-130
Toluene-d8	10.1	10.0	101	70-130
Dibromofluoromethane	11.3	10.0	113	70-130

Notes:
Sample Amount : 10ml Final Volume : 10ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG093.D
Acq On : 15 Sep 2024 1:50 am
Operator : DNguye
Sample : 24I020-08
Misc : 10.0mL
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 03 09:11:35 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

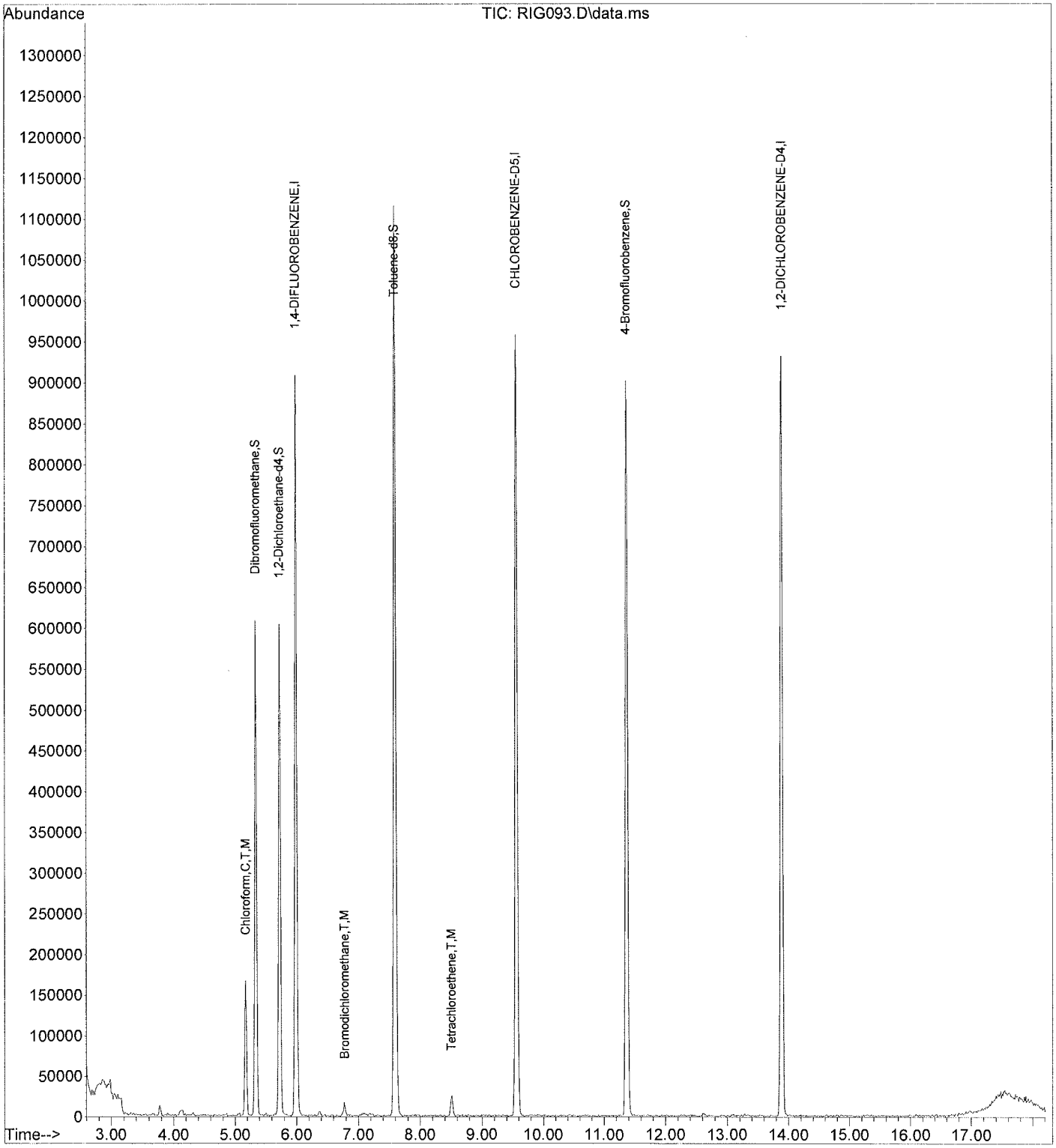
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	787324	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	701263	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	365976	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	389792	11.34	ug/l	0.00
Spiked Amount 10.000			Recovery =	113.40%		
41) 1,2-Dichloroethane-d4	5.723	65	553404	11.21	ug/L	0.00
Spiked Amount 10.000			Recovery =	112.10%		
56) Toluene-d8	7.594	98	1012282	10.15	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.50%		
77) 4-Bromofluorobenzene	11.369	95	394112	9.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.20%		
Target Compounds						Qvalue
33) Chloroform	5.173	83	135259	2.05	ug/l	95
50) Bromodichloromethane	6.780	83	11602	0.22	ug/L	69
63) Tetrachloroethene	8.508	164	8543	0.34	ug/l #	71

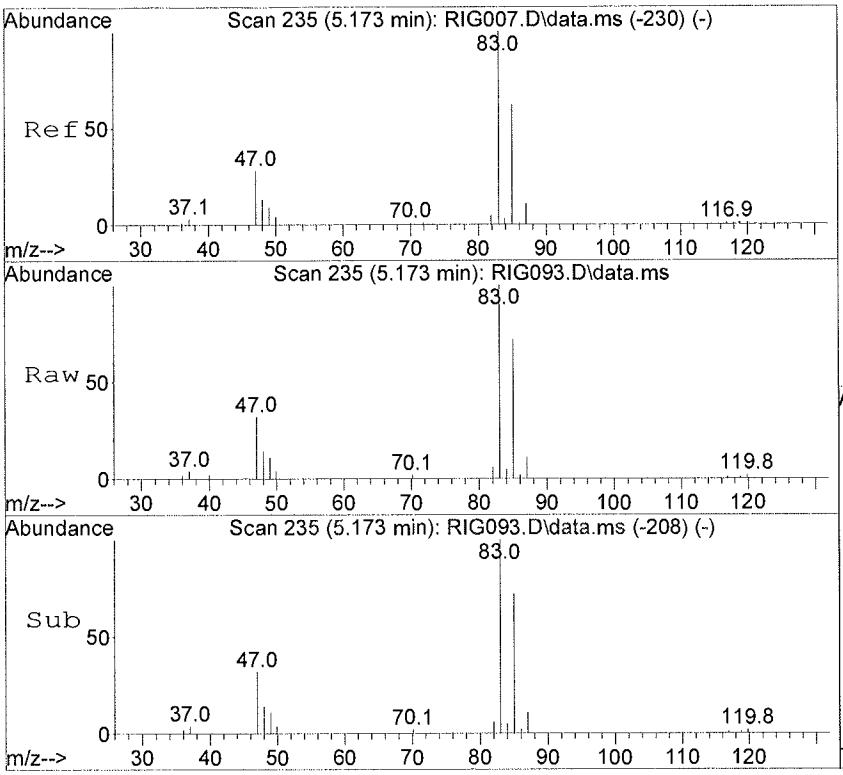
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG093.D
Acq On : 15 Sep 2024 1:50 am
Operator : DNguye
Sample : 24I020-08
Misc : 10.0mL
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 03 09:11:35 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

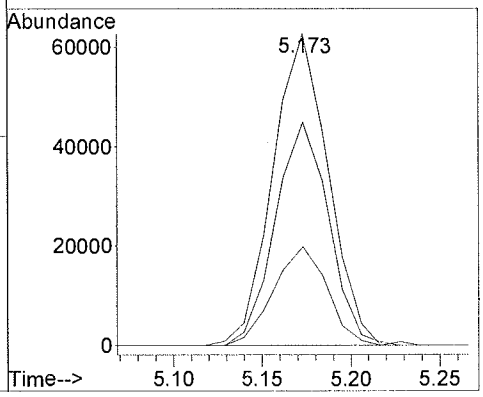


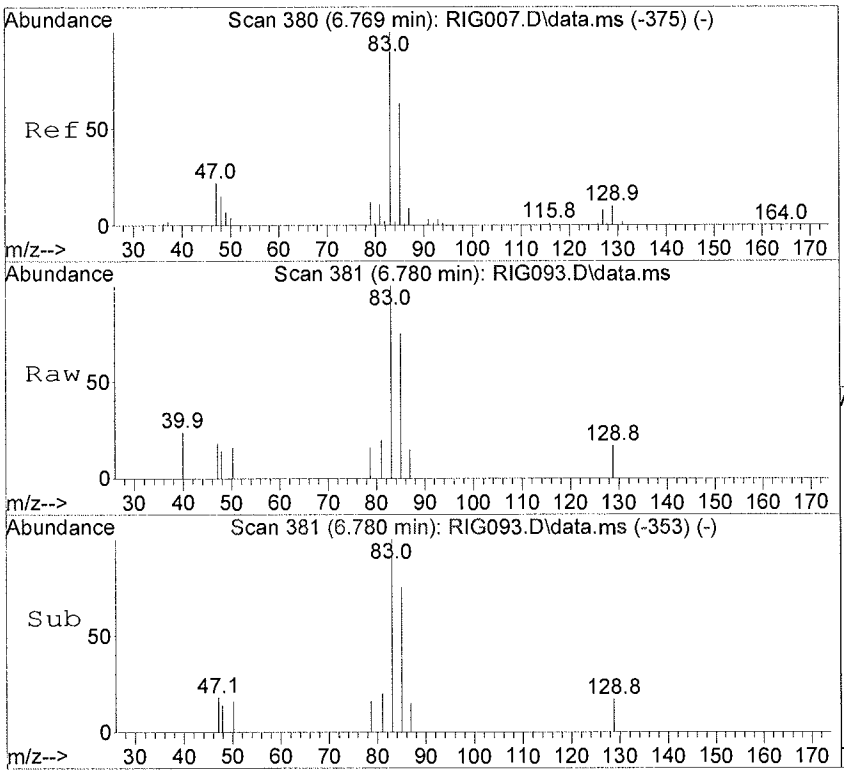


#33
Chloroform
Concen: 2.05 ug/l
RT: 5.173 min Scan# 235
Delta R.T. -0.000 min
Lab File: RIG093.D
Acq: 15 Sep 2024 1:50 am

Tgt Ion: 83 Resp: 135259

Ion	Ratio	Lower	Upper
83	100		
85	69.0	35.1	95.1
47	30.6	0.0	58.4

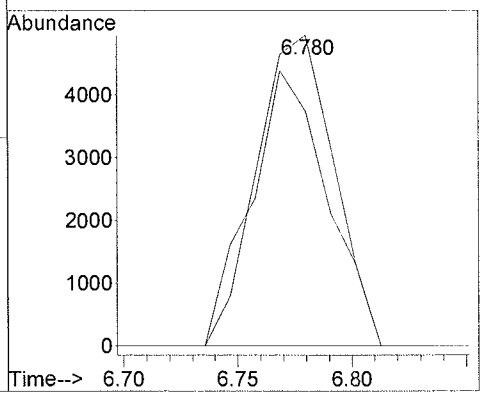


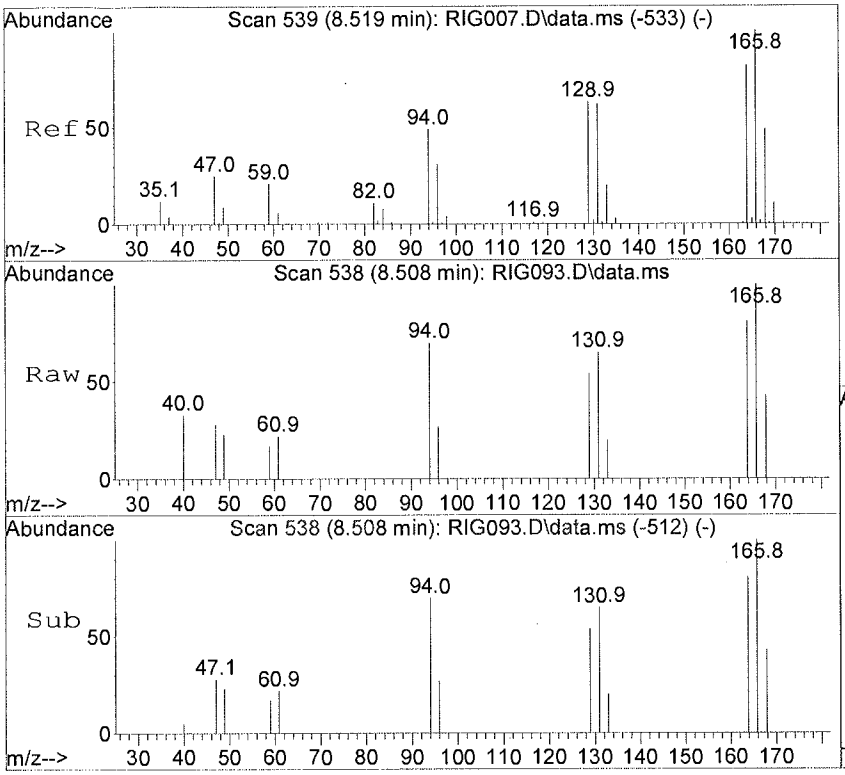


#50
Bromodichloromethane
Concen: 0.22 ug/L
RT: 6.780 min Scan# 381
Delta R.T. 0.011 min
Lab File: RIG093.D
Acq: 15 Sep 2024 1:50 am

Tgt Ion: 83 Resp: 11602

Ion	Ratio	Lower	Upper
83	100		
85	88.2	33.7	93.7

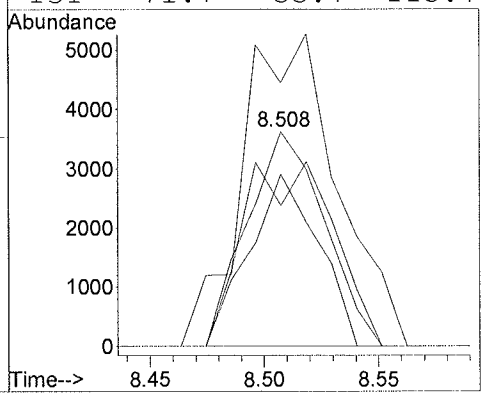




#63
Tetrachloroethene
Concen: 0.34 ug/l
RT: 8.508 min Scan# 538
Delta R.T. -0.011 min
Lab File: RIG093.D
Acq: 15 Sep 2024 1:50 am

Tgt Ion:164 Resp: 8543

Ion	Ratio	Lower	Upper
164	100		
166	179.0	97.2	157.2#
129	100.2	54.4	114.4
131	71.7	55.7	115.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/06/24 08:55
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/15/24 02:15
Sample ID	: MW37S-GW090624	Date Analyzed:	09/15/24 02:15
Lab Samp ID:	24I020-09	Dilution Factor:	1
Lab File ID:	RIG094	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.5	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.2	10.0	112	70-130
Bromofluorobenzene	10.2	10.0	102	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	11.1	10.0	111	70-130

Notes:
Sample Amount : 10ml
Final Volume : 10ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG094.D
Acq On : 15 Sep 2024 2:15 am
Operator : DNguye
Sample : 24I020-09
Misc : 10.0mL
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 03 09:12:04 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

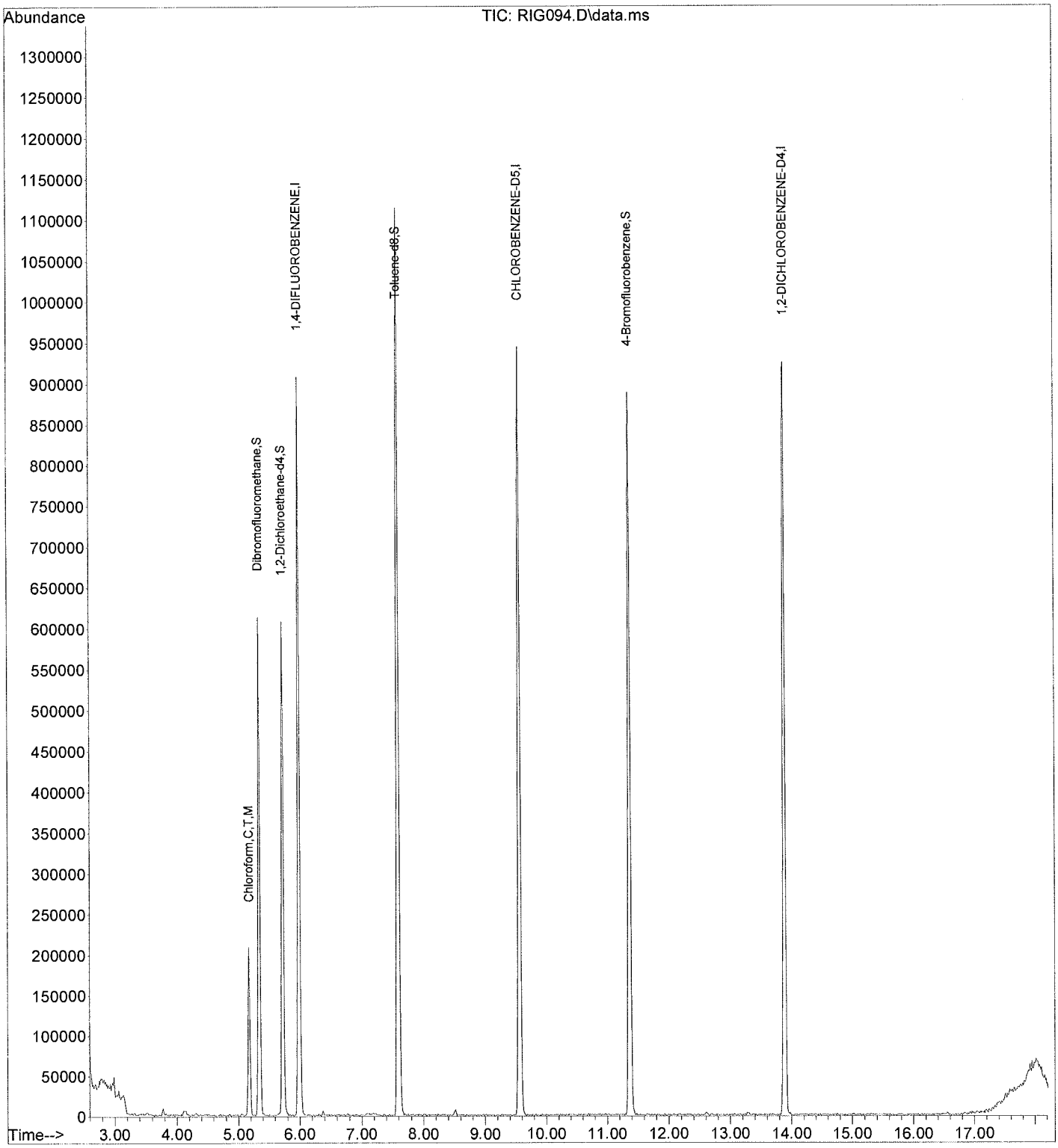
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	790530	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	693049	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	363214	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	382478	11.07	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.70%		
41) 1,2-Dichloroethane-d4	5.723	65	554080	11.18	ug/L	0.00
Spiked Amount 10.000			Recovery =	111.80%		
56) Toluene-d8	7.594	98	1018126	10.33	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.30%		
77) 4-Bromofluorobenzene	11.369	95	402178	10.20	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.00%		
Target Compounds						Qvalue
33) Chloroform	5.173	83	168333	2.54	ug/l	96

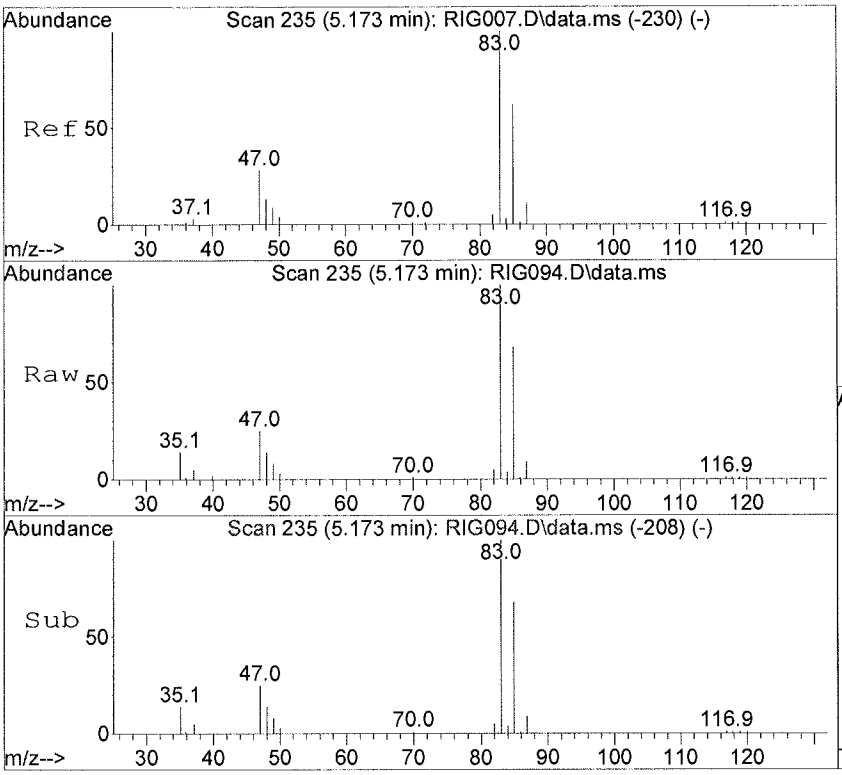
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG094.D
Acq On : 15 Sep 2024 2:15 am
Operator : DNguye
Sample : 24I020-09
Misc : 10.0mL
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 03 09:12:04 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

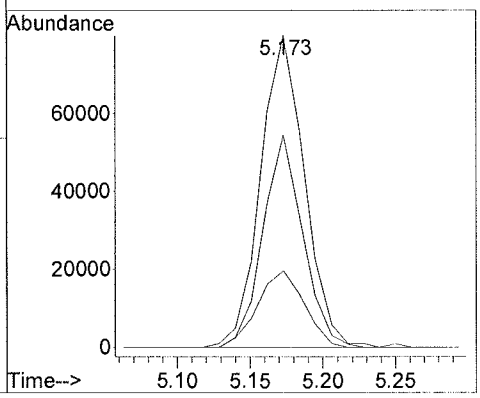




#33
Chloroform
Concen: 2.54 ug/l
RT: 5.173 min Scan# 235
Delta R.T. -0.000 min
Lab File: RIG094.D
Acq: 15 Sep 2024 2:15 am

Tgt Ion: 83 Resp: 168333

Ion	Ratio	Lower	Upper
83	100		
85	61.6	35.1	95.1
47	26.0	0.0	58.4



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/06/24 09:22
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/15/24 02:39
Sample ID	: MW37D-GW090624	Date Analyzed:	09/15/24 02:39
Lab Samp ID:	24I020-10	Dilution Factor:	1
Lab File ID:	RIG095	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	0.80J	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.3	10.0	113	70-130
Bromofluorobenzene	9.83	10.0	98	70-130
Toluene-d8	10.1	10.0	101	70-130
Dibromofluoromethane	10.7	10.0	107	70-130

Notes:
Sample Amount : 10ml
Final Volume : 10ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG095.D
Acq On : 15 Sep 2024 2:39 am
Operator : DNguye
Sample : 24I020-10
Misc : 10.0mL
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 03 09:12:29 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

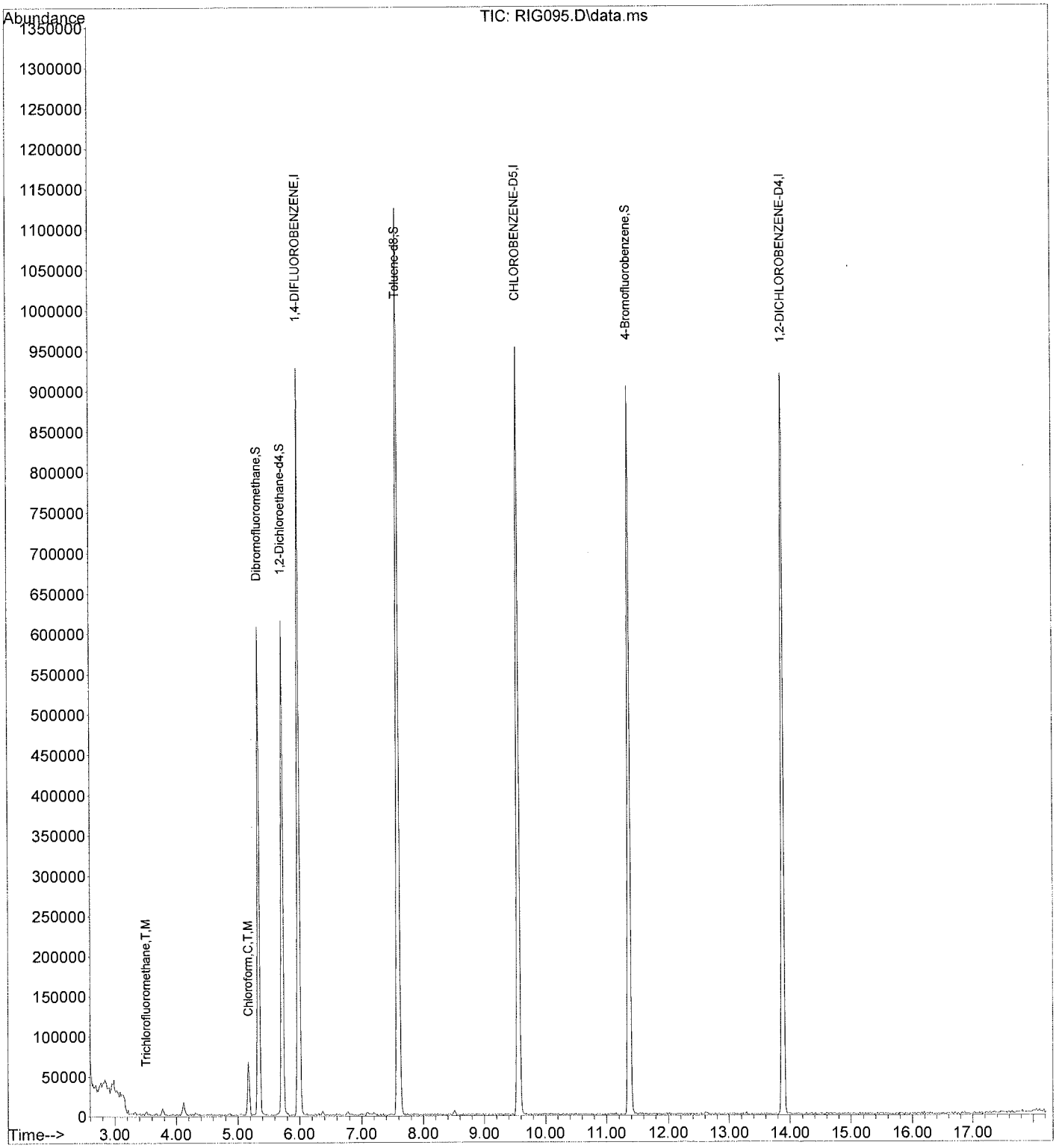
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	809875	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	703300	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	382410	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	379968	10.73	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.30%		
41) 1,2-Dichloroethane-d4	5.723	65	571478	11.25	ug/L	0.00
Spiked Amount 10.000			Recovery =	112.50%		
56) Toluene-d8	7.594	98	1012959	10.12	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.20%		
77) 4-Bromofluorobenzene	11.369	95	408296	9.83	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.30%		
Target Compounds						Qvalue
8) Trichlorofluoromethane	3.511	101	4430	0.11	ug/l	66
33) Chloroform	5.173	83	54296	0.80	ug/l	91

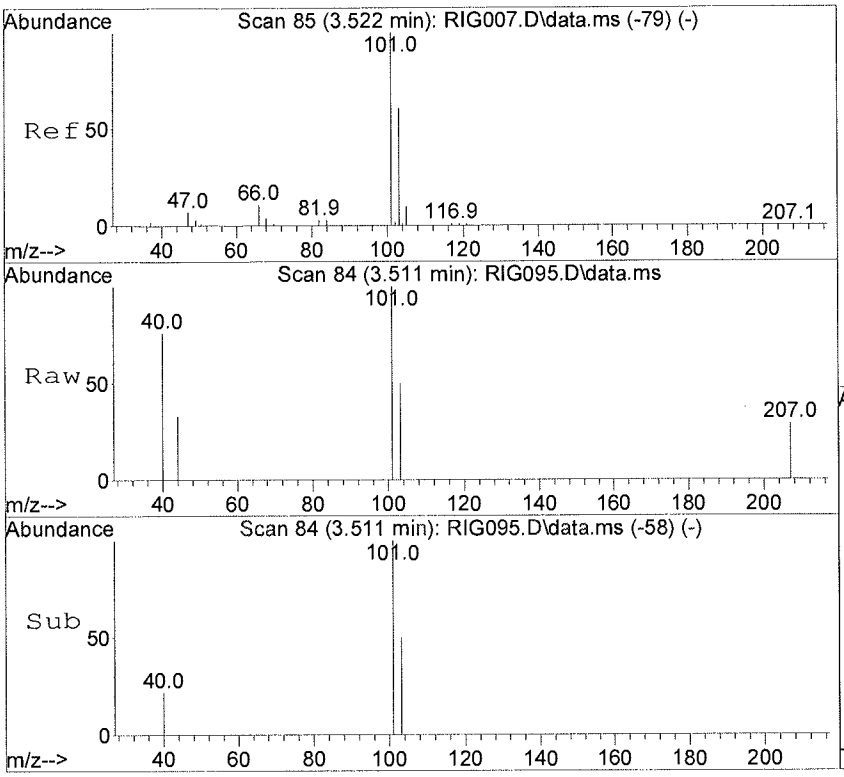
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG095.D
Acq On : 15 Sep 2024 2:39 am
Operator : DNguye
Sample : 24I020-10
Misc : 10.0mL
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 03 09:12:29 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

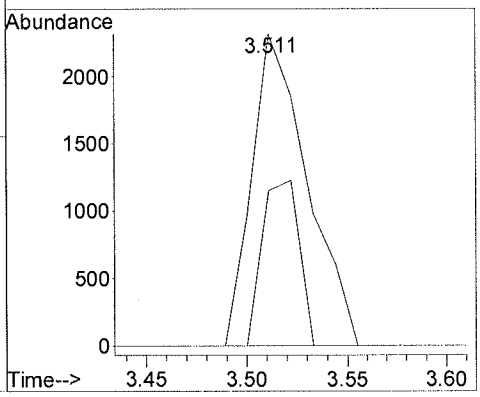


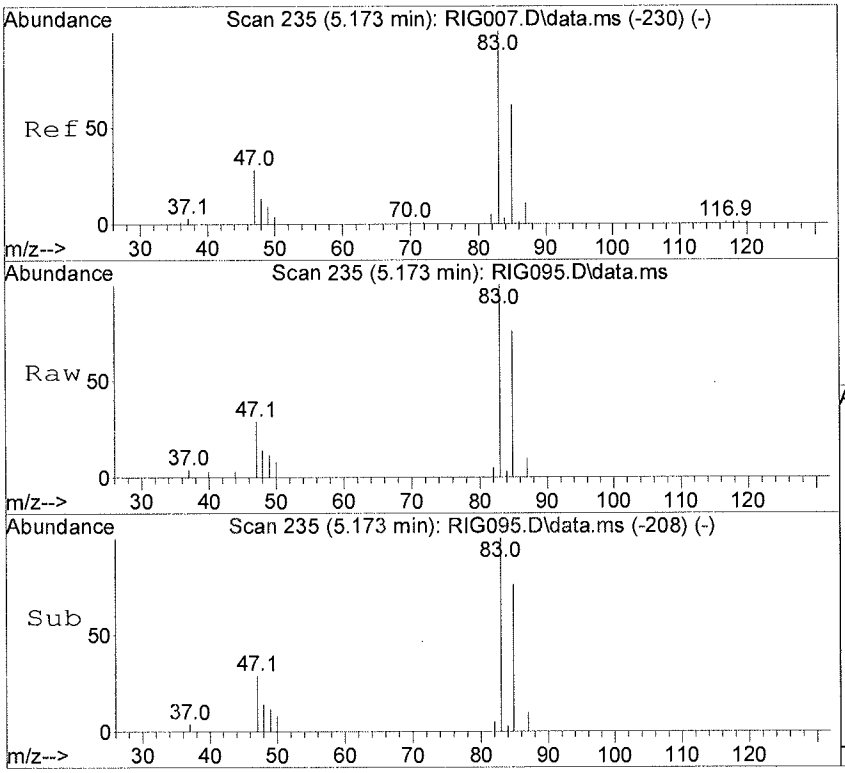


#8
Trichlorofluoromethane
Concen: 0.11 ug/l
RT: 3.511 min Scan# 84
Delta R.T. -0.011 min
Lab File: RIG095.D
Acq: 15 Sep 2024 2:39 am

Tgt Ion:101 Resp: 4430

Ion	Ratio	Lower	Upper
101	100		
103	35.4	31.8	91.8

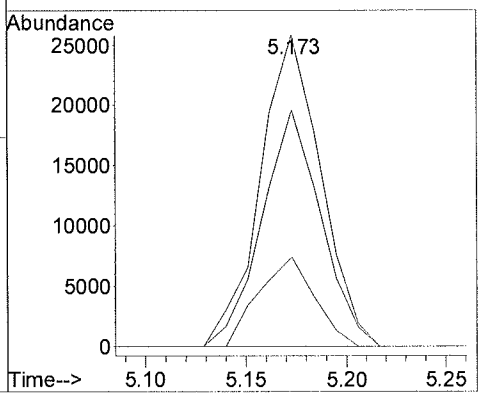




#33
Chloroform
Concen: 0.80 ug/l
RT: 5.173 min Scan# 235
Delta R.T. -0.000 min
Lab File: RIG095.D
Acq: 15 Sep 2024 2:39 am

Tgt Ion: 83 Resp: 54296

Ion	Ratio	Lower	Upper
83	100		
85	73.8	35.1	95.1
47	26.5	0.0	58.4



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/06/24 15:10
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/15/24 03:04
Sample ID	: MW36-GW090624	Date Analyzed:	09/15/24 03:04
Lab Samp ID:	24I020-11	Dilution Factor:	1
Lab File ID:	RIG096	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	0.28J	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.4	10.0	114	70-130
Bromofluorobenzene	9.84	10.0	98	70-130
Toluene-d8	10.1	10.0	101	70-130
Dibromofluoromethane	11.2	10.0	112	70-130

Notes:
Sample Amount : 10ml Final Volume : 10ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG096.D
Acq On : 15 Sep 2024 3:04 am
Operator : DNguye
Sample : 24I020-11
Misc : 10.0mL
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 03 09:12:51 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

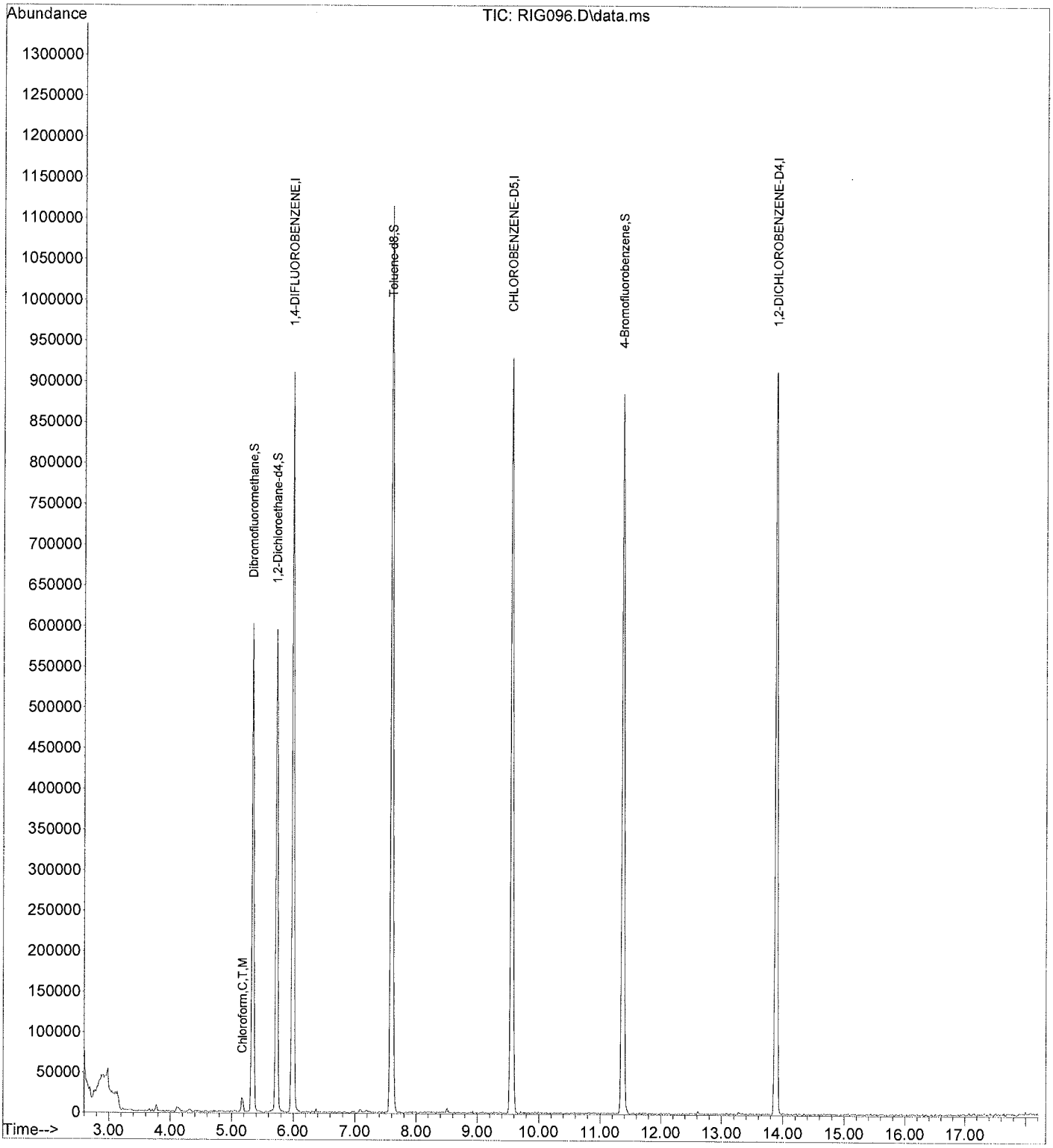
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	788868	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	696581	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	370600	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	386736	11.22	ug/l	0.00
Spiked Amount 10.000			Recovery =	112.20%		
41) 1,2-Dichloroethane-d4	5.723	65	564337	11.41	ug/L	0.00
Spiked Amount 10.000			Recovery =	114.10%		
56) Toluene-d8	7.594	98	997358	10.06	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.60%		
77) 4-Bromofluorobenzene	11.369	95	396070	9.84	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.40%		
Target Compounds						Qvalue
33) Chloroform	5.173	83	18522	0.28	ug/l	93

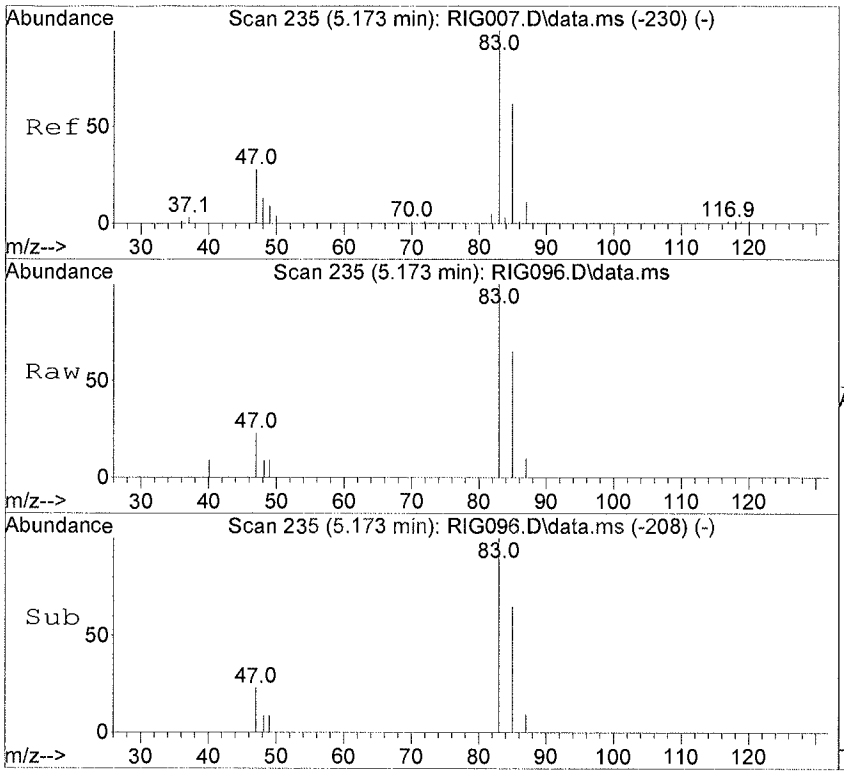
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG096.D
Acq On : 15 Sep 2024 3:04 am
Operator : DNguye
Sample : 24I020-11
Misc : 10.0mL
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 03 09:12:51 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

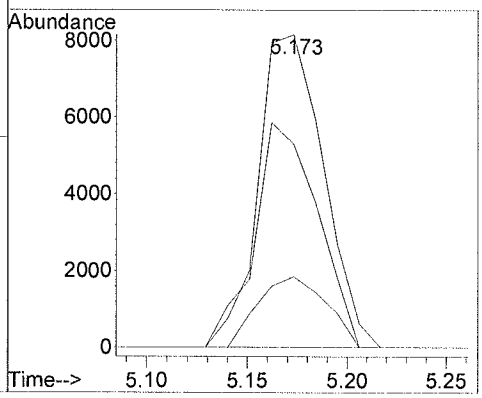




#33
Chloroform
Concen: 0.28 ug/l
RT: 5.173 min Scan# 235
Delta R.T. 0.000 min
Lab File: RIG096.D
Acq: 15 Sep 2024 3:04 am

Tgt Ion: 83 Resp: 18522

Ion	Ratio	Lower	Upper
83	100		
85	69.7	35.1	95.1
47	23.6	0.0	58.4



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/06/24 09:00
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/15/24 03:28
Sample ID	: MW01D-GW090624	Date Analyzed:	09/15/24 03:28
Lab Samp ID:	24I020-12	Dilution Factor:	1
Lab File ID:	RIG097	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	0.20J	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.3	10.0	113	70-130
Bromofluorobenzene	9.99	10.0	100	70-130
Toluene-d8	10.2	10.0	102	70-130
Dibromofluoromethane	10.9	10.0	109	70-130

Notes:
Sample Amount : 10ml Final Volume : 10ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG097.D
Acq On : 15 Sep 2024 3:28 am
Operator : DNguye
Sample : 24I020-12
Misc : 10.0mL
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 03 09:13:10 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

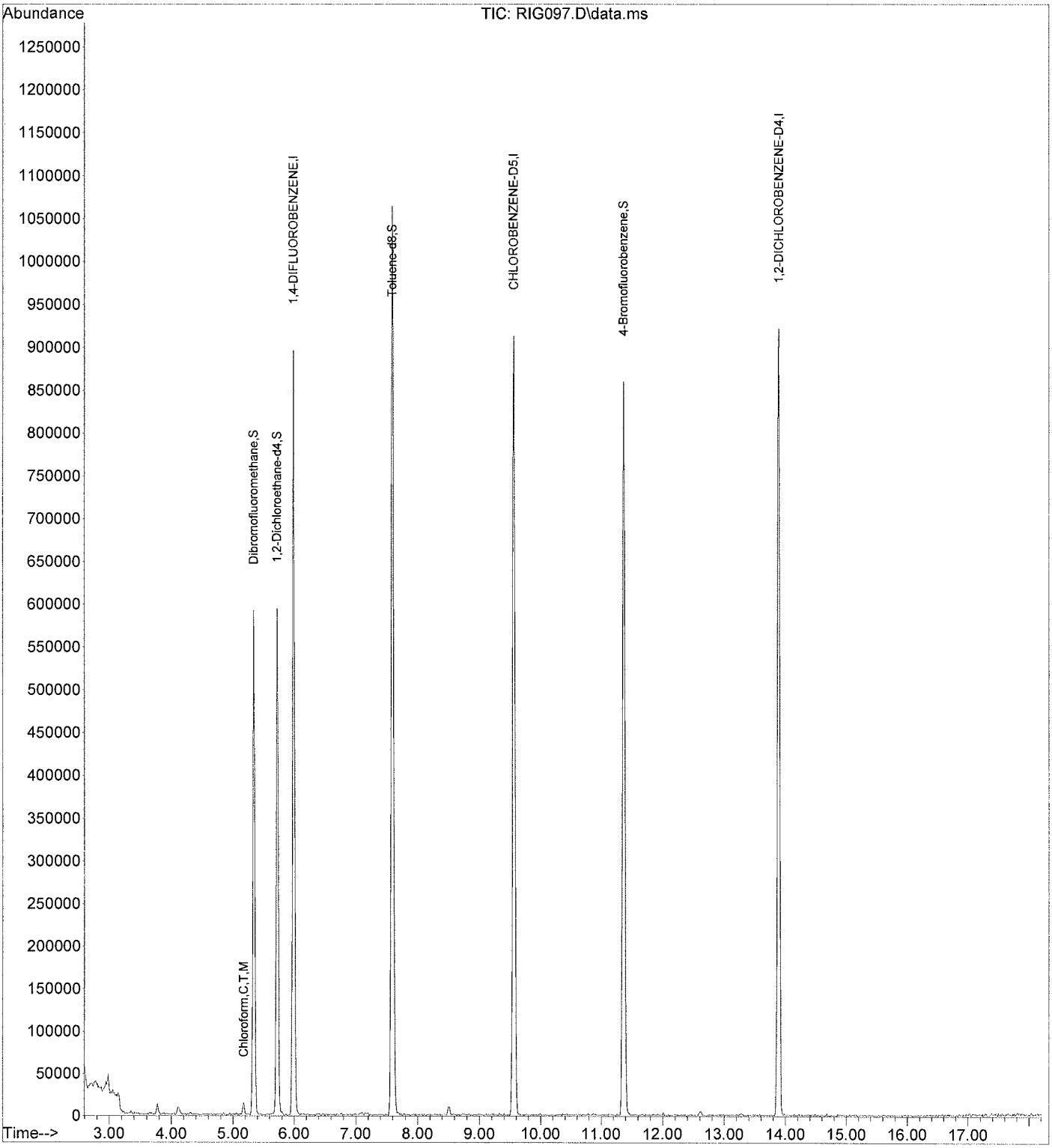
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	771305	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	675562	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	363313	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	367493	10.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.00%		
41) 1,2-Dichloroethane-d4	5.723	65	548182	11.33	ug/L	0.00
Spiked Amount 10.000			Recovery =	113.30%		
56) Toluene-d8	7.594	98	977398	10.17	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.70%		
77) 4-Bromofluorobenzene	11.369	95	393846	9.99	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.90%		
Target Compounds						Qvalue
33) Chloroform	5.173	83	13034	0.20	ug/l	97

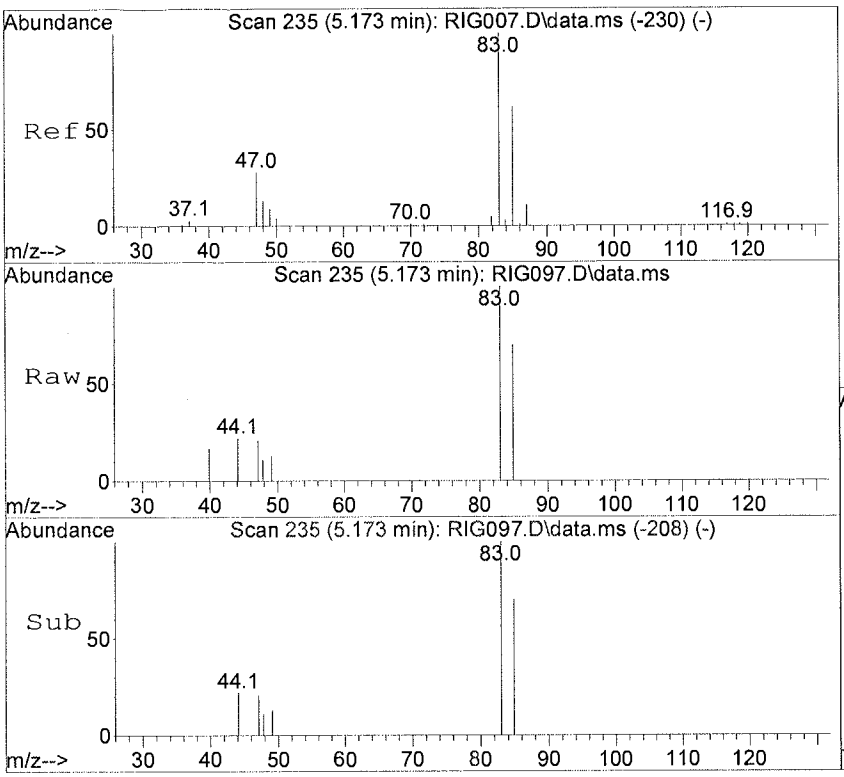
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG097.D
Acq On : 15 Sep 2024 3:28 am
Operator : DNguye
Sample : 24I020-12
Misc : 10.0mL
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 03 09:13:10 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

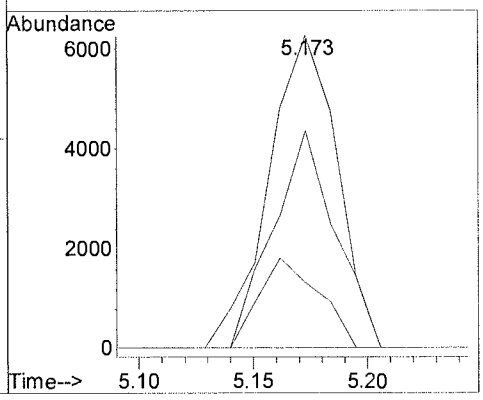




#33
Chloroform
Concen: 0.20 ug/l
RT: 5.173 min Scan# 235
Delta R.T. -0.000 min
Lab File: RIG097.D
Acq: 15 Sep 2024 3:28 am

Tgt Ion: 83 Resp: 13034

Ion	Ratio	Lower	Upper
83	100		
85	63.4	35.1	95.1
47	25.0	0.0	58.4



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/06/24 15:16
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/20/24 17:43
Sample ID	: MW08B-GW090624	Date Analyzed:	09/20/24 17:43
Lab Samp ID:	24I020-13N	Dilution Factor:	1
Lab File ID:	RIV434	Matrix:	WATER
Ext Btch ID:	VO01I16	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.14J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.1	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	6.2	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.67	10.0	97	70-130
Bromofluorobenzene	9.95	10.0	100	70-130
Toluene-dB	10.9	10.0	109	70-130
Dibromofluoromethane	9.76	10.0	98	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV434.D Vial: 13
Acq On : 20 Sep 2024 5:43 pm Operator: DNguye/CLingl
Sample : 24I020-13N Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 1 11:05 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	774820	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	612518	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	231825	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	229971	9.76	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.60%			
41) 1,2-Dichloroethane-d4	7.98	65	202599	9.67	ug/l	0.00
Spiked Amount 10.000			Recovery = 96.70%			
54) Toluene-d8	11.03	98	815583	10.89	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.90%			
76) 4-Bromofluorobenzene	16.01	95	292786	9.95	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.50%			
Target Compounds						Qvalue
31) Chloroform	6.93	83	99238	2.11	ug/l	97
47) Bromodichloromethane	9.74	83	4899	0.14	ug/l	95
61) Tetrachloroethene	12.31	164	128451	6.16	ug/l	95

(#) = qualifier out of range (m) = manual integration

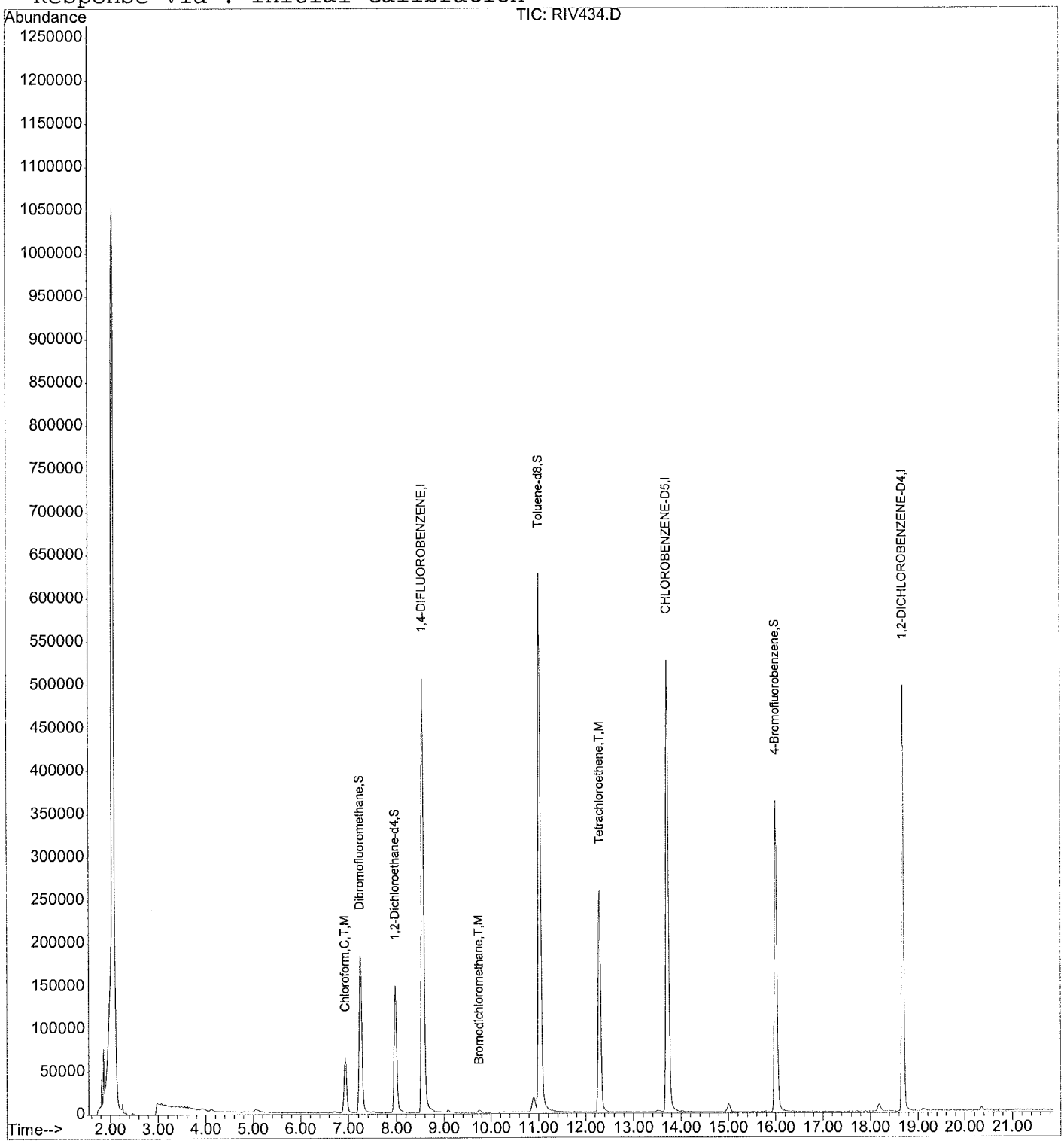
Quantitation Report

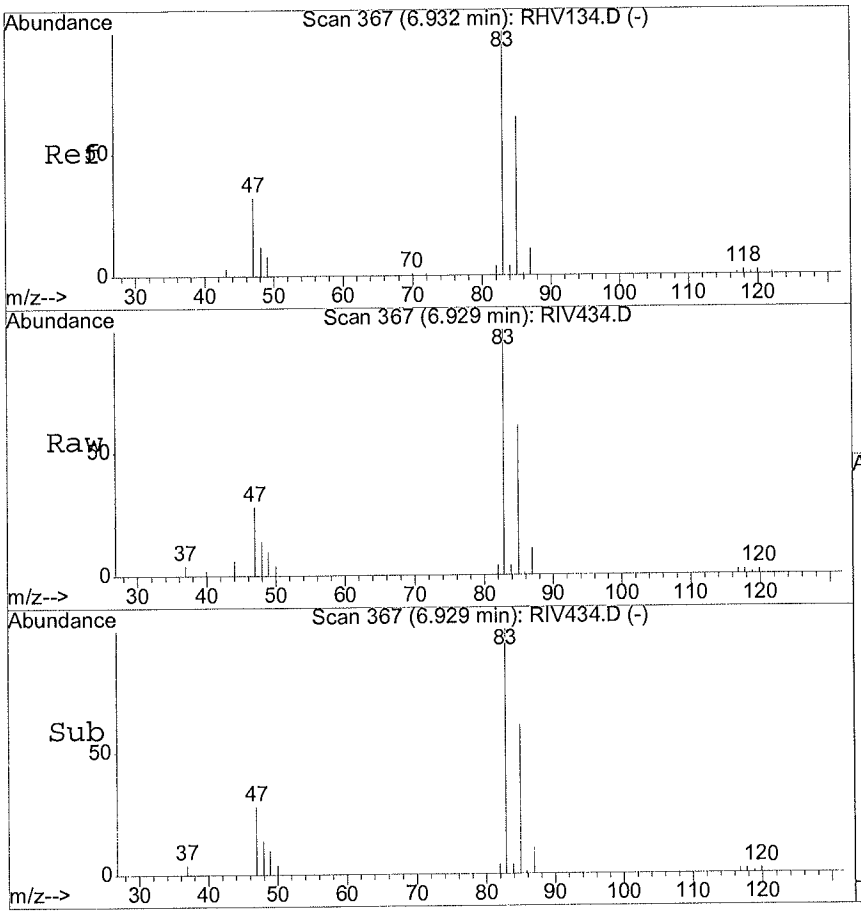
Data File : D:\HPCHEM\1\DATA\24I20\RIV434.D
Acq On : 20 Sep 2024 5:43 pm
Sample : 24I020-13N
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 1 11:05 2024

Vial: 13
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

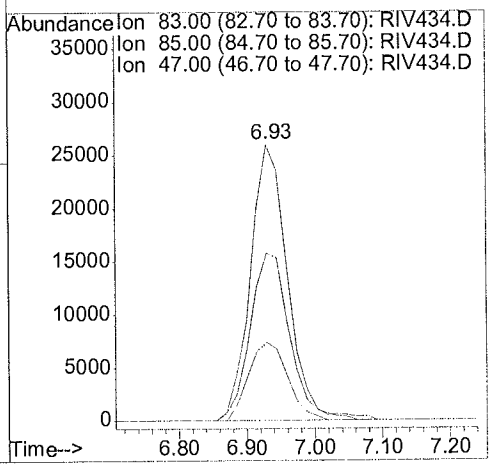


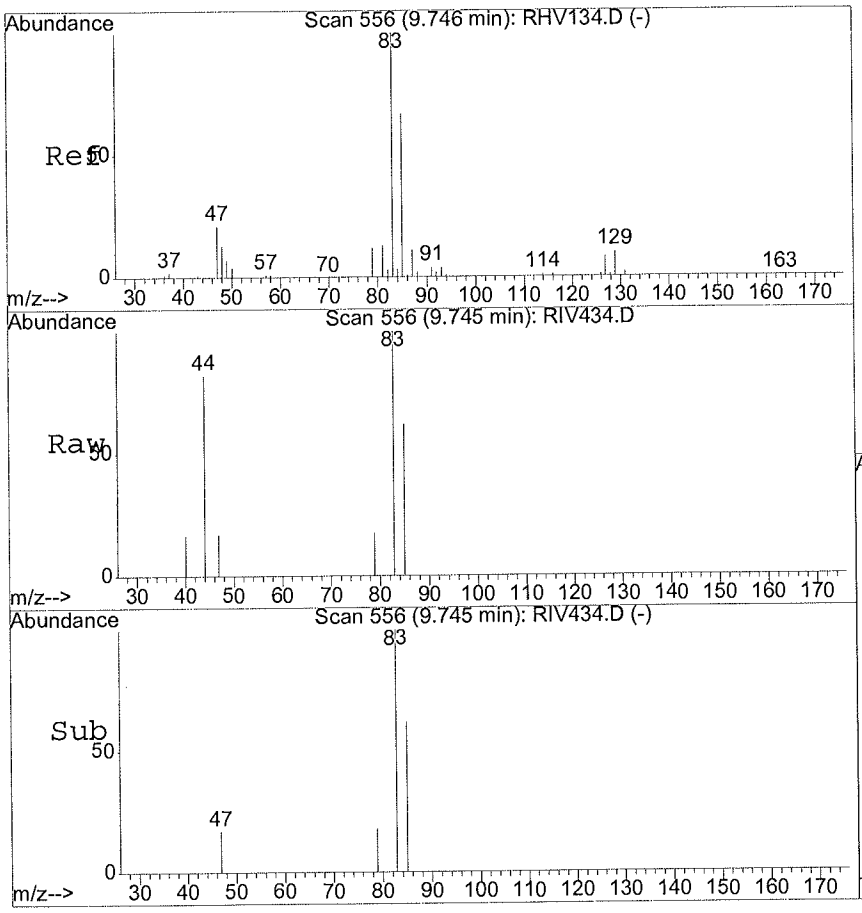


#31
Chloroform
Concen: 2.11 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV434.D
Acq: 20 Sep 2024 5:43 pm

Tgt Ion: 83 Resp: 99238

Ion	Ratio	Lower	Upper
83	100		
85	64.6	38.4	98.4
47	29.9	0.0	59.6

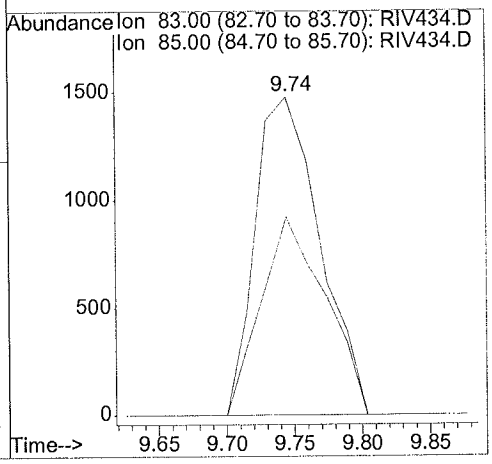


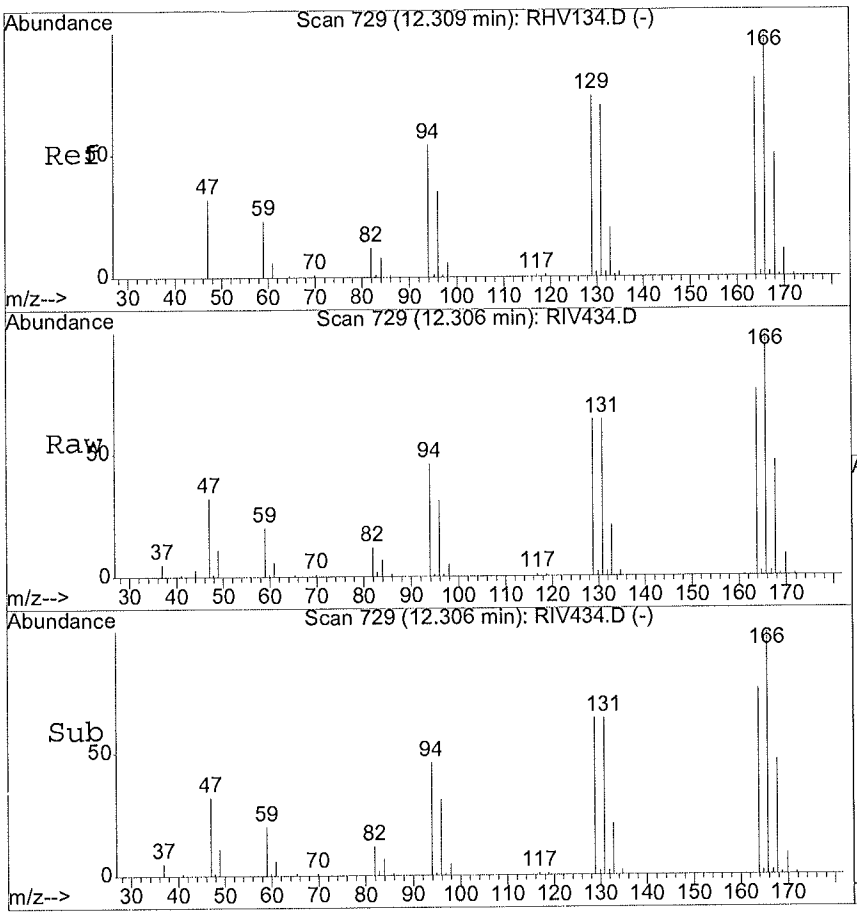


#47
Bromodichloromethane
Concen: 0.14 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RIV434.D
Acq: 20 Sep 2024 5:43 pm

Tgt Ion: 83 Resp: 4899

Ion	Ratio	Lower	Upper
83	100		
85	62.4	36.5	96.5

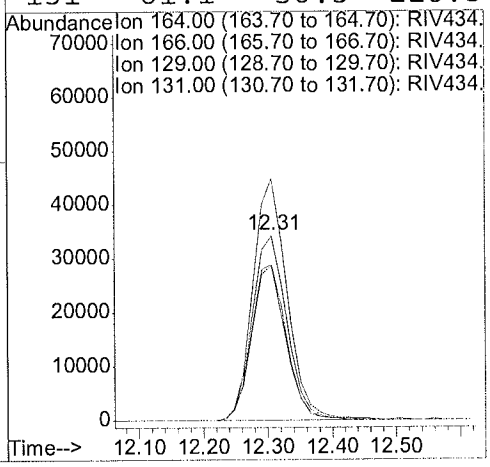




#61
Tetrachloroethene
Concen: 6.16 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV434.D
Acq: 20 Sep 2024 5:43 pm

Tgt Ion:164 Resp: 128451

Ion	Ratio	Lower	Upper
164	100		
166	128.1	98.2	158.2
129	85.4	62.8	122.8
131	81.1	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/06/24 10:21
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/20/24 18:13
Sample ID	: MW34D-GW090624	Date Analyzed:	09/20/24 18:13
Lab Samp ID:	24I020-14	Dilution Factor:	1
Lab File ID:	RIV435	Matrix:	WATER
Ext Btch ID:	V001I16	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	0.23J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	0.17J	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.81	10.0	98	70-130
Bromofluorobenzene	9.92	10.0	99	70-130
Toluene-d8	10.9	10.0	109	70-130
Dibromofluoromethane	9.86	10.0	99	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV435.D Vial: 14
Acq On : 20 Sep 2024 6:13 pm Operator: DNguye/CLingl
Sample : 24I020-14 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 1 11:06 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

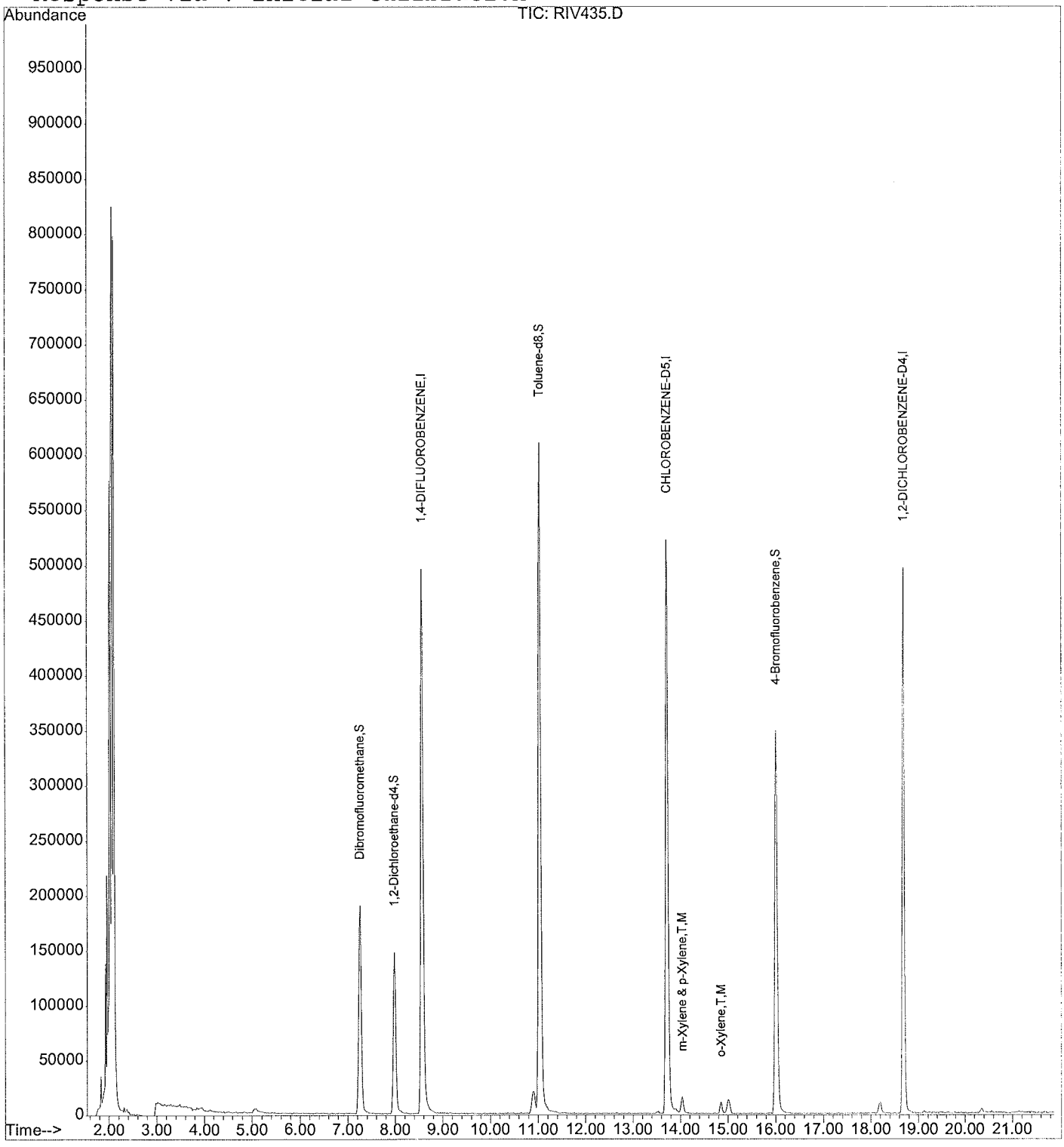
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	764590	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	598755	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	227166	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	229140	9.86	ug/l	0.01
Spiked Amount 10.000			Recovery = 98.60%			
41) 1,2-Dichloroethane-d4	7.98	65	202789	9.81	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.10%			
54) Toluene-d8	11.03	98	799315	10.92	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.20%			
76) 4-Bromofluorobenzene	16.01	95	285871	9.92	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.20%			
Target Compounds						Qvalue
68) m-Xylene & p-Xylene	14.04	91	20467	0.23	ug/l	97
69) o-Xylene	14.85	91	14662	0.17	ug/l	99

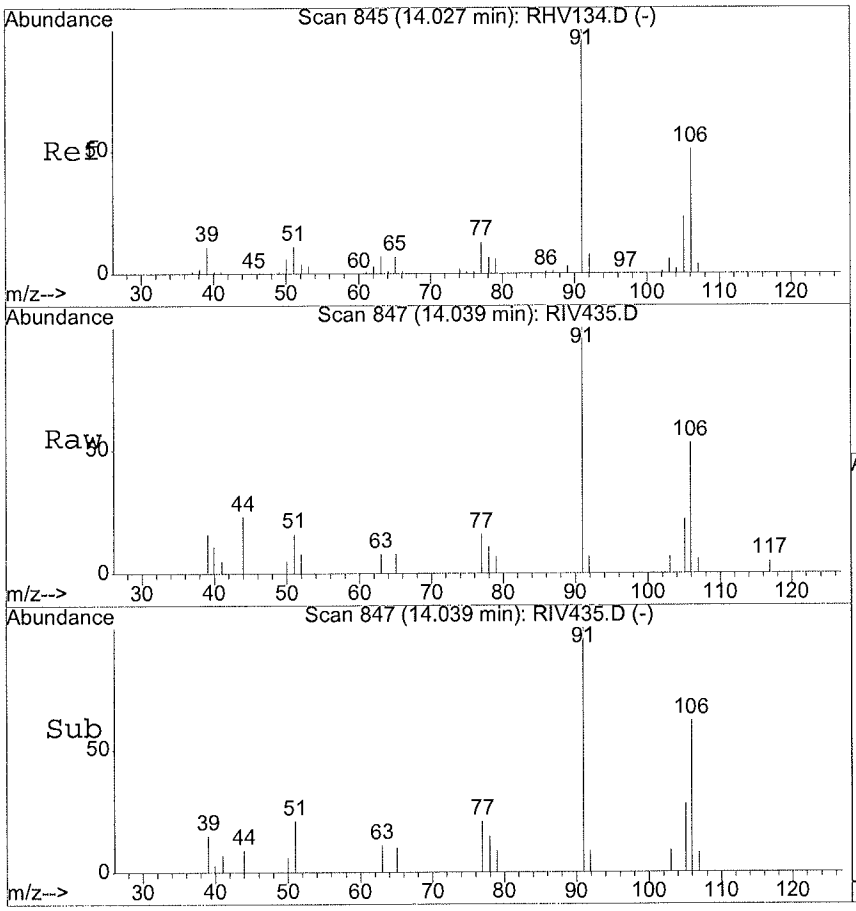
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIV435.D Vial: 14
Acq On : 20 Sep 2024 6:13 pm Operator: DNguye/CLing
Sample : 24I020-14 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 1 11:06 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

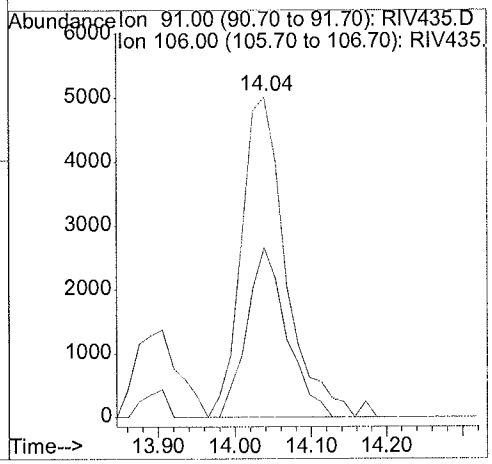


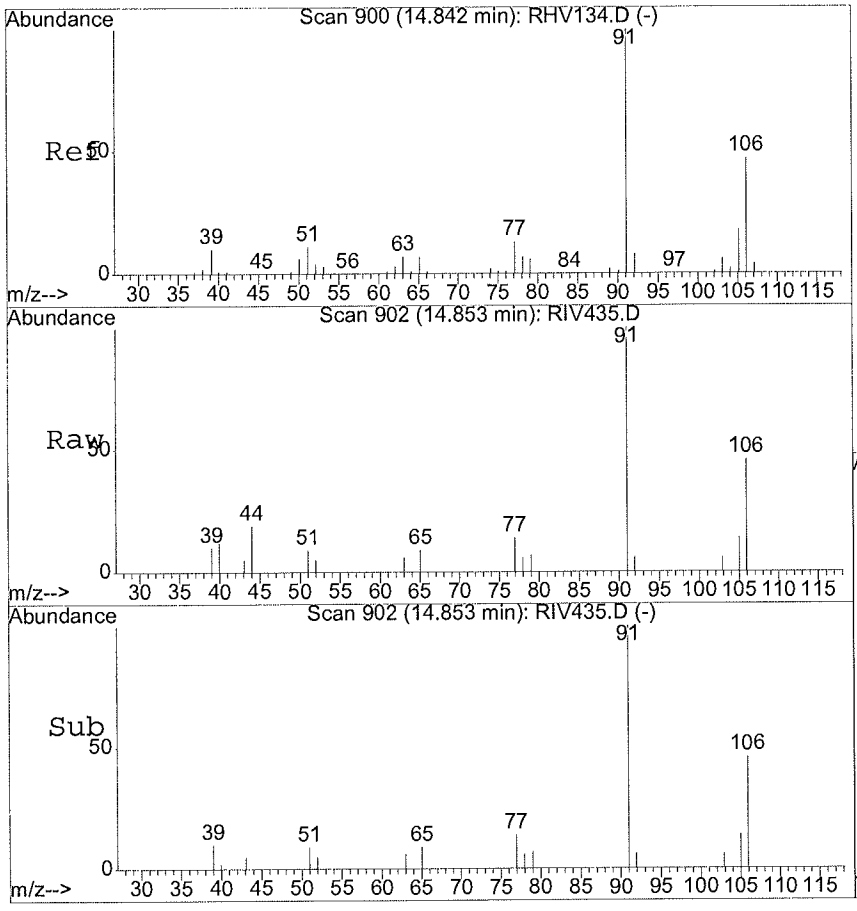


#68
m-Xylene & p-Xylene
Concen: 0.23 ug/l
RT: 14.04 min Scan# 847
Delta R.T. 0.01 min
Lab File: RIV435.D
Acq: 20 Sep 2024 6:13 pm

Tgt Ion: 91 Resp: 20467

Ion	Ratio	Lower	Upper
91	100		
106	47.5	19.5	79.5

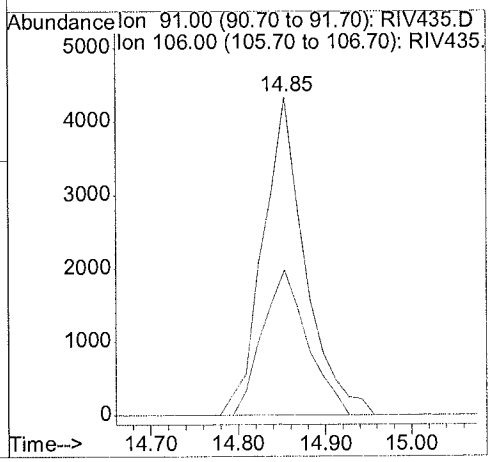




#69
o-Xylene
Concen: 0.17 ug/l
RT: 14.85 min Scan# 902
Delta R.T. 0.01 min
Lab File: RIV435.D
Acq: 20 Sep 2024 6:13 pm

Tgt Ion: 91 Resp: 14662

Ion	Ratio	Lower	Upper
91	100		
106	48.5	17.6	77.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/06/24 15:35
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/20/24 18:43
Sample ID	: MW34A-GW090624	Date Analyzed:	09/20/24 18:43
Lab Samp ID:	24I020-15	Dilution Factor:	1
Lab File ID:	RIV436	Matrix:	WATER
Ext Btch ID:	VQ01I16	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.20J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.2	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.41J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	2.4	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	1.8	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	25	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.43J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.1	10.0	101	70-130
Bromofluorobenzene	10.1	10.0	101	70-130
Toluene-d8	10.6	10.0	106	70-130
Dibromofluoromethane	9.79	10.0	98	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV436.D
Acq On : 20 Sep 2024 6:43 pm
Sample : 24I020-15
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 1 11:06 2024

Vial: 15
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	746198	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	593966	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	224928	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	222230	9.79	ug/l	0.01
Spiked Amount 10.000			Recovery = 97.90%			
41) 1,2-Dichloroethane-d4	7.98	65	204485	10.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.40%			
54) Toluene-d8	11.03	98	772614	10.64	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.40%			
76) 4-Bromofluorobenzene	16.01	95	288088	10.10	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.00%			
Target Compounds						Qvalue
31) Chloroform	6.93	83	101937	2.25	ug/l	96
44) Trichloroethene	9.08	130	11324	0.43	ug/l	95
47) Bromodichloromethane	9.76	83	6562	0.20	ug/l	98
61) Tetrachloroethene	12.31	164	511461	25.30	ug/l	95
67) Ethylbenzene	13.89	91	45793	0.41	ug/l	99
68) m-Xylene & p-Xylene	14.02	91	207118	2.35	ug/l	99
69) o-Xylene	14.84	91	150001	1.77	ug/l	97

(#) = qualifier out of range (m) = manual integration

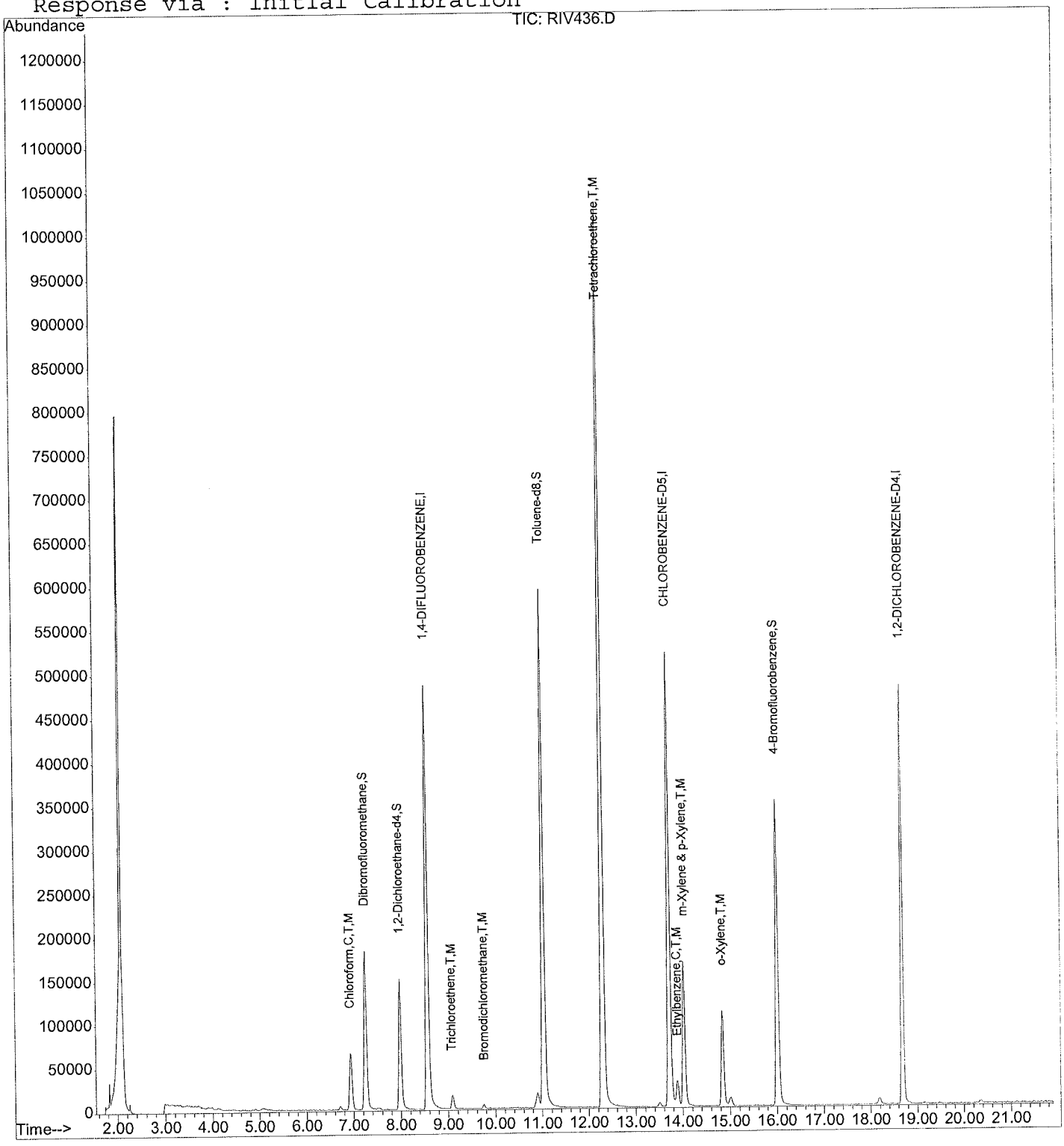
Quantitation Report

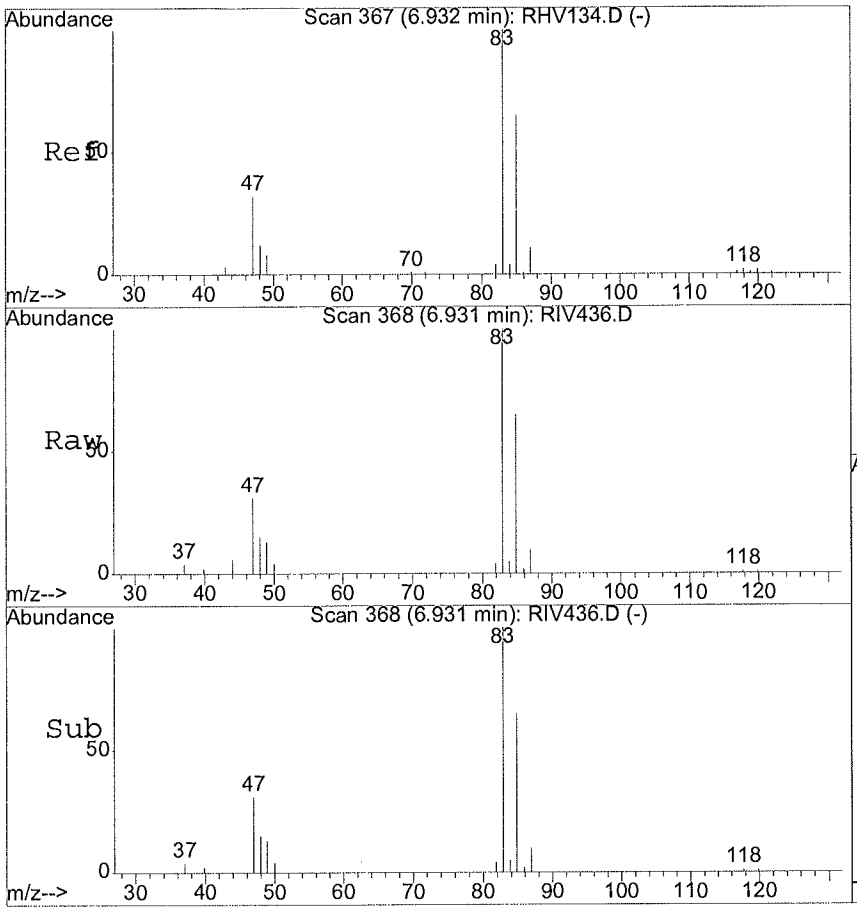
Data File : D:\HPCHEM\1\DATA\24I20\RIV436.D
Acq On : 20 Sep 2024 6:43 pm
Sample : 24I020-15
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 1 11:06 2024

Vial: 15
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

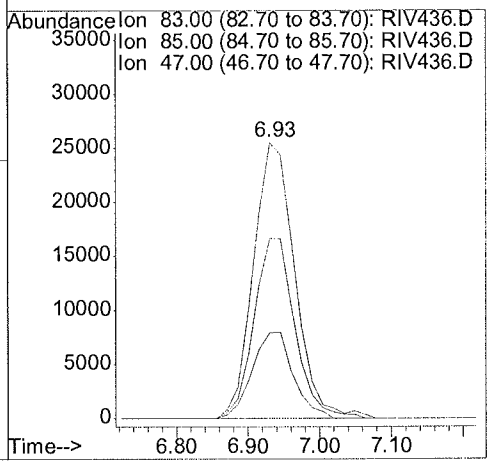


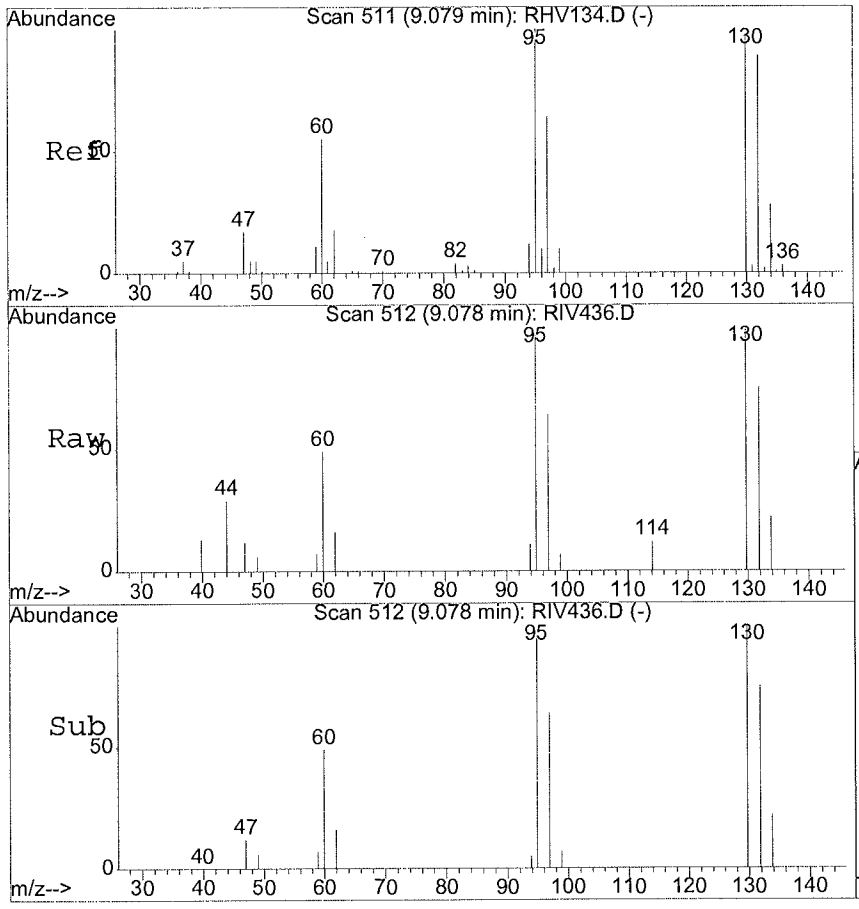


#31
Chloroform
Concen: 2.25 ug/l
RT: 6.93 min Scan# 368
Delta R.T. -0.00 min
Lab File: RIV436.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion: 83 Resp: 101937

Ion	Ratio	Lower	Upper
83	100		
85	64.5	38.4	98.4
47	31.0	0.0	59.6

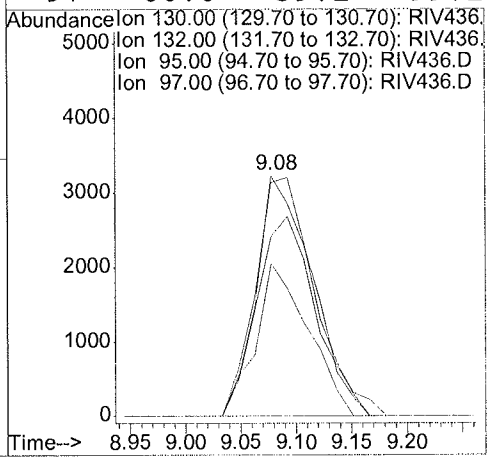


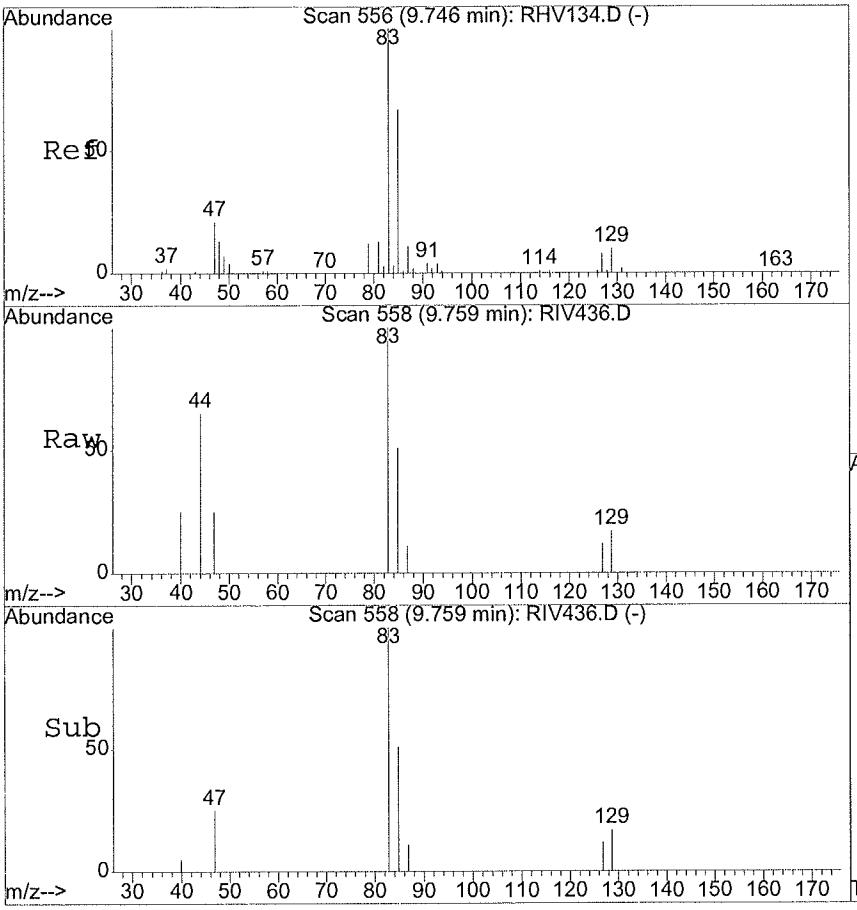


#44
Trichloroethene
Concen: 0.43 ug/l
RT: 9.08 min Scan# 512
Delta R.T. -0.00 min
Lab File: RIV436.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion:130 Resp: 11324

Ion	Ratio	Lower	Upper
130	100		
132	89.6	62.7	122.7
95	103.9	72.0	132.0
97	60.0	39.1	99.1

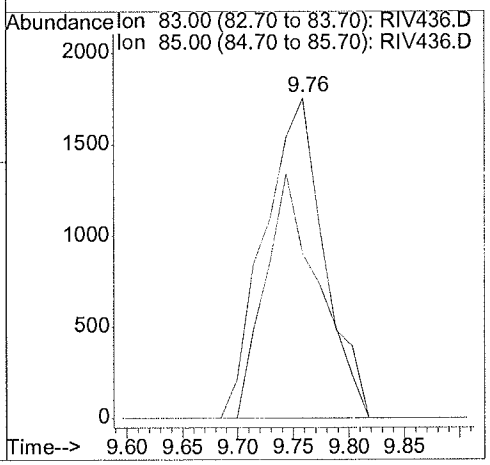


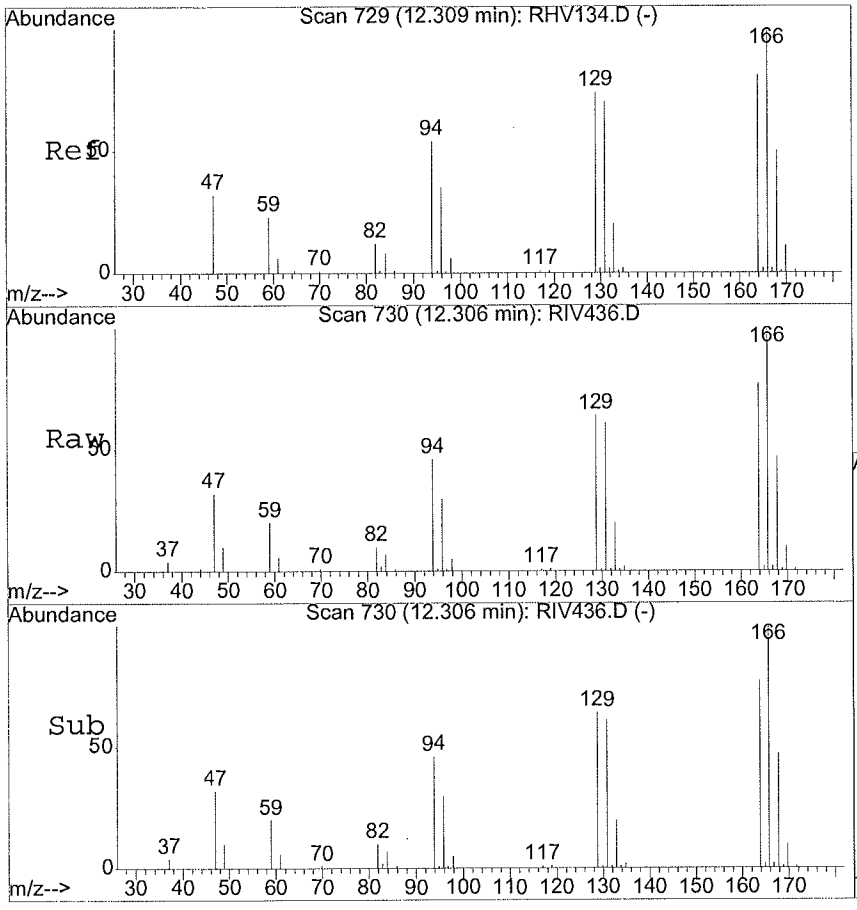


#47
Bromodichloromethane
Concen: 0.20 ug/l
RT: 9.76 min Scan# 558
Delta R.T. 0.01 min
Lab File: RIV436.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion: 83 Resp: 6562

Ion	Ratio	Lower	Upper
83	100		
85	68.4	36.5	96.5

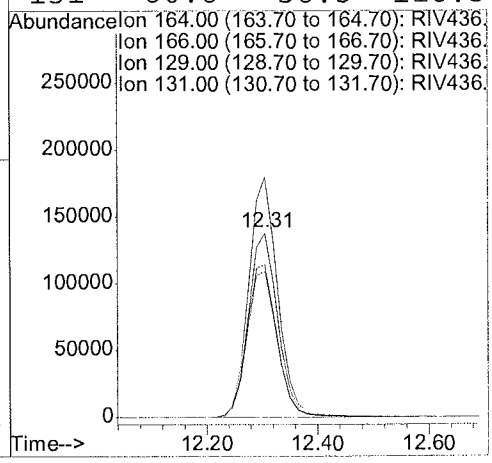


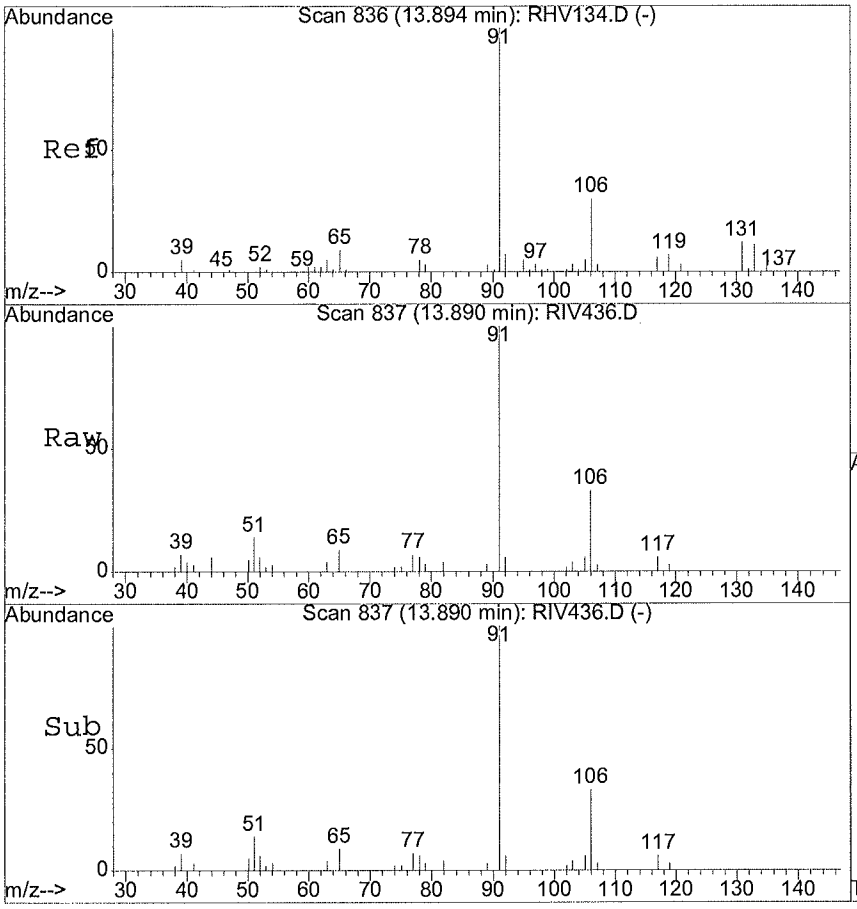


#61
Tetrachloroethene
Concen: 25.30 ug/l
RT: 12.31 min Scan# 730
Delta R.T. -0.00 min
Lab File: RIV436.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion:164 Resp: 511461

Ion	Ratio	Lower	Upper
164	100		
166	128.2	98.2	158.2
129	84.6	62.8	122.8
131	80.8	58.3	118.3

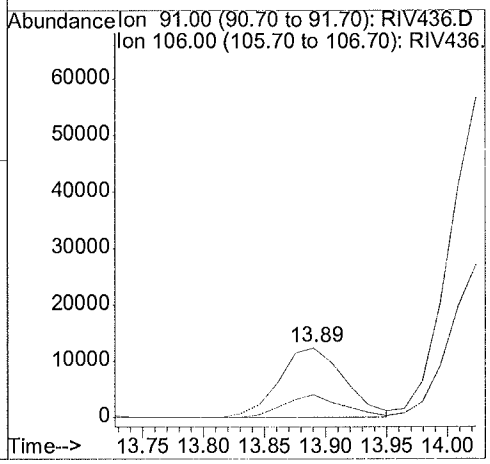


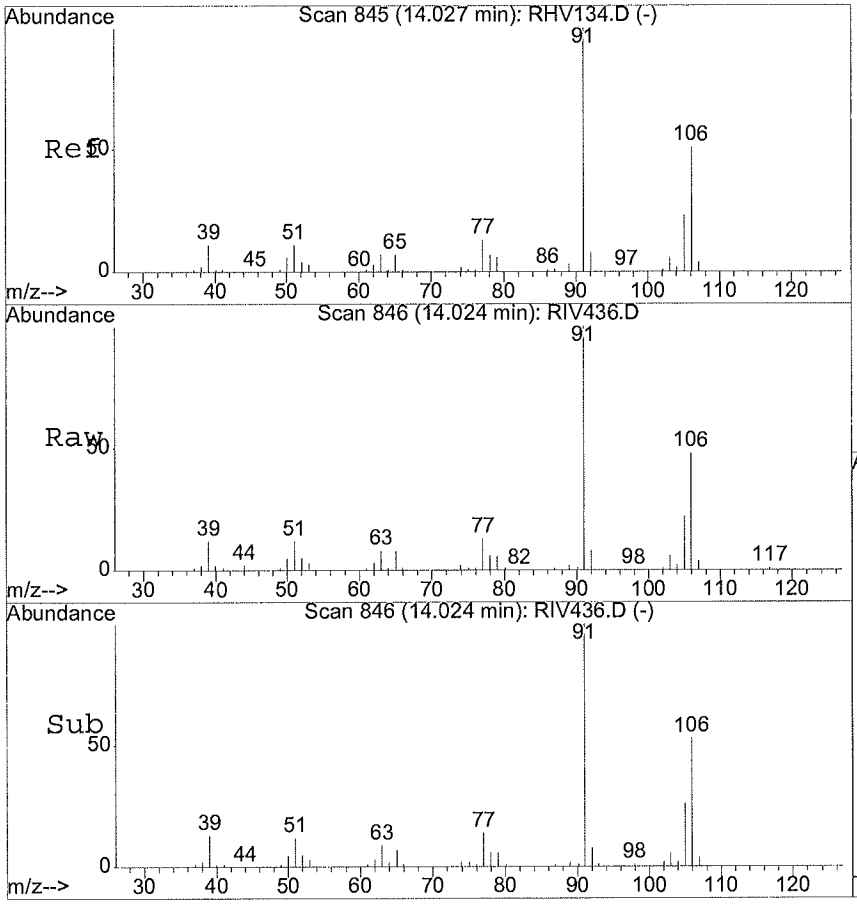


#67
Ethylbenzene
Concen: 0.41 ug/l
RT: 13.89 min Scan# 837
Delta R.T. -0.00 min
Lab File: RIV436.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion: 91 Resp: 45793

Ion	Ratio	Lower	Upper
91	100		
106	28.9	0.0	59.6

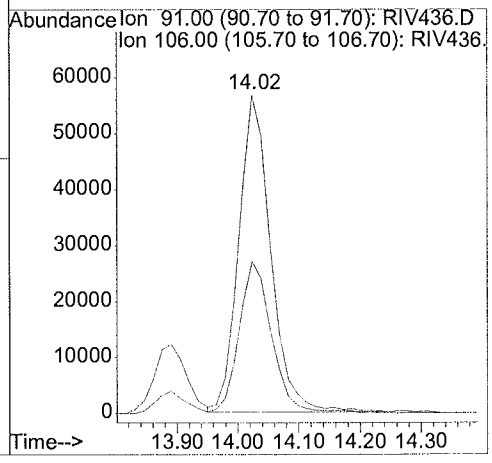


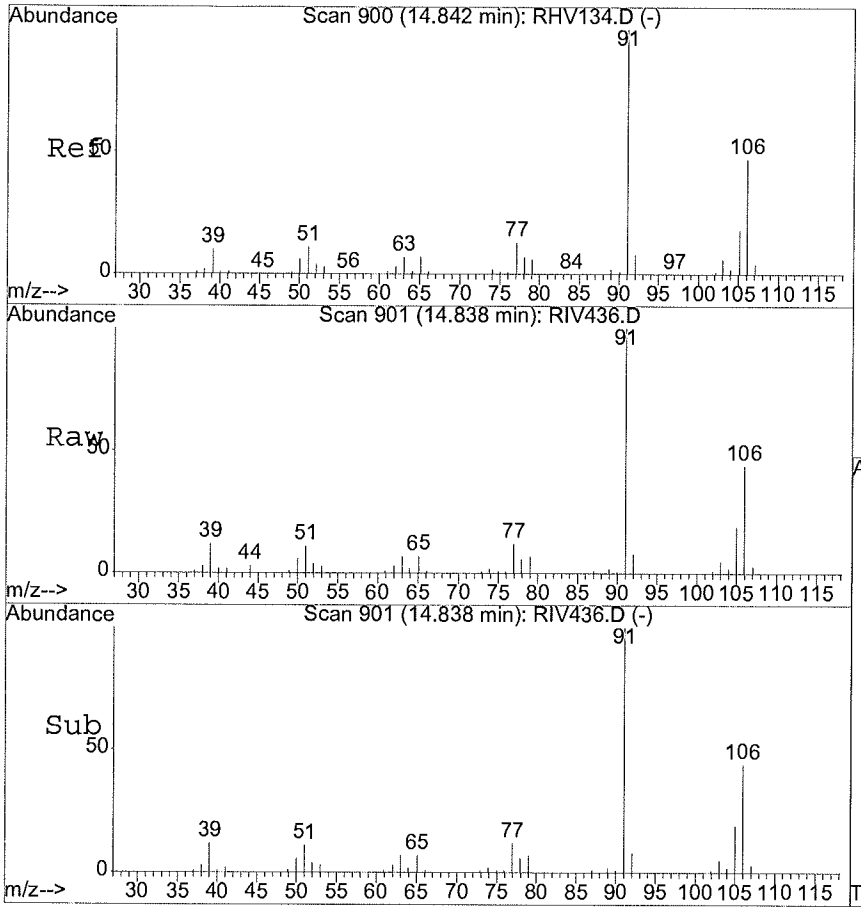


#68
m-Xylene & p-Xylene
Concen: 2.35 ug/l
RT: 14.02 min Scan# 846
Delta R.T. -0.00 min
Lab File: RIV436.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion: 91 Resp: 207118

Ion	Ratio	Lower	Upper
91	100		
106	48.9	19.5	79.5

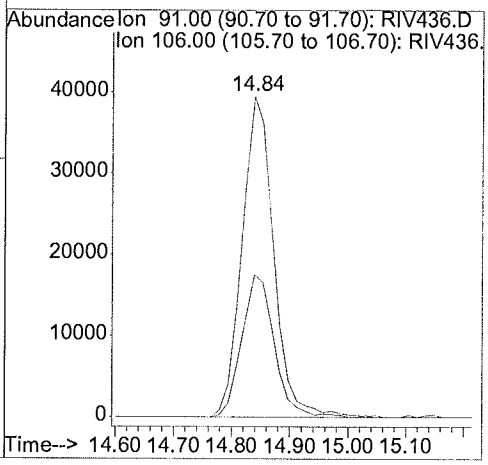




#69
o-Xylene
Concen: 1.77 ug/l
RT: 14.84 min Scan# 901
Delta R.T. -0.00 min
Lab File: RIV436.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion: 91 Resp: 150001

Ion	Ratio	Lower	Upper
91	100		
106	45.4	17.6	77.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/06/24 12:22
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/20/24 15:42
Sample ID	: MW38S-GW090624	Date Analyzed:	09/20/24 15:42
Lab Samp ID:	24I020-16	Dilution Factor:	1
Lab File ID:	RIV430	Matrix:	WATER
Ext Btch ID:	VOO1I16	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	5.0	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.40	10.0	94	70-130
Bromofluorobenzene	10.0	10.0	100	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	10.0	10.0	100	70-130

Notes:
Sample Amount : 25ml
Prepared by : DNguye
Final Volume : 25ml
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV430.D
Acq On : 20 Sep 2024 3:42 pm
Sample : 24I020-16
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 1 10:58 2024

Vial: 9
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	830193	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	666682	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	250961	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	253707	10.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.50%		
41) 1,2-Dichloroethane-d4	7.98	65	210882	9.40	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.00%		
54) Toluene-d8	11.03	98	871774	10.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.00%		
76) 4-Bromofluorobenzene	16.01	95	319198	10.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.30%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	252753	5.01	ug/l	96

(#) = qualifier out of range (m) = manual integration

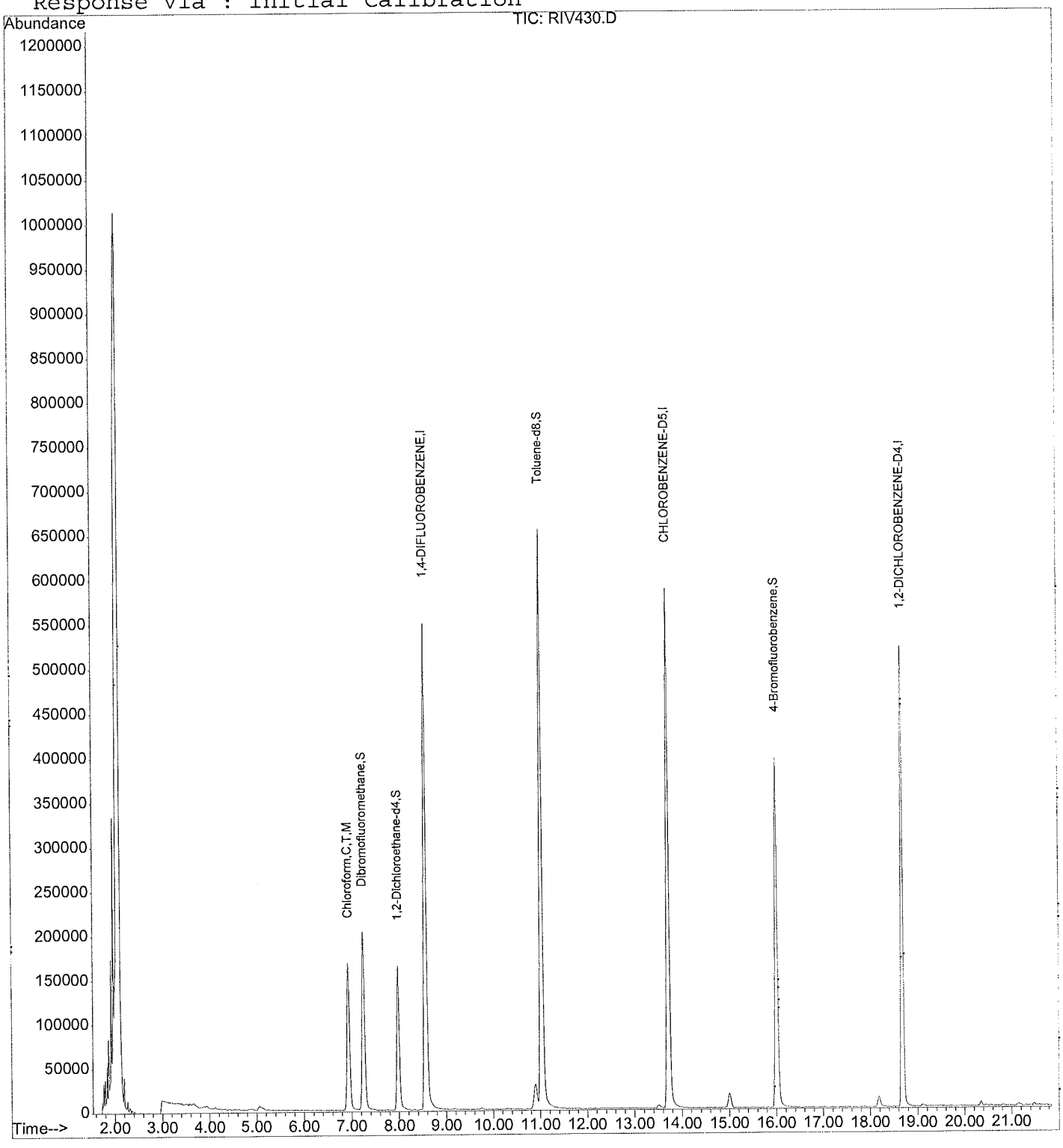
Quantitation Report

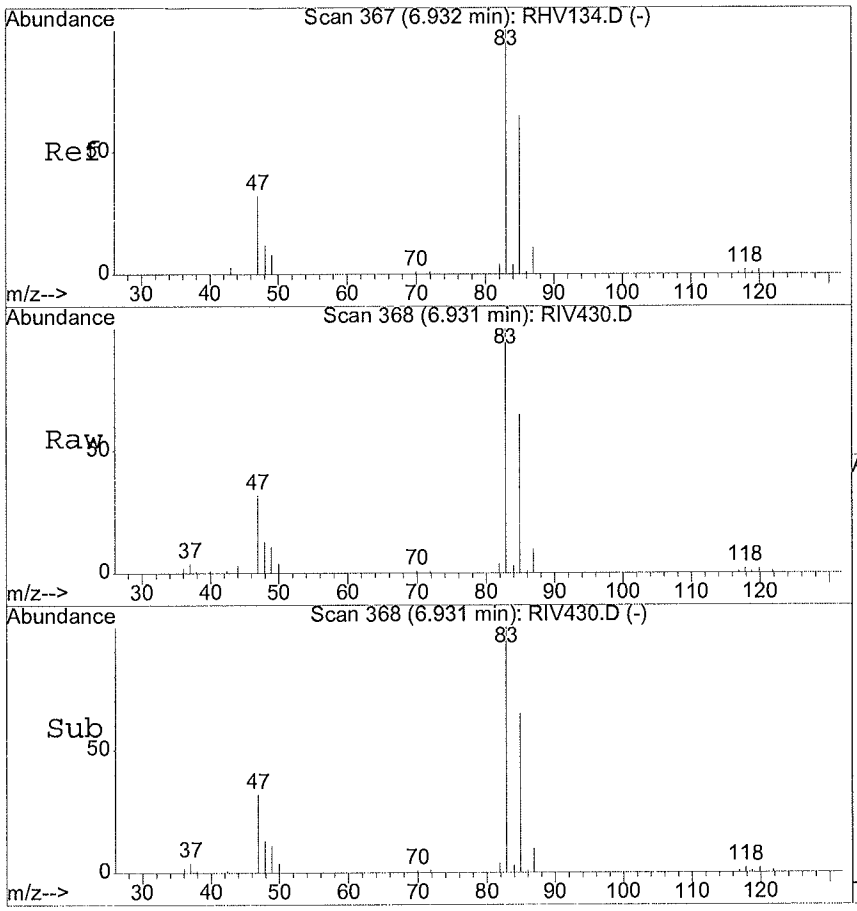
Data File : D:\HPCHEM\1\DATA\24I20\RIV430.D
Acq On : 20 Sep 2024 3:42 pm
Sample : 24I020-16
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 1 10:58 2024

Vial: 9
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

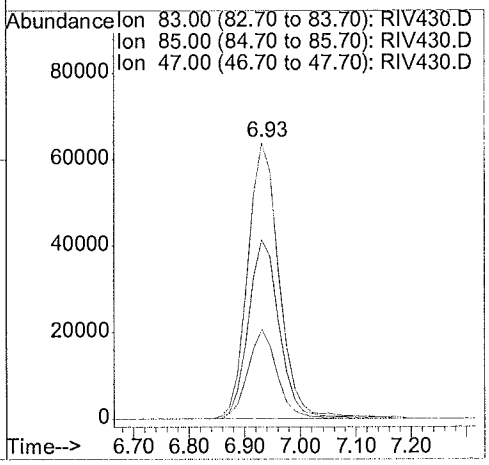




#31
Chloroform
Concen: 5.01 ug/l
RT: 6.93 min Scan# 368
Delta R.T. 0.00 min
Lab File: RIV430.D
Acq: 20 Sep 2024 3:42 pm

Tgt Ion: 83 Resp: 252753

Ion	Ratio	Lower	Upper
83	100		
85	63.7	38.4	98.4
47	29.7	0.0	59.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/06/24 13:30
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/20/24 19:13
Sample ID	: MW38D-GW090624	Date Analyzed:	09/20/24 19:13
Lab Samp ID:	24I020-17	Dilution Factor:	1
Lab File ID:	RIV437	Matrix:	WATER
Ext Btch ID:	VOOII16	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.12J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.1	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.3	10.0	103	70-130
Bromofluorobenzene	9.79	10.0	98	70-130
Toluene-d8	10.6	10.0	106	70-130
Dibromofluoromethane	9.88	10.0	99	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV437.D Vial: 16
Acq On : 20 Sep 2024 7:13 pm Operator: DNguye/CLingl
Sample : 24I020-17 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 1 11:07 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	737689	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	595230	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	229846	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	221588	9.88	ug/l	0.01
Spiked Amount 10.000			Recovery =	98.80%		
41) 1,2-Dichloroethane-d4	7.98	65	205197	10.29	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.90%		
54) Toluene-d8	11.03	98	773867	10.64	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.40%		
76) 4-Bromofluorobenzene	16.01	95	285616	9.79	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.90%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	185442	4.13	ug/l	94
47) Bromodichloromethane	9.74	83	3931	0.12	ug/l	100

(#) = qualifier out of range (m) = manual integration

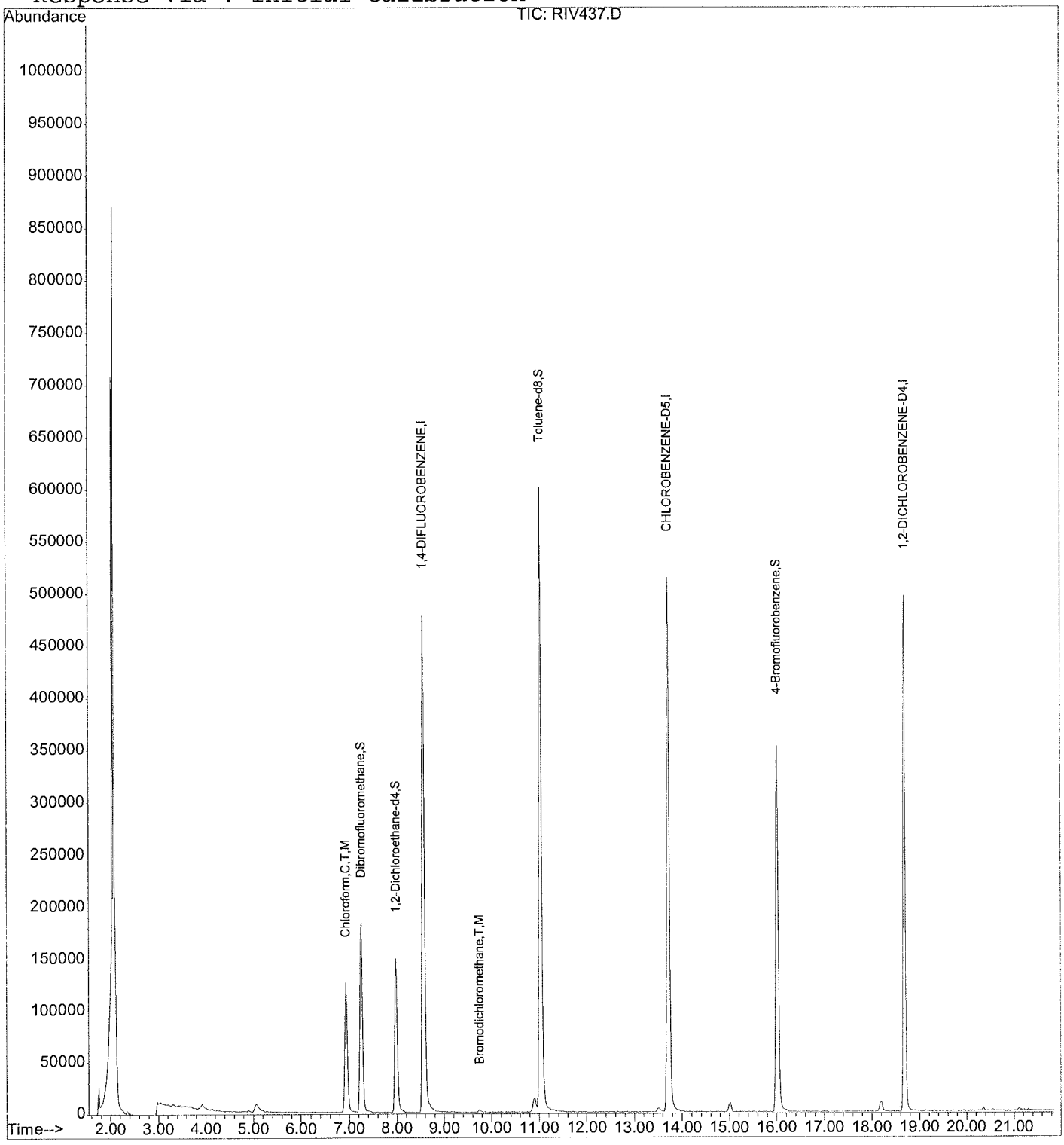
Quantitation Report

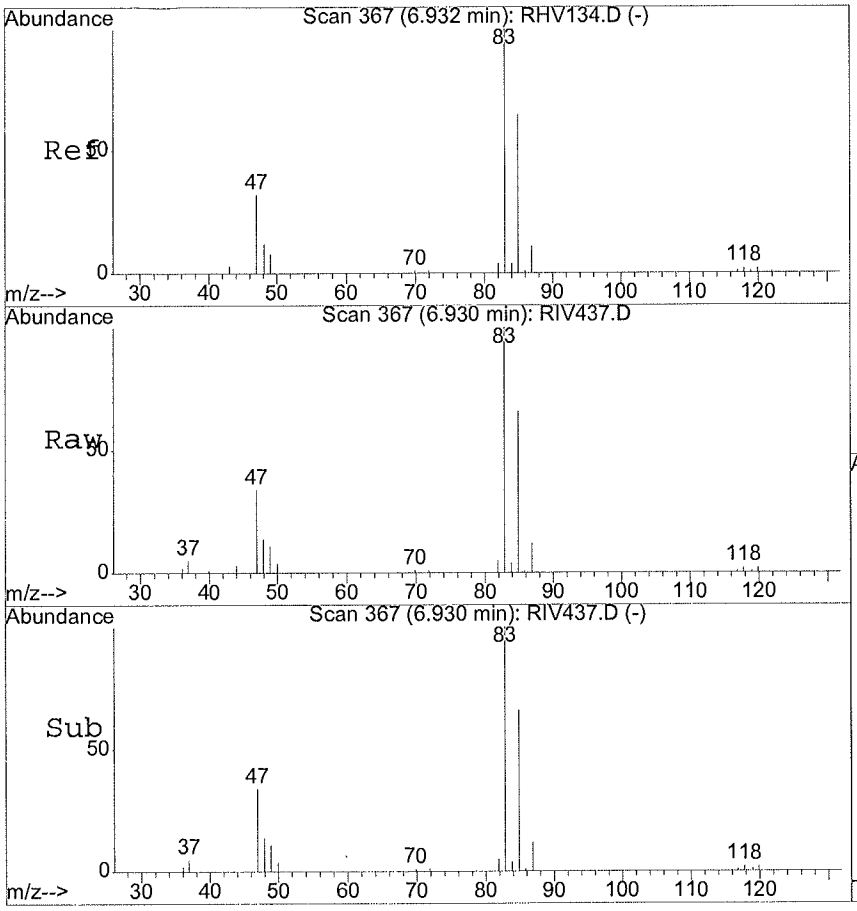
Data File : D:\HPCHEM\1\DATA\24I20\RIV437.D
Acq On : 20 Sep 2024 7:13 pm
Sample : 24I020-17
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 1 11:07 2024

Vial: 16
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

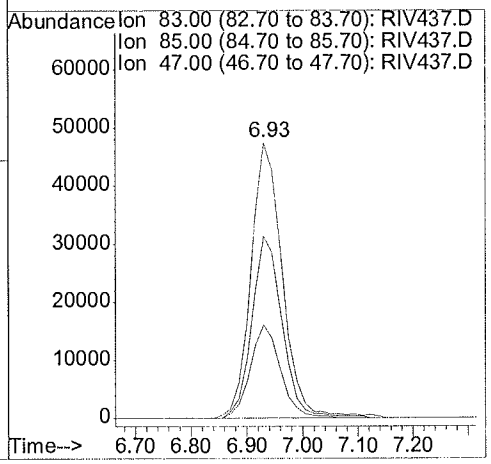


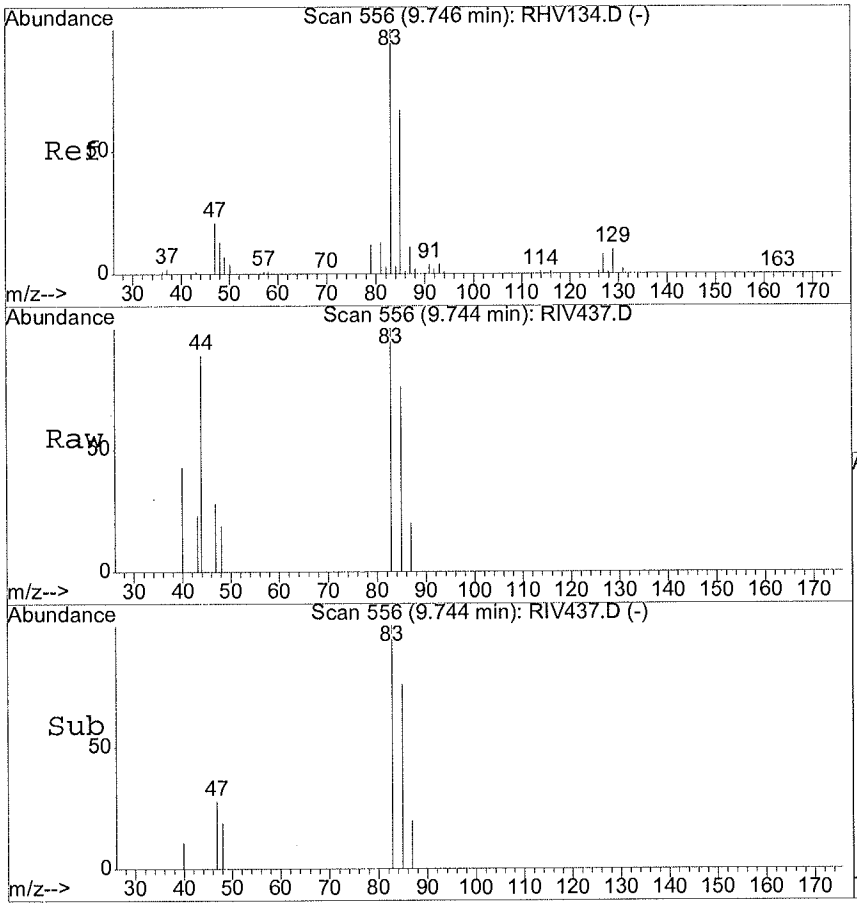


#31
Chloroform
Concen: 4.13 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV437.D
Acq: 20 Sep 2024 7:13 pm

Tgt Ion: 83 Resp: 185442

Ion	Ratio	Lower	Upper
83	100		
85	63.7	38.4	98.4
47	32.5	0.0	59.6

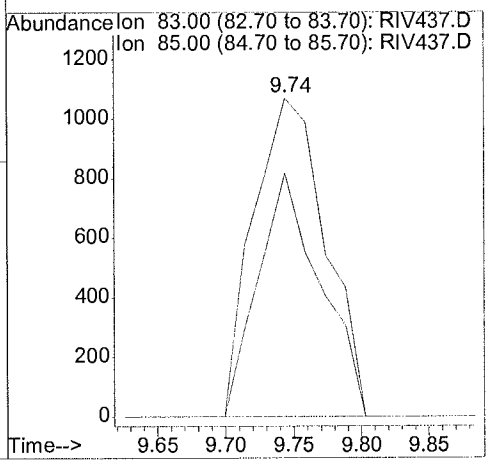




#47
Bromodichloromethane
Concen: 0.12 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RIV437.D
Acq: 20 Sep 2024 7:13 pm

Tgt Ion: 83 Resp: 3931

Ion	Ratio	Lower	Upper
83	100		
85	66.2	36.5	96.5



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/05/24 13:55
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/19/24 16:51
Sample ID	: MW04-GW090524	Date Analyzed:	09/19/24 16:51
Lab Samp ID:	24I020-18	Dilution Factor:	1
Lab File ID:	RIV409	Matrix:	WATER
Ext Btch ID:	VOO1I15	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.20J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.8	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	65	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.22J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	8.70	10.0	87	70-130
Bromofluorobenzene	10.0	10.0	100	70-130
Toluene-d8	10.8	10.0	108	70-130
Dibromofluoromethane	9.54	10.0	95	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIV409.D Vial: 15
Acq On : 19 Sep 2024 4:51 pm Operator: DNguye/CLingl
Sample : 24I020-18 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 27 16:05 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	960473	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	758334	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	284435	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	278504	9.54	ug/l	0.01
Spiked Amount 10.000			Recovery =	95.40%		
41) 1,2-Dichloroethane-d4	7.98	65	225847	8.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	87.00%		
54) Toluene-d8	11.03	98	1000395	10.79	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.90%		
76) 4-Bromofluorobenzene	16.01	95	361172	10.01	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.10%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	166393	2.85	ug/l	94
44) Trichloroethene	9.09	130	7409	0.22	ug/l	86
47) Bromodichloromethane	9.75	83	8458	0.20	ug/l	82
61) Tetrachloroethene	12.31	164	1668654	64.65	ug/l	95

(#) = qualifier out of range (m) = manual integration

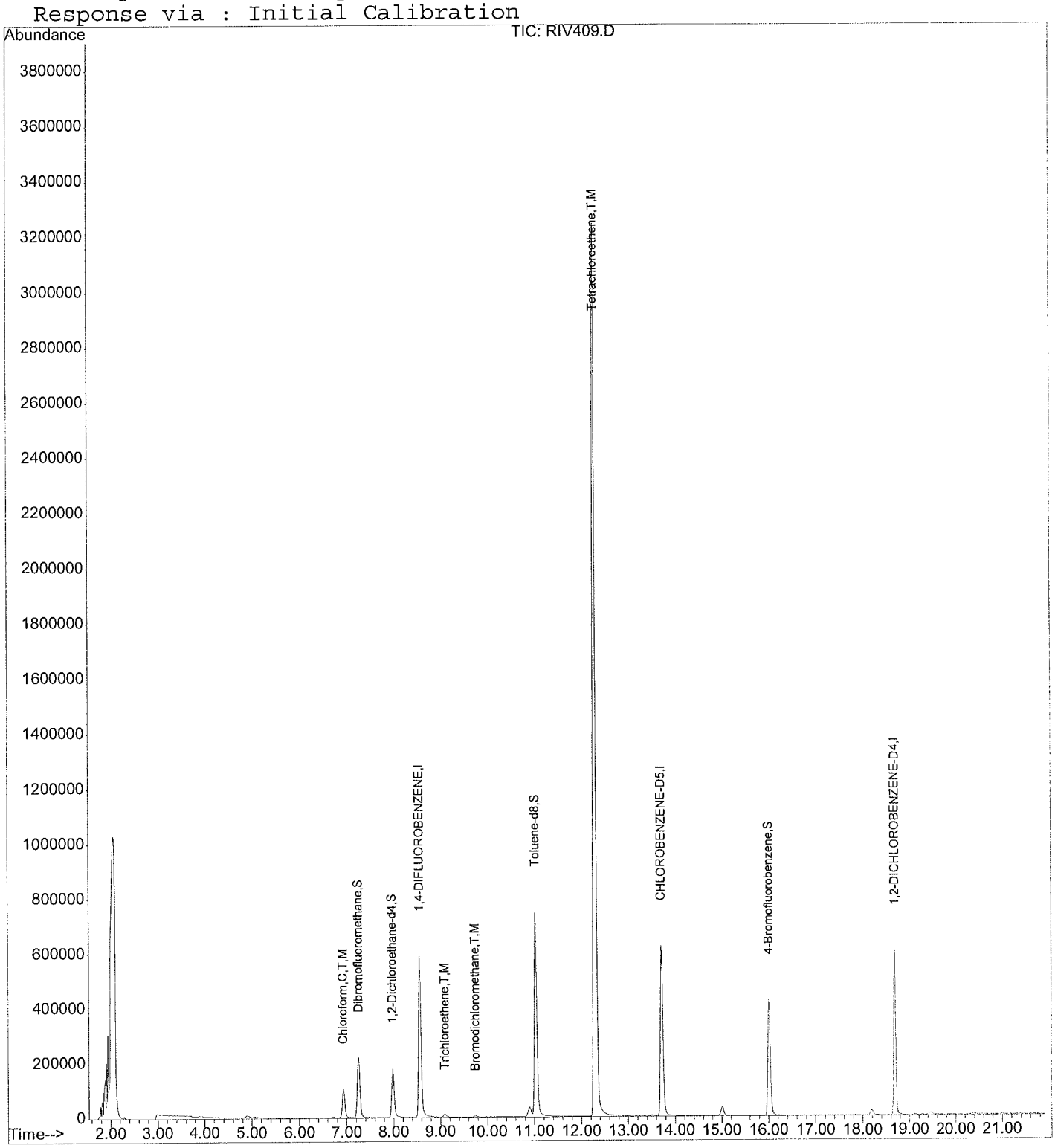
Quantitation Report

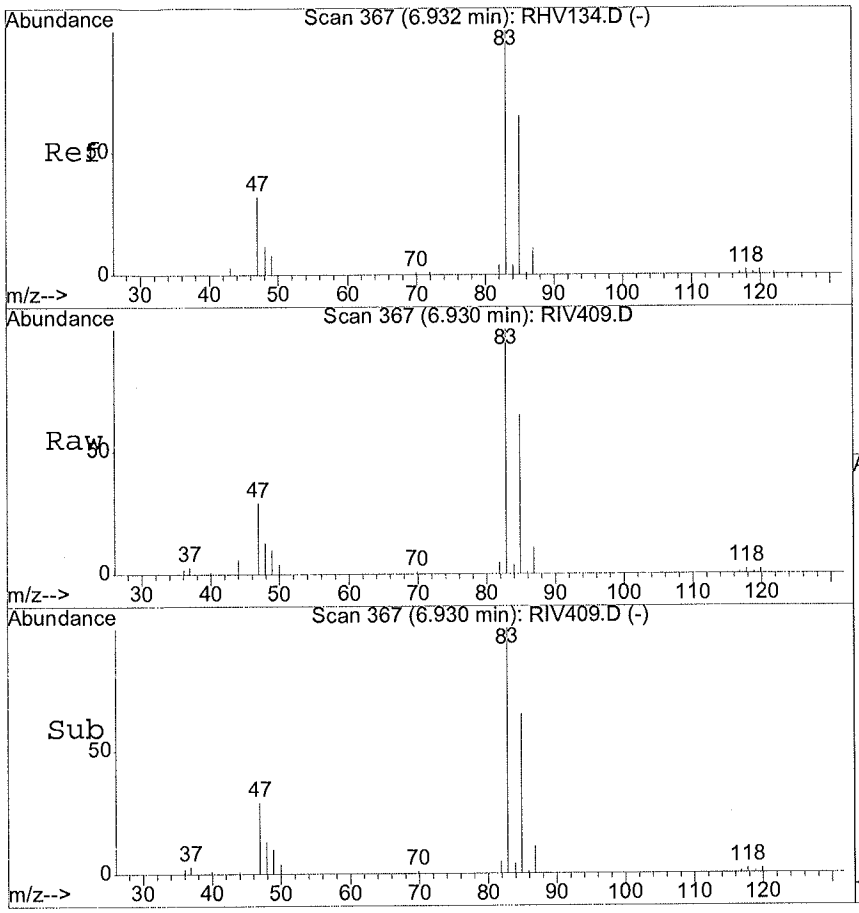
Data File : D:\HPCHEM\1\DATA\24I19\RIV409.D
Acq On : 19 Sep 2024 4:51 pm
Sample : 24I020-18
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 27 16:05 2024

Vial: 15
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

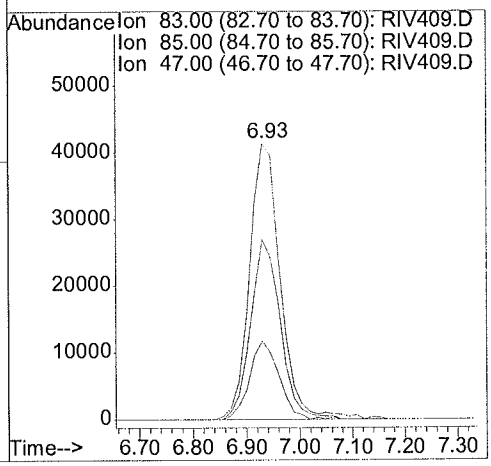


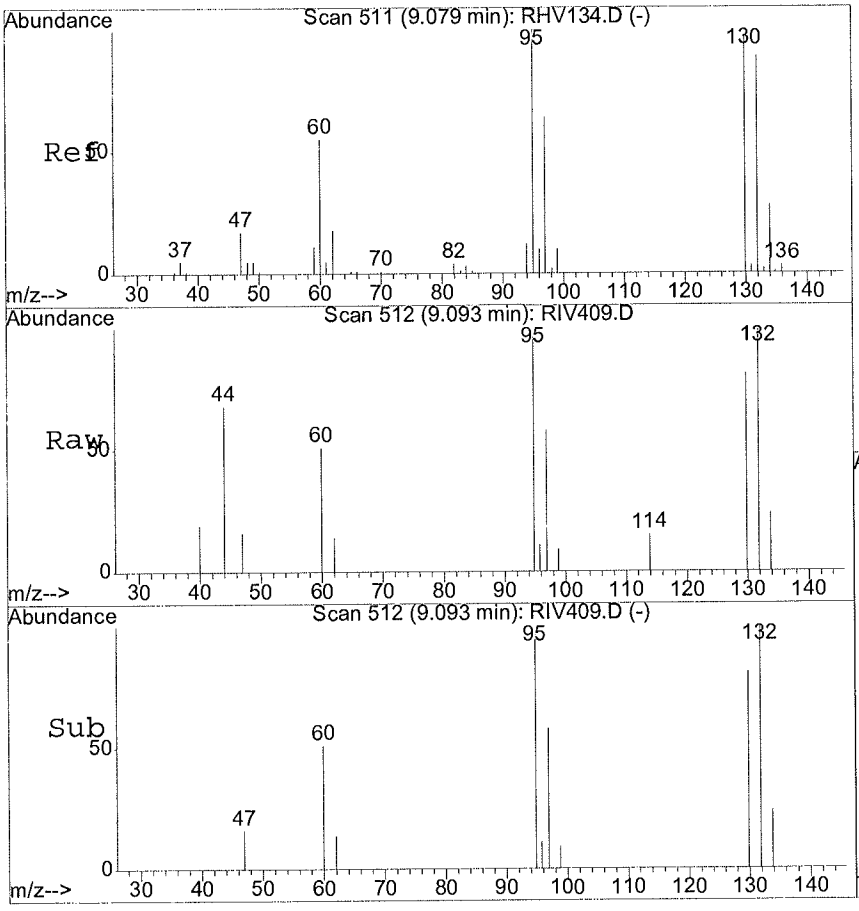


#31
Chloroform
Concen: 2.85 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV409.D
Acq: 19 Sep 2024 4:51 pm

Tgt Ion: 83 Resp: 166393

Ion	Ratio	Lower	Upper
83	100		
85	62.8	38.4	98.4
47	27.1	0.0	59.6

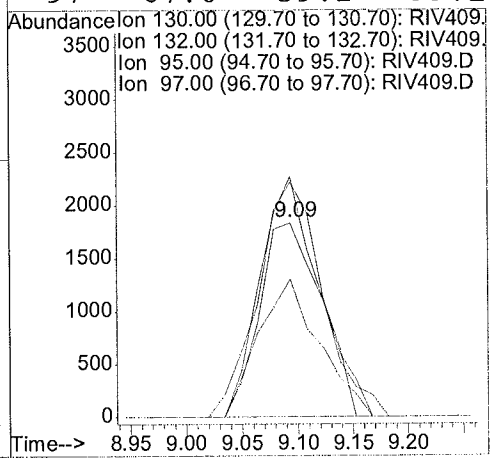


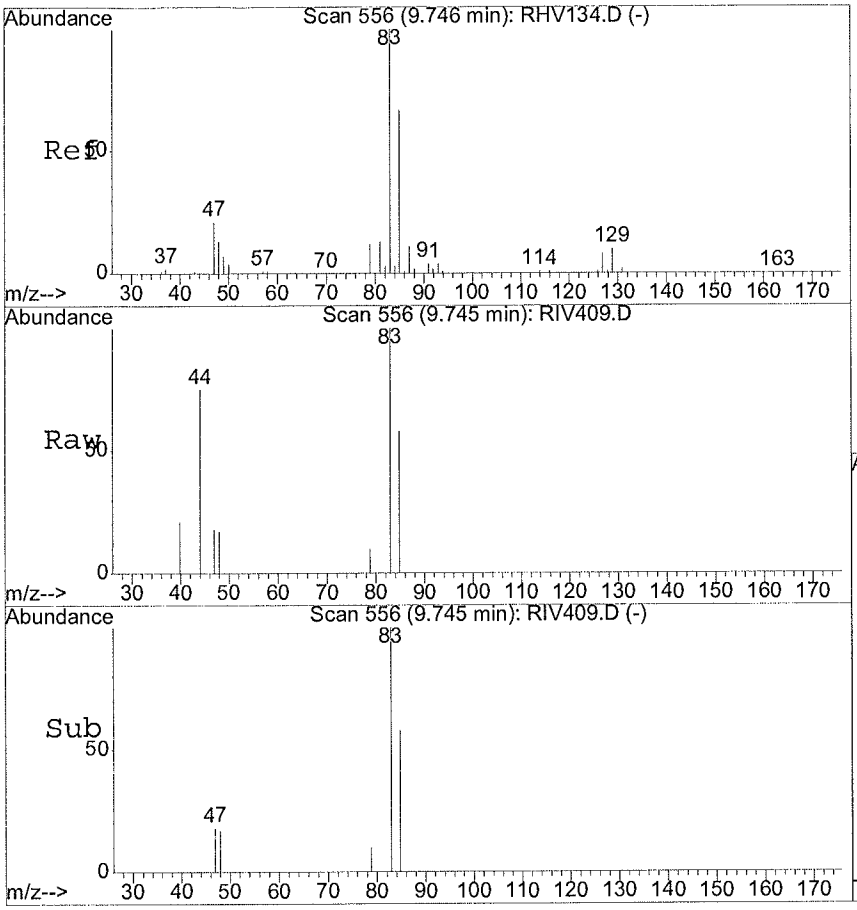


#44
Trichloroethene
Concen: 0.22 ug/l
RT: 9.09 min Scan# 512
Delta R.T. 0.01 min
Lab File: RIV409.D
Acq: 19 Sep 2024 4:51 pm

Tgt Ion:130 Resp: 7409

Ion	Ratio	Lower	Upper
130	100		
132	114.6	62.7	122.7
95	117.0	72.0	132.0
97	67.0	39.1	99.1

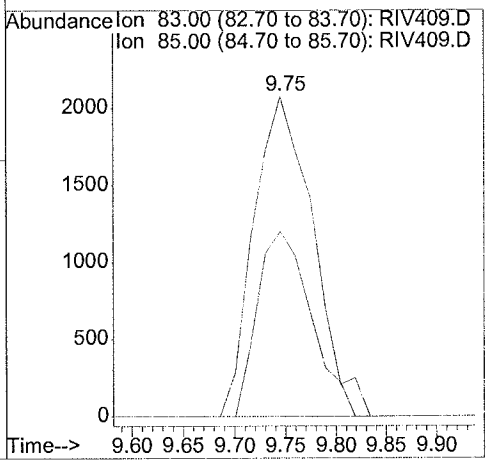


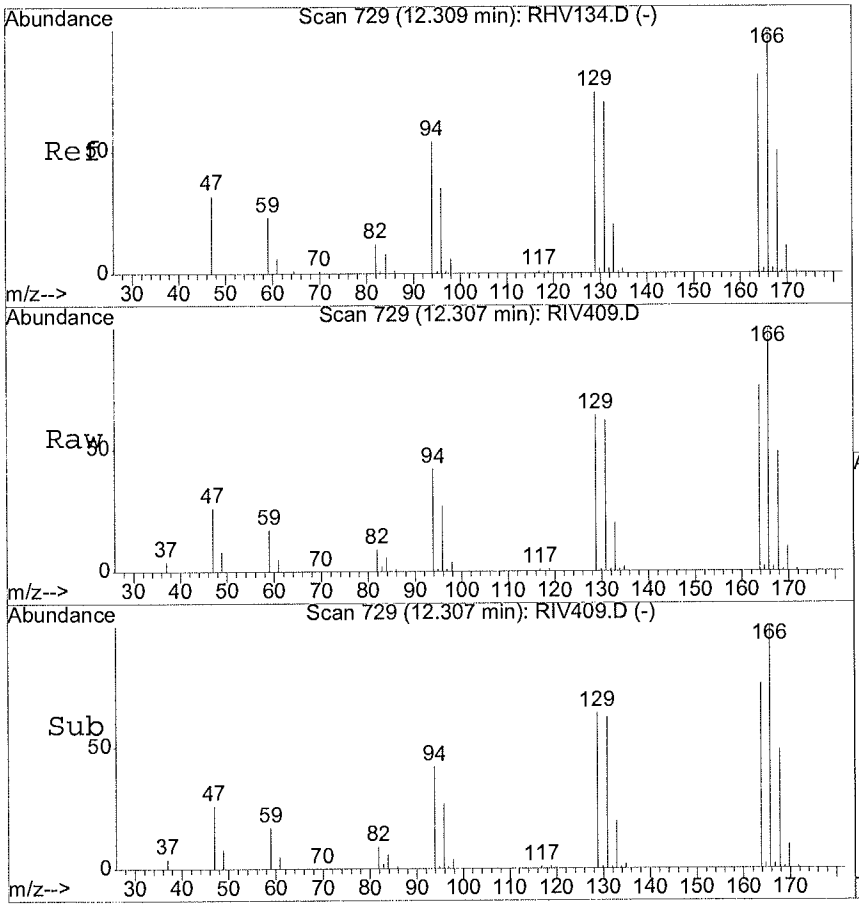


#47
Bromodichloromethane
Concen: 0.20 ug/l
RT: 9.75 min Scan# 556
Delta R.T. 0.00 min
Lab File: RIV409.D
Acq: 19 Sep 2024 4:51 pm

Tgt Ion: 83 Resp: 8458

Ion	Ratio	Lower	Upper
83	100		
85	52.1	36.5	96.5

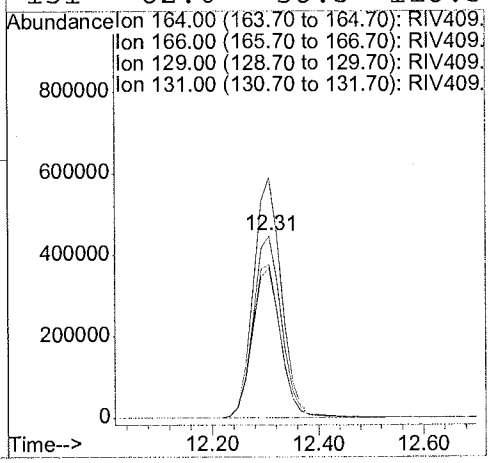




#61
Tetrachloroethene
Concen: 64.65 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV409.D
Acq: 19 Sep 2024 4:51 pm

Tgt Ion:164 Resp: 1668654

Ion	Ratio	Lower	Upper
164	100		
166	130.7	98.2	158.2
129	84.6	62.8	122.8
131	82.0	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/06/24 16:10
Project	: VA SALT LAKE CITY	Date Received:	09/07/24
Batch No.	: 24I020	Date Extracted:	09/20/24 15:12
Sample ID	: TB01-GW090624	Date Analyzed:	09/20/24 15:12
Lab Samp ID:	24I020-19	Dilution Factor:	1
Lab File ID:	RIV429	Matrix:	WATER
Ext Btch ID:	VO01I16	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	0.45J	1.0	0.15
1,2,4-Trichlorobenzene	0.24J	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	0.67J	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.43	10.0	94	70-130
Bromofluorobenzene	9.76	10.0	98	70-130
Toluene-d8	11.0	10.0	110	70-130
Dibromofluoromethane	9.60	10.0	96	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV429.D Vial: 8
Acq On : 20 Sep 2024 3:12 pm Operator: DNguye/CLingl
Sample : 24I020-19 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 1 10:57 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	858839	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	660843	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	257182	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	250584	9.60	ug/l	0.01
Spiked Amount 10.000			Recovery = 96.00%			
41) 1,2-Dichloroethane-d4	7.98	65	219061	9.43	ug/l	0.00
Spiked Amount 10.000			Recovery = 94.30%			
54) Toluene-d8	11.03	98	887730	10.99	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.90%			
76) 4-Bromofluorobenzene	16.01	95	318392	9.76	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.60%			
Target Compounds						Qvalue
18) Methylene chloride	4.90	49	19280	0.67	ug/l	87
93) 1,2,4-Trichlorobenzene	20.82	180	7010	0.24	ug/l	91
95) Naphthalene	21.16	128	25630	0.63	ug/l	94
96) 1,2,3-Trichlorobenzene	21.47	180	9850	0.45	ug/l	93

(#) = qualifier out of range (m) = manual integration

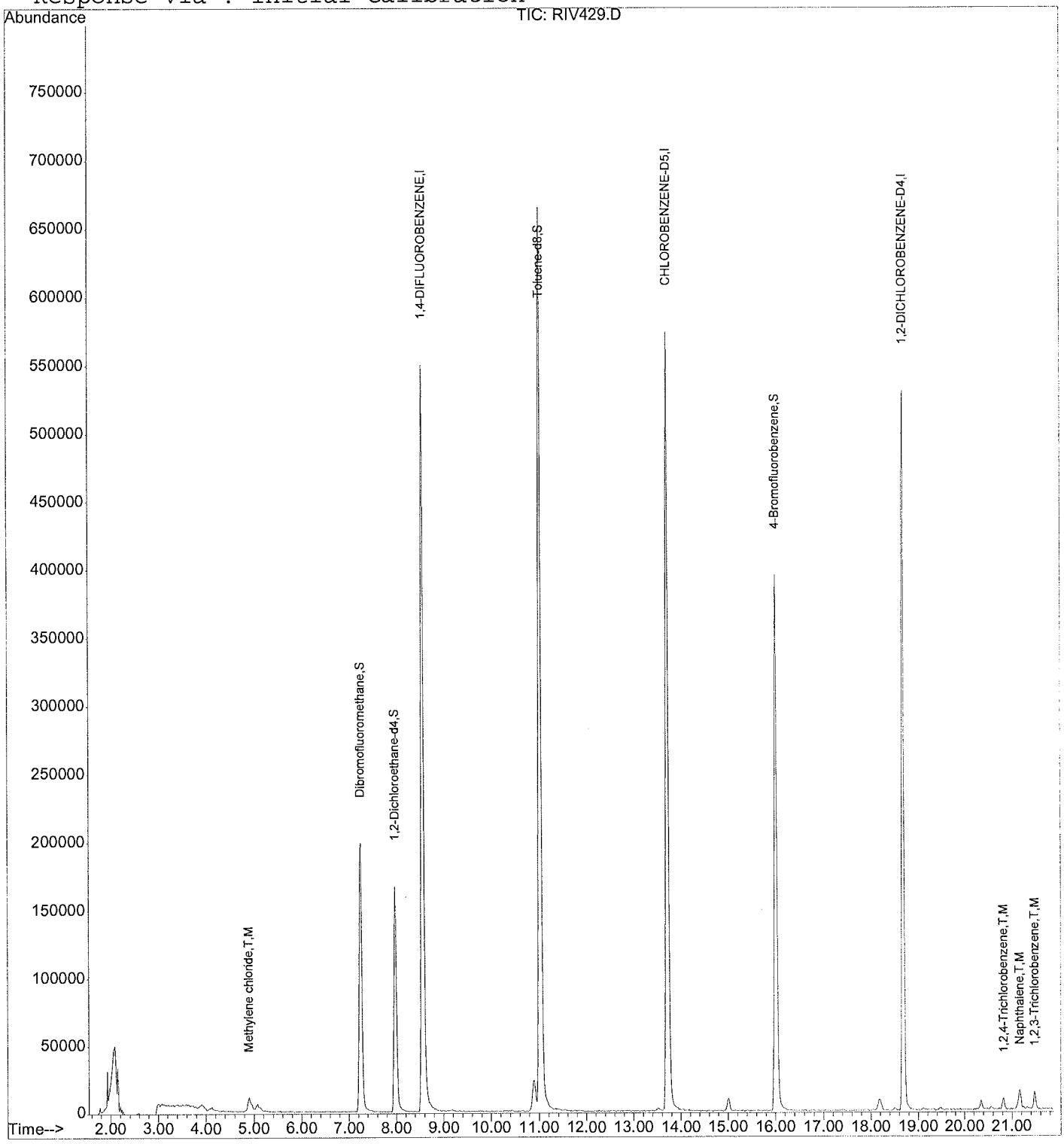
Quantitation Report

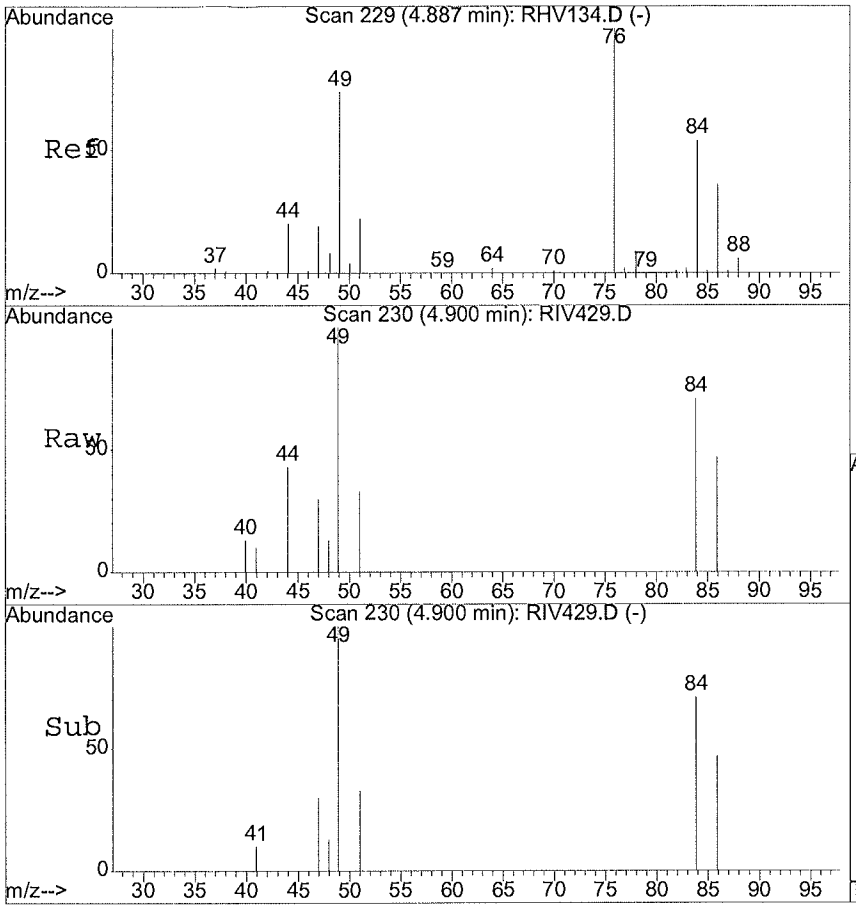
Data File : D:\HPCHEM\1\DATA\24I20\RIV429.D
Acq On : 20 Sep 2024 3:12 pm
Sample : 24I020-19
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 1 10:57 2024

Vial: 8
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

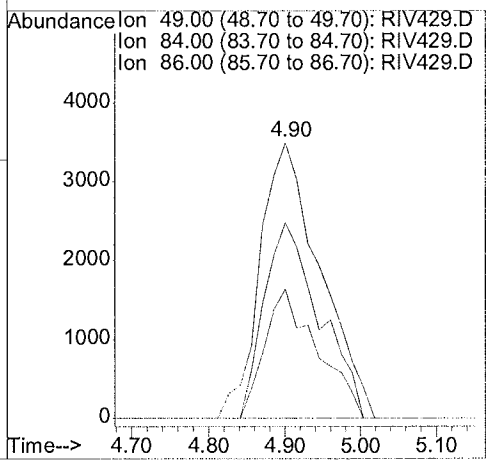


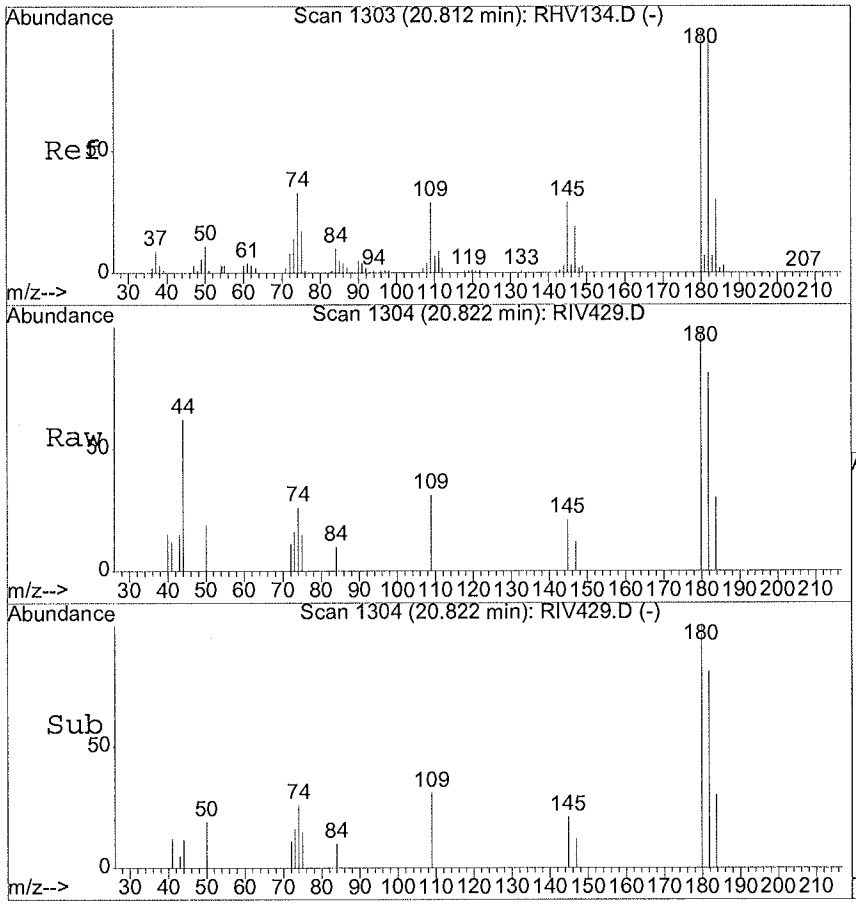


#18
Methylene chloride
Concen: 0.67 ug/l
RT: 4.90 min Scan# 230
Delta R.T. 0.01 min
Lab File: RIV429.D
Acq: 20 Sep 2024 3:12 pm

Tgt Ion: 49 Resp: 19280

Ion	Ratio	Lower	Upper
49	100		
84	65.6	45.8	105.8
86	41.0	21.5	81.5

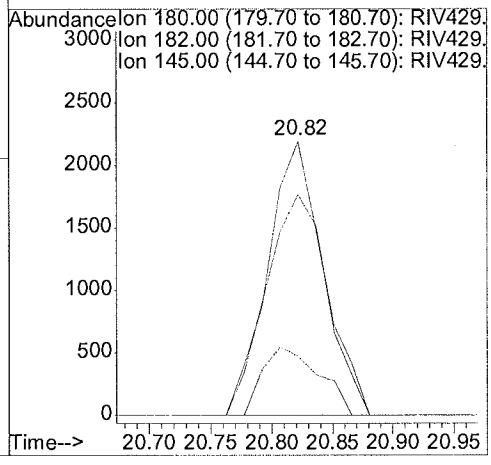


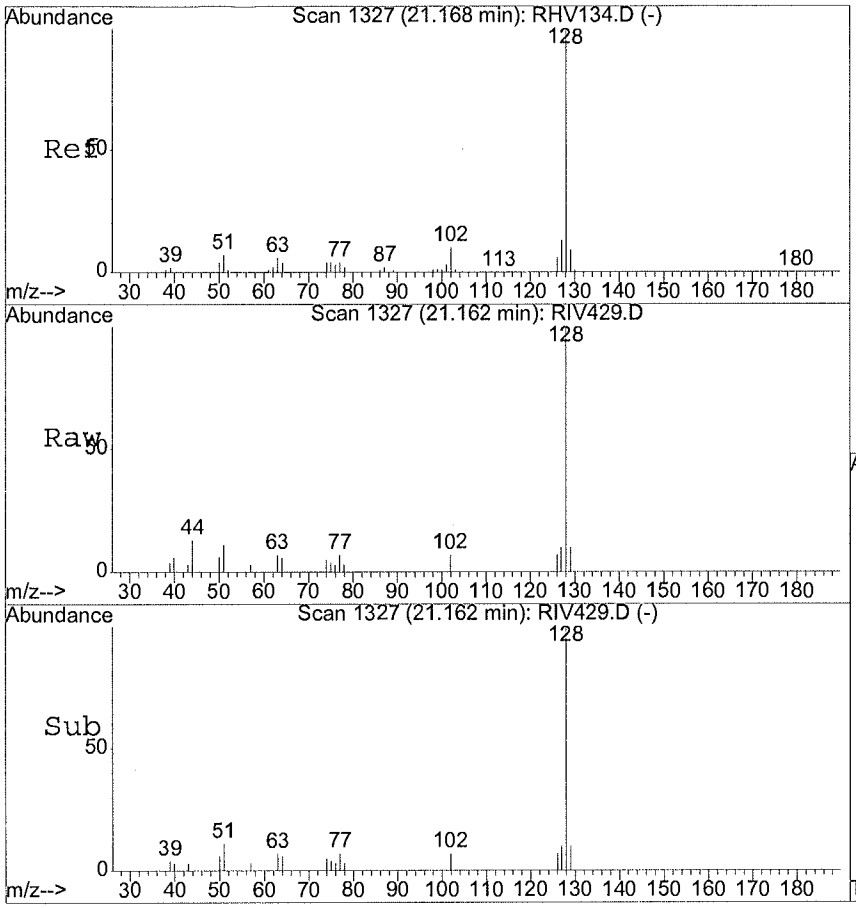


#93
1,2,4-Trichlorobenzene
Concen: 0.24 ug/l
RT: 20.82 min Scan# 1304
Delta R.T. 0.01 min
Lab File: RIV429.D
Acq: 20 Sep 2024 3:12 pm

Tgt Ion:180 Resp: 7010

Ion	Ratio	Lower	Upper
180	100		
182	88.4	67.7	127.7
145	25.1	0.0	59.3

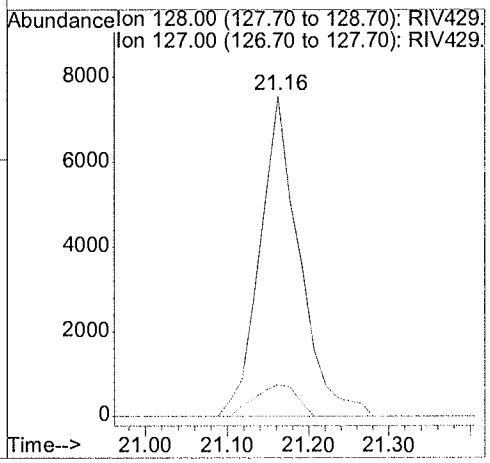


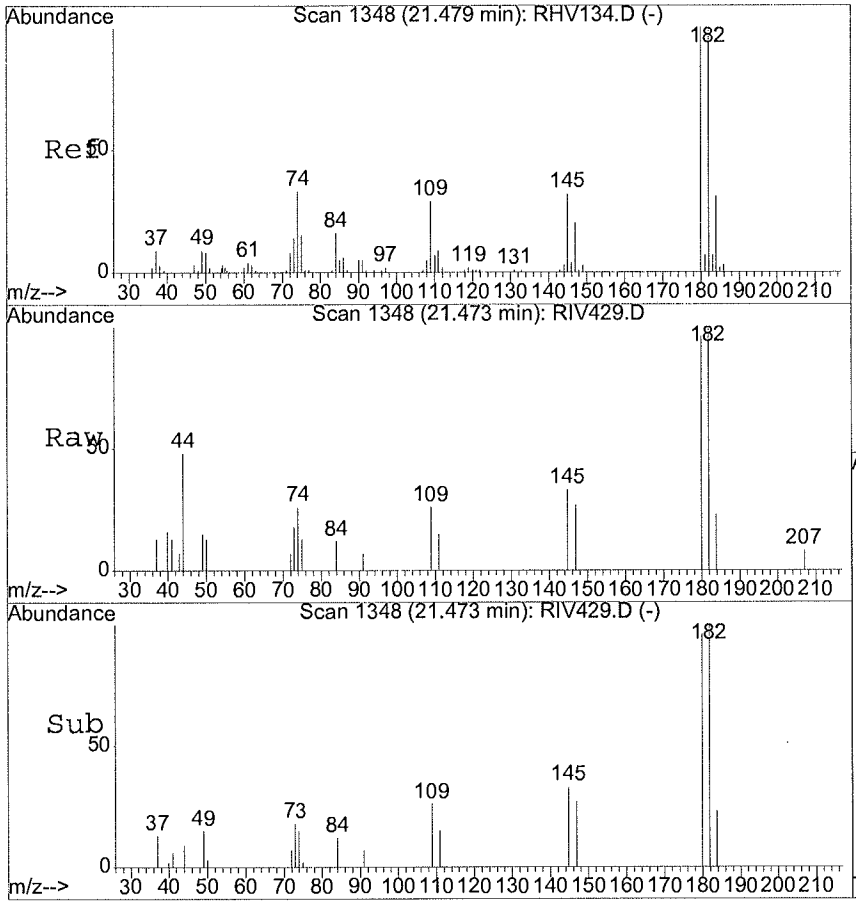


#95
Naphthalene
Concen: 0.63 ug/l
RT: 21.16 min Scan# 1327
Delta R.T. -0.01 min
Lab File: RIV429.D
Acq: 20 Sep 2024 3:12 pm

Tgt Ion:128 Resp: 25630

Ion	Ratio	Lower	Upper
128	100		
127	10.6	0.0	42.9

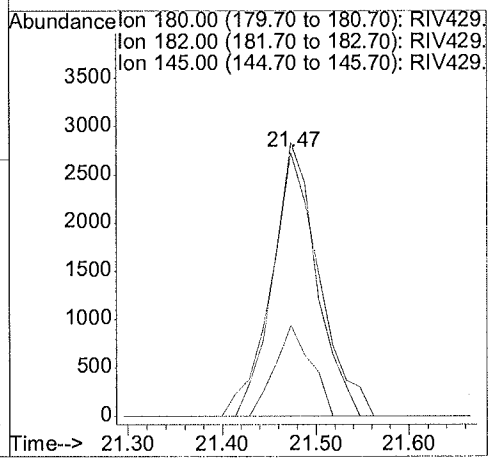




#96
1,2,3-Trichlorobenzene
Concen: 0.45 ug/l
RT: 21.47 min Scan# 1348
Delta R.T. -0.01 min
Lab File: RIV429.D
Acq: 20 Sep 2024 3:12 pm

Tgt Ion:180 Resp: 9850

Ion	Ratio	Lower	Upper
180	100		
182	92.6	68.5	128.5
145	25.7	1.7	61.7



QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/14/24 18:51
Project	: VA SALT LAKE CITY	Date Received:	09/14/24
Batch No.	: 24I020	Date Extracted:	09/14/24 18:51
Sample ID	: MBLK1W	Date Analyzed:	09/14/24 18:51
Lab Samp ID:	VOE2I07B	Dilution Factor:	1
Lab File ID:	RIG076	Matrix:	WATER
Ext Btch ID:	VOE2I07	% Moisture:	NA
Calib. Ref.:	RIG007	Instrument ID:	E2

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.4	10.0	104	70-130
Bromofluorobenzene	9.94	10.0	99	70-130
Toluene-d8	10.4	10.0	104	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 10ml Final Volume : 10ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I020
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VOE2I07B	VOE2I07X	VOE2I07C
LAB FILE ID	: RIG076	RIG073	RIG074
DATE PREPARED	: 09/14/24 18:51	09/14/24 17:37	09/14/24 18:02
DATE ANALYZED	: 09/14/24 18:51	09/14/24 17:37	09/14/24 18:02
PREP BATCH	: VOE2I07	VOE2I07	VOE2I07
CALIBRATION REF	: RIG007	RIG007	RIG007

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	10.0	100	10.0	10.3	103	3	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	8.19	82	10.0	8.47	85	3	71-121	20
1,1,2-Trichloroethane	ND	10.0	9.15	92	10.0	9.38	94	2	80-119	20
1,1-Dichloroethane	ND	10.0	10.0	100	10.0	10.0	100	0	77-125	20
1,1-Dichloroethene	ND	10.0	9.31	93	10.0	9.46	95	2	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	9.22	92	10.0	9.14	91	1	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	8.97	90	10.0	9.13	91	2	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	9.48	95	10.0	9.73	97	3	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	7.62	76	10.0	8.18	82	7	62-138	20
1,2-Dichlorobenzene	ND	10.0	8.92	89	10.0	9.03	90	1	80-119	20
1,2-Dichloroethane	ND	10.0	10.4	104	10.0	10.1	101	3	73-128	20
1,2-Dichloropropane	ND	10.0	10.1	101	10.0	9.86	99	2	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	9.17	92	10.0	9.63	96	5	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.18	92	10.0	9.31	93	1	80-119	20
1,4-Dichlorobenzene	ND	10.0	8.95	90	10.0	9.04	90	1	79-118	20
2-Butanone	ND	50.0	44.1	88	50.0	41.2	82	7	56-143	20
2-Hexanone	ND	50.0	43.2	86	50.0	44.4	89	3	57-139	20
Acetone	ND	50.0	44.2	88	50.0	41.5	83	6	39-160	20
Benzene	ND	10.0	9.87	99	10.0	9.88	99	0	79-120	20
Bromochloromethane	ND	10.0	9.54	95	10.0	9.66	97	1	78-120	20
Bromodichloromethane	ND	10.0	9.62	96	10.0	9.50	95	1	79-125	20
Bromoform	ND	10.0	8.07	81	10.0	8.13	81	1	66-130	20
Bromomethane	ND	10.0	7.27	73	10.0	7.06	71	3	53-141	20
Carbon Disulfide	ND	10.0	8.47	85	10.0	10.1	101	18	64-133	20
Carbon Tetrachloride	ND	10.0	9.57	96	10.0	9.81	98	2	72-136	20
Chlorobenzene	ND	10.0	8.93	89	10.0	8.83	88	1	82-118	20
Chloroethane	ND	10.0	9.19	92	10.0	9.07	91	1	60-138	20
Chloroform	ND	10.0	9.59	96	10.0	9.37	94	2	79-124	20
Chloromethane	ND	10.0	10.6	106	10.0	10.3	103	3	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.81	98	10.0	10.1	101	3	78-123	20
Dibromochloromethane	ND	10.0	8.68	87	10.0	8.72	87	0	74-126	20
Dichlorodifluoromethane	ND	10.0	9.32	93	10.0	9.03	90	3	32-152	20
Ethylbenzene	ND	10.0	9.60	96	10.0	9.72	97	1	79-121	20
Isopropylbenzene	ND	10.0	9.76	98	10.0	10.0	100	2	72-131	20
m,p-Xylene	ND	20.0	19.8	99	20.0	19.8	99	0	80-121	20
4-Methyl-2-Pentanone	ND	50.0	44.7	89	50.0	46.0	92	3	67-130	20
Methylene Chloride	ND	10.0	8.95	90	10.0	8.86	89	1	74-124	20
tert-Butyl Methyl Ether	ND	10.0	10.2	102	10.0	10.0	100	2	71-124	20
o-Xylene	ND	10.0	10.2	102	10.0	10.3	103	1	78-122	20
Styrene	ND	10.0	9.79	98	10.0	9.77	98	0	78-123	20
Tetrachloroethene	ND	10.0	9.58	96	10.0	9.77	98	2	74-129	20
Toluene	ND	10.0	9.56	96	10.0	9.50	95	1	80-121	20
Trans-1,2-DCE	ND	10.0	9.81	98	10.0	9.79	98	0	75-124	20
cis-1,3-Dichloropropene	ND	10.0	10.4	104	10.0	9.96	100	4	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	9.49	95	10.0	9.42	94	1	73-127	20
TCE	ND	10.0	9.22	92	10.0	9.45	95	2	79-123	20
Trichlorofluoromethane	ND	10.0	9.64	96	10.0	9.07	91	6	65-141	20
Vinyl Chloride	ND	10.0	11.1	111	10.0	10.7	107	4	58-137	20
1,2-Dibromoethane	ND	10.0	8.86	89	10.0	8.72	87	2	77-121	20
Vinyl Acetate	ND	10.0	9.89	99	10.0	9.69	97	2	54-146	20
Trichlorotrifluoroethane	ND	10.0	9.61	96	10.0	9.87	99	3	70-136	20
Methyl Acetate	ND	10.0	8.42	84	10.0	8.44	84	0	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	10.3	103	10.0	10.0	100	70-130
Bromofluorobenzene	10.0	10.1	101	10.0	10.4	104	70-130
Toluene-d8	10.0	10.4	104	10.0	10.3	103	70-130
Dibromofluoromethane	10.0	10.2	102	10.0	10.3	103	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/19/24 12:20
Project	: VA SALT LAKE CITY	Date Received:	09/19/24
Batch No.	: 24I020	Date Extracted:	09/19/24 12:20
Sample ID	: MBLK2W	Date Analyzed:	09/19/24 12:20
Lab Samp ID:	VD01I15B	Dilution Factor:	1
Lab File ID:	RIV400	Matrix:	WATER
Ext Btch ID:	VO01I15	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.25	10.0	93	70-130
Bromofluorobenzene	9.53	10.0	95	70-130
Toluene-dB	10.6	10.0	106	70-130
Dibromofluoromethane	9.75	10.0	98	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
8ATCH NO. : 24I020
METHOD : SW50308/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK2W	LCS2W	LCD2W
LAB SAMPLE ID	: VO01I15B	VO01I15L	VO01I15C
LAB FILE ID	: RIV400	RIV397	RIV398
DATE PREPARED	: 09/19/24 12:20	09/19/24 10:50	09/19/24 11:21
DATE ANALYZED	: 09/19/24 12:20	09/19/24 10:50	09/19/24 11:21
PREP 8ATCH	: VO01I15	VO01I15	VO01I15
CALI8RATION REF	: RHV134	RHV134	RHV134

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	8.48	85	10.0	8.41	84	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	12.3	123*	10.0	12.4	124*	1	71-121	20
1,1,2-Trichloroethane	ND	10.0	11.8	118	10.0	11.7	117	1	80-119	20
1,1-Dichloroethane	ND	10.0	10.9	109	10.0	11.0	110	1	77-125	20
1,1-Dichloroethene	ND	10.0	8.51	85	10.0	8.64	86	2	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	9.77	98	10.0	9.72	97	1	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.59	96	10.0	9.46	95	1	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.98	90	10.0	8.94	89	0	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	10.8	108	10.0	10.5	105	3	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.46	95	10.0	9.56	96	1	80-119	20
1,2-Dichloroethane	ND	10.0	9.03	90	10.0	8.97	90	1	73-128	20
1,2-Dichloropropane	ND	10.0	12.4	124*	10.0	12.0	120	3	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	8.71	87	10.0	8.90	89	2	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.11	91	10.0	9.15	92	0	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.18	92	10.0	9.19	92	0	79-118	20
2-8utanone	ND	50.0	60.1	120	50.0	61.2	122	2	56-143	20
2-Hexanone	ND	50.0	67.4	135	50.0	67.1	134	0	57-139	20
Acetone	ND	50.0	48.9	98	50.0	51.2	102	5	39-160	20
Benzene	ND	10.0	10.6	106	10.0	10.6	106	0	79-120	20
8romochloromethane	ND	10.0	11.6	116	10.0	11.6	116	0	78-120	20
8romodichloromethane	ND	10.0	9.56	96	10.0	9.44	94	1	79-125	20
8romoform	ND	10.0	9.62	96	10.0	10.2	102	6	66-130	20
8romomethane	ND	10.0	8.30	83	10.0	8.09	81	3	53-141	20
Carbon Disulfide	ND	10.0	10.6	106	10.0	10.3	103	3	64-133	20
Carbon Tetrachloride	ND	10.0	7.74	77	10.0	7.79	78	1	72-136	20
Chlorobenzene	ND	10.0	10.2	102	10.0	10.2	102	0	82-118	20
Chloroethane	ND	10.0	9.70	97	10.0	10.1	101	4	60-138	20
Chloroform	ND	10.0	9.42	94	10.0	9.34	93	1	79-124	20
Chloromethane	ND	10.0	11.0	110	10.0	10.5	105	5	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	10.4	104	10.0	10.3	103	1	78-123	20
Dibromochloromethane	ND	10.0	10.3	103	10.0	10.4	104	1	74-126	20
Dichlorodifluoromethane	ND	10.0	8.49	85	10.0	8.29	83	2	32-152	20
Ethylbenzene	ND	10.0	10.4	104	10.0	10.1	101	3	79-121	20
Isopropylbenzene	ND	10.0	10.3	103	10.0	10.6	106	3	72-131	20
m,p-Xylene	ND	20.0	18.8	94	20.0	18.6	93	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	71.9	144*	50.0	72.9	146*	1	67-130	20
Methylene Chloride	ND	10.0	11.3	113	10.0	11.5	115	2	74-124	20
tert-8utyl Methyl Ether	ND	10.0	10.6	106	10.0	10.6	106	0	71-124	20
o-Xylene	ND	10.0	10.3	103	10.0	10.5	105	2	78-122	20
Styrene	ND	10.0	11.4	114	10.0	11.4	114	0	78-123	20
Tetrachloroethene	ND	10.0	9.11	91	10.0	8.95	90	2	74-129	20
Toluene	ND	10.0	10.6	106	10.0	10.7	107	1	80-121	20
Trans-1,2-DCE	ND	10.0	9.32	93	10.0	9.42	94	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	10.5	105	10.0	10.6	106	1	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	10.7	107	10.0	10.8	108	1	73-127	20
TCE	ND	10.0	8.76	88	10.0	8.75	88	0	79-123	20
Trichlorofluoromethane	ND	10.0	6.74	67	10.0	6.58	66	2	65-141	20
Vinyl Chloride	ND	10.0	10.7	107	10.0	10.2	102	5	58-137	20
1,2-Dibromoethane	ND	10.0	10.6	106	10.0	10.5	105	1	77-121	20
Vinyl Acetate	ND	10.0	7.77	78	10.0	7.85	79	1	54-146	20
Trichlorotrifluoroethane	ND	10.0	8.85	89	10.0	9.33	93	5	70-136	20
Methyl Acetate	ND	10.0	11.9	119	10.0	11.4	114	4	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	8.60	86	10.0	8.64	86	70-130
8romofluorobenzene	10.0	9.59	96	10.0	9.92	99	70-130
Toluene-d8	10.0	10.9	109	10.0	10.9	109	70-130
Dibromofluoromethane	10.0	9.61	96	10.0	9.63	96	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate
* Out of QC Limit

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/20/24 14:12
Project	: VA SALT LAKE CITY	Date Received:	09/20/24
Batch No.	: 24I020	Date Extracted:	09/20/24 14:12
Sample ID	: MBLK3W	Date Analyzed:	09/20/24 14:12
Lab Samp ID:	VO01I16B	Dilution Factor:	1
Lab File ID:	RIV427	Matrix:	WATER
Ext Btch ID:	VO01I16	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	1.4J	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	B.22	10.0	82	70-130
Bromofluorobenzene	10.1	10.0	101	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	9.43	10.0	94	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I020
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK3W	LCS3W	LCD3W
LAB SAMPLE ID	: VO01I16B	VO01I16X	VO01I16C
LAB FILE ID	: RIV427	RIV428	RIV425
DATE PREPARED	: 09/20/24 14:12	09/20/24 14:42	09/20/24 13:12
DATE ANALYZED	: 09/20/24 14:12	09/20/24 14:42	09/20/24 13:12
PREP BATCH	: VO01I16	VO01I16	VO01I16
CALIBRATION REF	: RHV134	RHV134	RHV134

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	8.47	85	10.0	8.23	82	3	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	13.1	131*	10.0	12.2	122*	7	71-121	20
1,1,2-Trichloroethane	ND	10.0	12.4	124*	10.0	11.7	117	6	80-119	20
1,1-Dichloroethane	ND	10.0	11.3	113	10.0	11.2	112	1	77-125	20
1,1-Dichloroethene	ND	10.0	8.79	88	10.0	8.61	86	2	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	11.6	116	10.0	10.0	100	15	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	11.4	114	10.0	9.81	98	15	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	9.52	95	10.0	9.35	94	2	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	10.9	109	10.0	10.8	108	1	62-138	20
1,2-Dichlorobenzene	ND	10.0	10.2	102	10.0	9.78	98	4	80-119	20
1,2-Dichloroethane	ND	10.0	8.54	85	10.0	8.27	83	3	73-128	20
1,2-Dichloropropane	ND	10.0	12.5	125*	10.0	12.3	123*	2	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	9.63	96	10.0	9.29	93	4	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.83	98	10.0	9.43	94	4	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.77	98	10.0	9.53	95	2	79-118	20
2-Butanone	ND	50.0	63.8	128	50.0	61.3	123	4	56-143	20
2-Hexanone	ND	50.0	70.8	142*	50.0	66.7	133	6	57-139	20
Acetone	ND	50.0	51.4	103	50.0	50.6	101	2	39-160	20
Benzene	ND	10.0	10.7	107	10.0	10.7	107	0	79-120	20
Bromochloromethane	ND	10.0	11.5	115	10.0	11.4	114	1	78-120	20
Bromodichloromethane	ND	10.0	9.35	94	10.0	8.85	89	5	79-125	20
Bromoform	ND	10.0	11.1	111	10.0	10.1	101	9	66-130	20
Bromomethane	ND	10.0	9.39	94	10.0	8.47	85	10	53-141	20
Carbon Disulfide	ND	10.0	11.3	113	10.0	10.8	108	5	64-133	20
Carbon Tetrachloride	ND	10.0	7.70	77	10.0	7.46	75	3	72-136	20
Chlorobenzene	ND	10.0	10.6	106	10.0	10.4	104	2	82-118	20
Chloroethane	ND	10.0	11.9	119	10.0	10.6	106	12	60-138	20
Chloroform	ND	10.0	9.32	93	10.0	9.06	91	3	79-124	20
Chloromethane	ND	10.0	11.4	114	10.0	10.8	108	5	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	10.3	103	10.0	10.5	105	2	78-123	20
Dibromochloromethane	ND	10.0	10.6	106	10.0	10.1	101	5	74-126	20
Dichlorodifluoromethane	ND	10.0	9.06	91	10.0	7.63	76	17	32-152	20
Ethylbenzene	ND	10.0	10.6	106	10.0	10.4	104	2	79-121	20
Isopropylbenzene	ND	10.0	10.4	104	10.0	10.1	101	3	72-131	20
m,p-Xylene	ND	20.0	19.3	97	20.0	19.2	96	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	73.3	147*	50.0	69.5	139*	5	67-130	20
Methylene Chloride	1.39J	10.0	11.1	111	10.0	10.9	109	2	74-124	20
tert-Butyl Methyl Ether	ND	10.0	10.5	105	10.0	10.3	103	2	71-124	20
o-Xylene	ND	10.0	10.5	105	10.0	10.4	104	1	78-122	20
Styrene	ND	10.0	11.6	116	10.0	11.3	113	3	78-123	20
Tetrachloroethene	ND	10.0	9.45	95	10.0	9.08	91	4	74-129	20
Toluene	ND	10.0	11.2	112	10.0	11.1	111	1	80-121	20
Trans-1,2-DCE	ND	10.0	9.43	94	10.0	9.34	93	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	10.5	105	10.0	10.1	101	4	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	10.8	108	10.0	10.4	104	4	73-127	20
TCE	ND	10.0	8.90	89	10.0	9.07	91	2	79-123	20
Trichlorofluoromethane	ND	10.0	7.56	76	10.0	6.44	64*	16	65-141	20
Vinyl Chloride	ND	10.0	11.4	114	10.0	10.3	103	10	58-137	20
1,2-Dibromoethane	ND	10.0	10.6	106	10.0	10.2	102	4	77-121	20
Vinyl Acetate	ND	10.0	8.73	87	10.0	7.51	75	15	54-146	20
Trichlorotrifluoroethane	ND	10.0	9.79	98	10.0	9.00	90	8	70-136	20
Methyl Acetate	ND	10.0	12.6	126	10.0	11.9	119	6	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	7.88	79	10.0	7.87	79	70-130
Bromofluorobenzene	10.0	9.81	98	10.0	9.86	99	70-130
Toluene-d8	10.0	10.8	108	10.0	11.0	110	70-130
Dibromofluoromethane	10.0	9.15	92	10.0	9.12	91	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate
* Out of QC Limit

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
8ATCH NO. : 24I020
METHOD : SW50308/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MW38S-GW090624	MW38S-GW090624MS	MW38S-GW090624MSD
LAB SAMPLE ID	: 24I020-16	24I020-16M	24I020-16S
LAB FILE ID	: RIV430	RIV438	RIV439
DATE PREPARED	: 09/20/24 15:42	09/20/24 19:42	09/20/24 20:12
DATE ANALYZED	: 09/20/24 15:42	09/20/24 19:42	09/20/24 20:12
PREP 8ATCH	: VO0II16	VO0II16	VO0II16
CALI8RATION REF	: RHV134	RHV134	RHV134

ACCESSION:

PARAMETERS	PSResult (ug/L)	SpikeAmt (ug/L)	MSResult (ug/L)	MSRec (%)	SpikeAmt (ug/L)	MSDResult (ug/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	9.64	96	10.0	9.44	94	2	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	13.8	138*	10.0	13.6	136*	1	71-121	20
1,1,2-Trichloroethane	ND	10.0	13.4	134*	10.0	13.1	131*	2	80-119	20
1,1-Dichloroethane	ND	10.0	12.1	121	10.0	12.0	120	1	77-125	20
1,1-Dichloroethene	ND	10.0	9.30	93	10.0	9.01	90	3	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	10.1	101	10.0	10.5	105	4	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.68	97	10.0	10.1	101	4	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	9.16	92	10.0	9.30	93	2	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	12.0	120	10.0	11.8	118	2	62-138	20
1,2-Dichlorobenzene	ND	10.0	10.1	101	10.0	10.1	101	0	80-119	20
1,2-Dichloroethane	ND	10.0	11.5	115	10.0	11.2	112	3	73-128	20
1,2-Dichloropropane	ND	10.0	13.6	136*	10.0	13.8	138*	1	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	9.03	90	10.0	9.24	92	2	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.28	93	10.0	9.51	95	2	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.44	94	10.0	9.54	95	1	79-118	20
2-8utanone	ND	50.0	81.1	162*	50.0	75.4	151*	7	56-143	20
2-Hexanone	ND	50.0	86.5	173*	50.0	80.7	161*	7	57-139	20
Acetone	ND	50.0	66.3	133	50.0	60.2	120	10	39-160	20
8enzene	ND	10.0	11.2	112	10.0	11.2	112	0	79-120	20
8romochloromethane	ND	10.0	13.8	138*	10.0	13.4	134*	3	78-120	20
8romodichloromethane	ND	10.0	11.4	114	10.0	11.1	111	3	79-125	20
Bromoform	ND	10.0	11.2	112	10.0	11.0	110	2	66-130	20
Bromomethane	ND	10.0	9.29	93	10.0	10.4	104	11	53-141	20
Carbon Disulfide	ND	10.0	11.6	116	10.0	10.7	107	8	64-133	20
Carbon Tetrachloride	ND	10.0	8.75	88	10.0	8.57	86	2	72-136	20
Chlorobenzene	ND	10.0	10.8	108	10.0	10.9	109	1	82-118	20
Chloroethane	ND	10.0	11.5	115	10.0	12.3	123	7	60-138	20
Chloroform	5.01	10.0	15.9	109	10.0	16.0	110	1	79-124	20
Chloromethane	ND	10.0	12.1	121	10.0	13.2	132	9	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	11.1	111	10.0	10.8	108	3	78-123	20
Dibromochloromethane	ND	10.0	12.1	121	10.0	11.8	118	3	74-126	20
Dichlorodifluoromethane	ND	10.0	10.1	101	10.0	10.4	104	3	32-152	20
Ethylbenzene	ND	10.0	10.6	106	10.0	10.6	106	0	79-121	20
Isopropylbenzene	ND	10.0	10.7	107	10.0	10.7	107	0	72-131	20
m,p-Xylene	ND	20.0	19.6	98	20.0	20.1	101	3	80-121	20
4-Methyl-2-Pentanone	ND	50.0	88.6	177*	50.0	82.7	165*	7	67-130	20
Methylene Chloride	ND	10.0	12.4	124	10.0	12.0	120	3	74-124	20
tert-Butyl Methyl Ether	ND	10.0	12.5	125*	10.0	12.1	121	3	71-124	20
o-Xylene	ND	10.0	11.0	110	10.0	10.9	109	1	78-122	20
Styrene	ND	10.0	11.5	115	10.0	11.4	114	1	78-123	20
Tetrachloroethene	ND	10.0	8.92	89	10.0	8.94	89	0	74-129	20
Toluene	ND	10.0	11.1	111	10.0	11.3	113	2	80-121	20
Trans-1,2-DCE	ND	10.0	10.2	102	10.0	10.1	101	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	11.7	117	10.0	11.6	116	1	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	12.2	122	10.0	12.2	122	0	73-127	20
TCE	ND	10.0	9.21	92	10.0	8.98	90	3	79-123	20
Trichlorofluoromethane	ND	10.0	8.91	89	10.0	8.95	90	0	65-141	20
Vinyl Chloride	ND	10.0	11.7	117	10.0	12.6	126	7	58-137	20
1,2-Dibromoethane	ND	10.0	11.8	118	10.0	11.4	114	3	77-121	20
Vinyl Acetate	ND	10.0	10.9	109	10.0	10.7	107	2	54-146	20
Trichlorotrifluoroethane	ND	10.0	8.81	88	10.0	8.88	89	1	70-136	20
Methyl Acetate	ND	10.0	14.6	146*	10.0	13.2	132	10	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	MSResult (ug/L)	MSRec (%)	SpikeAmt (ug/L)	MSDResult (ug/L)	MSDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	10.5	105	10.0	10.3	103	70-130
Bromofluorobenzene	10.0	9.78	98	10.0	9.70	97	70-130
Toluene-d8	10.0	10.7	107	10.0	10.7	107	70-130
Dibromofluoromethane	10.0	10.3	103	10.0	10.1	101	70-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate
* Out of QC Limit

QC DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG076.D
Acq On : 14 Sep 2024 6:51 pm
Operator : DNguye
Sample : VOE2I07B
Misc : 10.0mL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 03 09:08:03 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

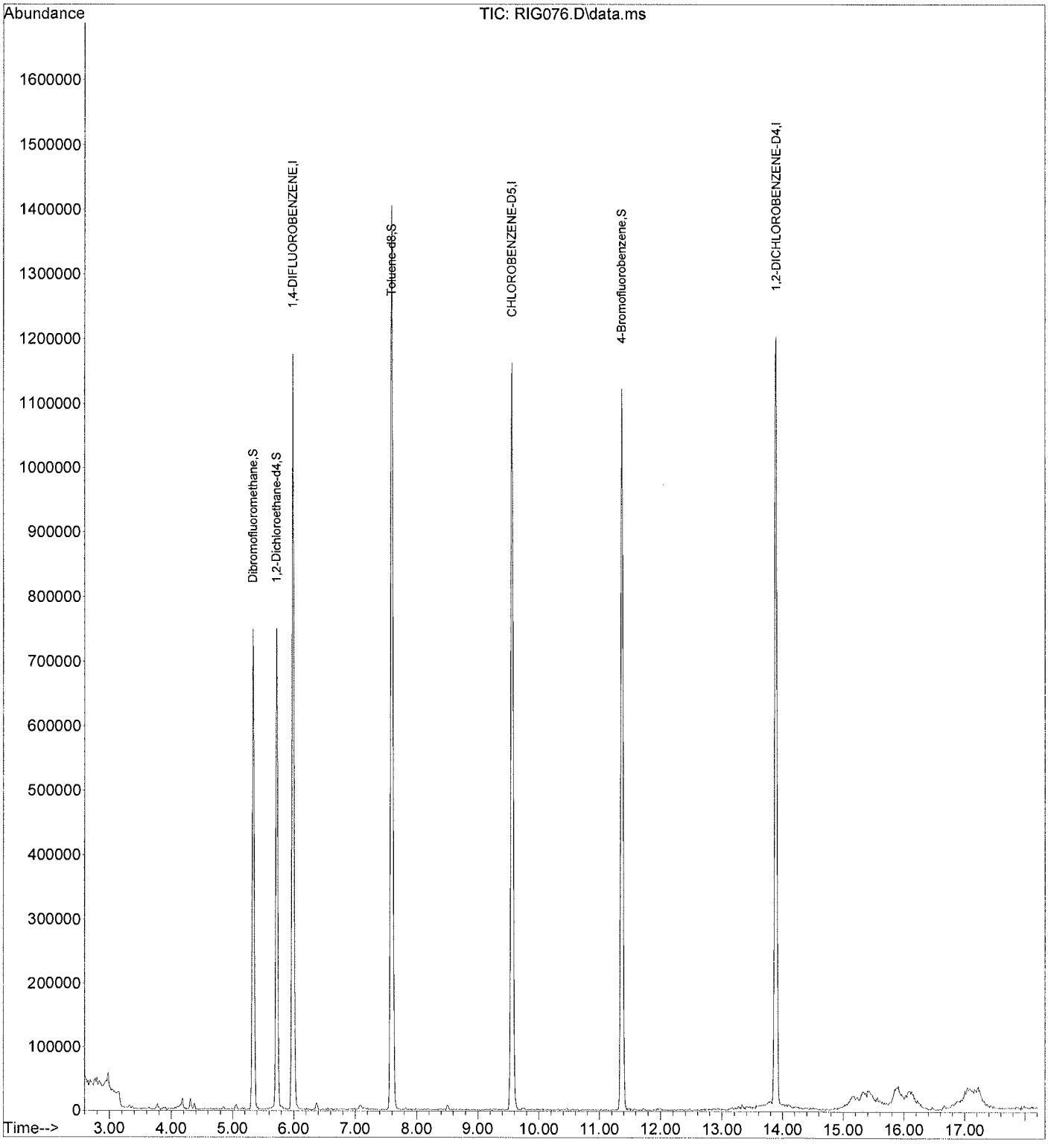
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	1033421	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	870646	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	475813	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	472748	10.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.50%		
41) 1,2-Dichloroethane-d4	5.723	65	673958	10.40	ug/L	0.00
Spiked Amount 10.000			Recovery =	104.00%		
56) Toluene-d8	7.594	98	1294213	10.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.50%		
77) 4-Bromofluorobenzene	11.369	95	513702	9.94	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.40%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG076.D
Acq On : 14 Sep 2024 6:51 pm
Operator : DNguye
Sample : VOE2I07B
Misc : 10.0mL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 03 09:08:03 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG073.D
Acq On : 14 Sep 2024 5:37 pm
Operator : DNguye
Sample : VOE2I07X
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 08 16:06:10 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	1142090	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	983966	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	564943	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	511655	10.23	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.30%		
41) 1,2-Dichloroethane-d4	5.723	65	738421	10.31	ug/L	0.00
Spiked Amount 10.000			Recovery =	103.10%		
56) Toluene-d8	7.594	98	1461047	10.44	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.40%		
77) 4-Bromofluorobenzene	11.369	95	618682	10.09	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.90%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.708	85	329136	9.32	ug/l	100
3) Chloromethane	2.917	50	264514	10.58	ug/l	98
4) Vinyl chloride	2.994	62	337790	11.10	ug/l	93
5) Bromomethane	3.324	94	134019	7.27	ug/l	92
6) Dichlorofluoromethane	3.357	67	802977	10.75	ug/L	99
7) Chloroethane	3.346	64	145569	9.19	ug/l	94
8) Trichlorofluoromethane	3.522	101	539926	9.64	ug/l	99
9) Acrolein	3.753	56	171154	44.69	ug/l	95
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	313387	9.61	ug/l	97
11) Acetone	3.775	43	742289	44.24	ug/l	100
12) tert-Butyl alcohol	3.874	59	1083693	240.83	ug/L	99
13) 1,1-Dichloroethene	3.907	61	645185	9.31	ug/l	96
14) Acetonitrile	3.874	41	244319	46.03	ug/L	99
15) Allyl chloride	4.106	76	185688	10.13	ug/L	99
16) Iodomethane	4.150	142	423048	8.97	ug/l	98
17) Methyl acetate	4.028	43	306382	8.42	ug/L	98
18) Methylene chloride	4.183	49	574336	8.95	ug/l	98
19) Acrylonitrile	4.216	53	715345	43.78	ug/l	98
20) tert-Butyl methyl ethe...	4.227	73	1219012	10.19	ug/L	100
21) Carbon disulfide	4.315	76	876921	8.47	ug/l	100
22) trans-1,2-Dichloroethene	4.370	96	355958	9.81	ug/l	100
23) Isopropyl ether (DIPE)	4.469	45	1321503	9.97	ug/l	100
24) Vinyl acetate	4.546	43	799584	9.89	ug/l	100
25) 1,1-Dichloroethane	4.634	63	758574	10.04	ug/l	99
26) tert-Butyl ethyl ether...	4.733	59	1575424	10.52	ug/l	99
27) 2-Butanone	4.854	72	209221	44.09	ug/l	96
28) Propionitrile	4.909	54	498756	91.72	ug/L	97
29) Isobutyl alcohol	5.030	43	334698	165.48	ug/L	96
30) 2,2-Dichloropropane	5.030	77	777466	10.42	ug/l	100
31) Methacrylonitrile	5.052	52	807625	89.20	ug/L	85
32) cis-1,2-Dichloroethene	5.063	96	420599	9.81	ug/l	95
33) Chloroform	5.173	83	916882	9.59	ug/l	99
34) Bromochloromethane	5.327	130	254892	9.54	ug/l	96
35) Tetrahydrofuran	5.327	42	111327	8.41	ug/L	98
37) 1,1,1-Trichloroethane	5.503	97	819889	10.03	ug/l	98
38) Cyclohexane	5.547	84	406026	9.73	ug/L	98
39) tert-Amyl methyl ether...	5.613	87	272985	10.02	ug/l	98
40) 1,1-Dichloropropene	5.602	110	164487	9.42	ug/L	96

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG073.D
Acq On : 14 Sep 2024 5:37 pm
Operator : DNguye
Sample : VOE2I07X
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 08 16:06:10 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42)	Carbon tetrachloride	5.734	119	693066	9.57	ug/L	98
43)	1,2-Dichloroethane	5.800	62	839259	10.37	ug/L	100
44)	Benzene	5.866	78	1397273	9.87	ug/L	98
45)	Trichloroethene	6.373	130	357239	9.22	ug/L	92
46)	Methyl methacrylate	6.439	69	335183	9.53	ug/L	98
47)	Methylcyclohexane	6.450	83	409314	10.03	ug/L	96
48)	1,2-Dichloropropane	6.527	63	389362	10.06	ug/L	99
49)	1,4-Dioxane	6.725	88	47902	235.36	ug/L	97
50)	Bromodichloromethane	6.769	83	733617	9.62	ug/L	97
51)	Dibromomethane	6.857	93	311267	9.78	ug/L	98
52)	2-Chloroethyl vinyl ether	6.934	63	91656	5.40	ug/L	93
53)	4-Methyl-2-pentanone	6.956	43	2185282	44.65	ug/L	97
54)	cis-1,3-Dichloropropene	7.275	75	683138	10.38	ug/L	99
57)	Ethyl methacrylate	7.693	69	461638	9.25	ug/L	96
58)	Toluene	7.693	91	1479846	9.56	ug/l	97
59)	trans-1,3-Dichloropropene	7.814	75	687191	9.49	ug/l	97
60)	2-Hexanone	7.935	43	1506284	43.20	ug/l	97
61)	1,1,2-Trichloroethane	8.045	97	367119	9.15	ug/l	95
62)	1,3-Dichloropropane	8.354	76	586301	9.42	ug/l	99
63)	Tetrachloroethene	8.508	164	337662	9.58	ug/l	98
64)	Dibromochloromethane	8.783	129	526876	8.68	ug/l	98
65)	1,2-Dibromoethane	9.069	107	377400	8.86	ug/l	98
66)	1-Chlorohexane	9.124	91	421996	9.71	ug/l	99
67)	Chlorobenzene	9.619	112	936366	8.93	ug/l	99
68)	1,1,1,2-Tetrachloroethane	9.641	131	437775	9.27	ug/l	100
69)	Ethylbenzene	9.641	91	1683781	9.60	ug/l	98
70)	m-Xylene & p-Xylene	9.740	91	2709968	19.84	ug/l	96
71)	o-Xylene	10.411	91	1370789	10.22	ug/l	96
72)	Styrene	10.456	104	967324	9.79	ug/l	98
73)	Isopropylbenzene	10.940	105	1407404	9.76	ug/L	98
75)	Bromoform	11.061	173	370658	8.07	ug/l	98
76)	1,1,2,2-Tetrachloroethane	11.204	83	454877	8.19	ug/l	99
78)	1,2,3-Trichloropropane	11.446	110	128514	7.88	ug/l	97
79)	trans-1,4-Dichloro-2-b...	11.512	53	160145	7.99	ug/l	97
80)	n-Propylbenzene	11.578	91	1834050	9.64	ug/l	99
81)	Bromobenzene	11.732	156	487123	9.48	ug/l	93
82)	1,3,5-Trimethylbenzene	11.820	105	1195545	9.17	ug/l	98
83)	2-Chlorotoluene	11.919	91	1171915	8.88	ug/l	98
84)	4-Chlorotoluene	11.974	91	1269534	10.39	ug/l	95
85)	tert-Butylbenzene	12.414	134	189916	9.07	ug/l	99
86)	1,2,4-Trimethylbenzene	12.480	105	1248019	9.48	ug/l	99
87)	sec-Butylbenzene	12.745	105	1318759	8.75	ug/l	98
88)	p-Isopropyltoluene	12.954	119	1142669	8.97	ug/l	99
89)	1,3-Dichlorobenzene	13.163	146	754296	9.18	ug/l	99
90)	1,2,3-Trimethylbenzene	13.251	105	1276964	9.35	ug/L	99
91)	1,4-Dichlorobenzene	13.328	146	765305	8.95	ug/l	98
92)	n-Butylbenzene	13.614	91	1051264	9.15	ug/l	98
93)	1,2-Dichlorobenzene	13.933	146	733915	8.92	ug/l	99
94)	1,2-Dibromo-3-chloropr...	15.144	157	94106	7.62	ug/l	89
95)	1,2,4-Trichlorobenzene	16.464	180	469380	8.97	ug/l	98
96)	Hexachlorobutadiene	16.662	225	243718	9.08	ug/l	98
97)	Naphthalene	16.872	128	989783	8.19	ug/l	97
98)	1,2,3-Trichlorobenzene	17.224	180	475717	9.22	ug/l	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG073.D
Acq On : 14 Sep 2024 5:37 pm
Operator : DNguye
Sample : VOE2I07X
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 08 16:06:10 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

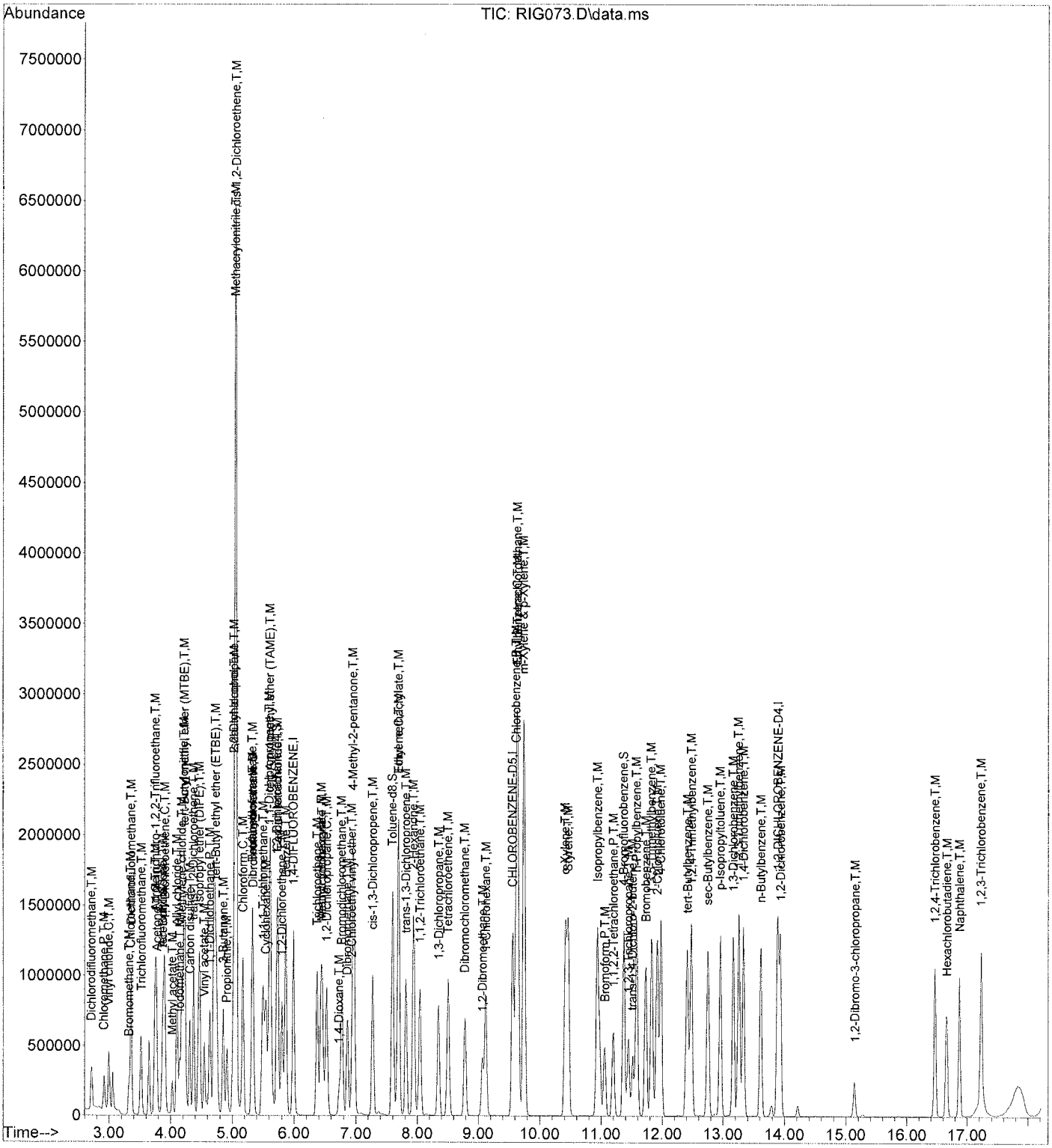
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG073.D
Acq On : 14 Sep 2024 5:37 pm
Operator : DNguye
Sample : VOE2I07X
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 08 16:06:10 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG074.D
Acq On : 14 Sep 2024 6:02 pm
Operator : DNguye
Sample : VOE2I07C
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 08 16:06:15 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.988	114	1180057	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	1012794	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	568393	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	531031	10.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.80%		
41) 1,2-Dichloroethane-d4	5.723	65	740594	10.01	ug/L	0.00
Spiked Amount 10.000			Recovery =	100.10%		
56) Toluene-d8	7.594	98	1488571	10.33	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.30%		
77) 4-Bromofluorobenzene	11.369	95	639681	10.37	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.70%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	329260	9.03	ug/l	98
3) Chloromethane	2.928	50	265918	10.28	ug/l	99
4) Vinyl chloride	2.994	62	336093	10.69	ug/l	96
5) Bromomethane	3.324	94	134983	7.06	ug/l	97
6) Dichlorofluoromethane	3.357	67	814678	10.55	ug/L	99
7) Chloroethane	3.357	64	148417	9.07	ug/l	100
8) Trichlorofluoromethane	3.522	101	524934	9.07	ug/l	94
9) Acrolein	3.753	56	174663	44.14	ug/l	94
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	332726	9.87	ug/l	98
11) Acetone	3.775	43	726501	41.52	ug/l	99
12) tert-Butyl alcohol	3.875	59	1059889	227.96	ug/L	100
13) 1,1-Dichloroethene	3.908	61	677774	9.46	ug/l	96
14) Acetonitrile	3.875	41	232144	42.33	ug/L	99
15) Allyl chloride	4.106	76	201537	10.64	ug/L	98
16) Iodomethane	4.150	142	446641	9.16	ug/l	100
17) Methyl acetate	4.029	43	317181	8.44	ug/L	98
18) Methylene chloride	4.183	49	587529	8.86	ug/l	97
19) Acrylonitrile	4.216	53	728213	43.13	ug/l	98
20) tert-Butyl methyl ethe...	4.227	73	1237948	10.01	ug/L	99
21) Carbon disulfide	4.315	76	1075981	10.05	ug/l	100
22) trans-1,2-Dichloroethene	4.370	96	366973	9.79	ug/l	100
23) Isopropyl ether (DIPE)	4.469	45	1352996	9.88	ug/l	98
24) Vinyl acetate	4.546	43	809395	9.69	ug/l	99
25) 1,1-Dichloroethane	4.634	63	780637	10.00	ug/l	99
26) tert-Butyl ethyl ether...	4.733	59	1605496	10.37	ug/l	99
27) 2-Butanone	4.854	72	202153	41.23	ug/l	100
28) Propionitrile	4.909	54	493030	87.75	ug/L	97
29) Isobutyl alcohol	5.030	43	314797	150.63	ug/L	90
30) 2,2-Dichloropropane	5.019	77	782974	10.16	ug/l	99
31) Methacrylonitrile	5.063	52	800158	85.53	ug/L	81
32) cis-1,2-Dichloroethene	5.063	96	445356	10.06	ug/l	97
33) Chloroform	5.173	83	925326	9.37	ug/l	99
34) Bromochloromethane	5.327	130	266557	9.66	ug/l	95
35) Tetrahydrofuran	5.316	42	110460	8.08	ug/L	91
37) 1,1,1-Trichloroethane	5.492	97	873442	10.34	ug/l	98
38) Cyclohexane	5.547	84	398888	9.25	ug/L	99
39) tert-Amyl methyl ether...	5.613	87	283050	10.06	ug/l	100
40) 1,1-Dichloropropene	5.613	110	173859	9.64	ug/L	99

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG074.D
Acq On : 14 Sep 2024 6:02 pm
Operator : DNguye
Sample : VOE2I07C
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 08 16:06:15 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) Carbon tetrachloride	5.734	119	733504	9.81	ug/L	99
43) 1,2-Dichloroethane	5.800	62	844737	10.10	ug/L	98
44) Benzene	5.866	78	1445553	9.88	ug/L	99
45) Trichloroethene	6.373	130	378585	9.45	ug/L	96
46) Methyl methacrylate	6.439	69	330973	9.11	ug/L	96
47) Methylcyclohexane	6.450	83	396161	9.40	ug/L	99
48) 1,2-Dichloropropane	6.527	63	394000	9.86	ug/L	96
49) 1,4-Dioxane	6.725	88	47795	227.28	ug/L	91
50) Bromodichloromethane	6.769	83	748496	9.50	ug/L	99
51) Dibromomethane	6.857	93	310032	9.42	ug/L	98
52) 2-Chloroethyl vinyl ether	6.934	63	95471	5.44	ug/L	91
53) 4-Methyl-2-pentanone	6.956	43	2327307	46.03	ug/L	96
54) cis-1,3-Dichloropropene	7.275	75	676803	9.96	ug/L	97
57) Ethyl methacrylate	7.693	69	470446	9.16	ug/L	95
58) Toluene	7.693	91	1512628	9.50	ug/l	100
59) trans-1,3-Dichloropropene	7.814	75	702334	9.42	ug/l	97
60) 2-Hexanone	7.935	43	1591887	44.35	ug/l	97
61) 1,1,2-Trichloroethane	8.046	97	387304	9.38	ug/l	99
62) 1,3-Dichloropropane	8.354	76	589161	9.20	ug/l	99
63) Tetrachloroethene	8.508	164	354470	9.77	ug/l	98
64) Dibromochloromethane	8.783	129	544475	8.72	ug/l	100
65) 1,2-Dibromoethane	9.069	107	382599	8.72	ug/l	97
66) 1-Chlorohexane	9.124	91	443781	9.92	ug/l	99
67) Chlorobenzene	9.619	112	952978	8.83	ug/l	98
68) 1,1,1,2-Tetrachloroethane	9.641	131	441358	9.08	ug/l	100
69) Ethylbenzene	9.641	91	1754859	9.72	ug/l	97
70) m-Xylene & p-Xylene	9.740	91	2784220	19.81	ug/l	95
71) o-Xylene	10.412	91	1421974	10.30	ug/l	96
72) Styrene	10.456	104	992963	9.77	ug/l	98
73) Isopropylbenzene	10.940	105	1485161	10.01	ug/L	99
75) Bromoform	11.061	173	375611	8.13	ug/l	98
76) 1,1,2,2-Tetrachloroethane	11.193	83	473155	8.47	ug/l	100
78) 1,2,3-Trichloropropane	11.446	110	138712	8.46	ug/l	96
79) trans-1,4-Dichloro-2-b...	11.512	53	162653	8.07	ug/l	96
80) n-Propylbenzene	11.578	91	1930254	10.09	ug/l	98
81) Bromobenzene	11.732	156	495910	9.59	ug/l	91
82) 1,3,5-Trimethylbenzene	11.820	105	1263243	9.63	ug/l	100
83) 2-Chlorotoluene	11.919	91	1226506	9.24	ug/l	97
84) 4-Chlorotoluene	11.974	91	1289118	10.49	ug/l	96
85) tert-Butylbenzene	12.404	134	199800	9.49	ug/l	92
86) 1,2,4-Trimethylbenzene	12.481	105	1289044	9.73	ug/l	100
87) sec-Butylbenzene	12.745	105	1372800	9.05	ug/l	97
88) p-Isopropyltoluene	12.954	119	1161449	9.06	ug/l	98
89) 1,3-Dichlorobenzene	13.163	146	769713	9.31	ug/l	99
90) 1,2,3-Trimethylbenzene	13.251	105	1305471	9.50	ug/L	99
91) 1,4-Dichlorobenzene	13.328	146	777999	9.04	ug/l	97
92) n-Butylbenzene	13.614	91	1108621	9.59	ug/l	98
93) 1,2-Dichlorobenzene	13.933	146	748067	9.03	ug/l	97
94) 1,2-Dibromo-3-chloropr...	15.144	157	101681	8.18	ug/l	92
95) 1,2,4-Trichlorobenzene	16.464	180	480914	9.13	ug/l	99
96) Hexachlorobutadiene	16.663	225	251053	9.30	ug/l	96
97) Naphthalene	16.872	128	1042749	8.57	ug/l	100
98) 1,2,3-Trichlorobenzene	17.224	180	474469	9.14	ug/l	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG074.D
Acq On : 14 Sep 2024 6:02 pm
Operator : DNguye
Sample : VOE2I07C
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 08 16:06:15 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

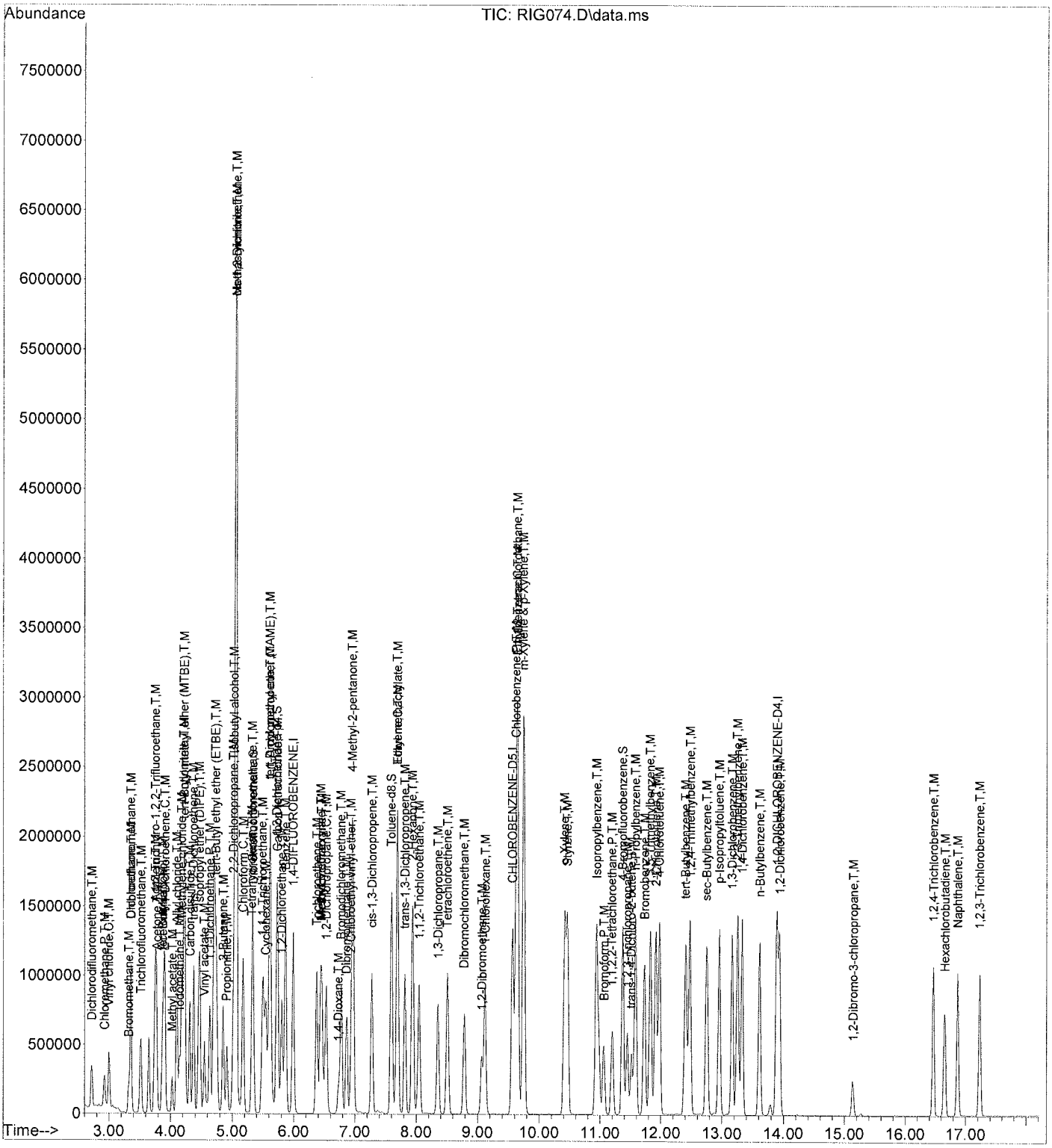
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG074.D
Acq On : 14 Sep 2024 6:02 pm
Operator : DNguye
Sample : VOE2I07C
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 08 16:06:15 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIV400.D Vial: 6
Acq On : 19 Sep 2024 12:20 pm Operator: DNguye/CLingl
Sample : VO01I15B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 27 13:23 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

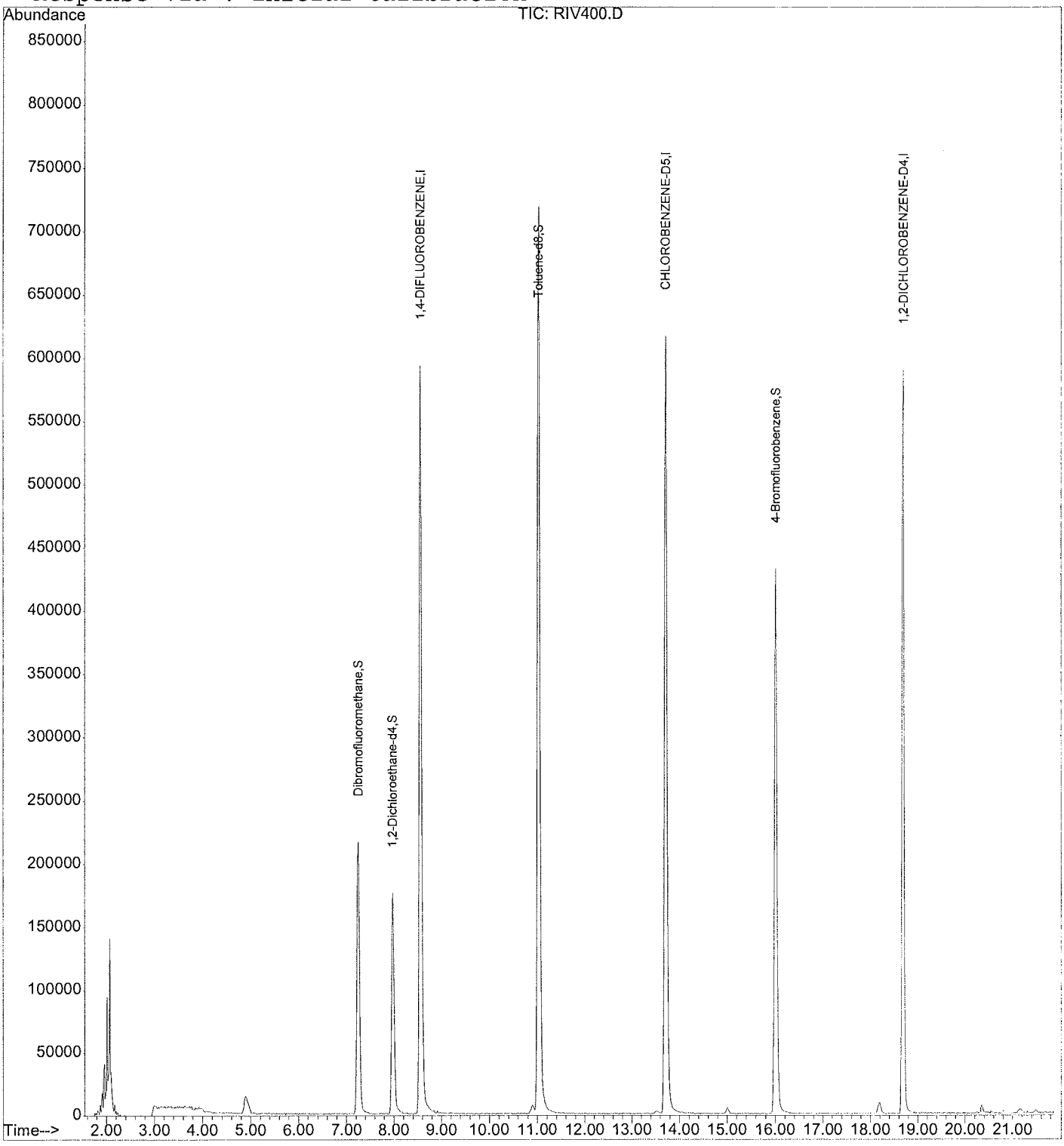
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	919111	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	742284	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	290314	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	272554	9.75	ug/l	0.01
Spiked Amount 10.000			Recovery =	97.50%		
41) 1,2-Dichloroethane-d4	7.98	65	229932	9.25	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.50%		
54) Toluene-d8	11.03	98	960256	10.58	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.80%		
76) 4-Bromofluorobenzene	16.01	95	351177	9.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.30%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIV400.D Vial: 6
Acq On : 19 Sep 2024 12:20 pm Operator: DNguye/CLing
Sample : VO01I15B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 27 13:23 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIV397.D Vial: 3
Acq On : 19 Sep 2024 10:50 am Operator: DNguye/CLingl
Sample : VO01I15L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 11:12 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	954562	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	752201	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	320598	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	278805	9.61	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.10%		
41) 1,2-Dichloroethane-d4	7.98	65	222031	8.60	ug/l	0.00
Spiked Amount 10.000			Recovery =	86.00%		
54) Toluene-d8	11.03	98	1001805	10.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.00%		
76) 4-Bromofluorobenzene	16.01	95	390099	9.59	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.90%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	266600	8.49	ug/l	98
5) Chloromethane	2.57	50	249492	10.96	ug/l	100
6) Vinyl chloride	2.69	62	214726	10.69	ug/l	97
7) Bromomethane	3.24	94	147611	8.30	ug/l	96
8) Chloroethane	3.26	64	151295	9.70	ug/l	98
9) Dichlorofluoromethane	3.36	67	395640	11.50	ug/l	96
10) Trichlorofluoromethane	3.64	101	307866	6.74	ug/l	98
11) Acrolein	4.03	56	44356	46.11	ug/l	75
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	165429	8.85	ug/l	100
13) Acetone	4.10	43	209793	48.94	ug/l	90
14) 1,1-Dichloroethene	4.26	61	393181	8.51	ug/l	75
15) tert-Butyl alcohol	4.38	59	289317	225.26	ug/l	93
16) Iodomethane	4.66	142	354058	8.48	ug/l	86
17) Methyl acetate	4.69	43	117796	11.93	ug/l	95
18) Methylene chloride	4.89	49	362179	11.28	ug/l	97
19) Carbon disulfide	4.90	76	848044	10.61	ug/l	99
20) Acrylonitrile	5.06	53	247885	65.34	ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	558995	10.64	ug/l	96
22) trans-1,2-Dichloroethene	5.27	61	391964	9.32	ug/l	99
23) Isopropyl ether (DIPE)	5.69	45	1083775	12.91	ug/l	94
24) Vinyl acetate	5.85	43	238304	7.77	ug/l	99
25) 1,1-Dichloroethane	5.85	63	564363	10.95	ug/l	98
27) tert-Butyl ethyl ether (ET	6.26	59	867272	11.17	ug/l	96
28) 2-Butanone	6.44	43	377496	60.07	ug/l	97
29) 2,2-Dichloropropane	6.65	77	472609	9.20	ug/l	97
30) cis-1,2-Dichloroethene	6.71	96	338343	10.43	ug/l	98
31) Chloroform	6.93	83	547010	9.42	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I19\RIV397.D Vial: 3
Acq On : 19 Sep 2024 10:50 am Operator: DNguye/CLingl
Sample : VO01I15L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 11:12 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	229476	11.64	ug/l	85
33)	Tetrahydrofuran	7.23	42	39353	11.22	ug/l	91
35)	1,1,1-Trichloroethane	7.51	97	485922	8.48	ug/l	96
36)	Cyclohexane	7.54	84	473570	11.48	ug/l	100
38)	1,1-Dichloropropene	7.73	110	136518	8.70	ug/l	99
39)	Carbon tetrachloride	7.89	119	368578	7.74	ug/l	98
40)	tert-Amyl methyl ether (TA	7.91	73	625772	10.97	ug/l	97
42)	Benzene	8.14	78	1112489	10.58	ug/l	100
43)	1,2-Dichloroethane	8.12	62	296783	9.03	ug/l	98
44)	Trichloroethene	9.08	130	293036	8.76	ug/l	96
45)	Methylcyclohexane	9.17	83	537508	11.68	ug/l	97
46)	1,2-Dichloropropane	9.36	63	296884	12.37	ug/l	79
47)	Bromodichloromethane	9.73	83	400463	9.56	ug/l	97
48)	1,4-Dioxane	9.77	88	20591	173.35	ug/l	87
49)	Dibromomethane	9.82	93	126234	9.45	ug/l	94
50)	2-Chloroethyl vinyl ether	10.22	63	116995	15.58	ug/l	94
51)	4-Methyl-2-pentanone	10.26	43	1032037	71.93	ug/l	96
52)	cis-1,3-Dichloropropene	10.62	75	446947	10.55	ug/l	99
55)	Toluene	11.17	91	1199537	10.64	ug/l	98
56)	Ethyl methacrylate	11.45	69	245522	12.92	ug/l	100
57)	trans-1,3-Dichloropropene	11.48	75	351138	10.74	ug/l	98
58)	1,1,2-Trichloroethane	11.74	97	195382	11.83	ug/l	96
59)	2-Hexanone	11.76	43	616440	67.41	ug/l	99
60)	1,3-Dichloropropane	12.19	76	347815	11.83	ug/l	99
61)	Tetrachloroethene	12.29	164	233191	9.11	ug/l	94
62)	Dibromochloromethane	12.66	129	224060	10.26	ug/l	98
63)	1,2-Dibromoethane	13.03	107	175946	10.58	ug/l	98
64)	1-Chlorohexane	13.30	91	503520	9.63	ug/l	99
65)	Chlorobenzene	13.79	112	792265	10.23	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	281621	10.89	ug/l	99
67)	Ethylbenzene	13.88	91	1461169	10.36	ug/l	99
68)	m-Xylene & p-Xylene	14.01	91	2097160	18.82	ug/l	98
69)	o-Xylene	14.84	91	1106149	10.30	ug/l	100
70)	Styrene	14.90	104	894528	11.38	ug/l	94
71)	Isopropylbenzene	15.52	105	1508730	10.25	ug/l	99
73)	Bromoform	15.55	173	113237	9.62	ug/l	96
74)	trans-1,4-Dichloro-2-buten	15.62	53	69991	9.77	ug/l	87
75)	1,1,2,2-Tetrachloroethane	15.86	83	235537	12.30	ug/l	95
77)	1,2,3-Trichloropropane	16.14	110	66554	9.44	ug/l	83
78)	n-Propylbenzene	16.29	91	1900696	9.33	ug/l	98
79)	Bromobenzene	16.38	156	294034	9.53	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIV397.D Vial: 3
Acq On : 19 Sep 2024 10:50 am Operator: DNguye/CLingl
Sample : VO01I15L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 11:12 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

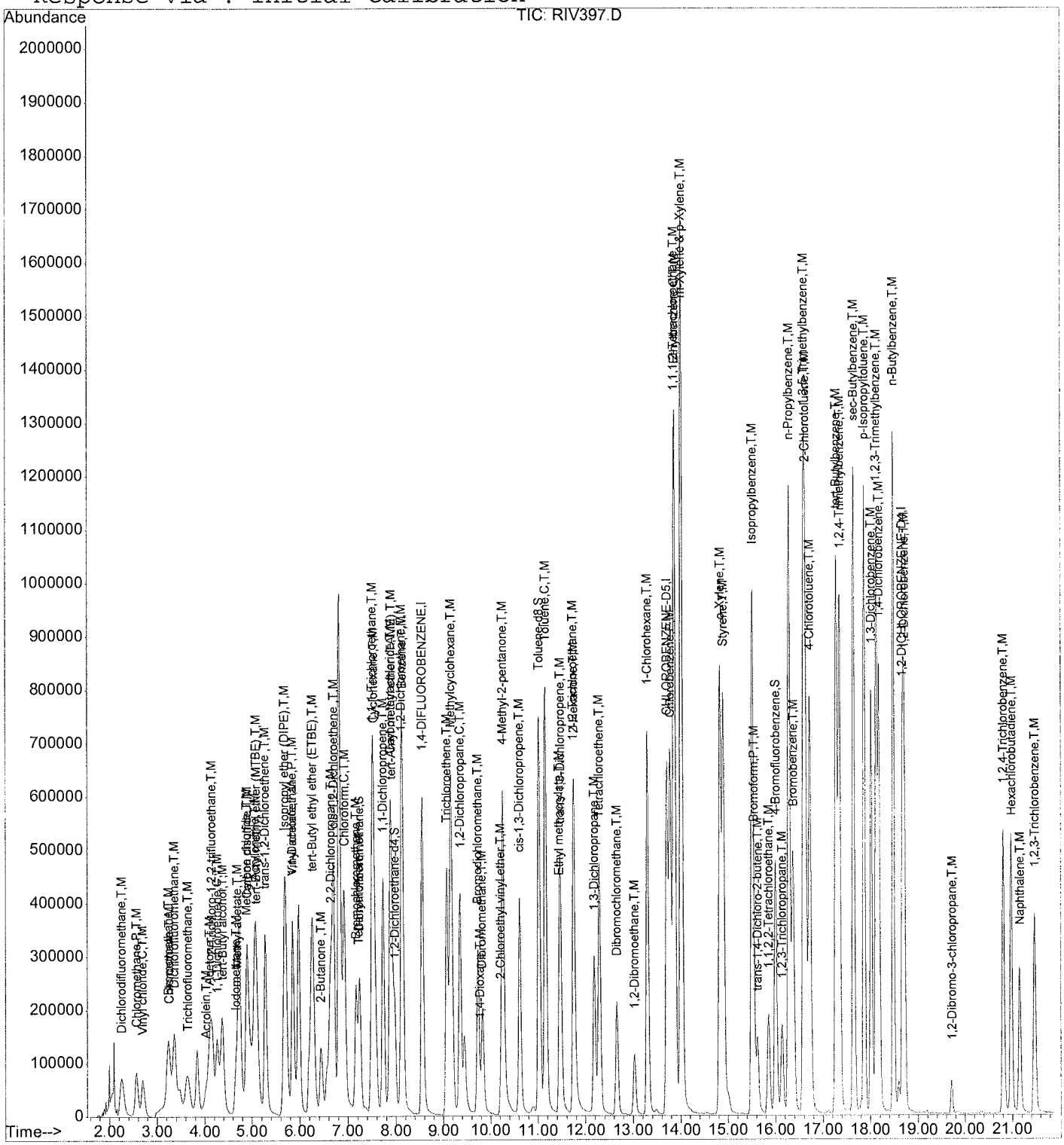
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1172669	8.71	ug/l	98
81)	2-Chlorotoluene	16.63	91	1158990	8.66	ug/l	97
82)	4-Chlorotoluene	16.72	91	1058895	9.27	ug/l	97
83)	tert-Butylbenzene	17.28	134	271277	9.12	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	1154547	8.98	ug/l	98
85)	sec-Butylbenzene	17.65	105	1733346	9.55	ug/l	99
86)	p-Isopropyltoluene	17.87	119	1306639	8.46	ug/l	97
87)	1,3-Dichlorobenzene	18.02	146	582530	9.11	ug/l	96
88)	1,2,3-Trimethylbenzene	18.13	105	1136303	9.11	ug/l	98
89)	1,4-Dichlorobenzene	18.18	146	567734	9.18	ug/l	96
90)	n-Butylbenzene	18.48	91	1272427	8.99	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	498172	9.46	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.72	157	31890	10.75	ug/l	90
93)	1,2,4-Trichlorobenzene	20.81	180	343140	9.59	ug/l	95
94)	Hexachlorobutadiene	20.98	225	193015	8.22	ug/l	99
95)	Naphthalene	21.16	128	468470	9.19	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	267136	9.77	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIV397.D Vial: 3
Acq On : 19 Sep 2024 10:50 am Operator: DNguye/CLing
Sample : VO01I15L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 11:12 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIV398.D Vial: 4
Acq On : 19 Sep 2024 11:21 am Operator: DNguye/CLingl
Sample : VO01I15C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 11:43 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	939947	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	746783	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	312904	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	275168	9.63	ug/l	0.01
Spiked Amount 10.000			Recovery =	96.30%		
41) 1,2-Dichloroethane-d4	7.98	65	219621	8.64	ug/l	0.00
Spiked Amount 10.000			Recovery =	86.40%		
54) Toluene-d8	11.03	98	994950	10.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.00%		
76) 4-Bromofluorobenzene	16.01	95	393986	9.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.20%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.27	85	256436	8.29	ug/l	97
5) Chloromethane	2.57	50	236445	10.55	ug/l	97
6) Vinyl chloride	2.71	62	201579	10.19	ug/l	99
7) Bromomethane	3.24	94	141662	8.09	ug/l	95
8) Chloroethane	3.27	64	155397	10.12	ug/l	88
9) Dichlorofluoromethane	3.38	67	380638	11.24	ug/l	100
10) Trichlorofluoromethane	3.64	101	295932	6.58	ug/l	97
11) Acrolein	4.04	56	44145	46.60	ug/l	88
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	171789	9.33	ug/l	98
13) Acetone	4.10	43	215516	51.17	ug/l	87
14) 1,1-Dichloroethene	4.26	61	392885	8.64	ug/l	86
15) tert-Butyl alcohol	4.38	59	341258	269.83	ug/l	97
16) Iodomethane	4.68	142	355067	8.63	ug/l	85
17) Methyl acetate	4.69	43	111037	11.42	ug/l	97
18) Methylene chloride	4.90	49	362320	11.46	ug/l	97
19) Carbon disulfide	4.92	76	809318	10.28	ug/l	100
20) Acrylonitrile	5.06	53	247390	66.22	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	547776	10.59	ug/l	95
22) trans-1,2-Dichloroethene	5.29	61	390092	9.42	ug/l	99
23) Isopropyl ether (DIPE)	5.70	45	1086214	13.14	ug/l	94
24) Vinyl acetate	5.86	43	237193	7.85	ug/l	98
25) 1,1-Dichloroethane	5.86	63	559815	11.03	ug/l	97
27) tert-Butyl ethyl ether (ET	6.26	59	871260	11.40	ug/l	98
28) 2-Butanone	6.44	43	379004	61.24	ug/l	99
29) 2,2-Dichloropropane	6.65	77	465106	9.19	ug/l	97
30) cis-1,2-Dichloroethene	6.71	96	327985	10.27	ug/l	99
31) Chloroform	6.93	83	533844	9.34	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIV398.D Vial: 4
Acq On : 19 Sep 2024 11:21 am Operator: DNguye/CLingl
Sample : VO01I15C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 11:43 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	225433	11.62	ug/l	84
33)	Tetrahydrofuran	7.23	42	36344	10.52	ug/l	94
35)	1,1,1-Trichloroethane	7.52	97	474251	8.41	ug/l	96
36)	Cyclohexane	7.54	84	449059	11.05	ug/l	98
38)	1,1-Dichloropropene	7.74	110	136487	8.83	ug/l	98
39)	Carbon tetrachloride	7.89	119	365358	7.79	ug/l	99
40)	tert-Amyl methyl ether (TA	7.91	73	627470	11.17	ug/l	97
42)	Benzene	8.14	78	1097900	10.61	ug/l	99
43)	1,2-Dichloroethane	8.11	62	290186	8.97	ug/l	98
44)	Trichloroethene	9.08	130	288200	8.75	ug/l	95
45)	Methylcyclohexane	9.17	83	511082	11.28	ug/l	97
46)	1,2-Dichloropropane	9.36	63	284336	12.03	ug/l	80
47)	Bromodichloromethane	9.73	83	389386	9.44	ug/l	97
48)	1,4-Dioxane	9.77	88	21008	179.61	ug/l	85
49)	Dibromomethane	9.83	93	124662	9.48	ug/l	93
50)	2-Chloroethyl vinyl ether	10.23	63	116100	15.70	ug/l	95
51)	4-Methyl-2-pentanone	10.26	43	1029704	72.88	ug/l	96
52)	cis-1,3-Dichloropropene	10.62	75	442351	10.60	ug/l	99
55)	Toluene	11.17	91	1202743	10.75	ug/l	98
56)	Ethyl methacrylate	11.45	69	249436	13.22	ug/l	100
57)	trans-1,3-Dichloropropene	11.48	75	351431	10.83	ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	192153	11.72	ug/l	96
59)	2-Hexanone	11.76	43	608774	67.07	ug/l	99
60)	1,3-Dichloropropane	12.19	76	344852	11.81	ug/l	99
61)	Tetrachloroethene	12.29	164	227385	8.95	ug/l	95
62)	Dibromochloromethane	12.66	129	226413	10.45	ug/l	100
63)	1,2-Dibromoethane	13.03	107	173557	10.52	ug/l	99
64)	1-Chlorohexane	13.30	91	503804	9.71	ug/l	99
65)	Chlorobenzene	13.79	112	784878	10.21	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	275401	10.72	ug/l	99
67)	Ethylbenzene	13.88	91	1417486	10.12	ug/l	99
68)	m-Xylene & p-Xylene	14.01	91	2059583	18.62	ug/l	99
69)	o-Xylene	14.84	91	1115407	10.46	ug/l	99
70)	Styrene	14.90	104	891059	11.42	ug/l	94
71)	Isopropylbenzene	15.52	105	1543037	10.56	ug/l	99
73)	Bromoform	15.55	173	116844	10.17	ug/l	96
74)	trans-1,4-Dichloro-2-buten	15.62	53	74678	10.69	ug/l	85
75)	1,1,2,2-Tetrachloroethane	15.86	83	231236	12.37	ug/l	96
77)	1,2,3-Trichloropropane	16.14	110	66389	9.65	ug/l	87
78)	n-Propylbenzene	16.29	91	1872509	9.41	ug/l	99
79)	Bromobenzene	16.38	156	287957	9.56	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIV398.D Vial: 4
Acq On : 19 Sep 2024 11:21 am Operator: DNguye/CLingl
Sample : VO01I15C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 11:43 2024 Quant Results File: VO01H09.RES

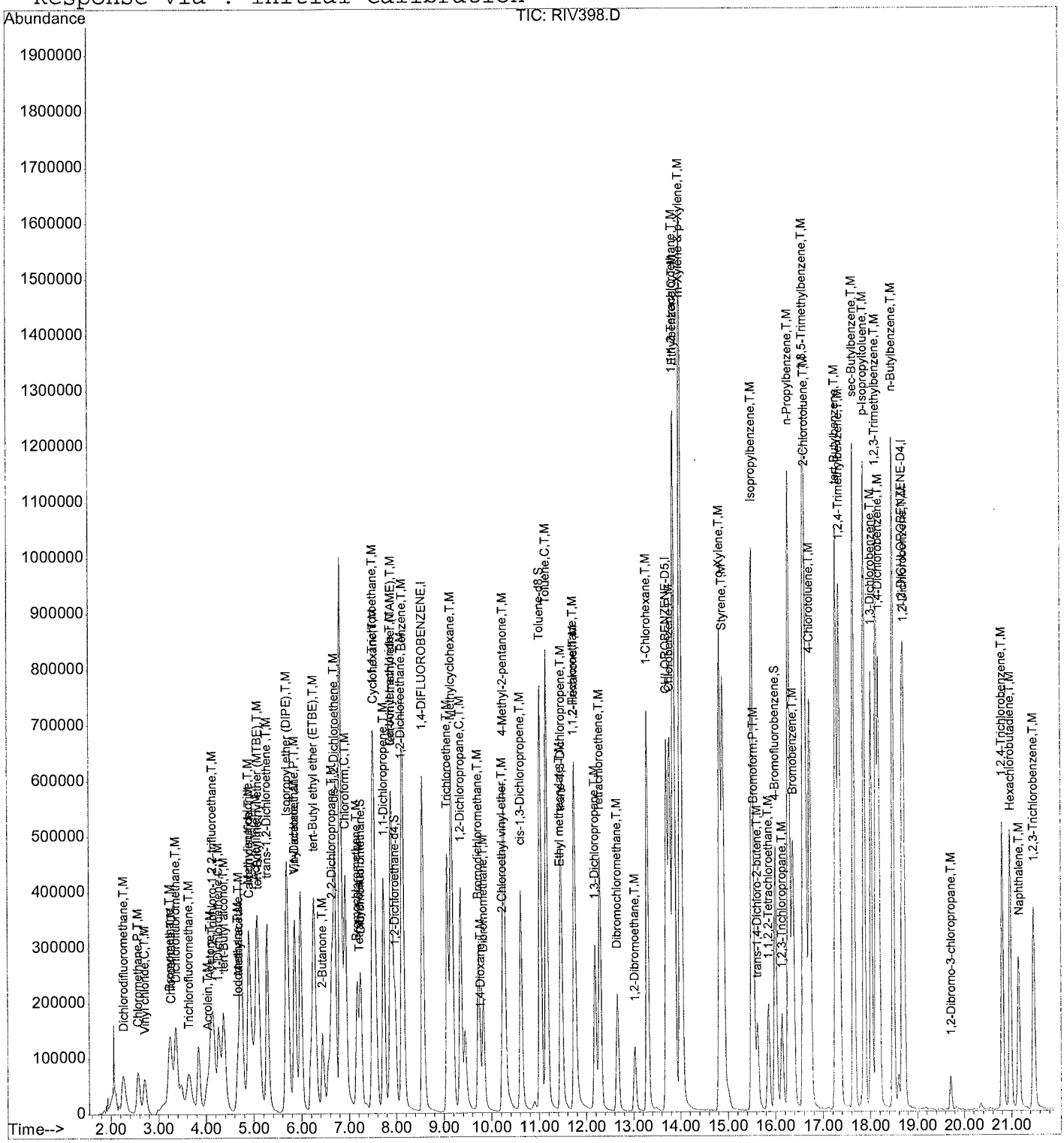
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1169083	8.90	ug/l	98
81)	2-Chlorotoluene	16.63	91	1130509	8.66	ug/l	93
82)	4-Chlorotoluene	16.72	91	1046761	9.38	ug/l	97
83)	tert-Butylbenzene	17.28	134	270104	9.30	ug/l	95
84)	1,2,4-Trimethylbenzene	17.36	105	1122395	8.94	ug/l	99
85)	sec-Butylbenzene	17.65	105	1689996	9.54	ug/l	99
86)	p-Isopropyltoluene	17.87	119	1298128	8.61	ug/l	97
87)	1,3-Dichlorobenzene	18.02	146	571019	9.15	ug/l	95
88)	1,2,3-Trimethylbenzene	18.13	105	1110549	9.12	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	554641	9.19	ug/l	97
90)	n-Butylbenzene	18.48	91	1220739	8.84	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	491087	9.56	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.73	157	30405	10.50	ug/l	97
93)	1,2,4-Trichlorobenzene	20.81	180	330451	9.46	ug/l	97
94)	Hexachlorobutadiene	20.98	225	188535	8.23	ug/l	99
95)	Naphthalene	21.16	128	462546	9.29	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	259413	9.72	ug/l	95

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I19\RIV398.D Vial: 4
Acq On : 19 Sep 2024 11:21 am Operator: DNguye/CLing
Sample : VO01I15C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 11:43 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV427.D Vial: 6
Acq On : 20 Sep 2024 2:12 pm Operator: DNguye/CLingl
Sample : VO01I16B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 1 10:49 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

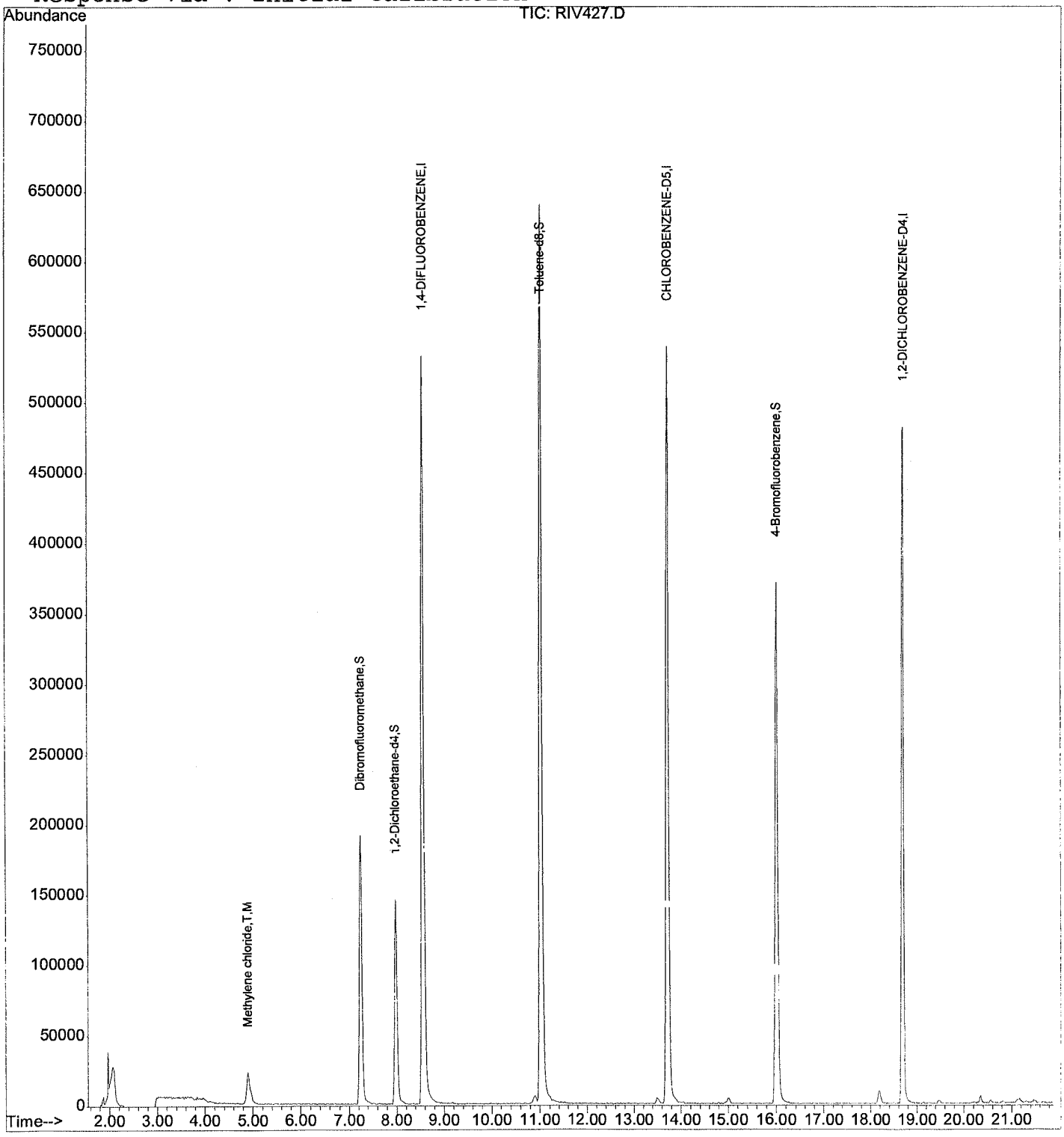
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	844583	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	660877	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	243874	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	242210	9.43	ug/l	0.01
Spiked Amount 10.000			Recovery = 94.30%			
41) 1,2-Dichloroethane-d4	7.98	65	187660	8.22	ug/l	0.00
Spiked Amount 10.000			Recovery = 82.20%			
54) Toluene-d8	11.03	98	863084	10.68	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.80%			
76) 4-Bromofluorobenzene	16.01	95	311447	10.07	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.70%			
Target Compounds						Qvalue
18) Methylene chloride	4.90	49	39557	1.39	ug/l	97

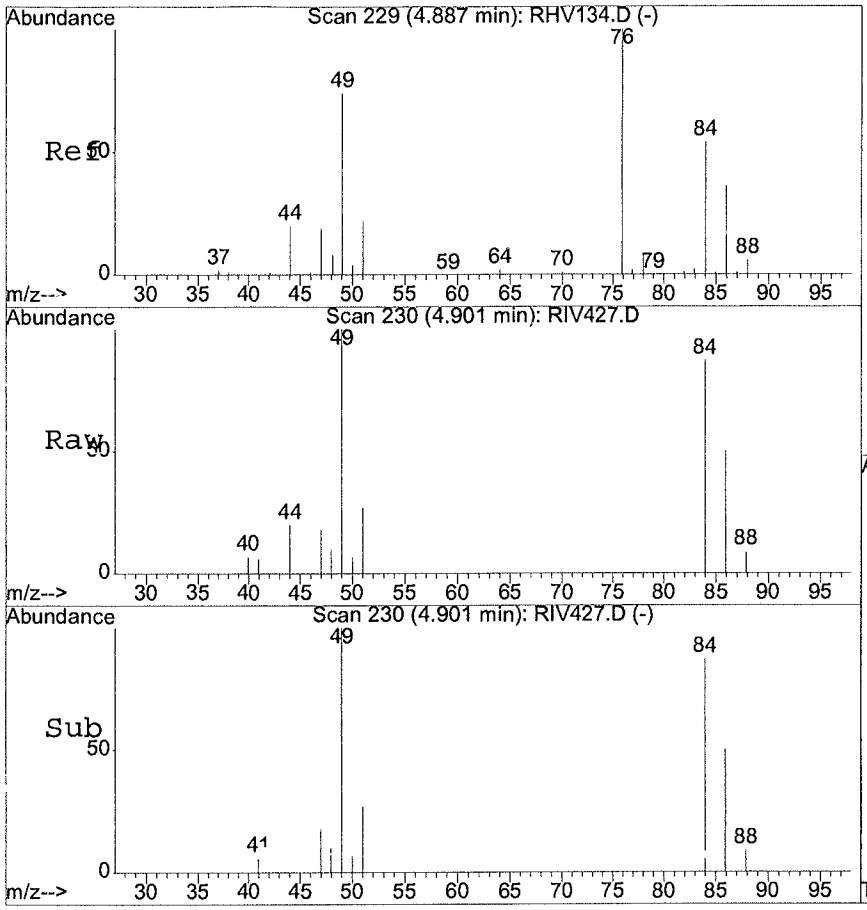
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIV427.D Vial: 6
Acq On : 20 Sep 2024 2:12 pm Operator: DNguye/CLing
Sample : VO01I16B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 1 10:49 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

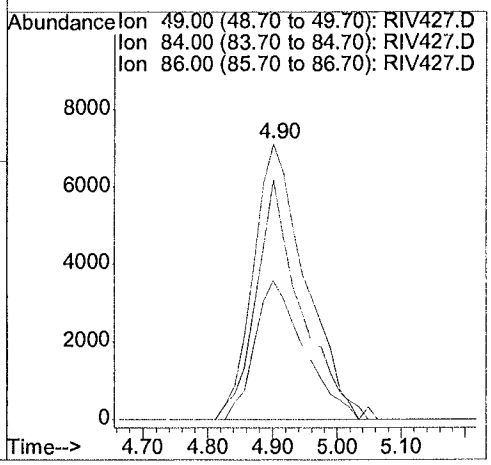




#18
Methylene chloride
Concen: 1.39 ug/l
RT: 4.90 min Scan# 230
Delta R.T. 0.01 min
Lab File: RIV427.D
Acq: 20 Sep 2024 2:12 pm

Tgt Ion: 49 Resp: 39557

Ion	Ratio	Lower	Upper
49	100		
84	74.6	45.8	105.8
86	47.5	21.5	81.5



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV428.D
Acq On : 20 Sep 2024 2:42 pm
Sample : VO01I16X
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 20 15:04 2024

Vial: 7
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	837261	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	637053	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	237720	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	232923	9.15	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.50%		
41) 1,2-Dichloroethane-d4	7.98	65	178446	7.88	ug/l	0.00
Spiked Amount 10.000			Recovery =	78.80%		
54) Toluene-d8	11.03	98	838040	10.76	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.60%		
76) 4-Bromofluorobenzene	16.01	95	295915	9.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.10%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	249491	9.06	ug/l	95
5) Chloromethane	2.57	50	228263	11.43	ug/l	98
6) Vinyl chloride	2.71	62	200676	11.39	ug/l	96
7) Bromomethane	3.24	94	146503	9.39	ug/l	94
8) Chloroethane	3.29	64	162200	11.86	ug/l	89
9) Dichlorofluoromethane	3.38	67	339740	11.26	ug/l	98
10) Trichlorofluoromethane	3.64	101	302595	7.56	ug/l	96
11) Acrolein	4.04	56	41285	48.93	ug/l	82
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	160509	9.79	ug/l	96
13) Acetone	4.12	43	192963	51.45	ug/l	84
14) 1,1-Dichloroethene	4.26	61	356028	8.79	ug/l	80
15) tert-Butyl alcohol	4.38	59	287967	255.62	ug/l	96
16) Iodomethane	4.66	142	314494	8.59	ug/l	85
17) Methyl acetate	4.69	43	108878	12.58	ug/l	97
18) Methylene chloride	4.90	49	313847	11.15	ug/l	97
19) Carbon disulfide	4.92	76	791811	11.29	ug/l	100
20) Acrylonitrile	5.06	53	243287	73.11	ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	483450	10.49	ug/l	93
22) trans-1,2-Dichloroethene	5.29	61	347977	9.43	ug/l	99
23) Isopropyl ether (DIPE)	5.70	45	971203	13.19	ug/l	93
24) Vinyl acetate	5.86	43	234818	8.73	ug/l	99
25) 1,1-Dichloroethane	5.86	63	511310	11.51	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	775086	11.38	ug/l	97
28) 2-Butanone	6.44	43	351586	63.78	ug/l	97
29) 2,2-Dichloropropane	6.65	77	410739	9.11	ug/l	97
30) cis-1,2-Dichloroethene	6.71	96	294111	10.34	ug/l	99
31) Chloroform	6.93	83	474742	9.32	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I20\RIV428.D
Acq On : 20 Sep 2024 2:42 pm
Sample : VO01I16X
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 20 15:04 2024

Vial: 7
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.18	49	199094	11.52 ug/l	85
33) Tetrahydrofuran	7.23	42	29995	9.75 ug/l	95
35) 1,1,1-Trichloroethane	7.52	97	425626	8.47 ug/l	97
36) Cyclohexane	7.54	84	464003	12.82 ug/l	98
38) 1,1-Dichloropropene	7.74	110	125830	9.14 ug/l	100
39) Carbon tetrachloride	7.89	119	321561	7.70 ug/l	100
40) tert-Amyl methyl ether (TA	7.91	73	554705	11.08 ug/l	96
42) Benzene	8.14	78	984750	10.68 ug/l	99
43) 1,2-Dichloroethane	8.11	62	246255	8.54 ug/l	97
44) Trichloroethene	9.08	130	261182	8.90 ug/l	97
45) Methylcyclohexane	9.17	83	524805	13.00 ug/l	98
46) 1,2-Dichloropropane	9.36	63	263236	12.51 ug/l	76
47) Bromodichloromethane	9.73	83	343557	9.35 ug/l	97
48) 1,4-Dioxane	9.79	88	19192	184.21 ug/l	84
49) Dibromomethane	9.83	93	108697	9.28 ug/l	91
50) 2-Chloroethyl vinyl ether	10.23	63	101097	15.34 ug/l	94
51) 4-Methyl-2-pentanone	10.26	43	922657	73.31 ug/l	97
52) cis-1,3-Dichloropropene	10.62	75	388654	10.46 ug/l	100
55) Toluene	11.17	91	1068077	11.19 ug/l	98
56) Ethyl methacrylate	11.45	69	209502	13.01 ug/l	98
57) trans-1,3-Dichloropropene	11.48	75	298226	10.77 ug/l	98
58) 1,1,2-Trichloroethane	11.74	97	172836	12.36 ug/l	96
59) 2-Hexanone	11.76	43	549224	70.79 ug/l	98
60) 1,3-Dichloropropane	12.19	76	299726	12.04 ug/l	99
61) Tetrachloroethene	12.29	164	204867	9.45 ug/l	94
62) Dibromochloromethane	12.66	129	195146	10.56 ug/l	100
63) 1,2-Dibromoethane	13.03	107	148547	10.55 ug/l	100
64) 1-Chlorohexane	13.30	91	459891	10.39 ug/l	99
65) Chlorobenzene	13.79	112	695536	10.60 ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.86	131	241449	11.02 ug/l	99
67) Ethylbenzene	13.88	91	1263290	10.57 ug/l	100
68) m-Xylene & p-Xylene	14.01	91	1825185	19.34 ug/l	98
69) o-Xylene	14.84	91	950587	10.45 ug/l	99
70) Styrene	14.91	104	770498	11.58 ug/l	94
71) Isopropylbenzene	15.52	105	1299902	10.43 ug/l	99
73) Bromoform	15.55	173	96544	11.06 ug/l	99
74) trans-1,4-Dichloro-2-buten	15.62	53	56705	10.69 ug/l	85
75) 1,1,2,2-Tetrachloroethane	15.86	83	186462	13.13 ug/l	95
77) 1,2,3-Trichloropropane	16.14	110	52217	9.99 ug/l	86
78) n-Propylbenzene	16.29	91	1516650	10.04 ug/l	98
79) Bromobenzene	16.38	156	235301	10.28 ug/l	95

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I20\RIV428.D
Acq On : 20 Sep 2024 2:42 pm
Sample : VO01I16X
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 20 15:04 2024

Vial: 7
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	961159	9.63	ug/l	97
81)	2-Chlorotoluene	16.63	91	914373	9.22	ug/l	93
82)	4-Chlorotoluene	16.73	91	857204	10.12	ug/l	99
83)	tert-Butylbenzene	17.28	134	224088	10.15	ug/l	94
84)	1,2,4-Trimethylbenzene	17.36	105	907429	9.52	ug/l	96
85)	sec-Butylbenzene	17.65	105	1418456	10.54	ug/l	99
86)	p-Isopropyltoluene	17.87	119	1065807	9.30	ug/l	96
87)	1,3-Dichlorobenzene	18.02	146	466189	9.83	ug/l	95
88)	1,2,3-Trimethylbenzene	18.13	105	903429	9.77	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	447813	9.77	ug/l	96
90)	n-Butylbenzene	18.48	91	1022699	9.75	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	397372	10.18	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.71	157	24028	10.93	ug/l	97
93)	1,2,4-Trichlorobenzene	20.81	180	303407	11.44	ug/l	98
94)	Hexachlorobutadiene	20.98	225	190851	10.96	ug/l	98
95)	Naphthalene	21.16	128	403140	10.66	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	234974	11.59	ug/l	95

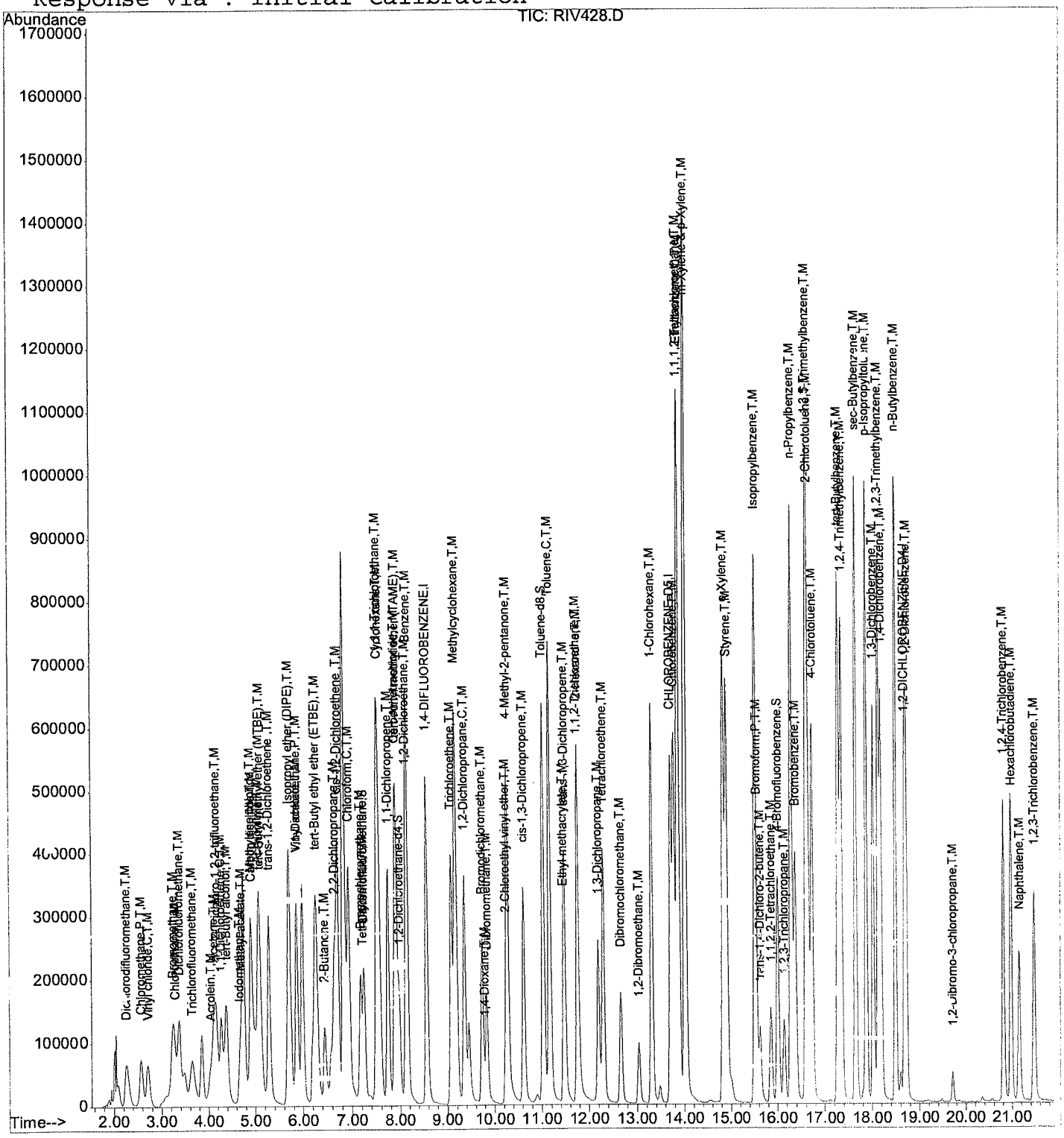
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I20\RIV428.D
Acq On : 20 Sep 2024 2:42 pm
Sample : VO01I16X
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 20 15:04 2024

Vial: 7
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV425.D Vial: 4
Acq On : 20 Sep 2024 1:12 pm Operator: DNguye/CLingl
Sample : VO01I16C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 20 13:34 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	820600	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	623961	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.68	152	233867	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	227600	9.12	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.20%		
41) 1,2-Dichloroethane-d4	7.97	65	174528	7.87	ug/l	-0.02
Spiked Amount 10.000			Recovery =	78.70%		
54) Toluene-d8	11.03	98	841819	11.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.40%		
76) 4-Bromofluorobenzene	16.01	95	292416	9.86	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.60%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	205957	7.63	ug/l	98
5) Chloromethane	2.56	50	211709	10.82	ug/l	99
6) Vinyl chloride	2.71	62	178350	10.33	ug/l	99
7) Bromomethane	3.23	94	129569	8.47	ug/l	100
8) Chloroethane	3.26	64	142084	10.60	ug/l	90
9) Dichlorofluoromethane	3.36	67	321251	10.87	ug/l	99
10) Trichlorofluoromethane	3.63	101	252682	6.44	ug/l	97
11) Acrolein	4.03	56	37029	44.78	ug/l	89
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	144717	9.00	ug/l	97
13) Acetone	4.10	43	186049	50.57	ug/l	85
14) 1,1-Dichloroethene	4.25	61	342062	8.61	ug/l	78
15) tert-Butyl alcohol	4.37	59	290265	262.89	ug/l	99
16) Iodomethane	4.66	142	308351	8.59	ug/l	83
17) Methyl acetate	4.69	43	100906	11.89	ug/l	96
18) Methylene chloride	4.89	49	300346	10.88	ug/l	99
19) Carbon disulfide	4.90	76	742489	10.80	ug/l	99
20) Acrylonitrile	5.06	53	221890	68.04	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	463375	10.26	ug/l	94
22) trans-1,2-Dichloroethene	5.27	61	337827	9.34	ug/l	97
23) Isopropyl ether (DIPE)	5.69	45	936949	12.98	ug/l	94
24) Vinyl acetate	5.85	43	198010	7.51	ug/l	99
25) 1,1-Dichloroethane	5.85	63	494436	11.16	ug/l	98
27) tert-Butyl ethyl ether (ET	6.26	59	740306	11.09	ug/l	97
28) 2-Butanone	6.44	43	331241	61.31	ug/l	98
29) 2,2-Dichloropropane	6.65	77	392307	8.88	ug/l	97
30) cis-1,2-Dichloroethene	6.71	96	293475	10.52	ug/l	98
31) Chloroform	6.93	83	451984	9.06	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV425.D Vial: 4
Acq On : 20 Sep 2024 1:12 pm Operator: DNguye/CLingl
Sample : VO01I16C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 20 13:34 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.17	49	193238	11.41 ug/l	84
33) Tetrahydrofuran	7.23	42	28801	9.55 ug/l	96
35) 1,1,1-Trichloroethane	7.52	97	405244	8.23 ug/l	97
36) Cyclohexane	7.54	84	399629	11.27 ug/l	100
38) 1,1-Dichloropropene	7.73	110	117095	8.68 ug/l	97
39) Carbon tetrachloride	7.89	119	305407	7.46 ug/l	100
40) tert-Amyl methyl ether (TA	7.91	73	522128	10.64 ug/l	97
42) Benzene	8.14	78	962814	10.66 ug/l	99
43) 1,2-Dichloroethane	8.11	62	233545	8.27 ug/l	97
44) Trichloroethene	9.08	130	260885	9.07 ug/l	98
45) Methylcyclohexane	9.17	83	451705	11.42 ug/l	97
46) 1,2-Dichloropropane	9.36	63	254077	12.32 ug/l	77
47) Bromodichloromethane	9.73	83	318674	8.85 ug/l	100
48) 1,4-Dioxane	9.79	88	19799	193.89 ug/l	81
49) Dibromomethane	9.82	93	103883	9.05 ug/l	92
50) 2-Chloroethyl vinyl ether	10.23	63	93508	14.48 ug/l	95
51) 4-Methyl-2-pentanone	10.26	43	857003	69.48 ug/l	97
52) cis-1,3-Dichloropropene	10.62	75	366981	10.08 ug/l	99
55) Toluene	11.17	91	1042176	11.15 ug/l	99
56) Ethyl methacrylate	11.45	69	197569	12.53 ug/l	96
57) trans-1,3-Dichloropropene	11.48	75	280932	10.36 ug/l	96
58) 1,1,2-Trichloroethane	11.74	97	159592	11.65 ug/l	96
59) 2-Hexanone	11.76	43	505995	66.73 ug/l	100
60) 1,3-Dichloropropane	12.19	76	283089	11.61 ug/l	100
61) Tetrachloroethene	12.29	164	192727	9.08 ug/l	95
62) Dibromochloromethane	12.66	129	182470	10.08 ug/l	99
63) 1,2-Dibromoethane	13.03	107	141154	10.24 ug/l	99
64) 1-Chlorohexane	13.30	91	427000	9.85 ug/l	98
65) Chlorobenzene	13.79	112	668385	10.40 ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.86	131	229238	10.68 ug/l	99
67) Ethylbenzene	13.88	91	1212817	10.36 ug/l	99
68) m-Xylene & p-Xylene	14.01	91	1773815	19.19 ug/l	99
69) o-Xylene	14.84	91	923067	10.36 ug/l	100
70) Styrene	14.90	104	738893	11.33 ug/l	93
71) Isopropylbenzene	15.52	105	1230354	10.08 ug/l	98
73) Bromoform	15.55	173	86738	10.10 ug/l	96
74) trans-1,4-Dichloro-2-buten	15.62	53	51039	9.77 ug/l	86
75) 1,1,2,2-Tetrachloroethane	15.86	83	170031	12.17 ug/l	96
77) 1,2,3-Trichloropropane	16.14	110	48358	9.41 ug/l	82
78) n-Propylbenzene	16.29	91	1456344	9.80 ug/l	99
79) Bromobenzene	16.38	156	223197	9.91 ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV425.D
Acq On : 20 Sep 2024 1:12 pm
Sample : VO01I16C
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 20 13:34 2024

Vial: 4
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	911516	9.29	ug/l	98
81)	2-Chlorotoluene	16.63	91	889981	9.12	ug/l	97
82)	4-Chlorotoluene	16.72	91	798501	9.58	ug/l	96
83)	tert-Butylbenzene	17.28	134	211599	9.75	ug/l	95
84)	1,2,4-Trimethylbenzene	17.36	105	876959	9.35	ug/l	98
85)	sec-Butylbenzene	17.65	105	1324448	10.00	ug/l	99
86)	p-Isopropyltoluene	17.88	119	1013499	8.99	ug/l	97
87)	1,3-Dichlorobenzene	18.02	146	439874	9.43	ug/l	96
88)	1,2,3-Trimethylbenzene	18.13	105	869078	9.55	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	429956	9.53	ug/l	96
90)	n-Butylbenzene	18.48	91	960779	9.31	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	375708	9.78	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.71	157	23371	10.80	ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	256102	9.81	ug/l	96
94)	Hexachlorobutadiene	20.99	225	153015	8.93	ug/l	99
95)	Naphthalene	21.15	128	348464	9.37	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	199429	10.00	ug/l	95

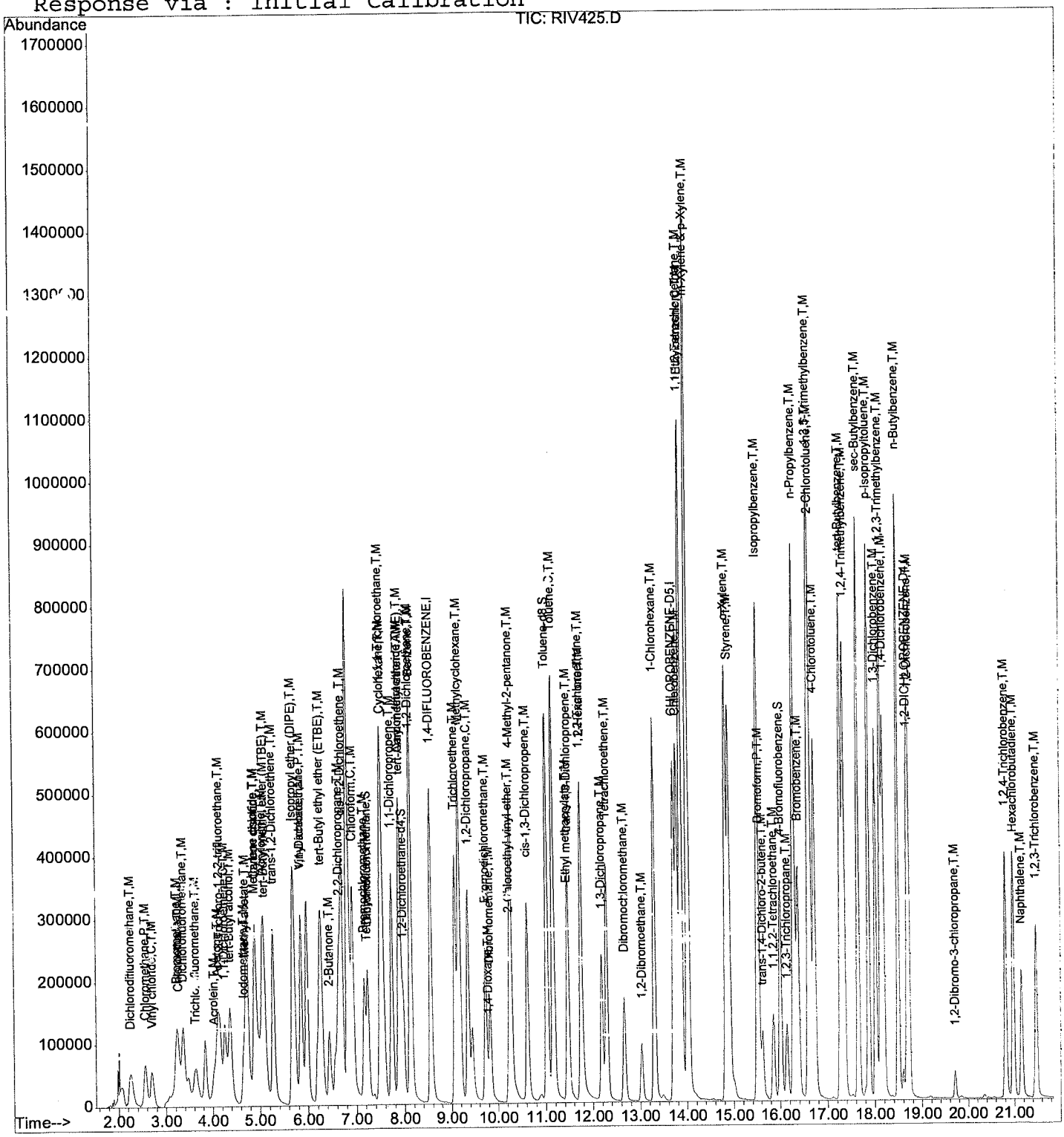
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIV425.D
Acq On : 20 Sep 2024 1:12 pm
Sample : VO01I16C
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 20 13:34 2024

Vial: 4
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV438.D Vial: 17
Acq On : 20 Sep 2024 7:42 pm Operator: DNguye/CLingl
Sample : 24I020-16M Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 21 7:31 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	689978	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	566525	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	229880	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	216821	10.33	ug/l	0.02
Spiked Amount 10.000			Recovery = 103.30%			
41) 1,2-Dichloroethane-d4	7.98	65	196079	10.51	ug/l	0.00
Spiked Amount 10.000			Recovery = 105.10%			
54) Toluene-d8	11.03	98	744180	10.75	ug/l	0.00
Spiked Amount 10.000			Recovery = 107.50%			
76) 4-Bromofluorobenzene	16.01	95	285196	9.78	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.80%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	229088	10.09	ug/l	96
5) Chloromethane	2.57	50	198998	12.09	ug/l	98
6) Vinyl chloride	2.71	62	169940	11.71	ug/l	98
7) Bromomethane	3.24	94	119399	9.29	ug/l	96
8) Chloroethane	3.26	64	129323	11.47	ug/l	69
9) Dichlorofluoromethane	3.38	67	288832	11.62	ug/l	97
10) Trichlorofluoromethane	3.63	101	294045	8.91	ug/l	87
11) Acrolein	4.03	56	33220	47.78	ug/l	89
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	119130	8.81	ug/l	100
13) Acetone	4.10	43	202671	66.29	ug/l	96
14) 1,1-Dichloroethene	4.27	61	310544	9.30	ug/l	74
15) tert-Butyl alcohol	4.38	59	278759	300.27	ug/l	93
16) Iodomethane	4.68	142	260291	8.62	ug/l	90
17) Methyl acetate	4.70	43	104225	14.61	ug/l	92
18) Methylene chloride	4.90	49	287104	12.37	ug/l	91
19) Carbon disulfide	4.92	76	671271	11.62	ug/l	99
20) Acrylonitrile	5.07	53	221352	80.72	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	474317	12.49	ug/l	100
22) trans-1,2-Dichloroethene	5.29	61	311515	10.24	ug/l	92
23) Isopropyl ether (DIPE)	5.70	45	914149	15.06	ug/l	92
24) Vinyl acetate	5.87	43	240985	10.87	ug/l	98
25) 1,1-Dichloroethane	5.87	63	450934	12.10	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	755116	13.45	ug/l	94
28) 2-Butanone	6.44	43	368317	81.08	ug/l	93
29) 2,2-Dichloropropane	6.65	77	362392	9.76	ug/l	98
30) cis-1,2-Dichloroethene	6.71	96	259171	11.05	ug/l	95
31) Chloroform	6.93	83	665465	15.86	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV438.D
Acq On : 20 Sep 2024 7:42 pm
Sample : 24I020-16M
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 21 7:31 2024

Vial: 17
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.17	49	196085	13.76	ug/l		79
33)	Tetrahydrofuran	7.23	42	35006	13.80	ug/l		87
35)	1,1,1-Trichloroethane	7.52	97	399189	9.64	ug/l		95
36)	Cyclohexane	7.54	84	389740	13.07	ug/l		97
38)	1,1-Dichloropropene	7.75	110	102511	9.04	ug/l		98
39)	Carbon tetrachloride	7.89	119	301285	8.75	ug/l		98
40)	tert-Amyl methyl ether (TA	7.91	73	531347	12.88	ug/l		99
42)	Benzene	8.15	78	847178	11.15	ug/l		98
43)	1,2-Dichloroethane	8.12	62	272584	11.47	ug/l		100
44)	Trichloroethene	9.08	130	222530	9.21	ug/l		93
45)	Methylcyclohexane	9.18	83	446214	13.42	ug/l		95
46)	1,2-Dichloropropane	9.36	63	236089	13.61	ug/l		83
47)	Bromodichloromethane	9.74	83	345647	11.42	ug/l		94
48)	1,4-Dioxane	9.79	88	17103	199.20	ug/l		82
49)	Dibromomethane	9.83	93	106720	11.06	ug/l		95
50)	2-Chloroethyl vinyl ether	10.28	63	951	0.18	ug/l	#	1
51)	4-Methyl-2-pentanone	10.28	43	918869	88.59	ug/l		98
52)	cis-1,3-Dichloropropene	10.63	75	359248	11.73	ug/l		98
55)	Toluene	11.17	91	939120	11.06	ug/l		100
56)	Ethyl methacrylate	11.46	69	222137	15.52	ug/l		98
57)	trans-1,3-Dichloropropene	11.48	75	300908	12.22	ug/l		98
58)	1,1,2-Trichloroethane	11.76	97	166990	13.43	ug/l		96
59)	2-Hexanone	11.76	43	600808	86.51	ug/l		95
60)	1,3-Dichloropropane	12.19	76	293861	13.27	ug/l		99
61)	Tetrachloroethene	12.31	164	171977	8.92	ug/l		96
62)	Dibromochloromethane	12.66	129	198145	12.05	ug/l		97
63)	1,2-Dibromoethane	13.03	107	148325	11.85	ug/l		99
64)	1-Chlorohexane	13.31	91	385854	9.80	ug/l		99
65)	Chlorobenzene	13.79	112	627444	10.75	ug/l		99
66)	1,1,1,2-Tetrachloroethane	13.86	131	228401	11.72	ug/l		99
67)	Ethylbenzene	13.88	91	1128479	10.62	ug/l		100
68)	m-Xylene & p-Xylene	14.02	91	1643966	19.59	ug/l		99
69)	o-Xylene	14.84	91	891291	11.02	ug/l		100
70)	Styrene	14.91	104	681808	11.52	ug/l		96
71)	Isopropylbenzene	15.52	105	1187073	10.71	ug/l		99
73)	Bromoform	15.56	173	94864	11.24	ug/l		95
74)	trans-1,4-Dichloro-2-buten	15.62	53	62176	12.11	ug/l		81
75)	1,1,2,2-Tetrachloroethane	15.86	83	189200	13.78	ug/l		94
77)	1,2,3-Trichloropropane	16.14	110	55284	10.94	ug/l		82
78)	n-Propylbenzene	16.29	91	1387578	9.50	ug/l		98
79)	Bromobenzene	16.38	156	218994	9.90	ug/l		96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I20\RIV438.D Vial: 17
Acq On : 20 Sep 2024 7:42 pm Operator: DNguye/CLingl
Sample : 24I020-16M Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 21 7:31 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	871056	9.03	ug/l	99
81)	2-Chlorotoluene	16.63	91	910458	9.49	ug/l	100
82)	4-Chlorotoluene	16.73	91	746885	9.11	ug/l	98
83)	tert-Butylbenzene	17.28	134	199721	9.36	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	844736	9.16	ug/l	99
85)	sec-Butylbenzene	17.65	105	1279670	9.83	ug/l	98
86)	p-Isopropyltoluene	17.87	119	948324	8.56	ug/l	98
87)	1,3-Dichlorobenzene	18.02	146	425532	9.28	ug/l	97
88)	1,2,3-Trimethylbenzene	18.13	105	864896	9.67	ug/l	98
89)	1,4-Dichlorobenzene	18.18	146	418288	9.44	ug/l	98
90)	n-Butylbenzene	18.50	91	928046	9.15	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	380695	10.09	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.71	157	25513	12.00	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	248399	9.68	ug/l	97
94)	Hexachlorobutadiene	20.97	225	146358	8.69	ug/l	98
95)	Naphthalene	21.16	128	354439	9.69	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	198553	10.13	ug/l	96

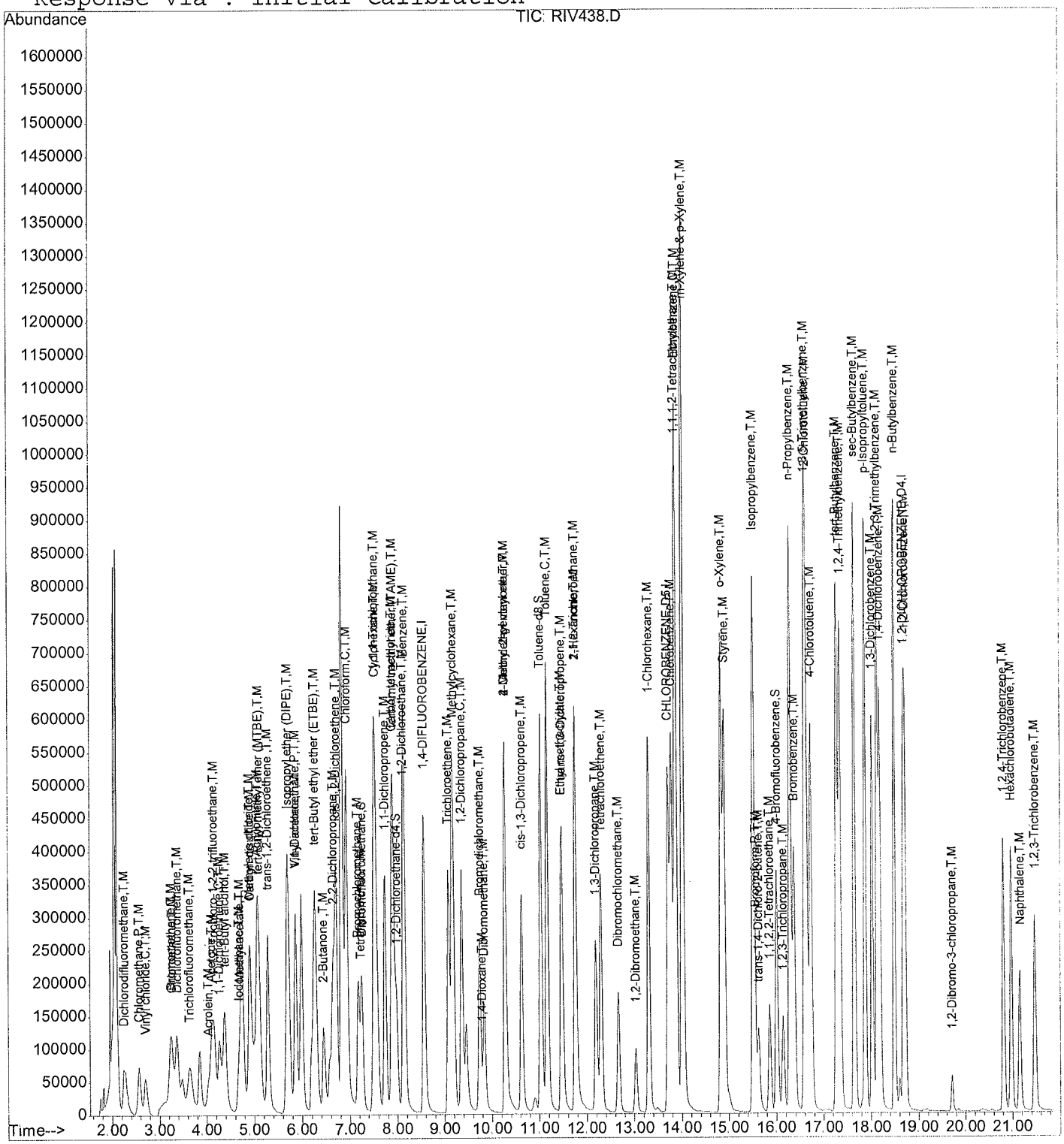
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I20\RIV438.D
Acq On : 20 Sep 2024 7:42 pm
Sample : 24I020-16M
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 21 7:31 2024

Vial: 17
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV439.D Vial: 18
Acq On : 20 Sep 2024 8:12 pm Operator: DNguye/CLingl
Sample : 24I020-16S Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 21 7:31 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	690339	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	556749	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	222732	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	211899	10.09	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.90%		
41) 1,2-Dichloroethane-d4	7.98	65	191317	10.25	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.50%		
54) Toluene-d8	11.03	98	725142	10.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.60%		
76) 4-Bromofluorobenzene	16.01	95	274169	9.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.27	85	236671	10.42	ug/l	98
5) Chloromethane	2.57	50	217924	13.23	ug/l	97
6) Vinyl chloride	2.69	62	183423	12.63	ug/l	99
7) Bromomethane	3.24	94	134093	10.42	ug/l	94
8) Chloroethane	3.29	64	138898	12.32	ug/l	97
9) Dichlorofluoromethane	3.36	67	294114	11.82	ug/l	96
10) Trichlorofluoromethane	3.63	101	295371	8.95	ug/l	98
11) Acrolein	4.03	56	31614	45.44	ug/l	85
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	120029	8.88	ug/l	97
13) Acetone	4.10	43	184907	60.21	ug/l	99
14) 1,1-Dichloroethene	4.26	61	300845	9.01	ug/l	75
15) tert-Butyl alcohol	4.38	59	258505	278.31	ug/l	94
16) Iodomethane	4.66	142	257926	8.54	ug/l	91
17) Methyl acetate	4.69	43	94336	13.21	ug/l	96
18) Methylene chloride	4.89	49	279395	12.03	ug/l	91
19) Carbon disulfide	4.92	76	616444	10.66	ug/l	100
20) Acrylonitrile	5.06	53	206303	75.19	ug/l	95
21) tert-Butyl methyl ether (M	5.09	73	460743	12.13	ug/l	98
22) trans-1,2-Dichloroethene	5.29	61	307170	10.10	ug/l	94
23) Isopropyl ether (DIPE)	5.70	45	891688	14.68	ug/l	91
24) Vinyl acetate	5.86	43	237233	10.70	ug/l	96
25) 1,1-Dichloroethane	5.85	63	448227	12.02	ug/l	98
27) tert-Butyl ethyl ether (ET	6.26	59	710955	12.66	ug/l	96
28) 2-Butanone	6.44	43	342792	75.42	ug/l	94
29) 2,2-Dichloropropane	6.65	77	358368	9.64	ug/l	98
30) cis-1,2-Dichloroethene	6.71	96	253824	10.82	ug/l	95
31) Chloroform	6.93	83	671574	16.00	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV439.D
Acq On : 20 Sep 2024 8:12 pm
Sample : 24I020-16S
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 21 7:31 2024

Vial: 18
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.17	49	191449	13.43	ug/l		79
33)	Tetrahydrofuran	7.23	42	30573	12.05	ug/l		88
35)	1,1,1-Trichloroethane	7.51	97	391088	9.44	ug/l		94
36)	Cyclohexane	7.54	84	378845	12.70	ug/l		98
38)	1,1-Dichloropropene	7.74	110	100116	8.82	ug/l		100
39)	Carbon tetrachloride	7.89	119	295027	8.57	ug/l		98
40)	tert-Amyl methyl ether (TA	7.91	73	527446	12.78	ug/l		97
42)	Benzene	8.14	78	853900	11.23	ug/l		98
43)	1,2-Dichloroethane	8.12	62	265907	11.19	ug/l		100
44)	Trichloroethene	9.08	130	217137	8.98	ug/l		92
45)	Methylcyclohexane	9.17	83	430425	12.93	ug/l		94
46)	1,2-Dichloropropane	9.36	63	239866	13.82	ug/l		82
47)	Bromodichloromethane	9.73	83	337221	11.14	ug/l		95
48)	1,4-Dioxane	9.77	88	16231	188.94	ug/l		80
49)	Dibromomethane	9.83	93	101468	10.51	ug/l		93
50)	2-Chloroethyl vinyl ether	10.29	63	936	0.17	ug/l	#	1
51)	4-Methyl-2-pentanone	10.26	43	858491	82.73	ug/l		98
52)	cis-1,3-Dichloropropene	10.62	75	356267	11.63	ug/l		98
55)	Toluene	11.17	91	943272	11.31	ug/l		99
56)	Ethyl methacrylate	11.46	69	209677	14.90	ug/l		94
57)	trans-1,3-Dichloropropene	11.48	75	295451	12.21	ug/l		99
58)	1,1,2-Trichloroethane	11.74	97	160548	13.14	ug/l		96
59)	2-Hexanone	11.76	43	549673	80.71	ug/l		97
60)	1,3-Dichloropropane	12.19	76	291199	13.38	ug/l		99
61)	Tetrachloroethene	12.31	164	169490	8.94	ug/l		95
62)	Dibromochloromethane	12.66	129	190298	11.78	ug/l		99
63)	1,2-Dibromoethane	13.03	107	139741	11.36	ug/l		99
64)	1-Chlorohexane	13.31	91	383238	9.91	ug/l		99
65)	Chlorobenzene	13.79	112	622664	10.86	ug/l		99
66)	1,1,1,2-Tetrachloroethane	13.86	131	222145	11.60	ug/l		100
67)	Ethylbenzene	13.88	91	1103169	10.56	ug/l		100
68)	m-Xylene & p-Xylene	14.02	91	1653883	20.06	ug/l		100
69)	o-Xylene	14.84	91	867987	10.92	ug/l		100
70)	Styrene	14.91	104	664215	11.42	ug/l		96
71)	Isopropylbenzene	15.52	105	1161422	10.66	ug/l		99
73)	Bromoform	15.56	173	89836	10.98	ug/l		99
74)	trans-1,4-Dichloro-2-buten	15.62	53	58954	11.85	ug/l		84
75)	1,1,2,2-Tetrachloroethane	15.86	83	180751	13.59	ug/l		94
77)	1,2,3-Trichloropropane	16.14	110	51805	10.58	ug/l		79
78)	n-Propylbenzene	16.29	91	1373458	9.70	ug/l		99
79)	Bromobenzene	16.38	156	213891	9.97	ug/l		96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I20\RIV439.D
Acq On : 20 Sep 2024 8:12 pm
Sample : 24I020-16S
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 21 7:31 2024

Vial: 18
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	863626	9.24	ug/l	99
81)	2-Chlorotoluene	16.63	91	908563	9.77	ug/l	100
82)	4-Chlorotoluene	16.73	91	742483	9.35	ug/l	98
83)	tert-Butylbenzene	17.28	134	195379	9.45	ug/l	97
84)	1,2,4-Trimethylbenzene	17.36	105	830582	9.30	ug/l	99
85)	sec-Butylbenzene	17.65	105	1253786	9.94	ug/l	99
86)	p-Isopropyltoluene	17.87	119	949746	8.85	ug/l	98
87)	1,3-Dichlorobenzene	18.02	146	422225	9.51	ug/l	96
88)	1,2,3-Trimethylbenzene	18.13	105	847769	9.78	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	409669	9.54	ug/l	97
90)	n-Butylbenzene	18.50	91	906473	9.22	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	369236	10.10	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.73	157	24280	11.78	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	249985	10.06	ug/l	97
94)	Hexachlorobutadiene	20.97	225	140686	8.62	ug/l	99
95)	Naphthalene	21.16	128	357420	10.09	ug/l	100
96)	1,2,3-Trichlorobenzene	21.47	180	198903	10.47	ug/l	96

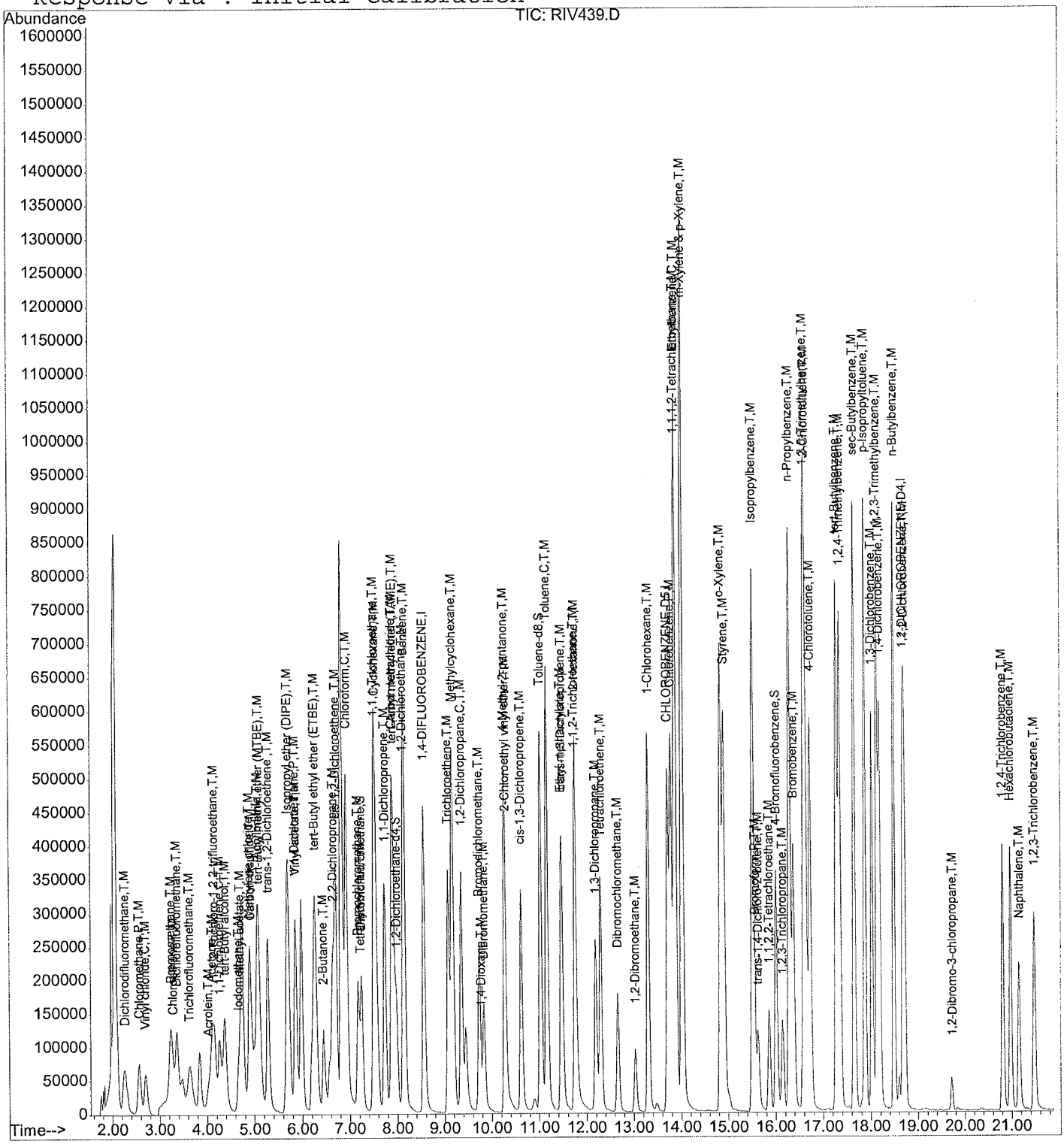
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I20\RIV439.D
Acq On : 20 Sep 2024 8:12 pm
Sample : 24I020-16S
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 21 7:31 2024

Vial: 18
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



INITIAL CALIBRATIONS

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL
Lab Code : EMAX SDG No : ICAL
Lab File ID: RIG001 BFB Injection Date: 09/04/24
Instrument ID: E2 BFB Injection Time: 12:22

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	21.751
75	30 - 60% of mass 95	54.057
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.424
173	Less than 2% of mass 174	0.838(.88)1
174	Greater than 50% of mass 95	95.046
175	5 - 9% of mass 174	7.825(8.23)1
176	95 - 101% % of mass 174	90.681(95.41)1
177	5 - 9% % of mass 176	6.237(6.88)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	VOE2I041	RIG002	09/04/24	13:12
2	VSTD0.5	VOE2I042	RIG003	09/04/24	13:38
3	VSTD1	VOE2I043	RIG004	09/04/24	14:03
4	VSTD2	VOE2I044	RIG005	09/04/24	14:28
5	VSTD5	VOE2I045	RIG006	09/04/24	14:54
6	VSTD10	VOE2I046	RIG007	09/04/24	15:19
7	VSTD20	VOE2I047	RIG008	09/04/24	15:44
8	VSTD50	VOE2I048	RIG009	09/04/24	16:09
9	VSTD100	VOE2I049	RIG010	09/04/24	16:34
10	VSTD200	VOE2I0410	RIG011	09/04/24	16:59

10/4/24

INITIAL_CALI8RATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :E2
8eginning DateTime :09/04/24 13:12
Spike Units :PP8
IC File :RIG007

Column Spec :RTX-502.2 ID :0.32MM
Ending DateTime :09/04/24 16:59
HPChem Method :VOe2I04

M	IDX	Parameters	3 13:12 RIG002	5 13:38 RIG003	1 14:03 RIG004	2 14:28 RIG005	5 14:54 RIG006	10 15:19 RIG007	20 15:44 RIG008	50 16:09 RIG009	100 16:34 RIG010	200 16:59 RIG011	Av_RRF	% RSD	Av_Rt_M
	1	1,4-DIFLUOR0BENZENE	1	1	1	1	1	1	1	1	1	1	1	0	5.9885
	2	Dichlorodifluoromethane	0.295	0.363	0.310	0.268	0.336	0.317	0.322	0.305	0.284	0.292	0.309	8.80	2.7189
	3	Chloromethane	0.451	0.295	0.322	0.230	0.241	0.229	0.226	0.213	0.204	0.216	0.263	29.05	2.9335
	4	Vinyl chloride	------	0.289	0.276	0.233	0.279	0.270	0.269	0.271	0.254	0.258	0.267	6.12	2.9940
	5	8romomethane	------	0.238	0.205	0.176	0.170	0.156	0.136	------	------	------	0.180	20.17	3.3242
	6	Dichlorofluoromethane	0.558	0.691	0.735	0.662	0.729	0.646	0.655	0.614	0.620	0.632	0.654	8.24	3.3572
	7	Chloroethane	0.180	0.150	0.140	0.122	0.148	0.129	0.135	0.129	0.126	0.128	0.139	12.50	3.3528
	8	Trichlorofluoromethane	0.498	0.506	0.485	0.453	0.535	0.514	0.516	0.486	0.460	0.454	0.491	5.76	3.5190
5	9	Acrolein	------	0.032	0.034	0.031	0.033	0.033	0.035	0.035	0.034	0.035	0.034	4.33	3.7534
	10	1,1,2-Trichloro-1,2,2-Trifluoroethane	0.253	0.249	0.314	0.279	0.331	0.292	0.286	0.285	0.281	0.287	0.286	8.54	3.7512
5	11	Acetone	------	------	------	0.225	0.159	0.139	0.138	0.130	------	------	0.158	24.60	3.7754
25	12	tert-8utyl alcohol	0.033	0.041	0.042	0.039	0.037	0.040	0.041	0.042	0.040	0.039	0.039	6.71	3.8744
	13	1,1-Dichloroethene	0.519	0.605	0.686	0.577	0.673	0.611	0.604	0.592	0.592	0.613	0.607	7.70	3.9074
10	14	Acetonitrile	------	0.024	0.027	0.023	0.022	0.022	0.024	0.023	0.021	0.021	0.023	7.48	3.8744
	15	Allyl chloride	0.146	0.198	0.178	0.148	0.171	0.161	0.156	0.148	0.150	0.149	0.160	10.63	4.1055
	16	Iodomethane	0.400	0.326	0.306	0.278	0.309	0.333	0.369	0.406	0.452	0.422	0.360	16.09	4.1495
	17	Methyl acetate	------	------	0.430	0.326	0.308	0.302	0.300	0.301	0.288	0.294	0.319	14.63	4.0285
	18	Methylene chloride	0.650	0.635	0.638	0.560	0.574	0.522	0.519	0.495	0.508	0.522	0.562	10.51	4.1826
5	19	Acrylonitrile	0.122	0.142	0.145	0.147	0.145	0.145	0.146	0.150	0.145	0.144	0.143	5.32	4.2156
	20	tert-8utyl methyl ether (MT8E)	0.898	1.059	1.100	0.959	1.114	1.077	1.087	1.057	1.080	1.046	1.048	6.45	4.2277
	21	Carbon disulfide	1.018	0.893	0.774	0.807	0.966	0.881	0.952	0.965	------	------	0.907	9.28	4.3147
	22	trans-1,2-Dichloroethene	0.282	0.332	0.363	0.286	0.352	0.308	0.314	0.307	0.309	0.322	0.318	8.16	4.3719
	23	Isopropyl ether (DIPE)	1.045	1.093	1.209	1.101	1.247	1.175	1.199	1.193	1.237	1.110	1.161	5.91	4.4665
	24	Vinyl acetate	------	0.638	0.640	0.649	0.772	0.713	0.739	0.758	0.734	0.728	0.708	7.34	4.5457
	25	1,1-Dichloroethane	0.572	0.656	0.749	0.637	0.696	0.670	0.665	0.644	0.651	0.674	0.661	6.76	4.6349
	26	tert-Butyl ethyl ether (ET8E)	1.016	1.242	1.376	1.285	1.379	1.350	1.380	1.365	1.412	------	1.312	9.35	4.7353
5	27	2-8utanone	------	------	0.049	0.042	0.038	0.040	0.042	0.041	0.039	0.040	0.042	8.13	4.8539
10	28	Propionitrile	0.034	0.044	0.053	0.048	0.049	0.049	0.049	0.049	0.049	0.051	0.048	10.97	4.9166
20	29	Isobutyl alcohol	------	0.016	0.018	0.017	0.017	0.017	0.018	0.019	0.018	0.018	0.018	4.54	5.0300
	30	2,2-Dichloropropane	0.595	0.636	0.685	0.593	0.689	0.646	0.666	0.659	0.679	0.686	0.653	5.50	5.0256
10	31	Methacrylonitrile	0.069	0.078	0.083	0.073	0.084	0.082	0.083	0.081	0.080	------	0.079	6.39	5.0630
	32	cis-1,2-Dichloroethene	0.314	0.377	0.415	0.343	0.388	0.380	0.378	0.369	0.383	0.406	0.375	7.77	5.0630
	33	Chloroform	------	------	1.046	0.845	0.888	0.814	0.800	0.760	0.773	0.769	0.837	11.33	5.1730
	34	8romochloromethane	0.214	0.233	0.257	0.226	0.262	0.239	0.241	0.225	0.223	0.220	0.234	6.82	5.3271
	35	Tetrahydrofuran	------	------	0.107	0.109	0.114	0.116	0.120	0.121	0.118	0.123	0.116	4.75	5.3243
	36	Dibromofluoromethane	1.016	0.644	0.476	0.425	0.445	0.451	0.440	0.426	------	------	0.540	37.96	5.3381
	37	1,1,1-Trichloroethane	0.666	0.710	0.744	0.663	0.782	0.726	0.712	0.717	0.716	0.723	0.716	4.79	5.5032
	38	Cyclohexane	------	0.274	0.384	0.335	0.341	0.348	0.389	0.398	0.400	0.418	0.365	12.30	5.5472
	39	tert-Amyl methyl ether (TAME)	------	0.207	0.238	0.218	0.247	0.235	0.252	0.243	0.249	0.257	0.239	6.89	5.6206
	40	1,1-Dichloropropene	0.126	0.140	0.152	0.141	0.167	0.153	0.158	0.160	0.162	0.169	0.153	8.92	5.6121
	41	1,2-Dichloroethane-d4	------	------	------	0.669	0.652	0.617	0.608	0.590	------	------	0.627	5.16	5.7233
	42	Carbon tetrachloride	0.603	0.586	0.715	0.593	0.682	0.642	0.629	0.633	0.626	0.629	0.634	6.23	5.7354
	43	1,2-Dichloroethane	0.633	0.672	0.822	0.730	0.755	0.710	0.714	0.688	0.683	0.678	0.708	7.37	5.8014
	44	8enzene	1.128	1.220	1.385	1.176	1.301	1.216	1.246	1.224	1.263	------	1.240	5.93	5.8664
	45	Trichloroethene	0.349	0.326	0.363	0.311	0.357	0.336	0.333	0.333	0.336	0.351	0.339	4.58	6.3726
	46	Methyl methacrylate	0.274	0.293	0.290	0.273	0.305	0.312	0.321	0.330	0.334	0.346	0.308	8.22	6.4397
	47	Methylcyclohexane	0.338	0.299	0.354	0.328	0.334	0.347	0.399	0.404	0.413	------	0.357	10.98	6.4570
	48	1,2-Dichloropropane	0.280	0.330	0.383	0.323	0.360	0.333	0.335	0.335	0.347	0.360	0.339	8.09	6.5278
20	49	1,4-Dioxane	------	------	------	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	11.26	6.7311
	50	8romodichloromethane	------	------	0.813	0.704	0.700	0.640	0.628	0.613	0.620	0.622	0.667	10.34	6.7715
	51	Dibromomethane	0.221	0.318	0.317	0.263	0.294	0.284	0.268	0.273	0.273	0.278	0.279	9.98	6.8645
	52	2-Chloroethyl vinyl ether	------	0.127	0.126	0.131	0.153	0.155	0.161	0.160	0.159	0.165	0.149	10.70	6.9338
5	53	4-Methyl-2-pentanone	0.338	0.407	0.431	0.408	0.426	0.465	0.467	0.485	------	------	0.428	10.82	6.9614
	54	cis-1,3-Dichloropropene	0.457	0.489	0.614	0.539	0.614	0.580	0.602	0.603	0.619	0.644	0.576	10.67	7.2750
	55	CHLOR0BENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	9.5641
	56	Toluene-d8	------	------	1.573	1.391	1.407	1.413	1.363	1.389	------	------	1.423	5.32	7.5942
	57	Ethyl methacrylate	------	0.379	0.444	0.424	0.528	0.529	0.538	0.572	0.575	0.577	0.507	14.41	7.6944
	58	Toluene	1.445	1.544	1.598	1.489	1.690	1.596	1.553	1.603	1.634	------	1.573	4.73	7.6932
	59	trans-1,3-Dichloropropene	0.566	0.684	0.746	0.715	0.776	0.742	0.757	0.790	0.803	0.780	0.736	9.45	7.8154
5	60	2-Hexanone	0.276	0.322	0.360	0.344	0.350	0.381	0.383	0.420	------	------	0.354	12.25	7.9381
	61	1,1,2-Trichloroethane	0.384	0.387	0.429	0.411	0.423	0.417	0.392	0.418	0.415	0.403	0.408	3.85	8.0465
	62	1,3-Dichloropropane	0.481	0.612	0.663	0.655	0.670	0.641	0.642	0.652	0.663	0.644	0.632	8.81	8.3535
	63	Tetrachloroethene	0.289	0.397	0.372	0.332	0.384	0.363	0.348	0.361	0.373	0.361	0.358	8.43	8.5120
	64	Dibromochloromethane	------	------	0.771	0.625	0.619	0.591	0.576	0.587	0.595	0.568	0.617	10.61	8.7827
	65	1,2-Dibromoethane	0.371	0.433	0.456	0.410	0.452	0.435	0.427	0.456	0.453	0.438	0.433	6.08	9.0689
	66	1-Chlorohexane	0.364	0.369	0.413	0.383	0.465	0.463	0.475	0.492	0.500	0.492	0.442	12.22	9.1239
	67	Chlorobenzene	1.000	1.106	1.161	1.032	1.094	1.050	1.030	1.051	1.073	1.054	1.065	4.29	9.6202
	68	1,1,1,2-Tetrachloroethane	------	0.523	0.495	0.456	0.508	0.469	0.465	0.468	0.477	0.459	0.480	4.89	9.6460
	69	Ethylbenzene	1.564	1.690	1.787	1.652	1.915	1.834	1.805	1.860	1.942	------	1.783	7.03	9.6411
2	70	m-Xylene & p-Xylene	1.188	1.225	1.448	1.333	1.519	1.464	1.433	1.493	------	------	1.388	9.01	9.7457
	71	o-Xylene	1.037	1.207	1.348	1.269	1.485	1.414	1.447	1.519	1.547	------	1.364	12.23	10.4128
	72	Styrene	0.745	0.858	0.930	0.916	1.101	1.074	1.076	1.103	1.133	1.102	1.004	13.14	10.4599
	73	Isopropylbenzene	1.222	1.151	1.340	1.337	1.569	1.580	1.599	1.674	1.716	------	1.465	14.04	10.9410
	74	1,2-DICHLOR0BENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	13.8891
	75	8romoform	0.746	0.891	0.946	0.752	0.831	0.764	0.788	0.828	0.796	0.790	0.813	7.82	11.0597
	76	1,1,2,2-Tetrachloroethane	1.032	1.031	1.014	0.927	1.003	0.934	0.966	0.987	0.962	0.970	0.983	3.79	11.2028
	77	4-8romofluorobenzene	------	------	1.305	1.078	1.039	1.038	1.021	1.033	------	------	1.086	10.04	11.3689
	78	1,2,3-Trichloropropane	------	0.274	0.313	0.292	0.292	0.286	0.293	0.296	0.280	0.272	0.289	4.33	11.4472
	79	trans-1,4-Dichloro-2-butene	------	0.290	0.337	0.290	0.378	0.368	0.372	0.402	0.381	0.374	0.355	11.37	11.5157
	80	n-Propylbenzene	2.910	2.493	3.208	3.114	3.774	3.591	3.651	3.796	3.767	------	3.367	13.70	11.5793
	81	8romobenzene	0.817	0.839	0.989	0.918	0.971	0.908	0.894	0.930	0.914	0.917	0.910	5.74	11.7332
	82	1,3,5-Trimethylbenzene	------	1.664	2.111	2.114	2.482	2.451	2.521	2.568	2.555	------	2.308	13.86	11.8312
	83	2-Chlorotoluene	1.852	2.034	2.430	2.382	2.703	2.237	2.528	2.312	2.550	------	2.336	11.37	11.9192
	84	4-Chlorotoluene	1.771	1.838	2.183	1.934	2.344	2.412	2.207	2.511	2.259	------	2.162	12.01	11.9779
	85	tert-8utylbenzene	0.379	0.325	0.348	0.311	0.393	0.374	0.385	0.405	0.390	0.396	0.370	8.60	12.4122
	86	1,2,4-Trimethylbenzene	1.890	1.720	2.220	2.163	2.611	2.512	2.574	2.643	2.639	------	2.330	14.95	12.4768
	87	sec-8utylbenzene	------	------	2.479	2.250	2.759	2.674	2.753	2.881	2.877	------	2.667	8.60	12.7525
	88	p-Isopropyltoluene	------	------	1.979	1.944	2.343	2.262	2.349	2.468	2.438	------	2.255	9.38	12.9537
	89	1,3-Dichlorobenzene	1.428	1.363	1.511	1.383	1.489	1.434	1.469	1.519	1.498	------	1.455	3.85	13.1677
	90	1,2,3-Trimethylbenzene	1.826	1.971	2.410	2.259	2.700	2.540	2.655	2.726	2.714	2.371	2.417	13.17	13.2542
	91	1,4-Dichlorobenzene	1.407	1.315	1.728	1.413	1.581	1.497	1.527	1.576	1.544	1.546	1.513	7.56	13.3279
	92	n-8utylbenzene	------	------	1.641	1.759	2.054	2.051	2.161	2.276	2.291	------	2.033	12.24	13.6124
	93	1,2-Dichlorobenzene	1.427	1.220	1.604	1.412	1.551	1.411	1.475	1.506	1.495	1.470	1.457	7.09	13.9332
	94	1,2-Dibromo-3-chloropropane	------	0.247	0.194	0.201	0.207	0.221	0.207	0.235	0.228	0.228	0.219	8.03	15.1339
	95	1,2,4-Trichlorobenzene	0.936	0.746	0.913	0.859	0.872	0.870	0.931	1.028	1.050	1.060	0.927	10.63	16.4643
	96	Hexachlorobutadiene	------	0.404	0.553	0.448	0.462	0.464	0.471	0.492	0.491	0.490	0.475	8.43	16.6600
	97	Naphthalene	1.890	1.709	2.025	1.892	2.066	2.159	2.329	2.607	2.580	------	2.140	14.56	16.8715
	98	1,2,3-Trichlorobenzene	0.865	0.761	0.865	0.817	0.938	0.876	0.923	1.035	1.027	1.031	0.914	10.38	17.2281

Spike Amount = Nominal Amount * M
Ave_%RSD : 9.6 Max_%RSD : 38

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15

10/9/24

Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
3	Chloromethane	0.00697	0.21235	0.9994
11	Acetone	0.09199	0.12613	0.9997
16	Iodomethane	-0.00862	0.42244	0.9977
36	Dibromofluoromethane	0.01279	0.42536	0.9991

Use Quadratic Regression of inv conc w.f. for comps of linear reg of inv conc w.f. with CCF < .995
Resp_Ratio = xo + x1 * Amt_Ratio + x2 * Amt_Ratio * Amt_Ratio

IDX	Parameter	x0	x1	x2	CCF2
5	Bromomethane	0.00336	0.1701	-0.01822	0.9998

10/4/24

Instrument ID :E2
Beginning DateTime :09/04/24 13:12
Spike Units :PP8
IC File :RIG007

Column Spec :RTX-502.2 ID :0.32MM
Ending DateTime :09/04/24 16:59
HPChem Method :VOe2I04

M	IDX	Parameters	3 13:12 RIG002	5 13:38 RIG003	1 14:03 RIG004	2 14:28 RIG005	5 14:54 RIG006	10 15:19 RIG007	20 15:44 RIG008	50 16:09 RIG009	100 16:34 RIG010	200 16:59 RIG011	AvDRec	% RSD	Av Rt M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	5.9885
	2	Dichlorodifluoromethane	95	117	100	87	109	103	104	99	92	94	6.6	8.80	2.7189
	3	Chloromethane	107	76	119	92	107	104	105	99	96	102	21.3	29.05	2.9335
	4	Vinyl chloride	------	108	103	87	104	101	101	101	95	97	4.5	6.12	2.9940
	5	Bromomethane	------	101	102	96	102	100	101	------	------	------	15.3	20.17	3.3242
	6	Dichlorofluoromethane	85	106	112	101	111	99	100	94	95	97	6.1	8.24	3.3572
	7	Chloroethane	129	108	101	88	106	93	97	93	91	92	9.1	12.50	3.3528
	8	Trichlorofluoromethane	101	103	99	92	109	105	105	99	94	92	4.7	5.76	3.5190
5	9	Acrolein	------	94	100	91	97	97	103	103	100	103	3.3	4.33	3.7534
	10	1,1,2-Trichloro-1,2,2-Trifluoroethane	88	87	110	98	116	102	100	100	98	100	5.7	8.54	3.7512
5	11	Acetone	------	------	------	105	97	95	102	100	------	------	17.1	24.60	3.7754
25	12	tert-Butyl alcohol	85	105	108	100	95	103	105	108	103	100	5.1	6.71	3.8744
	13	1,1-Dichloroethene	86	100	113	95	111	101	100	98	98	101	5.1	7.70	3.9074
10	14	Acetonitrile	------	104	117	100	96	96	104	100	91	91	5.8	7.48	3.8744
	15	Allyl chloride	91	124	111	92	107	101	98	92	94	93	8.2	10.63	4.1055
	16	Iodomethane	111	91	85	77	86	92	102	113	126	117	13.8	16.09	4.1495
	17	Methyl acetate	------	------	135	102	97	95	94	94	90	92	9.4	14.63	4.0285
	18	Methylene chloride	116	113	114	100	102	93	92	88	90	93	8.8	10.51	4.1826
5	19	Acrylonitrile	85	99	101	103	101	101	102	105	101	101	3.1	5.32	4.2156
	20	tert-Butyl methyl ether (MTBE)	86	101	105	92	106	103	104	101	103	100	4.6	6.45	4.2277
	21	Carbon disulfide	112	98	85	89	107	97	105	106	------	------	7.5	9.28	4.3147
	22	trans-1,2-Dichloroethene	89	104	114	90	111	97	99	97	97	101	6.3	8.16	4.3719
	23	Isopropyl ether (DIPE)	90	94	104	95	107	101	103	103	107	96	5.1	5.91	4.4665
	24	Vinyl acetate	------	90	90	92	109	101	104	107	104	103	6.2	7.34	4.5457
	25	1,1-Dichloroethane	87	99	113	96	105	101	101	97	98	102	4.4	6.76	4.6349
	26	tert-Butyl ethyl ether (ETBE)	77	95	105	98	105	103	105	104	108	------	6.6	9.35	4.7353
5	27	2-Butanone	------	------	117	100	90	95	100	98	93	95	5.7	8.13	4.8539
10	28	Propionitrile	71	92	110	100	102	102	102	102	102	106	6.5	10.97	4.9166
20	29	Isobutyl alcohol	------	89	100	94	94	94	100	106	100	100	3.7	4.54	5.0300
	30	2,2-Dichloropropane	91	97	105	91	106	99	102	101	104	105	4.4	5.50	5.0256
10	31	Methacrylonitrile	87	99	105	92	106	104	105	103	101	------	5.1	6.39	5.0630
	32	cis-1,2-Dichloroethene	84	101	111	91	103	101	101	98	102	108	5.4	7.77	5.0630
	33	Chloroform	------	------	125	101	106	97	96	91	92	92	8	11.33	5.1730
	34	Bromochloromethane	91	100	110	97	112	102	103	96	95	94	5.4	6.82	5.3271
	35	Tetrahydrofuran	------	------	92	94	98	100	103	104	102	106	3.9	4.75	5.3243
	36	Dibromofluoromethane	139	91	82	85	99	103	102	100	------	------	26.8	37.96	5.3381
	37	1,1,1-Trichloroethane	93	99	104	93	109	101	99	100	100	101	3.1	4.79	5.5032
	38	Cyclohexane	------	75	105	92	93	95	107	109	110	115	9.9	12.30	5.5472
	39	tert-Amyl methyl ether (TAME)	------	87	100	91	103	98	105	102	104	108	5.2	6.89	5.6206
	40	1,1-Dichloropropene	82	92	99	92	109	100	103	105	106	110	6.8	8.92	5.6121
	41	1,2-Dichloroethane-d4	------	------	------	107	104	98	97	94	------	------	4.2	5.16	5.7233
	42	Carbon tetrachloride	95	92	113	94	108	101	99	100	99	99	4.4	6.23	5.7354
	43	1,2-Dichloroethane	89	95	116	103	107	100	101	97	96	96	5.3	7.37	5.8014
	44	Benzene	91	98	112	95	105	98	100	99	102	------	4.2	5.93	5.8664
	45	Trichloroethene	103	96	107	92	105	99	98	98	99	104	3.6	4.58	6.3726
	46	Methyl methacrylate	89	95	94	89	99	101	104	107	108	112	6.8	8.22	6.4397
	47	Methylcyclohexane	95	84	99	92	94	97	112	113	116	------	8.9	10.98	6.4570
	48	1,2-Dichloropropane	83	97	113	95	106	98	99	99	102	106	5.7	8.09	6.5278
20	49	1,4-Dioxane	------	------	------	100	50	100	100	100	100	100	7.1	11.26	6.7311
	50	Bromodichloromethane	------	------	122	106	105	96	94	92	93	93	8	10.34	6.7715
	51	Dibromomethane	79	114	114	94	105	102	96	98	98	100	7	9.98	6.8645
	52	2-Chloroethyl vinyl ether	------	85	85	88	103	104	108	107	107	111	9.1	10.70	6.9338
5	53	4-Methyl-2-pentanone	79	95	101	95	100	109	109	113	------	------	7.9	10.82	6.9614
	54	cis-1,3-Dichloropropene	79	85	107	94	107	101	105	105	107	112	8.5	10.67	7.2750
	55	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	9.5641
	56	Toluene-d8	------	------	111	98	99	99	96	98	------	------	3.5	5.32	7.5942
	57	Ethyl methacrylate	------	75	88	84	104	104	106	113	113	114	12.1	14.41	7.6944
	58	Toluene	92	98	102	95	107	101	99	102	104	------	3.7	4.73	7.6932
	59	trans-1,3-Dichloropropene	77	93	101	97	105	101	103	107	109	106	6.6	9.45	7.8154
5	60	2-Hexanone	78	91	102	97	99	108	108	119	------	------	8.9	12.25	7.9381
	61	1,1,2-Trichloroethane	94	95	105	101	104	102	96	102	102	99	3.2	3.85	8.0465
	62	1,3-Dichloropropane	76	97	105	104	106	101	102	103	105	102	5.5	8.81	8.3535
	63	Tetrachloroethene	81	111	104	93	107	101	97	101	104	101	5.9	8.43	8.5120
	64	Dibromochloromethane	------	------	125	101	100	96	93	95	96	92	6.7	10.61	8.7827
	65	1,2-Dibromoethane	86	100	105	95	104	100	99	105	105	101	4.2	6.08	9.0689
	66	Chlorohexane	82	83	93	87	105	105	107	111	113	111	10.7	12.22	9.1239
	67	Chlorobenzene	94	104	109	97	103	99	97	99	101	99	3.3	4.29	9.6202
	68	1,1,1,2-Tetrachloroethane	------	109	103	95	106	98	97	98	99	96	4	4.89	9.6460
	69	Ethylbenzene	88	95	100	93	107	103	101	104	109	------	5.5	7.03	9.6411
2	70	m-Xylene & p-Xylene	86	88	104	96	109	105	103	108	------	------	7.5	9.01	9.7457
	71	o-Xylene	76	88	99	93	109	104	106	111	113	------	9.7	12.23	10.4128
	72	Styrene	74	85	93	91	110	107	107	110	113	110	11.3	13.14	10.4599
	73	Isopropylbenzene	83	79	91	91	107	108	109	114	117	------	12.3	14.04	10.9410
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	13.8891
	75	Bromoform	92	110	116	92	102	94	97	102	98	97	6	7.82	11.0597
	76	1,1,2,2-Tetrachloroethane	105	105	103	94	102	95	98	100	98	99	3.1	3.79	11.2028
	77	4-Bromofluorobenzene	------	------	120	99	96	96	94	95	------	------	6.8	10.04	11.3689
	78	1,2,3-Trichloropropane	------	95	108	101	101	99	101	102	97	94	3.3	4.33	11.4472
	79	trans-1,4-Dichloro-2-butene	------	82	95	82	106	104	105	113	107	105	9.2	11.37	11.5157
	80	n-Propylbenzene	86	74	95	92	112	107	108	113	112	------	11.5	13.70	11.5793
	81	Bromobenzene	90	92	109	101	107	100	98	102	100	101	4	5.74	11.7332
	82	1,3,5-Trimethylbenzene	------	72	91	92	108	106	109	111	111	------	11.2	13.86	11.8312
	83	2-Chlorotoluene	79	87	104	102	116	96	108	99	109	------	8.7	11.37	11.9192
	84	4-Chlorotoluene	82	85	101	89	108	112	102	116	104	------	9.7	12.01	11.9779
	85	tert-Butylbenzene	102	88	94	84	106	101	104	109	105	107	7	8.60	12.4122
	86	1,2,4-Trimethylbenzene	81	74	95	93	112	108	110	113	113	------	12.7	14.95	12.4768
	87	sec-Butylbenzene	------	------	93	84	103	100	103	108	108	------	6.5	8.60	12.7525
	88	p-Isopropyltoluene	------	------	88	86	104	100	104	109	108	------	7.4	9.38	12.9537
	89	1,3-Dichlorobenzene	98	94	104	95	102	99	101	104	103	------	3.2	3.85	13.1677
	90	1,2,3-Trimethylbenzene	76	82	100	93	112	105	110	113	112	98	10.3	13.17	13.2542
	91	1,4-Dichlorobenzene	93	87	114	93	104	99	101	104	102	102	5.6	7.56	13.3279
	92	n-Butylbenzene	------	------	81	87	101	101	106	112	113	------	9.4	12.24	13.6124
	93	1,2-Dichlorobenzene	98	84	110	97	106	97	101	103	103	101	4.9	7.09	13.9332
	94	1,2-Dibromo-3-chloropropane	------	113	89	92	95	101	95	107	104	104	6.6	8.03	15.1339
	95	1,2,4-Trichlorobenzene	101	80	98	93	94	94	100	111	113	114	8	10.63	16.4643
	96	Hexachlorobutadiene	------	85	116	94	97	98	99	104	103	103	5.9	8.43	16.6600
	97	Naphthalene	88	80	95	88	97	101	109	122	121	------	11.6	14.56	16.8715
	98	1,2,3-Trichlorobenzene	95	83	95	89	103	96	101	113	112	113	8.4	10.38	17.2281

Compound List Report E2

Method Path : C:\msdchem\1\METHODS\
Method File : VOE2I04.M
Title : METHOD 8260B 10mL
Last Update : Tue Sep 10 18:59:15 2024
Response Via : Initial Calibration

Total Cpnds : 98

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-DIFLUOROBENZENE	114	5.987	1.000	A	1	A	B
2	T	Dichlorodifluoromethane	85	2.719	0.454	A	1	A	B
3	T	Chloromethane	50	2.928	0.489	L	1	A	B
4	T	Vinyl chloride	62	2.994	0.500	A	1	A	B
5	T	Bromomethane	94	3.324	0.555	Q	1	A	B
6	T	Dichlorofluoromethane	67	3.357	0.561	A	1	A	B
7	T	Chloroethane	64	3.357	0.561	A	1	A	B
8	T	Trichlorofluoromethane	101	3.522	0.588	A	1	A	B
9	T	Acrolein	56	3.753	0.627	A	1	A	B
10	T	1,1,2-Trichloro-1,2,2-Trifl...	151	3.753	0.627	A	1	A	B
11	T	Acetone	43	3.775	0.631	L	1	A	B
12	T	tert-Butyl alcohol	59	3.874	0.647	A	1	A	B
13	T	1,1-Dichloroethene	61	3.907	0.653	A	2	A	B
14	T	Acetonitrile	41	3.874	0.647	A	1	A	B
15	T	Allyl chloride	76	4.106	0.686	A	1	A	B
16	T	Iodomethane	142	4.150	0.693	L	1	A	B
17	T	Methyl acetate	43	4.028	0.673	A	1	A	B
18	T	Methylene chloride	49	4.183	0.699	A	2	A	B
19	T	Acrylonitrile	53	4.216	0.704	A	2	A	B
20	T	tert-Butyl methyl ether (MTBE)	73	4.227	0.706	A	1	A	B
21	T	Carbon disulfide	76	4.315	0.721	A	1	A	B
22	T	trans-1,2-Dichloroethene	96	4.370	0.730	A	1	A	B
23	T	Isopropyl ether (DIPE)	45	4.469	0.746	A	1	A	B
24	T	Vinyl acetate	43	4.546	0.759	A	1	A	B
25	T	1,1-Dichloroethane	63	4.634	0.774	A	2	A	B
26	T	tert-Butyl ethyl ether (ETBE)	59	4.733	0.791	A	1	A	B
27	T	2-Butanone	72	4.854	0.811	A	1	A	B
28	T	Propionitrile	54	4.909	0.820	A	1	A	B
29	T	Isobutyl alcohol	43	5.030	0.840	A	1	A	B
30	T	2,2-Dichloropropane	77	5.030	0.840	A	2	A	B
31	T	Methacrylonitrile	52	5.063	0.846	A	1	A	B
32	T	cis-1,2-Dichloroethene	96	5.063	0.846	A	1	A	B
33	T	Chloroform	83	5.173	0.864	A	2	A	B
34	T	Bromochloromethane	130	5.327	0.890	A	1	A	B
35	T	Tetrahydrofuran	42	5.327	0.890	A	2	A	B
36	S	Dibromofluoromethane	111	5.338	0.892	L	1	A	B
37	T	1,1,1-Trichloroethane	97	5.503	0.919	A	2	A	B
38	T	Cyclohexane	84	5.547	0.927	A	1	A	B
39	T	tert-Amyl methyl ether (TAME)	87	5.624	0.939	A	1	A	B
40	T	1,1-Dichloropropene	110	5.613	0.938	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	5.723	0.956	A	1	A	B
42	T	Carbon tetrachloride	119	5.734	0.958	A	1	A	B
43	T	1,2-Dichloroethane	62	5.800	0.969	A	1	A	B
44	T	Benzene	78	5.866	0.980	A	2	A	B
45	T	Trichloroethene	130	6.373	1.064	A	3	A	B
46	T	Methyl methacrylate	69	6.439	1.075	A	1	A	B
47	T	Methylcyclohexane	83	6.461	1.079	A	2	A	B
48	T	1,2-Dichloropropane	63	6.527	1.090	A	1	A	B
49	T	1,4-Dioxane	88	6.725	1.123	A	1	A	B
50	T	Bromodichloromethane	83	6.769	1.131	A	1	A	B
51	T	Dibromomethane	93	6.857	1.145	A	2	A	B
52	T	2-Chloroethyl vinyl ether	63	6.934	1.158	A	1	A	B
53	T	4-Methyl-2-pentanone	43	6.967	1.164	A	3	A	B
54	T	cis-1,3-Dichloropropene	75	7.275	1.215	A	3	A	B
55	I	CHLOROBENZENE-D5	117	9.564	1.000	A	2	A	B

56	S	Toluene-d8	98	7.594	0.794	A	1	A	B
57	T	Ethyl methacrylate	69	7.693	0.804	A	1	A	B
58	T	Toluene	91	7.693	0.804	A	1	A	B
59	T	trans-1,3-Dichloropropene	75	7.814	0.817	A	1	A	B
60	T	2-Hexanone	43	7.935	0.830	A	1	A	B
61	T	1,1,2-Trichloroethane	97	8.045	0.841	A	2	A	B
62	T	1,3-Dichloropropane	76	8.354	0.873	A	1	A	B
63	T	Tetrachloroethene	164	8.519	0.891	A	3	A	B
64	T	Dibromochloromethane	129	8.783	0.918	A	1	A	B
65	T	1,2-Dibromoethane	107	9.069	0.948	A	1	A	B
66	T	1-Chlorohexane	91	9.124	0.954	A	1	A	B
67	T	Chlorobenzene	112	9.619	1.006	A	1	A	B
68	T	1,1,1,2-Tetrachloroethane	131	9.641	1.008	A	1	A	B
69	T	Ethylbenzene	91	9.641	1.008	A	1	A	B
70	T	m-Xylene & p-Xylene	91	9.751	1.020	A	1	A	B
71	T	o-Xylene	91	10.411	1.089	A	1	A	B
72	T	Styrene	104	10.456	1.093	A	2	A	B
73	T	Isopropylbenzene	105	10.940	1.144	A	3	A	B
74	I	1,2-DICHLOROBENZENE-D4	152	13.889	1.000	A	1	A	B
75	T	Bromoform	173	11.061	0.796	A	2	A	B
76	T	1,1,2,2-Tetrachloroethane	83	11.204	0.807	A	1	A	B
77	S	4-Bromofluorobenzene	95	11.369	0.819	A	2	A	B
78	T	1,2,3-Trichloropropane	110	11.446	0.824	A	1	A	B
79	T	trans-1,4-Dichloro-2-butene	53	11.512	0.829	A	1	A	B
80	T	n-Propylbenzene	91	11.578	0.834	A	2	A	B
81	T	Bromobenzene	156	11.732	0.845	A	1	A	B
82	T	1,3,5-Trimethylbenzene	105	11.831	0.852	A	2	A	B
83	T	2-Chlorotoluene	91	11.919	0.858	A	1	A	B
84	T	4-Chlorotoluene	91	11.974	0.862	A	1	A	B
85	T	tert-Butylbenzene	134	12.414	0.894	A	1	A	B
86	T	1,2,4-Trimethylbenzene	105	12.480	0.899	A	1	A	B
87	T	sec-Butylbenzene	105	12.756	0.918	A	1	A	B
88	T	p-Isopropyltoluene	119	12.954	0.933	A	2	A	B
89	T	1,3-Dichlorobenzene	146	13.163	0.948	A	2	A	B
90	T	1,2,3-Trimethylbenzene	105	13.251	0.954	A	2	A	B
91	T	1,4-Dichlorobenzene	146	13.328	0.960	A	2	A	B
92	T	n-Butylbenzene	91	13.614	0.980	A	2	A	B
93	T	1,2-Dichlorobenzene	146	13.933	1.003	A	1	A	B
94	T	1,2-Dibromo-3-chloropropane	157	15.133	1.090	A	1	A	B
95	T	1,2,4-Trichlorobenzene	180	16.464	1.185	A	2	A	B
96	T	Hexachlorobutadiene	225	16.662	1.200	A	2	A	B
97	T	Naphthalene	128	16.872	1.215	A	1	A	B
98	T	1,2,3-Trichlorobenzene	180	17.235	1.241	A	2	A	B

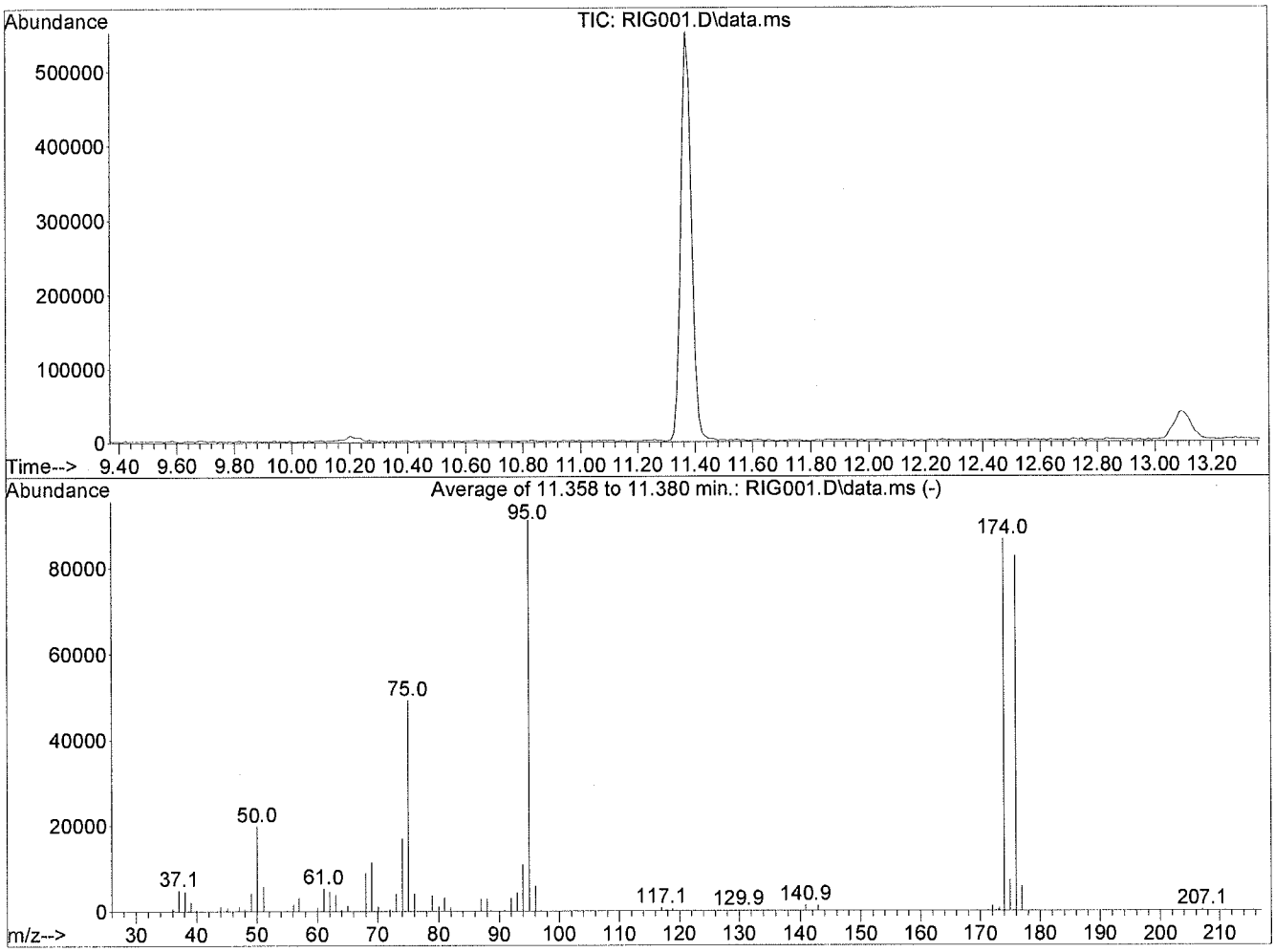
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VOE2I04.M Tue Sep 10 19:03:52 2024

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG001.D
Acq On : 4 Sep 2024 12:22 pm
Operator : DNguye
Sample : BFBE2I01
Misc : T/CHK
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\VOE2I04.M
Title : METHOD 8260B 10mL
Last Update : Tue Sep 10 18:59:15 2024



AutoFind: Scans 797, 798, 799; Background Corrected with Scan 791

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.8	19811	PASS
75	95	30	60	54.1	49235	PASS
95	95	100	100	100.0	91080	PASS
96	95	5	9	6.4	5851	PASS
173	174	0.00	2	0.9	763	PASS
174	95	50	100	95.0	86568	PASS
175	174	5	9	8.2	7127	PASS
176	174	95	101	95.4	82592	PASS
177	176	5	9	6.9	5681	PASS

CA 10/4/24

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG002.D
Acq On : 4 Sep 2024 1:12 pm
Operator : DNguye
Sample : VOE2I041 0.012
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 19:52:34 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.999	114	841897	10.00	ug/l	0.01
55) CHLOROBENZENE-D5	9.564	117	681850	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	345376	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	25665	0.42	ug/l	0.00
Spiked Amount 10.000			Recovery =	4.20%		
41) 1,2-Dichloroethane-d4	5.723	65	36931	0.70	ug/L	0.00
Spiked Amount 10.000			Recovery =	7.00%		
56) Toluene-d8	7.594	98	76849	0.79	ug/l	0.00
Spiked Amount 10.000			Recovery =	7.90%		
77) 4-Bromofluorobenzene	11.369	95	31430	0.84	ug/l	0.00
Spiked Amount 10.000			Recovery =	8.40%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	7447	0.29	ug/l	89
3) Chloromethane	2.928	50	11583	0.32	ug/l	96
5) Bromomethane	3.324	94	7670	0.34	ug/l	99
6) Dichlorofluoromethane	3.357	67	14105	0.26	ug/L	87
7) Chloroethane	3.357	64	4554	0.39	ug/l	72
8) Trichlorofluoromethane	3.522	101	12571	0.30	ug/l	84
9) Acrolein	3.753	56	3282	1.16	ug/l	66
10) 1,1,2-Trichloro-1,2,2-...	3.742	151	6392	0.27	ug/l	86
11) Acetone	3.776	43	134735	5.39	ug/l	96
12) tert-Butyl alcohol	3.875	59	20977	6.32	ug/L	88
13) 1,1-Dichloroethene	3.908	61	13106	0.26	ug/l	99
14) Acetonitrile	3.875	41	5669	1.45	ug/L	69
15) Allyl chloride	4.106	76	3694	0.27	ug/L	100
16) Iodomethane	4.150	142	10096	0.49	ug/l	93
17) Methyl acetate	4.029	43	17179	0.64	ug/L	77
18) Methylene chloride	4.183	49	16415	0.35	ug/l	97
19) Acrylonitrile	4.216	53	15425	1.28	ug/l	99
20) tert-Butyl methyl ethe...	4.227	73	22685	0.26	ug/L	94
21) Carbon disulfide	4.315	76	25700	0.34	ug/l	94
22) trans-1,2-Dichloroethene	4.370	96	7128	0.27	ug/l	91
23) Isopropyl ether (DIPE)	4.469	45	26400	0.27	ug/l	96
25) 1,1-Dichloroethane	4.634	63	14459	0.26	ug/l	98
26) tert-Butyl ethyl ether...	4.744	59	25671	0.23	ug/l	99
27) 2-Butanone	4.854	72	11515	3.29	ug/l	72
28) Propionitrile	4.920	54	8689	2.17	ug/L	90
30) 2,2-Dichloropropane	5.030	77	15017	0.27	ug/l	88
31) Methacrylonitrile	5.063	52	17487	2.62	ug/L	96
32) cis-1,2-Dichloroethene	5.063	96	7921	0.25	ug/l	96
33) Chloroform	5.173	83	33435	0.47	ug/l	98
34) Bromochloromethane	5.327	130	5396	0.27	ug/l	77
37) 1,1,1-Trichloroethane	5.503	97	16831	0.28	ug/l	91
38) Cyclohexane	5.558	84	6610	0.21	ug/L	86
39) tert-Amyl methyl ether...	5.635	87	2995	0.15	ug/l	69
40) 1,1-Dichloropropene	5.613	110	3182	0.25	ug/L	93
42) Carbon tetrachloride	5.745	119	15238	0.29	ug/L	89
43) 1,2-Dichloroethane	5.800	62	15976	0.27	ug/L	91
44) Benzene	5.866	78	28479	0.27	ug/L	99
45) Trichloroethene	6.373	130	8823	0.31	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG002.D
Acq On : 4 Sep 2024 1:12 pm
Operator : DNguye
Sample : VOE2I041 0.012
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 19:52:34 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

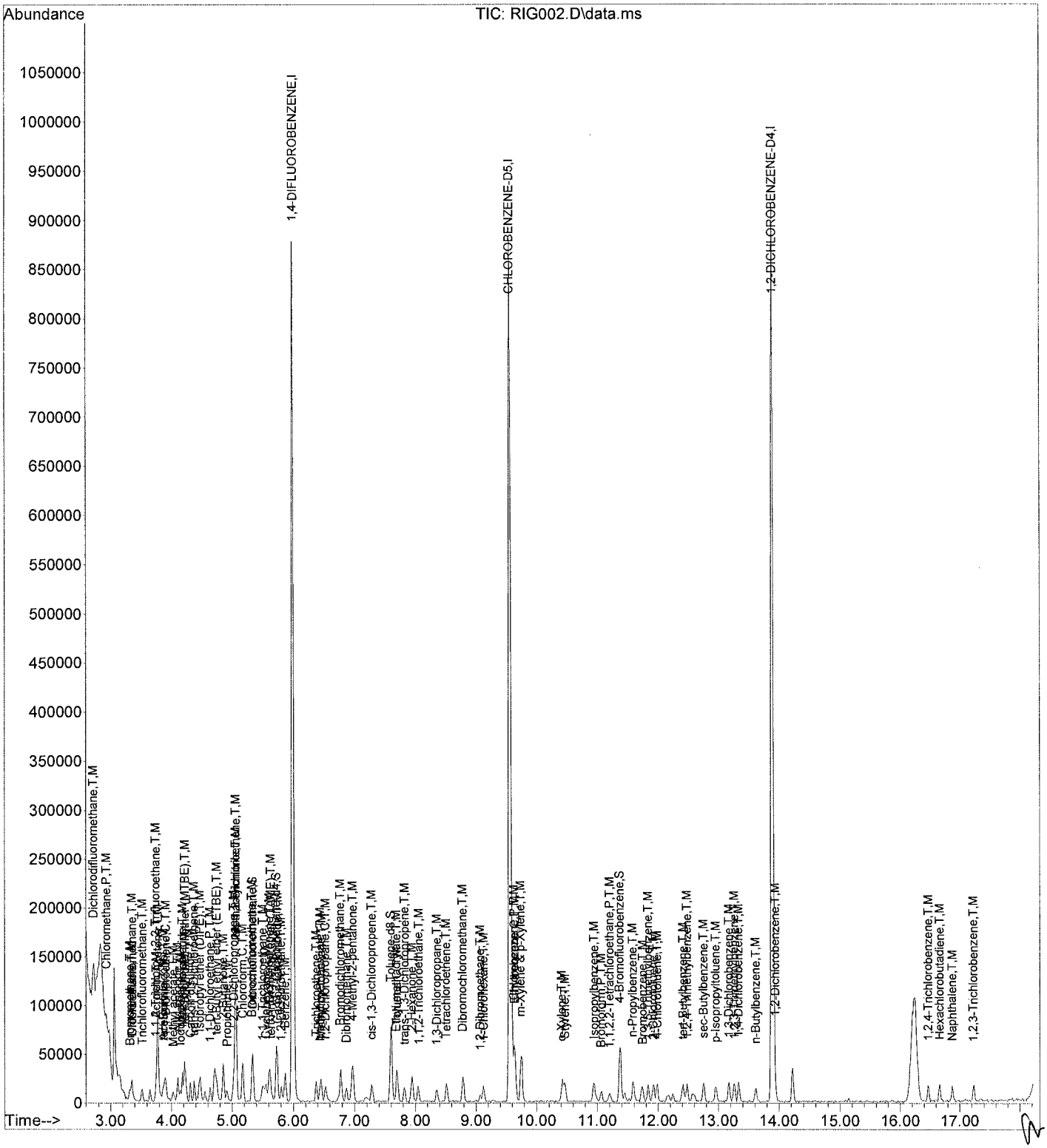
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) Methyl methacrylate	6.439	69	6928	0.27	ug/L	84
47) Methylcyclohexane	6.461	83	8549	0.28	ug/L	91
48) 1,2-Dichloropropane	6.527	63	7077	0.25	ug/L	96
50) Bromodichloromethane	6.769	83	27933	0.50	ug/L	98
51) Dibromomethane	6.868	93	5579	0.24	ug/L	92
53) 4-Methyl-2-pentanone	6.967	43	42735	1.18	ug/L	94
54) cis-1,3-Dichloropropene	7.275	75	11534	0.24	ug/L	85
57) Ethyl methacrylate	7.682	69	5876	0.17	ug/L	74
58) Toluene	7.693	91	29555	0.28	ug/l	93
59) trans-1,3-Dichloropropene	7.825	75	11585	0.23	ug/l	97
60) 2-Hexanone	7.946	43	28231	1.17	ug/l	94
61) 1,1,2-Trichloroethane	8.056	97	7846	0.28	ug/l	86
62) 1,3-Dichloropropane	8.354	76	9837	0.23	ug/l	97
63) Tetrachloroethene	8.508	164	5907	0.24	ug/l	94
64) Dibromochloromethane	8.783	129	21844	0.52	ug/l	95
65) 1,2-Dibromoethane	9.069	107	7594	0.26	ug/l	99
66) 1-Chlorohexane	9.124	91	7438	0.25	ug/l	86
67) Chlorobenzene	9.630	112	20464	0.28	ug/l	97
69) Ethylbenzene	9.641	91	31991	0.26	ug/l	92
70) m-Xylene & p-Xylene	9.740	91	48603	0.51	ug/l	100
71) o-Xylene	10.412	91	21204	0.23	ug/l	90
72) Styrene	10.467	104	15249	0.22	ug/l	94
73) Isopropylbenzene	10.951	105	25006	0.25	ug/L	96
75) Bromoform	11.061	173	7729	0.28	ug/l	97
76) 1,1,2,2-Tetrachloroethane	11.204	83	10695	0.32	ug/l	91
80) n-Propylbenzene	11.578	91	30156	0.26	ug/l	93
81) Bromobenzene	11.743	156	8460	0.27	ug/l	99
82) 1,3,5-Trimethylbenzene	11.831	105	17917	0.22	ug/l	99
83) 2-Chlorotoluene	11.919	91	19186	0.24	ug/l	94
84) 4-Chlorotoluene	11.985	91	18351	0.25	ug/l	92
85) tert-Butylbenzene	12.415	134	3922	0.31	ug/l	92
86) 1,2,4-Trimethylbenzene	12.481	105	19586	0.24	ug/l	88
87) sec-Butylbenzene	12.756	105	23341	0.25	ug/l	98
88) p-Isopropyltoluene	12.954	119	18190	0.23	ug/l	92
89) 1,3-Dichlorobenzene	13.174	146	14798	0.29	ug/l	91
90) 1,2,3-Trimethylbenzene	13.262	105	18915	0.23	ug/L	88
91) 1,4-Dichlorobenzene	13.328	146	14575	0.28	ug/l	94
92) n-Butylbenzene	13.614	91	17852	0.25	ug/l	96
93) 1,2-Dichlorobenzene	13.933	146	14790	0.29	ug/l	94
95) 1,2,4-Trichlorobenzene	16.464	180	9700	0.30	ug/l	100
96) Hexachlorobutadiene	16.663	225	8518	0.52	ug/l	89
97) Naphthalene	16.872	128	19580	0.26	ug/l	87
98) 1,2,3-Trichlorobenzene	17.224	180	8961	0.28	ug/l	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

10/4/24

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG002.D
Acq On : 4 Sep 2024 1:12 pm
Operator : DNguye
Sample : VOE2I041 0.012
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 19:52:34 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG003.D
Acq On : 4 Sep 2024 1:38 pm
Operator : DNguye
Sample : VOE2I042 0.02
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 19:56:24 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-DIFLUOROBENZENE	5.987	114	828151	10.00	ug/l		0.00
55) CHLOROBENZENE-D5	9.564	117	659164	10.00	ug/l		0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	346920	10.00	ug/l		0.00
System Monitoring Compounds							
36) Dibromofluoromethane	5.338	111	26674	0.46	ug/l		0.00
Spiked Amount 10.000			Recovery =	4.60%			
41) 1,2-Dichloroethane-d4	5.723	65	45504	0.88	ug/L		0.00
Spiked Amount 10.000			Recovery =	8.80%			
56) Toluene-d8	7.594	98	86191	0.92	ug/l		0.00
Spiked Amount 10.000			Recovery =	9.20%			
77) 4-Bromofluorobenzene	11.369	95	32809	0.87	ug/l		0.00
Spiked Amount 10.000			Recovery =	8.70%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.719	85	15017	0.59	ug/l		82
3) Chloromethane	2.928	50	12467	0.38	ug/l		93
4) Vinyl chloride	2.994	62	11949	0.54	ug/l	#	1
5) Bromomethane	3.324	94	9841	0.50	ug/l		94
6) Dichlorofluoromethane	3.357	67	28611	0.53	ug/L		100
7) Chloroethane	3.357	64	6208	0.54	ug/l		88
8) Trichlorofluoromethane	3.522	101	20944	0.52	ug/l		97
9) Acrolein	3.753	56	6586	2.37	ug/l		76
10) 1,1,2-Trichloro-1,2,2-...	3.742	151	10312	0.44	ug/l		80
11) Acetone	3.775	43	125272	4.70	ug/l		97
12) tert-Butyl alcohol	3.874	59	42073	12.89	ug/L		85
13) 1,1-Dichloroethene	3.908	61	25051	0.50	ug/l		95
14) Acetonitrile	3.874	41	10068	2.62	ug/L		94
15) Allyl chloride	4.106	76	8202	0.62	ug/L		82
16) Iodomethane	4.150	142	13489	0.59	ug/l		97
17) Methyl acetate	4.029	43	20537	0.78	ug/L		81
18) Methylene chloride	4.183	49	26275	0.56	ug/l		97
19) Acrylonitrile	4.216	53	29480	2.49	ug/l		94
20) tert-Butyl methyl ethe...	4.238	73	43854	0.51	ug/L		99
21) Carbon disulfide	4.315	76	36987	0.49	ug/l		97
22) trans-1,2-Dichloroethene	4.370	96	13761	0.52	ug/l		99
23) Isopropyl ether (DIPE)	4.469	45	45273	0.47	ug/l		97
24) Vinyl acetate	4.546	43	26429	0.45	ug/l		95
25) 1,1-Dichloroethane	4.645	63	27156	0.50	ug/l		99
26) tert-Butyl ethyl ether...	4.744	59	51441	0.47	ug/l		100
27) 2-Butanone	4.865	72	13358	3.88	ug/l		99
28) Propionitrile	4.920	54	18038	4.57	ug/L		86
29) Isobutyl alcohol	5.030	43	13557	9.24	ug/L		94
30) 2,2-Dichloropropane	5.019	77	26345	0.49	ug/l		94
31) Methacrylonitrile	5.063	52	32262	4.91	ug/L		100
32) cis-1,2-Dichloroethene	5.063	96	15623	0.50	ug/l		93
33) Chloroform	5.173	83	47669	0.69	ug/l		97
34) Bromochloromethane	5.327	130	9657	0.50	ug/l		86
35) Tetrahydrofuran	5.327	42	4426	0.46	ug/L	#	69
37) 1,1,1-Trichloroethane	5.503	97	29400	0.50	ug/l		95
38) Cyclohexane	5.547	84	11357	0.38	ug/L		89
39) tert-Amyl methyl ether...	5.624	87	8582	0.43	ug/l		93
40) 1,1-Dichloropropene	5.602	110	5788	0.46	ug/L		86

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG003.D
Acq On : 4 Sep 2024 1:38 pm
Operator : DNguye
Sample : VOE2I042 0.02
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 19:56:24 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
42) Carbon tetrachloride	5.734	119	24278	0.46 ug/L	91
43) 1,2-Dichloroethane	5.811	62	27812	0.47 ug/L	97
44) Benzene	5.866	78	50527	0.49 ug/L	96
45) Trichloroethene	6.373	130	13491	0.48 ug/L	98
46) Methyl methacrylate	6.439	69	12122	0.48 ug/L	95
47) Methylcyclohexane	6.461	83	12385	0.42 ug/L	96
48) 1,2-Dichloropropane	6.538	63	13668	0.49 ug/L	97
50) Bromodichloromethane	6.769	83	38517	0.70 ug/L	92
51) Dibromomethane	6.868	93	13152	0.57 ug/L	95
52) 2-Chloroethyl vinyl ether	6.934	63	5256	0.43 ug/L	84
53) 4-Methyl-2-pentanone	6.967	43	84261	2.37 ug/L	97
54) cis-1,3-Dichloropropene	7.275	75	20246	0.42 ug/L	97
57) Ethyl methacrylate	7.693	69	12499	0.37 ug/L	83
58) Toluene	7.693	91	50893	0.49 ug/l	93
59) trans-1,3-Dichloropropene	7.814	75	22531	0.46 ug/l	83
60) 2-Hexanone	7.935	43	53019	2.27 ug/l	98
61) 1,1,2-Trichloroethane	8.045	97	12768	0.47 ug/l	90
62) 1,3-Dichloropropane	8.354	76	20170	0.48 ug/l	97
63) Tetrachloroethene	8.519	164	13079	0.55 ug/l	83
64) Dibromochloromethane	8.794	129	30247	0.74 ug/l	97
65) 1,2-Dibromoethane	9.069	107	14255	0.50 ug/l	98
66) 1-Chlorohexane	9.124	91	12175	0.42 ug/l	96
67) Chlorobenzene	9.619	112	36462	0.52 ug/l	97
68) 1,1,1,2-Tetrachloroethane	9.641	131	17245	0.55 ug/l	93
69) Ethylbenzene	9.641	91	55713	0.47 ug/l	97
70) m-Xylene & p-Xylene	9.740	91	80740	0.88 ug/l	97
71) o-Xylene	10.412	91	39795	0.44 ug/l	97
72) Styrene	10.467	104	28287	0.43 ug/l	92
73) Isopropylbenzene	10.940	105	37922	0.39 ug/L	98
75) Bromoform	11.061	173	15455	0.55 ug/l	98
76) 1,1,2,2-Tetrachloroethane	11.204	83	17882	0.52 ug/l	96
78) 1,2,3-Trichloropropane	11.457	110	4752	0.47 ug/l	56
79) trans-1,4-Dichloro-2-b...	11.512	53	5024	0.41 ug/l	95
80) n-Propylbenzene	11.589	91	43244	0.37 ug/l	100
81) Bromobenzene	11.732	156	14552	0.46 ug/l	95
82) 1,3,5-Trimethylbenzene	11.831	105	28859	0.36 ug/l	98
83) 2-Chlorotoluene	11.919	91	35276	0.44 ug/l	90
84) 4-Chlorotoluene	11.985	91	31888	0.43 ug/l	94
85) tert-Butylbenzene	12.415	134	5633	0.44 ug/l	98
86) 1,2,4-Trimethylbenzene	12.481	105	29833	0.37 ug/l	94
87) sec-Butylbenzene	12.756	105	29508	0.32 ug/l	95
88) p-Isopropyltoluene	12.954	119	24247	0.31 ug/l	97
89) 1,3-Dichlorobenzene	13.174	146	23649	0.47 ug/l	98
90) 1,2,3-Trimethylbenzene	13.251	105	34184	0.41 ug/L	96
91) 1,4-Dichlorobenzene	13.328	146	22811	0.43 ug/l	98
92) n-Butylbenzene	13.603	91	19734	0.28 ug/l	97
93) 1,2-Dichlorobenzene	13.933	146	21163	0.42 ug/l	92
94) 1,2-Dibromo-3-chloropr...	15.144	157	4279	0.56 ug/l	99
95) 1,2,4-Trichlorobenzene	16.464	180	12932	0.40 ug/l	86
96) Hexachlorobutadiene	16.663	225	7013	0.43 ug/l	83
97) Naphthalene	16.872	128	29646	0.40 ug/l	98
98) 1,2,3-Trichlorobenzene	17.224	180	13203	0.42 ug/l	91

10/4/24

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG003.D
Acq On : 4 Sep 2024 1:38 pm
Operator : DNguye
Sample : VOE2I042 0.02
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 19:56:24 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

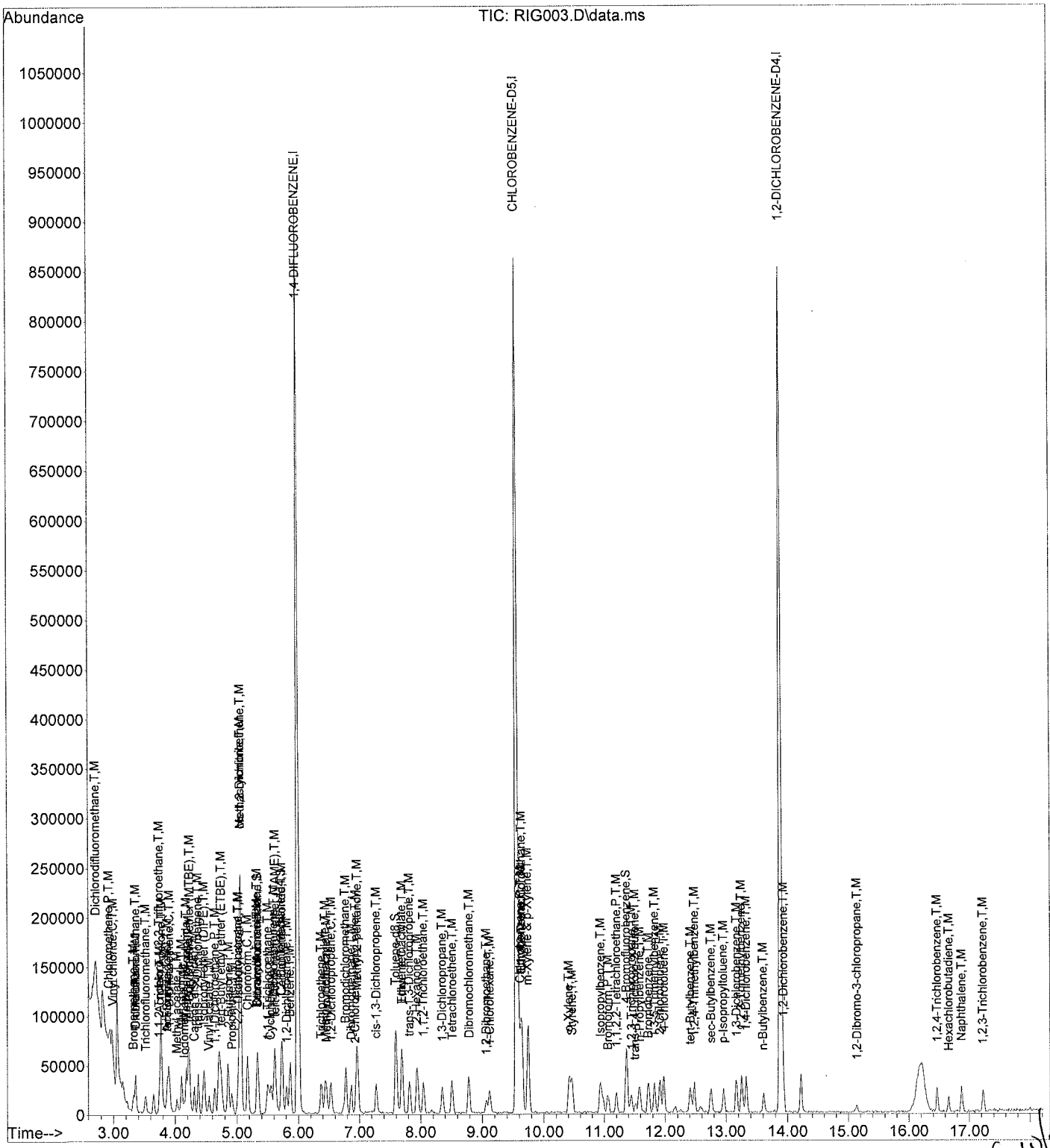
(#) = qualifier out of range (m) = manual integration (+) = signals summed

cm 10/4/24

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG003.D
Acq On : 4 Sep 2024 1:38 pm
Operator : DNguye
Sample : VOE2I042 0.02
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 19:56:24 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



VOE2I04.M Thu Oct 03 11:02:01 2024 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG004.D
Acq On : 4 Sep 2024 2:03 pm
Operator : DNguye
Sample : VOE2I043 0.04
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 19:09:48 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	812940	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	652521	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	344182	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	38667	0.82	ug/l	0.00
Spiked Amount 10.000			Recovery =	8.20%		
41) 1,2-Dichloroethane-d4	5.723	65	70586	1.38	ug/L	0.00
Spiked Amount 10.000			Recovery =	13.80%		
56) Toluene-d8	7.594	98	102638	1.11	ug/l	0.00
Spiked Amount 10.000			Recovery =	11.10%		
77) 4-Bromofluorobenzene	11.369	95	44908	1.20	ug/l	0.00
Spiked Amount 10.000			Recovery =	12.00%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	25226	1.00	ug/l	100
3) Chloromethane	2.928	50	26191	1.19	ug/l	100
4) Vinyl chloride	2.994	62	22402	1.03	ug/l	79
5) Bromomethane	3.324	94	16688	1.02	ug/l	95
6) Dichlorofluoromethane	3.357	67	59775	1.12	ug/L	97
7) Chloroethane	3.346	64	11403	1.01	ug/l	91
8) Trichlorofluoromethane	3.511	101	39431	0.99	ug/l	95
9) Acrolein	3.753	56	14018	5.14	ug/l	100
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	25528	1.10	ug/l	98
11) Acetone	3.775	43	135743	5.95	ug/l	99
12) tert-Butyl alcohol	3.874	59	86228	26.92	ug/L	91
13) 1,1-Dichloroethene	3.907	61	55734	1.13	ug/l	95
14) Acetonitrile	3.874	41	21960	5.81	ug/L	86
15) Allyl chloride	4.105	76	14476	1.11	ug/L	99
16) Iodomethane	4.149	142	24915	0.93	ug/l	89
17) Methyl acetate	4.028	43	34994	1.35	ug/L	87
18) Methylene chloride	4.182	49	51836	1.13	ug/l	95
19) Acrylonitrile	4.215	53	58863	5.06	ug/l	96
20) tert-Butyl methyl ethe...	4.226	73	89450	1.05	ug/L	93
21) Carbon disulfide	4.315	76	62942	0.85	ug/l	99
22) trans-1,2-Dichloroethene	4.381	96	29516	1.14	ug/l	90
23) Isopropyl ether (DIPE)	4.458	45	98290	1.04	ug/l	96
24) Vinyl acetate	4.546	43	52038	0.90	ug/l	97
25) 1,1-Dichloroethane	4.634	63	60857	1.13	ug/l	97
26) tert-Butyl ethyl ether...	4.733	59	111832	1.05	ug/l	97
27) 2-Butanone	4.854	72	20026	5.93	ug/l	83
28) Propionitrile	4.920	54	42953	11.10	ug/L	95
29) Isobutyl alcohol	5.030	43	29038	20.17	ug/L	95
30) 2,2-Dichloropropane	5.019	77	55673	1.05	ug/l	98
31) Methacrylonitrile	5.063	52	67345	10.45	ug/L	99
32) cis-1,2-Dichloroethene	5.063	96	33756	1.11	ug/l	100
33) Chloroform	5.173	83	85033	1.25	ug/l	97
34) Bromochloromethane	5.327	130	20863	1.10	ug/l	98
35) Tetrahydrofuran	5.316	42	8735	0.93	ug/L	90
37) 1,1,1-Trichloroethane	5.503	97	60485	1.04	ug/l	97
38) Cyclohexane	5.547	84	31251	1.05	ug/L	80
39) tert-Amyl methyl ether...	5.613	87	19339	1.00	ug/l	90
40) 1,1-Dichloropropene	5.613	110	12397	1.00	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG004.D
Acq On : 4 Sep 2024 2:03 pm
Operator : DNguye
Sample : VOE2I043 0.04
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 19:09:48 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
42) Carbon tetrachloride	5.734	119	58147	1.13 ug/L		99
43) 1,2-Dichloroethane	5.800	62	66794	1.16 ug/L		90
44) Benzene	5.866	78	112599	1.12 ug/L		95
45) Trichloroethene	6.372	130	29497	1.07 ug/L		97
46) Methyl methacrylate	6.450	69	23593	0.94 ug/L		96
47) Methylcyclohexane	6.450	83	28765	0.99 ug/L		98
48) 1,2-Dichloropropane	6.527	63	31168	1.13 ug/L		99
49) 1,4-Dioxane	6.780	88	983	6.79 ug/L		71
50) Bromodichloromethane	6.769	83	66106	1.22 ug/L		100
51) Dibromomethane	6.868	93	25731	1.14 ug/L		97
52) 2-Chloroethyl vinyl ether	6.934	63	10231	0.85 ug/L		91
53) 4-Methyl-2-pentanone	6.956	43	175092	5.03 ug/L		99
54) cis-1,3-Dichloropropene	7.275	75	49904	1.07 ug/L		98
57) Ethyl methacrylate	7.704	69	28943	0.87 ug/L		92
58) Toluene	7.693	91	104302	1.02 ug/l		99
59) trans-1,3-Dichloropropene	7.814	75	48647	1.01 ug/l		94
60) 2-Hexanone	7.946	43	117319	5.07 ug/l		96
61) 1,1,2-Trichloroethane	8.045	97	27983	1.05 ug/l		95
62) 1,3-Dichloropropane	8.353	76	43255	1.05 ug/l		99
63) Tetrachloroethene	8.508	164	24293	1.04 ug/l		96
64) Dibromochloromethane	8.783	129	50333	1.25 ug/l		100
65) 1,2-Dibromoethane	9.069	107	29782	1.05 ug/l		95
66) 1-Chlorohexane	9.124	91	26954	0.94 ug/l		100
67) Chlorobenzene	9.619	112	75726	1.09 ug/l		98
68) 1,1,1,2-Tetrachloroethane	9.652	131	32298	1.03 ug/l		97
69) Ethylbenzene	9.641	91	116604	1.00 ug/l		98
70) m-Xylene & p-Xylene	9.740	91	189023	2.09 ug/l		99
71) o-Xylene	10.422	91	87981	0.99 ug/l		99
72) Styrene	10.466	104	60681	0.93 ug/l		96
73) Isopropylbenzene	10.940	105	87456	0.91 ug/L		97
75) Bromoform	11.050	173	32561	1.16 ug/l		91
76) 1,1,2,2-Tetrachloroethane	11.193	83	34915	1.03 ug/l		94
78) 1,2,3-Trichloropropane	11.446	110	10769	1.08 ug/l		95
79) trans-1,4-Dichloro-2-b...	11.523	53	11605	0.95 ug/l		100
80) n-Propylbenzene	11.578	91	110425	0.95 ug/l		99
81) Bromobenzene	11.732	156	34053	1.09 ug/l		97
82) 1,3,5-Trimethylbenzene	11.831	105	72665	0.91 ug/l		92
83) 2-Chlorotoluene	11.919	91	83627	1.04 ug/l		90
84) 4-Chlorotoluene	11.974	91	75133	1.01 ug/l		86
85) tert-Butylbenzene	12.403	134	11969	0.94 ug/l		72
86) 1,2,4-Trimethylbenzene	12.480	105	76425	0.95 ug/l		93
87) sec-Butylbenzene	12.756	105	85312	0.93 ug/l		98
88) p-Isopropyltoluene	12.954	119	68104	0.88 ug/l		98
89) 1,3-Dichlorobenzene	13.163	146	52020	1.04 ug/l		98
90) 1,2,3-Trimethylbenzene	13.262	105	82933	1.00 ug/L		95
91) 1,4-Dichlorobenzene	13.328	146	59485	1.14 ug/l		92
92) n-Butylbenzene	13.603	91	56477	0.81 ug/l		97
93) 1,2-Dichlorobenzene	13.933	146	55201	1.10 ug/l		99
94) 1,2-Dibromo-3-chloropr...	15.133	157	6665	0.89 ug/l	#	56
95) 1,2,4-Trichlorobenzene	16.464	180	31436	0.99 ug/l		90
96) Hexachlorobutadiene	16.651	225	19032	1.16 ug/l		96
97) Naphthalene	16.871	128	69713	0.95 ug/l		93
98) 1,2,3-Trichlorobenzene	17.235	180	29780	0.95 ug/l		99

10/4/24

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG004.D
Acq On : 4 Sep 2024 2:03 pm
Operator : DNguye
Sample : VOE2I043 0.04
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 19:09:48 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

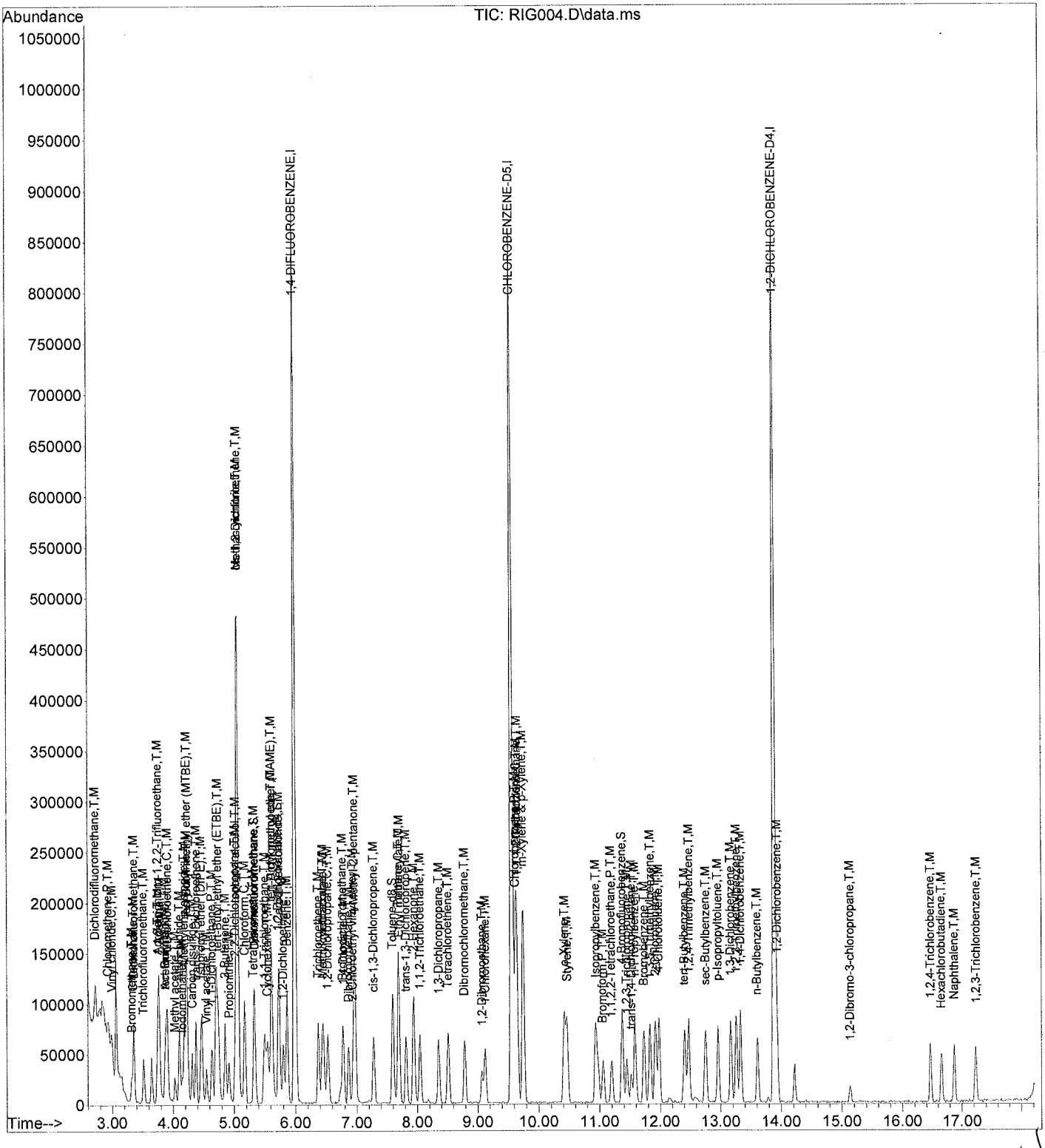
(#) = qualifier out of range (m) = manual integration (+) = signals summed

10/4/24

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG004.D
Acq On : 4 Sep 2024 2:03 pm
Operator : DNguye
Sample : VOE2I043 0.04
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 19:09:48 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG005.D
Acq On : 4 Sep 2024 2:28 pm
Operator : DNguye
Sample : VOE2I044 0.08
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 10 19:09:53 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	827343	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	654370	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	349107	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	70374	1.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	17.00%		
41) 1,2-Dichloroethane-d4	5.723	65	110655	2.13	ug/L	0.00
Spiked Amount 10.000			Recovery =	21.30%		
56) Toluene-d8	7.594	98	182002	1.96	ug/l	0.00
Spiked Amount 10.000			Recovery =	19.60%		
77) 4-Bromofluorobenzene	11.369	95	75233	1.99	ug/l	0.00
Spiked Amount 10.000			Recovery =	19.90%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	44277	1.73	ug/l	99
3) Chloromethane	2.928	50	38114	1.84	ug/l	90
4) Vinyl chloride	2.994	62	38512	1.75	ug/l	84
5) Bromomethane	3.324	94	29163	1.91	ug/l	99
6) Dichlorofluoromethane	3.357	67	109574	2.02	ug/L	97
7) Chloroethane	3.357	64	20122	1.75	ug/l	96
8) Trichlorofluoromethane	3.522	101	74891	1.85	ug/l	100
9) Acrolein	3.753	56	25800	9.30	ug/l	88
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	46148	1.95	ug/l	99
11) Acetone	3.775	43	186194	10.55	ug/l	98
12) tert-Butyl alcohol	3.874	59	160045	49.10	ug/L	92
13) 1,1-Dichloroethene	3.907	61	95405	1.90	ug/l	98
14) Acetonitrile	3.874	41	38792	10.09	ug/L	93
15) Allyl chloride	4.105	76	24427	1.84	ug/L	96
16) Iodomethane	4.149	142	46059	1.52	ug/l	99
17) Methyl acetate	4.028	43	53998	2.05	ug/L	98
18) Methylene chloride	4.183	49	92703	1.99	ug/l	95
19) Acrylonitrile	4.216	53	121362	10.25	ug/l	96
20) tert-Butyl methyl ethe...	4.227	73	158689	1.83	ug/L	98
21) Carbon disulfide	4.315	76	133514	1.78	ug/l	100
22) trans-1,2-Dichloroethene	4.370	96	47314	1.80	ug/l	98
23) Isopropyl ether (DIPE)	4.469	45	182123	1.90	ug/l	98
24) Vinyl acetate	4.546	43	107441	1.83	ug/l	96
25) 1,1-Dichloroethane	4.634	63	105420	1.93	ug/l	98
26) tert-Butyl ethyl ether...	4.733	59	212608	1.96	ug/l	94
27) 2-Butanone	4.854	72	35046	10.20	ug/l	94
28) Propionitrile	4.920	54	79725	20.24	ug/L	99
29) Isobutyl alcohol	5.030	43	57080	38.96	ug/L	88
30) 2,2-Dichloropropane	5.019	77	98091	1.81	ug/l	98
31) Methacrylonitrile	5.063	52	120701	18.40	ug/L	96
32) cis-1,2-Dichloroethene	5.063	96	56791	1.83	ug/l	96
33) Chloroform	5.173	83	139869	2.02	ug/l	98
34) Bromochloromethane	5.327	130	37451	1.94	ug/l	85
35) Tetrahydrofuran	5.316	42	18078	1.88	ug/L	92
37) 1,1,1-Trichloroethane	5.503	97	109757	1.85	ug/l	98
38) Cyclohexane	5.547	84	55355	1.83	ug/L	95
39) tert-Amyl methyl ether...	5.613	87	36036	1.83	ug/l	98
40) 1,1-Dichloropropene	5.613	110	23299	1.84	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG005.D
Acq On : 4 Sep 2024 2:28 pm
Operator : DNguye
Sample : VOE2I044 0.08
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 10 19:09:53 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
42) Carbon tetrachloride	5.734	119	98074	1.87 ug/L	95
43) 1,2-Dichloroethane	5.800	62	120815	2.06 ug/L	95
44) Benzene	5.866	78	194625	1.90 ug/L	100
45) Trichloroethene	6.373	130	51474	1.83 ug/L	95
46) Methyl methacrylate	6.439	69	45104	1.77 ug/L	96
47) Methylcyclohexane	6.450	83	54237	1.83 ug/L	99
48) 1,2-Dichloropropane	6.527	63	53441	1.91 ug/L	99
49) 1,4-Dioxane	6.736	88	6107	41.42 ug/L	99
50) Bromodichloromethane	6.769	83	116548	2.11 ug/L	100
51) Dibromomethane	6.868	93	43588	1.89 ug/L	96
52) 2-Chloroethyl vinyl ether	6.934	63	21716	1.77 ug/L	91
53) 4-Methyl-2-pentanone	6.967	43	337678	9.53 ug/L	98
54) cis-1,3-Dichloropropene	7.275	75	89224	1.87 ug/L	97
57) Ethyl methacrylate	7.693	69	55504	1.67 ug/L	95
58) Toluene	7.693	91	194908	1.89 ug/l	98
59) trans-1,3-Dichloropropene	7.814	75	93526	1.94 ug/l	95
60) 2-Hexanone	7.935	43	225273	9.71 ug/l	99
61) 1,1,2-Trichloroethane	8.045	97	53779	2.02 ug/l	96
62) 1,3-Dichloropropane	8.353	76	85781	2.07 ug/l	95
63) Tetrachloroethene	8.519	164	43448	1.85 ug/l	92
64) Dibromochloromethane	8.783	129	81788	2.03 ug/l	100
65) 1,2-Dibromoethane	9.069	107	53667	1.89 ug/l	99
66) 1-Chlorohexane	9.124	91	50132	1.73 ug/l	95
67) Chlorobenzene	9.619	112	135124	1.94 ug/l	98
68) 1,1,1,2-Tetrachloroethane	9.652	131	59629	1.90 ug/l	97
69) Ethylbenzene	9.641	91	216228	1.85 ug/l	100
70) m-Xylene & p-Xylene	9.751	91	348829	3.84 ug/l	100
71) o-Xylene	10.411	91	166077	1.86 ug/l	99
72) Styrene	10.466	104	119922	1.83 ug/l	98
73) Isopropylbenzene	10.940	105	174960	1.82 ug/L	97
75) Bromoform	11.061	173	52525	1.85 ug/l	98
76) 1,1,2,2-Tetrachloroethane	11.204	83	64736	1.89 ug/l	94
78) 1,2,3-Trichloropropane	11.446	110	20371	2.02 ug/l	88
79) trans-1,4-Dichloro-2-b...	11.523	53	20259	1.64 ug/l	85
80) n-Propylbenzene	11.578	91	217441	1.85 ug/l	99
81) Bromobenzene	11.732	156	64097	2.02 ug/l	93
82) 1,3,5-Trimethylbenzene	11.831	105	147599	1.83 ug/l	96
83) 2-Chlorotoluene	11.919	91	166345	2.04 ug/l	89
84) 4-Chlorotoluene	11.985	91	135008	1.79 ug/l	87
85) tert-Butylbenzene	12.414	134	21726	1.68 ug/l	93
86) 1,2,4-Trimethylbenzene	12.469	105	151012	1.86 ug/l	99
87) sec-Butylbenzene	12.756	105	157064	1.69 ug/l	98
88) p-Isopropyltoluene	12.954	119	135744	1.72 ug/l	97
89) 1,3-Dichlorobenzene	13.174	146	96597	1.90 ug/l	98
90) 1,2,3-Trimethylbenzene	13.251	105	157695	1.87 ug/L	98
91) 1,4-Dichlorobenzene	13.328	146	98690	1.87 ug/l	99
92) n-Butylbenzene	13.614	91	122817	1.73 ug/l	97
93) 1,2-Dichlorobenzene	13.933	146	98566	1.94 ug/l	98
94) 1,2-Dibromo-3-chloropr...	15.133	157	14055	1.84 ug/l	94
95) 1,2,4-Trichlorobenzene	16.464	180	59982	1.85 ug/l	90
96) Hexachlorobutadiene	16.651	225	31278	1.89 ug/l	98
97) Naphthalene	16.871	128	132075	1.77 ug/l	99
98) 1,2,3-Trichlorobenzene	17.224	180	57015	1.79 ug/l	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG005.D
Acq On : 4 Sep 2024 2:28 pm
Operator : DNguye
Sample : VOE2I044 0.08
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 10 19:09:53 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

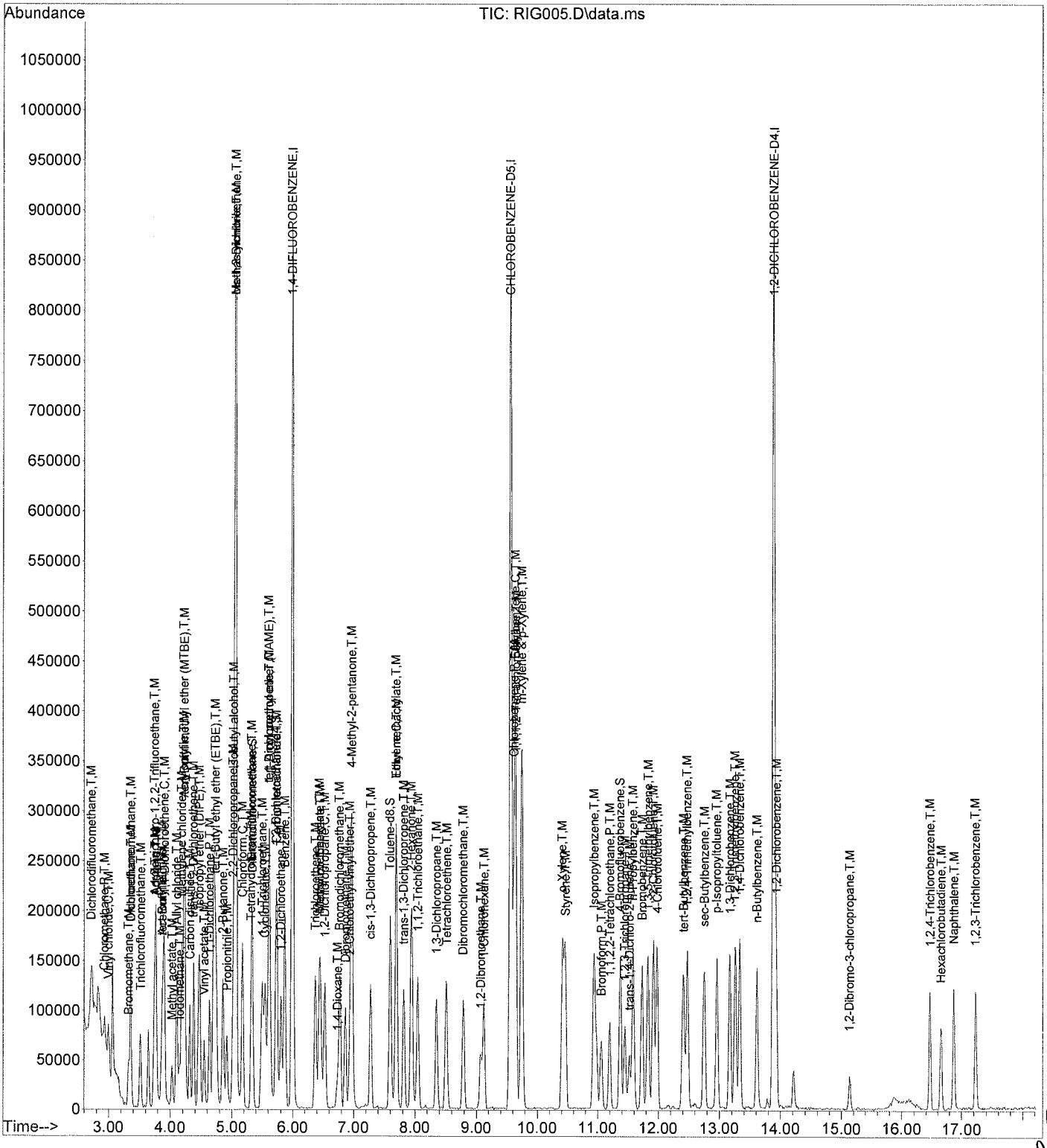
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG005.D
Acq On : 4 Sep 2024 2:28 pm
Operator : DNguye
Sample : VOE2I044 0.08
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 10 19:09:53 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG006.D
Acq On : 4 Sep 2024 2:54 pm
Operator : DNguye
Sample : VOE2I045 0.2
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 10 19:09:58 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	834620	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	682249	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	363256	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	185848	4.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	49.30%		
41) 1,2-Dichloroethane-d4	5.723	65	272067	5.20	ug/L	0.00
Spiked Amount 10.000			Recovery =	52.00%		
56) Toluene-d8	7.594	98	480033	4.95	ug/l	0.00
Spiked Amount 10.000			Recovery =	49.50%		
77) 4-Bromofluorobenzene	11.369	95	188653	4.78	ug/l	0.00
Spiked Amount 10.000			Recovery =	47.80%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	140225	5.43	ug/l	97
3) Chloromethane	2.939	50	100472	5.34	ug/l	100
4) Vinyl chloride	2.994	62	116481	5.24	ug/l	100
5) Bromomethane	3.324	94	71053	5.08	ug/l	97
6) Dichlorofluoromethane	3.357	67	304385	5.57	ug/L	98
7) Chloroethane	3.357	64	61665	5.33	ug/l	93
8) Trichlorofluoromethane	3.522	101	223238	5.45	ug/l	96
9) Acrolein	3.753	56	68227	24.38	ug/l	97
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	138021	5.79	ug/l	100
11) Acetone	3.775	43	331832	24.23	ug/l	100
12) tert-Butyl alcohol	3.874	59	388485	118.14	ug/L	97
13) 1,1-Dichloroethene	3.907	61	280728	5.54	ug/l	98
14) Acetonitrile	3.874	41	93433	24.09	ug/L	97
15) Allyl chloride	4.106	76	71347	5.33	ug/L	99
16) Iodomethane	4.150	142	128824	3.86	ug/l	98
17) Methyl acetate	4.029	43	128740	4.84	ug/L	96
18) Methylene chloride	4.183	49	239610	5.11	ug/l	98
19) Acrylonitrile	4.216	53	302193	25.31	ug/l	97
20) tert-Butyl methyl ethe...	4.227	73	464943	5.32	ug/L	99
21) Carbon disulfide	4.315	76	403060	5.33	ug/l	99
22) trans-1,2-Dichloroethene	4.381	96	146927	5.54	ug/l	95
23) Isopropyl ether (DIPE)	4.469	45	520518	5.37	ug/l	99
24) Vinyl acetate	4.546	43	322169	5.45	ug/l	100
25) 1,1-Dichloroethane	4.634	63	290624	5.26	ug/l	98
26) tert-Butyl ethyl ether...	4.733	59	575543	5.26	ug/l	99
27) 2-Butanone	4.854	72	80247	23.14	ug/l	99
28) Propionitrile	4.920	54	204119	51.36	ug/L	98
29) Isobutyl alcohol	5.030	43	140532	95.08	ug/L	100
30) 2,2-Dichloropropane	5.019	77	287581	5.27	ug/l	99
31) Methacrylonitrile	5.063	52	352590	53.29	ug/L	98
32) cis-1,2-Dichloroethene	5.063	96	161843	5.17	ug/l	96
33) Chloroform	5.173	83	370674	5.31	ug/l	98
34) Bromochloromethane	5.327	130	109516	5.61	ug/l	98
35) Tetrahydrofuran	5.327	42	47447	4.90	ug/L	98
37) 1,1,1-Trichloroethane	5.503	97	326294	5.46	ug/l	99
38) Cyclohexane	5.547	84	142344	4.67	ug/L	100
39) tert-Amyl methyl ether...	5.624	87	103269	5.19	ug/l	95
40) 1,1-Dichloropropene	5.613	110	69864	5.48	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG006.D
Acq On : 4 Sep 2024 2:54 pm
Operator : DNguye
Sample : VOE2I045 0.2
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 10 19:09:58 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) Carbon tetrachloride	5.734	119	284685	5.38	ug/L	97
43) 1,2-Dichloroethane	5.800	62	314893	5.33	ug/L	99
44) Benzene	5.866	78	543044	5.25	ug/L	99
45) Trichloroethene	6.373	130	148868	5.26	ug/L	97
46) Methyl methacrylate	6.439	69	127370	4.96	ug/L	97
47) Methylcyclohexane	6.450	83	139361	4.67	ug/L	98
48) 1,2-Dichloropropane	6.527	63	150214	5.31	ug/L	100
49) 1,4-Dioxane	6.736	88	11495	77.29	ug/L	86
50) Bromodichloromethane	6.769	83	292192	5.25	ug/L	99
51) Dibromomethane	6.868	93	122661	5.27	ug/L	96
52) 2-Chloroethyl vinyl ether	6.934	63	63894	5.15	ug/L	97
53) 4-Methyl-2-pentanone	6.956	43	889688	24.88	ug/L	98
54) cis-1,3-Dichloropropene	7.275	75	256066	5.33	ug/L	98
57) Ethyl methacrylate	7.693	69	180068	5.20	ug/L	96
58) Toluene	7.693	91	576599	5.37	ug/l	97
59) trans-1,3-Dichloropropene	7.814	75	264772	5.27	ug/l	99
60) 2-Hexanone	7.935	43	596312	24.66	ug/l	99
61) 1,1,2-Trichloroethane	8.045	97	144170	5.18	ug/l	97
62) 1,3-Dichloropropane	8.354	76	228684	5.30	ug/l	96
63) Tetrachloroethene	8.519	164	130943	5.36	ug/l	96
64) Dibromochloromethane	8.783	129	211116	5.02	ug/l	99
65) 1,2-Dibromoethane	9.069	107	154112	5.22	ug/l	96
66) 1-Chlorohexane	9.124	91	158466	5.26	ug/l	100
67) Chlorobenzene	9.619	112	373155	5.13	ug/l	98
68) 1,1,1,2-Tetrachloroethane	9.641	131	173248	5.29	ug/l	99
69) Ethylbenzene	9.641	91	653387	5.37	ug/l	99
70) m-Xylene & p-Xylene	9.751	91	1036466	10.95	ug/l	99
71) o-Xylene	10.412	91	506514	5.44	ug/l	99
72) Styrene	10.456	104	375559	5.48	ug/l	98
73) Isopropylbenzene	10.940	105	535372	5.35	ug/L	99
75) Bromoform	11.061	173	150920	5.11	ug/l	97
76) 1,1,2,2-Tetrachloroethane	11.204	83	182170	5.10	ug/l	93
78) 1,2,3-Trichloropropane	11.446	110	53102	5.07	ug/l	94
79) trans-1,4-Dichloro-2-b...	11.512	53	68607	5.33	ug/l	97
80) n-Propylbenzene	11.578	91	685503	5.60	ug/l	98
81) Bromobenzene	11.732	156	176284	5.34	ug/l	99
82) 1,3,5-Trimethylbenzene	11.831	105	450807	5.38	ug/l	99
83) 2-Chlorotoluene	11.919	91	490988	5.78	ug/l	92
84) 4-Chlorotoluene	11.974	91	425818	5.42	ug/l	96
85) tert-Butylbenzene	12.414	134	71297	5.30	ug/l	96
86) 1,2,4-Trimethylbenzene	12.480	105	474156	5.60	ug/l	99
87) sec-Butylbenzene	12.745	105	501170	5.17	ug/l	99
88) p-Isopropyltoluene	12.954	119	425616	5.20	ug/l	98
89) 1,3-Dichlorobenzene	13.163	146	270509	5.12	ug/l	99
90) 1,2,3-Trimethylbenzene	13.251	105	490330	5.58	ug/L	99
91) 1,4-Dichlorobenzene	13.328	146	287101	5.22	ug/l	99
92) n-Butylbenzene	13.614	91	373066	5.05	ug/l	99
93) 1,2-Dichlorobenzene	13.933	146	281761	5.32	ug/l	99
94) 1,2-Dibromo-3-chloropr...	15.133	157	37557	4.73	ug/l	91
95) 1,2,4-Trichlorobenzene	16.464	180	158460	4.71	ug/l	99
96) Hexachlorobutadiene	16.662	225	83992	4.87	ug/l	94
97) Naphthalene	16.872	128	375203	4.83	ug/l	98
98) 1,2,3-Trichlorobenzene	17.224	180	170379	5.13	ug/l	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG006.D
Acq On : 4 Sep 2024 2:54 pm
Operator : DNguye
Sample : VOE2I045 0.2
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 10 19:09:58 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

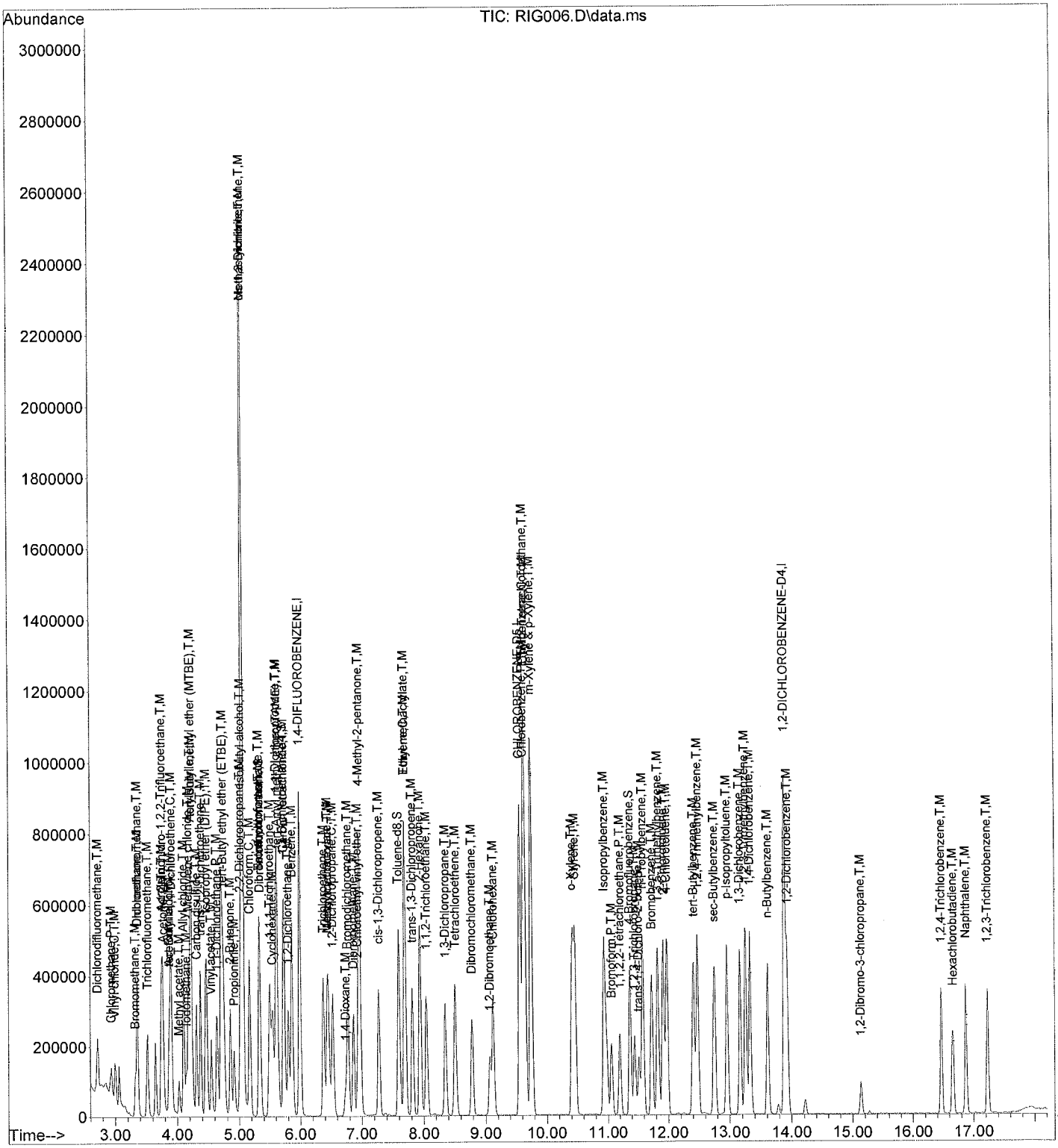
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG006.D
Acq On : 4 Sep 2024 2:54 pm
Operator : DNguye
Sample : VOE2I045 0.2
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 10 19:09:58 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG007.D
Acq On : 4 Sep 2024 3:19 pm
Operator : DNguye
Sample : VOE2I046 0.4
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 10 19:10:03 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	872251	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	708785	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	391856	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	393412	10.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.00%		
41) 1,2-Dichloroethane-d4	5.723	65	538124	9.84	ug/L	0.00
Spiked Amount 10.000			Recovery =	98.40%		
56) Toluene-d8	7.594	98	1001620	9.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.30%		
77) 4-Bromofluorobenzene	11.369	95	406787	9.56	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.60%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	276239	10.24	ug/l	100
3) Chloromethane	2.928	50	199489	10.44	ug/l	100
4) Vinyl chloride	2.994	62	235822	10.14	ug/l	100
5) Bromomethane	3.324	94	135949	10.05	ug/l	100
6) Dichlorofluoromethane	3.357	67	563375	9.87	ug/L	100
7) Chloroethane	3.357	64	112785	9.32	ug/l	100
8) Trichlorofluoromethane	3.522	101	448292	10.48	ug/l	100
9) Acrolein	3.753	56	143559	49.08	ug/l	100
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	254437	10.21	ug/l	100
11) Acetone	3.775	43	605234	47.72	ug/l	100
12) tert-Butyl alcohol	3.874	59	873855	254.27	ug/L	100
13) 1,1-Dichloroethene	3.907	61	532768	10.06	ug/l	100
14) Acetonitrile	3.874	41	195845	48.31	ug/L	100
15) Allyl chloride	4.106	76	140146	10.01	ug/L	100
16) Iodomethane	4.150	142	290717	8.09	ug/l	100
17) Methyl acetate	4.028	43	263222	9.47	ug/L	100
18) Methylene chloride	4.183	49	454951	9.28	ug/l	100
19) Acrylonitrile	4.216	53	630228	50.50	ug/l	100
20) tert-Butyl methyl ethe...	4.227	73	939053	10.28	ug/L	100
21) Carbon disulfide	4.315	76	768149	9.71	ug/l	100
22) trans-1,2-Dichloroethene	4.370	96	268394	9.69	ug/l	100
23) Isopropyl ether (DIPE)	4.469	45	1024619	10.12	ug/l	100
24) Vinyl acetate	4.546	43	622242	10.08	ug/l	100
25) 1,1-Dichloroethane	4.634	63	584024	10.12	ug/l	100
26) tert-Butyl ethyl ether...	4.733	59	1177848	10.29	ug/l	100
27) 2-Butanone	4.854	72	174015	48.02	ug/l	100
28) Propionitrile	4.909	54	423274	101.92	ug/L	100
29) Isobutyl alcohol	5.030	43	304142	196.89	ug/L	100
30) 2,2-Dichloropropane	5.030	77	563381	9.89	ug/l	100
31) Methacrylonitrile	5.063	52	713095	103.13	ug/L	100
32) cis-1,2-Dichloroethene	5.063	96	331581	10.13	ug/l	100
33) Chloroform	5.173	83	709677	9.72	ug/l	100
34) Bromochloromethane	5.327	130	208654	10.23	ug/l	100
35) Tetrahydrofuran	5.327	42	100960	9.99	ug/L	100
37) 1,1,1-Trichloroethane	5.503	97	633234	10.14	ug/l	100
38) Cyclohexane	5.547	84	303169	9.52	ug/L	100
39) tert-Amyl methyl ether...	5.624	87	204873	9.85	ug/l	100
40) 1,1-Dichloropropene	5.613	110	133334	10.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG007.D
Acq On : 4 Sep 2024 3:19 pm
Operator : DNguye
Sample : VOE2I046 0.4
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 10 19:10:03 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) Carbon tetrachloride	5.734	119	560151	10.13	ug/L	100
43) 1,2-Dichloroethane	5.800	62	619693	10.03	ug/L	100
44) Benzene	5.866	78	1060310	9.80	ug/L	100
45) Trichloroethene	6.373	130	293461	9.91	ug/L	100
46) Methyl methacrylate	6.439	69	272230	10.14	ug/L	100
47) Methylcyclohexane	6.461	83	302402	9.70	ug/L	100
48) 1,2-Dichloropropane	6.527	63	290843	9.84	ug/L	100
49) 1,4-Dioxane	6.725	88	29360	188.88	ug/L	100
50) Bromodichloromethane	6.769	83	558454	9.59	ug/L	100
51) Dibromomethane	6.857	93	248029	10.20	ug/L	100
52) 2-Chloroethyl vinyl ether	6.934	63	135495	10.45	ug/L	100
53) 4-Methyl-2-pentanone	6.967	43	2027434	54.25	ug/L	100
54) cis-1,3-Dichloropropene	7.275	75	505686	10.06	ug/L	100
57) Ethyl methacrylate	7.693	69	374709	10.42	ug/L	100
58) Toluene	7.693	91	1131463	10.15	ug/l	100
59) trans-1,3-Dichloropropene	7.814	75	525976	10.08	ug/l	100
60) 2-Hexanone	7.935	43	1349150	53.71	ug/l	100
61) 1,1,2-Trichloroethane	8.045	97	295714	10.23	ug/l	100
62) 1,3-Dichloropropane	8.354	76	454566	10.14	ug/l	100
63) Tetrachloroethene	8.519	164	257499	10.15	ug/l	100
64) Dibromochloromethane	8.783	129	419124	9.59	ug/l	100
65) 1,2-Dibromoethane	9.069	107	308129	10.04	ug/l	100
66) 1-Chlorohexane	9.124	91	328346	10.49	ug/l	100
67) Chlorobenzene	9.619	112	743899	9.85	ug/l	100
68) 1,1,1,2-Tetrachloroethane	9.641	131	332323	9.77	ug/l	100
69) Ethylbenzene	9.641	91	1300006	10.28	ug/l	100
70) m-Xylene & p-Xylene	9.751	91	2075329	21.10	ug/l	100
71) o-Xylene	10.411	91	1002093	10.37	ug/l	100
72) Styrene	10.456	104	761333	10.70	ug/l	100
73) Isopropylbenzene	10.940	105	1119864	10.78	ug/L	100
75) Bromoform	11.061	173	299188	9.39	ug/l	100
76) 1,1,2,2-Tetrachloroethane	11.204	83	366157	9.51	ug/l	100
78) 1,2,3-Trichloropropane	11.446	110	111897	9.90	ug/l	100
79) trans-1,4-Dichloro-2-b...	11.512	53	144397	10.39	ug/l	100
80) n-Propylbenzene	11.578	91	1407194	10.66	ug/l	100
81) Bromobenzene	11.732	156	355706	9.98	ug/l	100
82) 1,3,5-Trimethylbenzene	11.831	105	960244	10.62	ug/l	100
83) 2-Chlorotoluene	11.919	91	876642	9.57	ug/l	100
84) 4-Chlorotoluene	11.974	91	945346	11.16	ug/l	100
85) tert-Butylbenzene	12.414	134	146430	10.09	ug/l	100
86) 1,2,4-Trimethylbenzene	12.480	105	984455	10.78	ug/l	100
87) sec-Butylbenzene	12.756	105	1047641	10.02	ug/l	100
88) p-Isopropyltoluene	12.954	119	886504	10.03	ug/l	100
89) 1,3-Dichlorobenzene	13.163	146	562030	9.86	ug/l	100
90) 1,2,3-Trimethylbenzene	13.251	105	995332	10.51	ug/L	100
91) 1,4-Dichlorobenzene	13.328	146	586691	9.89	ug/l	100
92) n-Butylbenzene	13.614	91	803775	10.09	ug/l	100
93) 1,2-Dichlorobenzene	13.933	146	552793	9.68	ug/l	100
94) 1,2-Dibromo-3-chloropr...	15.133	157	86471	10.09	ug/l	100
95) 1,2,4-Trichlorobenzene	16.464	180	340721	9.38	ug/l	100
96) Hexachlorobutadiene	16.662	225	182016	9.78	ug/l	100
97) Naphthalene	16.872	128	846178	10.09	ug/l	100
98) 1,2,3-Trichlorobenzene	17.235	180	343159	9.58	ug/l	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG007.D
Acq On : 4 Sep 2024 3:19 pm
Operator : DNguye
Sample : VOE2I046 0.4
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 10 19:10:03 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

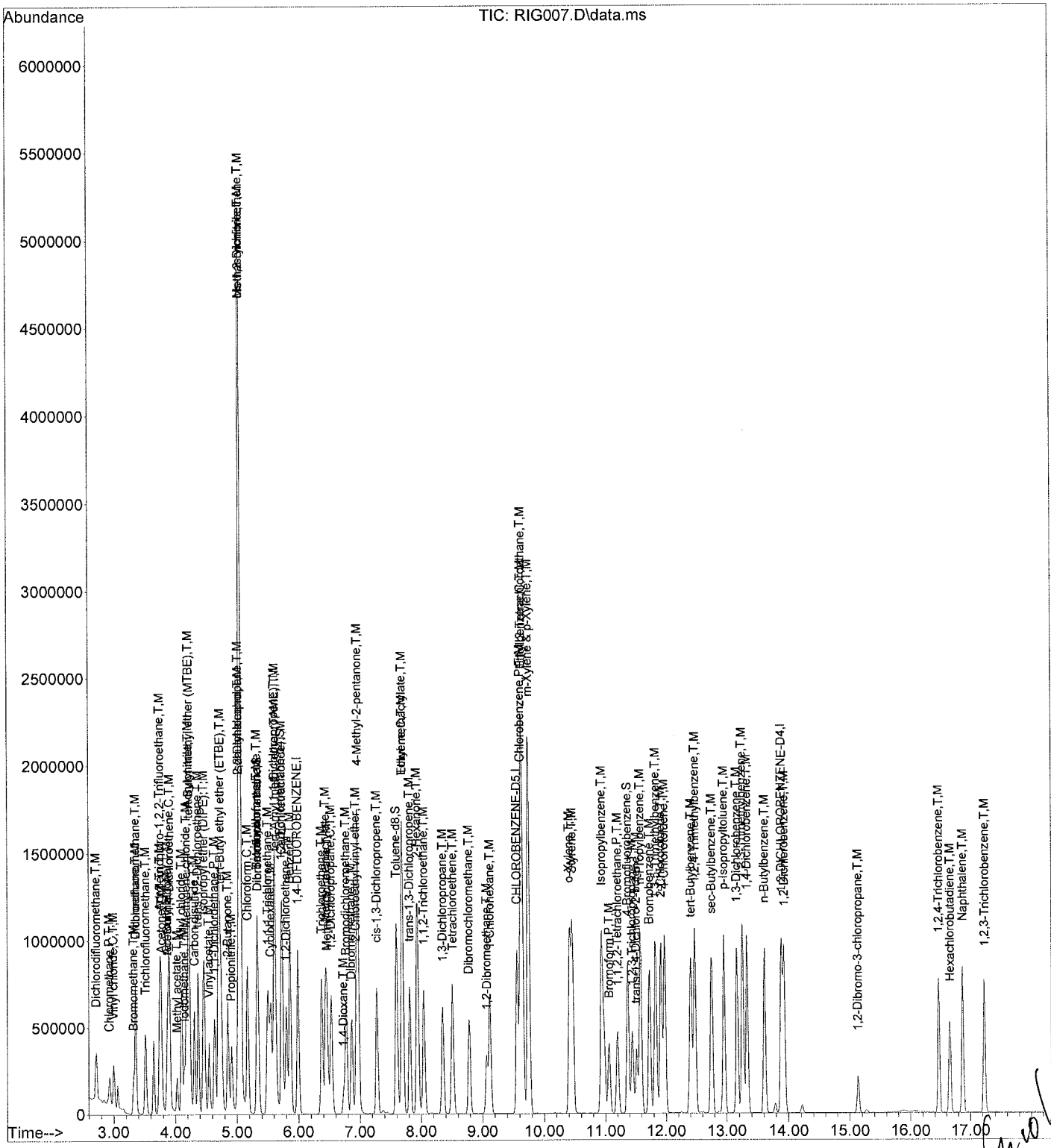
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG007.D
Acq On : 4 Sep 2024 3:19 pm
Operator : DNguye
Sample : VOE2I046 0.4
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 10 19:10:03 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG008.D
Acq On : 4 Sep 2024 3:44 pm
Operator : DNguye
Sample : VOE2I047 1.2uL
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 10 19:10:08 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	897195	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	750843	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	408922	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	789900	20.40	ug/l	0.00
Spiked Amount 10.000			Recovery =	204.00%		
41) 1,2-Dichloroethane-d4	5.723	65	1091444	19.40	ug/L	0.00
Spiked Amount 10.000			Recovery =	194.00%		
56) Toluene-d8	7.594	98	2046389	19.16	ug/l	0.00
Spiked Amount 10.000			Recovery =	191.60%		
77) 4-Bromofluorobenzene	11.369	95	835334	18.82	ug/l	0.00
Spiked Amount 10.000			Recovery =	188.20%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	577041	20.80	ug/l	99
3) Chloromethane	2.939	50	405937	20.98	ug/l	99
4) Vinyl chloride	2.994	62	483225	20.21	ug/l	95
5) Bromomethane	3.324	94	243741	20.11	ug/l	96
6) Dichlorofluoromethane	3.357	67	1174481	20.01	ug/L	98
7) Chloroethane	3.346	64	242573	19.49	ug/l	95
8) Trichlorofluoromethane	3.511	101	925108	21.02	ug/l	96
9) Acrolein	3.753	56	313413	104.17	ug/l	93
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	513877	20.06	ug/l	99
11) Acetone	3.775	43	1235776	101.91	ug/l	98
12) tert-Butyl alcohol	3.874	59	1824968	516.27	ug/L	98
13) 1,1-Dichloroethene	3.908	61	1083427	19.89	ug/l	100
14) Acetonitrile	3.874	41	422941	101.43	ug/L	97
15) Allyl chloride	4.106	76	280030	19.45	ug/L	100
16) Iodomethane	4.150	142	662702	17.69	ug/l	100
17) Methyl acetate	4.029	43	537492	18.80	ug/L	100
18) Methylene chloride	4.183	49	930529	18.45	ug/l	99
19) Acrylonitrile	4.216	53	1311362	102.16	ug/l	99
20) tert-Butyl methyl ethe...	4.227	73	1951150	20.76	ug/L	98
21) Carbon disulfide	4.315	76	1708138	20.99	ug/l	100
22) trans-1,2-Dichloroethene	4.370	96	564318	19.81	ug/l	100
23) Isopropyl ether (DIPE)	4.469	45	2151601	20.66	ug/l	100
24) Vinyl acetate	4.546	43	1326214	20.88	ug/l	100
25) 1,1-Dichloroethane	4.634	63	1193603	20.11	ug/l	99
26) tert-Butyl ethyl ether...	4.733	59	2475864	21.04	ug/l	98
27) 2-Butanone	4.854	72	374278	100.41	ug/l	96
28) Propionitrile	4.909	54	885539	207.29	ug/L	99
29) Isobutyl alcohol	5.030	43	649392	408.70	ug/L	99
30) 2,2-Dichloropropane	5.030	77	1194176	20.37	ug/l	98
31) Methacrylonitrile	5.063	52	1482182	208.39	ug/L	99
32) cis-1,2-Dichloroethene	5.063	96	677604	20.12	ug/l	99
33) Chloroform	5.173	83	1435822	19.12	ug/l	99
34) Bromochloromethane	5.327	130	431565	20.57	ug/l	98
35) Tetrahydrofuran	5.327	42	215590	20.73	ug/L	99
37) 1,1,1-Trichloroethane	5.503	97	1278308	19.90	ug/l	99
38) Cyclohexane	5.547	84	697467	21.28	ug/L	99
39) tert-Amyl methyl ether...	5.624	87	452519	21.14	ug/l	98
40) 1,1-Dichloropropene	5.613	110	284019	20.71	ug/L	100

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG008.D
Acq On : 4 Sep 2024 3:44 pm
Operator : DNguye
Sample : VOE2I047 1.2uL
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 10 19:10:08 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) Carbon tetrachloride	5.734	119	1129083	19.85	ug/L	97
43) 1,2-Dichloroethane	5.800	62	1281179	20.16	ug/L	98
44) Benzene	5.866	78	2236301	20.10	ug/L	99
45) Trichloroethene	6.373	130	596670	19.59	ug/L	97
46) Methyl methacrylate	6.439	69	576091	20.85	ug/L	97
47) Methylcyclohexane	6.461	83	715855	22.33	ug/L	99
48) 1,2-Dichloropropane	6.527	63	601690	19.80	ug/L	98
49) 1,4-Dioxane	6.725	88	65240	408.04	ug/L	98
50) Bromodichloromethane	6.780	83	1126271	18.81	ug/L	99
51) Dibromomethane	6.857	93	481148	19.23	ug/L	95
52) 2-Chloroethyl vinyl ether	6.934	63	289054	21.67	ug/L	100
53) 4-Methyl-2-pentanone	6.956	43	4190966	109.01	ug/L	99
54) cis-1,3-Dichloropropene	7.275	75	1081040	20.92	ug/L	99
57) Ethyl methacrylate	7.693	69	808457	21.23	ug/L	99
58) Toluene	7.693	91	2331629	19.75	ug/l	100
59) trans-1,3-Dichloropropene	7.814	75	1137359	20.58	ug/l	99
60) 2-Hexanone	7.935	43	2877891	108.15	ug/l	99
61) 1,1,2-Trichloroethane	8.045	97	587972	19.20	ug/l	96
62) 1,3-Dichloropropane	8.354	76	964005	20.30	ug/l	97
63) Tetrachloroethene	8.508	164	523279	19.46	ug/l	98
64) Dibromochloromethane	8.783	129	865520	18.69	ug/l	100
65) 1,2-Dibromoethane	9.069	107	641795	19.73	ug/l	99
66) 1-Chlorohexane	9.124	91	713882	21.53	ug/l	100
67) Chlorobenzene	9.619	112	1546101	19.33	ug/l	99
68) 1,1,1,2-Tetrachloroethane	9.652	131	698532	19.38	ug/l	99
69) Ethylbenzene	9.641	91	2710321	20.24	ug/l	100
70) m-Xylene & p-Xylene	9.740	91	4303443	41.30	ug/l	100
71) o-Xylene	10.412	91	2172602	21.22	ug/l	99
72) Styrene	10.456	104	1615688	21.44	ug/l	98
73) Isopropylbenzene	10.940	105	2401249	21.82	ug/L	100
75) Bromoform	11.061	173	644345	19.38	ug/l	99
76) 1,1,2,2-Tetrachloroethane	11.204	83	790196	19.66	ug/l	97
78) 1,2,3-Trichloropropane	11.446	110	239421	20.29	ug/l	97
79) trans-1,4-Dichloro-2-b...	11.512	53	304125	20.97	ug/l	96
80) n-Propylbenzene	11.578	91	2985950	21.69	ug/l	100
81) Bromobenzene	11.732	156	731300	19.66	ug/l	100
82) 1,3,5-Trimethylbenzene	11.831	105	2061742	21.84	ug/l	99
83) 2-Chlorotoluene	11.919	91	2067798	21.64	ug/l	92
84) 4-Chlorotoluene	11.974	91	1804884	20.41	ug/l	96
85) tert-Butylbenzene	12.415	134	314602	20.77	ug/l	99
86) 1,2,4-Trimethylbenzene	12.470	105	2105403	22.09	ug/l	100
87) sec-Butylbenzene	12.756	105	2251565	20.64	ug/l	100
88) p-Isopropyltoluene	12.954	119	1921373	20.84	ug/l	99
89) 1,3-Dichlorobenzene	13.163	146	1201777	20.20	ug/l	99
90) 1,2,3-Trimethylbenzene	13.251	105	2171257	21.97	ug/L	99
91) 1,4-Dichlorobenzene	13.328	146	1248975	20.18	ug/l	100
92) n-Butylbenzene	13.614	91	1767708	21.26	ug/l	100
93) 1,2-Dichlorobenzene	13.933	146	1206613	20.25	ug/l	97
94) 1,2-Dibromo-3-chloropr...	15.133	157	169078	18.91	ug/l	90
95) 1,2,4-Trichlorobenzene	16.464	180	761468	20.10	ug/l	99
96) Hexachlorobutadiene	16.662	225	385148	19.83	ug/l	96
97) Naphthalene	16.872	128	1905108	21.77	ug/l	100
98) 1,2,3-Trichlorobenzene	17.224	180	754533	20.19	ug/l	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG008.D
Acq On : 4 Sep 2024 3:44 pm
Operator : DNguye
Sample : VOE2I047 1.2uL
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 10 19:10:08 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

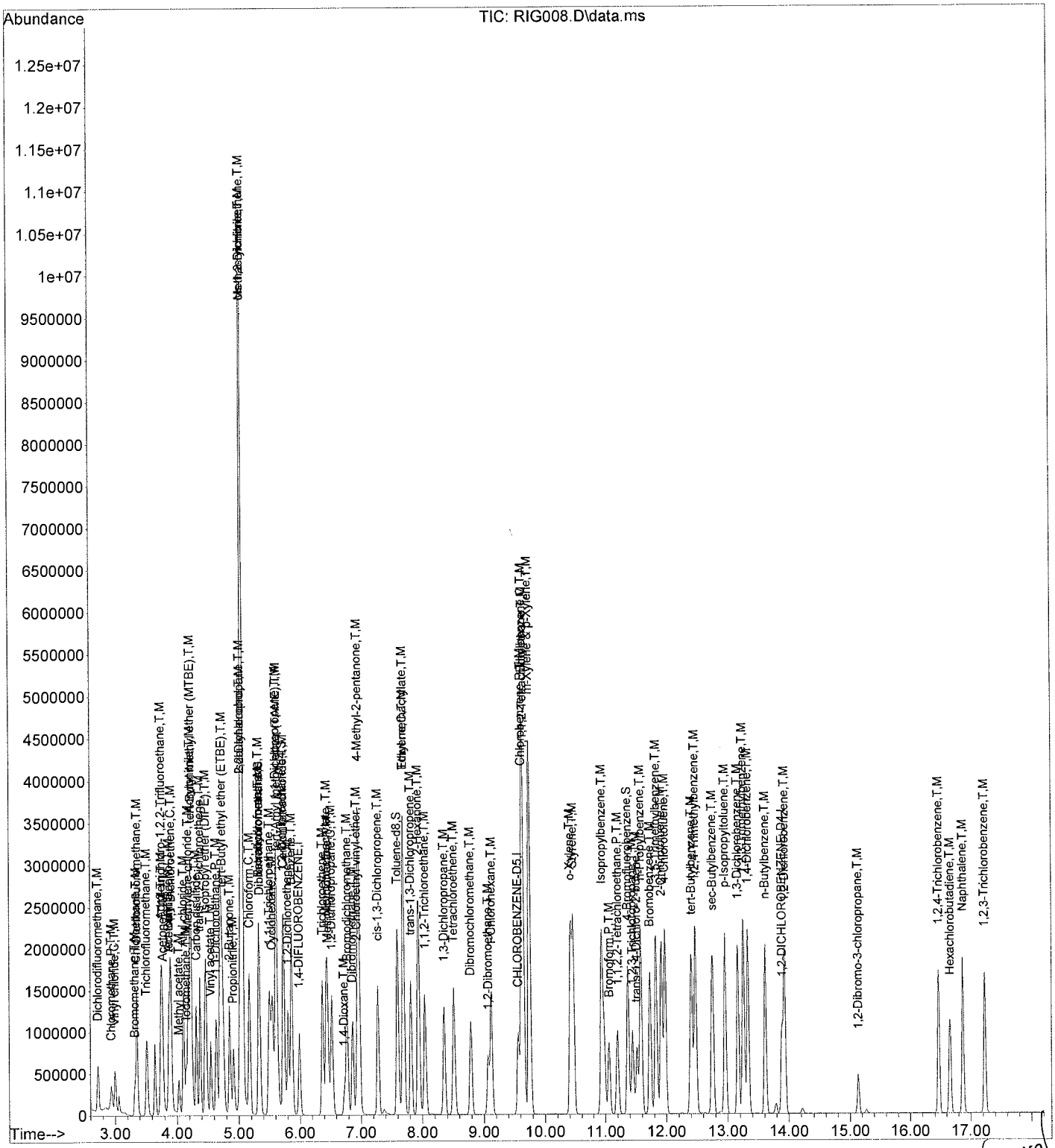
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG008.D
Acq On : 4 Sep 2024 3:44 pm
Operator : DNguye
Sample : VOE2I047 1.2uL
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 10 19:10:08 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG009.D
Acq On : 4 Sep 2024 4:09 pm
Operator : DNguye
Sample : VOE2I048 2uL
Misc : 50ppb 8260/250pb KET-AA/1250ppb TBA
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 10 19:10:13 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	987989	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	792419	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	432274	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	2104504	49.78	ug/l	0.00
Spiked Amount 10.000			Recovery =	497.80%		
41) 1,2-Dichloroethane-d4	5.723	65	2914717	47.04	ug/L	0.00
Spiked Amount 10.000			Recovery =	470.40%		
56) Toluene-d8	7.594	98	5501759	48.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	488.10%		
77) 4-Bromofluorobenzene	11.369	95	2233556	47.59	ug/l	0.00
Spiked Amount 10.000			Recovery =	475.90%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	1508931	49.40	ug/l	100
3) Chloromethane	2.939	50	1049883	49.71	ug/l	100
4) Vinyl chloride	2.994	62	1337060	50.78	ug/l	95
5) Bromomethane	3.324	94	555168	Below Cal		97
6) Dichlorofluoromethane	3.357	67	3034208	46.94	ug/L	98
7) Chloroethane	3.346	64	635808	46.39	ug/l	96
8) Trichlorofluoromethane	3.522	101	2399957	49.52	ug/l	97
9) Acrolein	3.753	56	863830	260.73	ug/l	96
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	1405653	49.82	ug/l	99
11) Acetone	3.775	43	3213488	250.59	ug/l	100
12) tert-Butyl alcohol	3.874	59	5183949	1331.72	ug/L	100
13) 1,1-Dichloroethene	3.908	61	2925265	48.78	ug/l	99
14) Acetonitrile	3.874	41	1150659	250.58	ug/L	94
15) Allyl chloride	4.106	76	730736	46.09	ug/L	98
16) Iodomethane	4.150	142	2004190	48.22	ug/l	99
17) Methyl acetate	4.029	43	1484845	47.17	ug/L	100
18) Methylene chloride	4.183	49	2444263	44.01	ug/l	99
19) Acrylonitrile	4.216	53	3704112	262.04	ug/l	98
20) tert-Butyl methyl ethe...	4.227	73	5220938	50.43	ug/L	97
21) Carbon disulfide	4.315	76	4765138	53.18	ug/l	100
22) trans-1,2-Dichloroethene	4.370	96	1517335	48.36	ug/l	99
23) Isopropyl ether (DIPE)	4.469	45	5894099	51.39	ug/l	98
24) Vinyl acetate	4.546	43	3744280	53.53	ug/l	100
25) 1,1-Dichloroethane	4.634	63	3181438	48.68	ug/l	98
26) tert-Butyl ethyl ether...	4.733	59	6741987	52.02	ug/l	98
27) 2-Butanone	4.854	72	1020731	248.67	ug/l	99
28) Propionitrile	4.909	54	2443847	519.50	ug/L	99
29) Isobutyl alcohol	5.030	43	1865982	1066.44	ug/L	96
30) 2,2-Dichloropropane	5.030	77	3257579	50.47	ug/l	99
31) Methacrylonitrile	5.063	52	4018769	513.11	ug/L	96
32) cis-1,2-Dichloroethene	5.063	96	1822215	49.15	ug/l	96
33) Chloroform	5.173	83	3756067	45.43	ug/l	99
34) Bromochloromethane	5.327	130	1110068	48.04	ug/l	98
35) Tetrahydrofuran	5.327	42	596073	52.05	ug/L	94
37) 1,1,1-Trichloroethane	5.503	97	3541505	50.06	ug/l	98
38) Cyclohexane	5.547	84	1967637	54.53	ug/L	98
39) tert-Amyl methyl ether...	5.613	87	1201301	50.97	ug/l	97
40) 1,1-Dichloropropene	5.613	110	791093	52.38	ug/L	99

10/4/24

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG009.D
Acq On : 4 Sep 2024 4:09 pm
Operator : DNguye
Sample : VOE2I048 2uL
Misc : 50ppb 8260/250pb KET-AA/1250ppb TBA
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 10 19:10:13 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) Carbon tetrachloride	5.734	119	3126758	49.93	ug/L	96
43) 1,2-Dichloroethane	5.800	62	3399325	48.57	ug/L	100
44) Benzene	5.866	78	6047952	49.37	ug/L	99
45) Trichloroethene	6.373	130	1643320	49.00	ug/L	98
46) Methyl methacrylate	6.439	69	1632100	53.65	ug/L	97
47) Methylcyclohexane	6.461	83	1994042	56.49	ug/L	99
48) 1,2-Dichloropropane	6.527	63	1655889	49.48	ug/L	96
49) 1,4-Dioxane	6.725	88	184780	1049.50	ug/L	91
50) Bromodichloromethane	6.769	83	3025959	45.89	ug/L	99
51) Dibromomethane	6.857	93	1347896	48.93	ug/L	99
52) 2-Chloroethyl vinyl ether	6.934	63	791616	53.90	ug/L	100
53) 4-Methyl-2-pentanone	6.956	43	11985383	283.11	ug/L	99
54) cis-1,3-Dichloropropene	7.275	75	2976973	52.30	ug/L	98
57) Ethyl methacrylate	7.693	69	2264481	56.34	ug/L	96
58) Toluene	7.693	91	6351493	50.97	ug/l	99
59) trans-1,3-Dichloropropene	7.814	75	3129690	53.67	ug/l	98
60) 2-Hexanone	7.935	43	8318964	296.23	ug/l	100
61) 1,1,2-Trichloroethane	8.045	97	1655847	51.24	ug/l	100
62) 1,3-Dichloropropane	8.354	76	2583546	51.55	ug/l	100
63) Tetrachloroethene	8.508	164	1430497	50.42	ug/l	97
64) Dibromochloromethane	8.783	129	2325346	47.59	ug/l	98
65) 1,2-Dibromoethane	9.069	107	1808150	52.68	ug/l	97
66) 1-Chlorohexane	9.124	91	1950472	55.73	ug/l	99
67) Chlorobenzene	9.619	112	4165537	49.35	ug/l	99
68) 1,1,1,2-Tetrachloroethane	9.641	131	1854645	48.76	ug/l	98
69) Ethylbenzene	9.641	91	7371432	52.16	ug/l	100
70) m-Xylene & p-Xylene	9.751	91	11831033	107.58	ug/l	99
71) o-Xylene	10.412	91	6019593	55.71	ug/l	99
72) Styrene	10.456	104	4368524	54.92	ug/l	98
73) Isopropylbenzene	10.940	105	6634226	57.13	ug/L	99
75) Bromoform	11.061	173	1788792	50.89	ug/l	99
76) 1,1,2,2-Tetrachloroethane	11.204	83	2134020	50.23	ug/l	100
78) 1,2,3-Trichloropropane	11.446	110	638794	51.21	ug/l	99
79) trans-1,4-Dichloro-2-b...	11.512	53	869084	56.69	ug/l	98
80) n-Propylbenzene	11.578	91	8204436	56.37	ug/l	100
81) Bromobenzene	11.732	156	2010625	51.13	ug/l	97
82) 1,3,5-Trimethylbenzene	11.831	105	5550309	55.63	ug/l	99
83) 2-Chlorotoluene	11.919	91	4996352	49.47	ug/l	99
84) 4-Chlorotoluene	11.974	91	5426802	58.06	ug/l	99
85) tert-Butylbenzene	12.403	134	875540	54.67	ug/l	100
86) 1,2,4-Trimethylbenzene	12.470	105	5712239	56.71	ug/l	99
87) sec-Butylbenzene	12.745	105	6227275	54.01	ug/l	100
88) p-Isopropyltoluene	12.954	119	5334340	54.73	ug/l	98
89) 1,3-Dichlorobenzene	13.163	146	3282321	52.18	ug/l	100
90) 1,2,3-Trimethylbenzene	13.251	105	5891754	56.39	ug/L	99
91) 1,4-Dichlorobenzene	13.328	146	3406194	52.06	ug/l	99
92) n-Butylbenzene	13.614	91	4918470	55.96	ug/l	99
93) 1,2-Dichlorobenzene	13.933	146	3255452	51.68	ug/l	98
94) 1,2-Dibromo-3-chloropr...	15.133	157	508939	53.85	ug/l	91
95) 1,2,4-Trichlorobenzene	16.464	180	2221533	55.46	ug/l	99
96) Hexachlorobutadiene	16.663	225	1063830	51.81	ug/l	95
97) Naphthalene	16.872	128	5633757	60.91	ug/l	100
98) 1,2,3-Trichlorobenzene	17.224	180	2237275	56.64	ug/l	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG009.D
Acq On : 4 Sep 2024 4:09 pm
Operator : DNguye
Sample : VOE2I048 2uL
Misc : 50ppb 8260/250pb KET-AA/1250ppb TBA
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 10 19:10:13 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

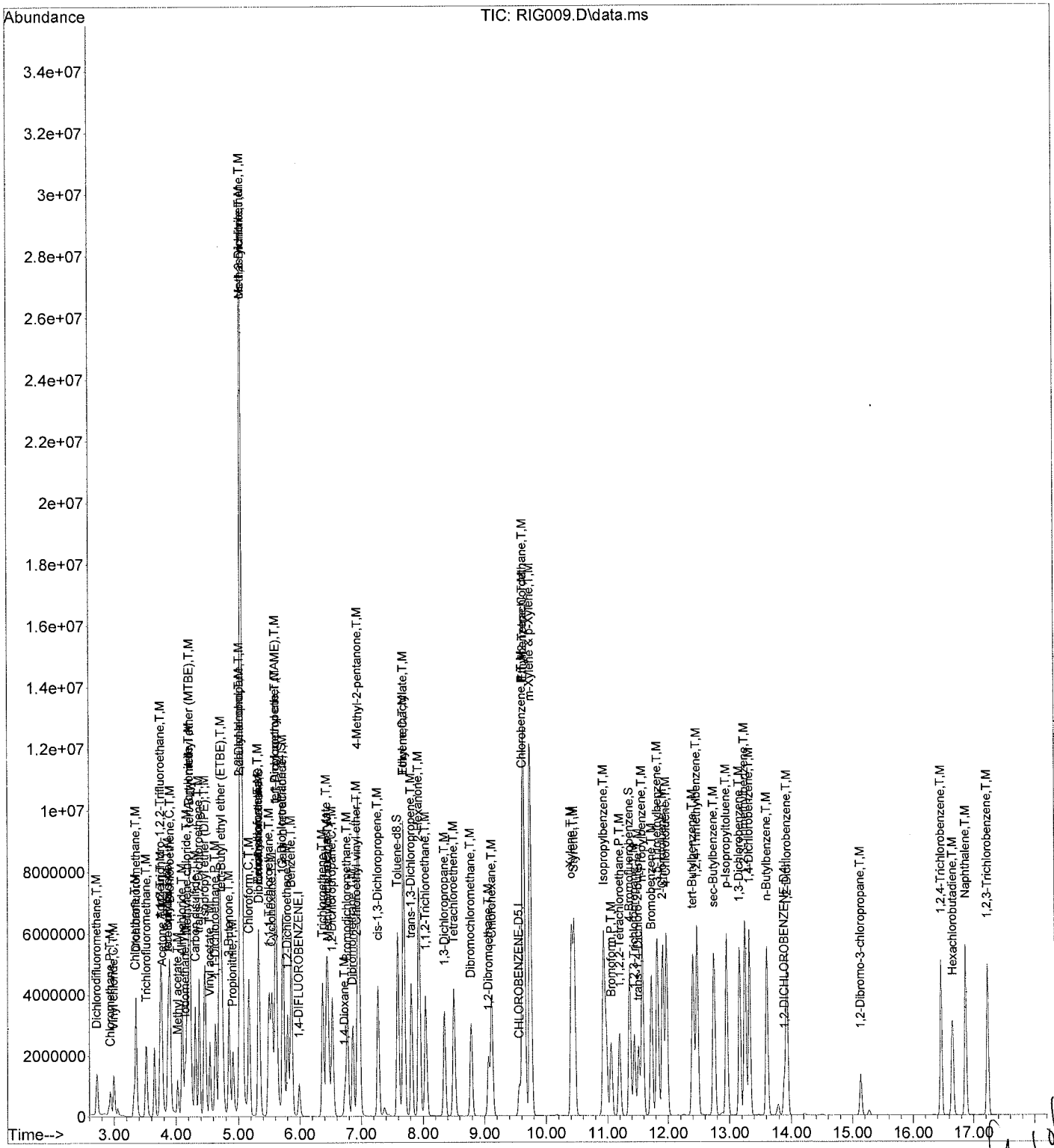
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG009.D
Acq On : 4 Sep 2024 4:09 pm
Operator : DNguye
Sample : VOE2I048 2uL
Misc : 50ppb 8260/250pb KET-AA/1250ppb TBA
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 10 19:10:13 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG010.D
Acq On : 4 Sep 2024 4:34 pm
Operator : DNguye
Sample : VOE2I049 4uL
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 10 19:10:18 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	1089869	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	877461	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	493309	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	22452	0.18	ug/l	0.00
Spiked Amount 10.000			Recovery =	1.80%		
41) 1,2-Dichloroethane-d4	5.723	65	36786	0.54	ug/L	0.00
Spiked Amount 10.000			Recovery =	5.40%		
56) Toluene-d8	7.594	98	87968	0.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	7.00%		
77) 4-Bromofluorobenzene	11.369	95	57817	1.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	10.80%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	3094575	91.85	ug/l	99
3) Chloromethane	2.939	50	2219502	95.57	ug/l	99
4) Vinyl chloride	2.994	62	2771883	95.43	ug/l	98
5) Bromomethane	3.324	94	1221463	Below Cal		96
6) Dichlorofluoromethane	3.357	67	6756942	94.76	ug/L	98
7) Chloroethane	3.357	64	1374494	90.91	ug/l	94
8) Trichlorofluoromethane	3.522	101	5014288	93.79	ug/l	97
9) Acrolein	3.753	56	1838516	503.04	ug/l	96
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	3060208	98.32	ug/l	100
11) Acetone	3.775	43	6414175	459.33	ug/l	100
12) tert-Butyl alcohol	3.874	59	10833526	2522.90	ug/L	98
13) 1,1-Dichloroethene	3.908	61	6452124	97.52	ug/l	99
14) Acetonitrile	3.874	41	2335138	461.00	ug/L	94
15) Allyl chloride	4.106	76	1635197	93.49	ug/L	99
16) Iodomethane	4.150	142	4931607	107.32	ug/l	97
17) Methyl acetate	4.029	43	3136253	90.33	ug/L	99
18) Methylene chloride	4.183	49	5538411	90.40	ug/l	98
19) Acrylonitrile	4.216	53	7913006	507.47	ug/l	99
20) tert-Butyl methyl ethe...	4.227	73	11771644	103.09	ug/L	98
21) Carbon disulfide	4.315	76	199379	2.02	ug/l	96
22) trans-1,2-Dichloroethene	4.370	96	3365440	97.24	ug/l	100
23) Isopropyl ether (DIPE)	4.469	45	13480671	106.54	ug/l	98
24) Vinyl acetate	4.546	43	8000950	103.69	ug/l	99
25) 1,1-Dichloroethane	4.634	63	7096086	98.44	ug/l	99
26) tert-Butyl ethyl ether...	4.733	59	15387552	107.64	ug/l	97
27) 2-Butanone	4.854	72	2141553	472.96	ug/l	99
28) Propionitrile	4.920	54	5393068	1039.27	ug/L	97
29) Isobutyl alcohol	5.030	43	3988057	2066.18	ug/L	96
30) 2,2-Dichloropropane	5.030	77	7396705	103.89	ug/l	99
31) Methacrylonitrile	5.063	52	8755415	1013.37	ug/L	91
32) cis-1,2-Dichloroethene	5.063	96	4179199	102.18	ug/l	97
33) Chloroform	5.173	83	8424560	92.36	ug/l	99
34) Bromochloromethane	5.327	130	2425297	95.15	ug/l	97
35) Tetrahydrofuran	5.327	42	1281336	101.42	ug/L	96
37) 1,1,1-Trichloroethane	5.503	97	7804722	100.01	ug/l	98
38) Cyclohexane	5.547	84	4360536	109.54	ug/L	98
39) tert-Amyl methyl ether...	5.624	87	2717741	104.54	ug/l	98
40) 1,1-Dichloropropene	5.613	110	1763386	105.85	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG010.D
Acq On : 4 Sep 2024 4:34 pm
Operator : DNguye
Sample : VOE2I049 4uL
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 10 19:10:18 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) Carbon tetrachloride	5.734	119	6817527	98.69	ug/L	97
43) 1,2-Dichloroethane	5.800	62	7447007	96.45	ug/L	99
44) Benzene	5.866	78	13764229	101.85	ug/L	99
45) Trichloroethene	6.373	130	3662275	99.00	ug/L	98
46) Methyl methacrylate	6.439	69	3644895	108.62	ug/L	99
47) Methylcyclohexane	6.461	83	4505045	115.69	ug/L	99
48) 1,2-Dichloropropane	6.527	63	3780545	102.41	ug/L	95
49) 1,4-Dioxane	6.736	88	433579	2232.40	ug/L	99
50) Bromodichloromethane	6.780	83	6754379	92.85	ug/L	99
51) Dibromomethane	6.868	93	2970757	97.76	ug/L	99
52) 2-Chloroethyl vinyl ether	6.934	63	1733315	106.99	ug/L	99
53) 4-Methyl-2-pentanone	6.956	43	25185458	539.30	ug/L	99
54) cis-1,3-Dichloropropene	7.275	75	6751554	107.53	ug/L	98
57) Ethyl methacrylate	7.693	69	5046387	113.39	ug/L	96
58) Toluene	7.693	91	14338996	103.91	ug/l	99
59) trans-1,3-Dichloropropene	7.814	75	7048963	109.17	ug/l	97
60) 2-Hexanone	7.946	43	17400730	559.57	ug/l	100
61) 1,1,2-Trichloroethane	8.045	97	3645606	101.88	ug/l	100
62) 1,3-Dichloropropane	8.354	76	5821750	104.90	ug/l	99
63) Tetrachloroethene	8.508	164	3268824	104.05	ug/l	98
64) Dibromochloromethane	8.783	129	5222053	96.51	ug/l	99
65) 1,2-Dibromoethane	9.069	107	3972706	104.53	ug/l	98
66) 1-Chlorohexane	9.124	91	4388785	113.24	ug/l	99
67) Chlorobenzene	9.619	112	9418414	100.77	ug/l	99
68) 1,1,1,2-Tetrachloroethane	9.641	131	4186910	99.41	ug/l	100
69) Ethylbenzene	9.641	91	17040404	108.90	ug/l	99
70) m-Xylene & p-Xylene	9.740	91	25037880	205.60	ug/l	96
71) o-Xylene	10.412	91	13573722	113.44	ug/l	99
72) Styrene	10.456	104	9941296	112.86	ug/l	98
73) Isopropylbenzene	10.940	105	15060362	117.12	ug/L	99
75) Bromoform	11.061	173	3925468	97.87	ug/l	99
76) 1,1,2,2-Tetrachloroethane	11.204	83	4747436	97.93	ug/l	99
78) 1,2,3-Trichloropropane	11.446	110	1380745	97.00	ug/l	98
79) trans-1,4-Dichloro-2-b...	11.512	53	1877916	107.35	ug/l	95
80) n-Propylbenzene	11.578	91	18582086	111.87	ug/l	99
81) Bromobenzene	11.732	156	4508335	100.47	ug/l	98
82) 1,3,5-Trimethylbenzene	11.831	105	12605628	110.71	ug/l	100
83) 2-Chlorotoluene	11.919	91	12581084	109.15	ug/l	92
84) 4-Chlorotoluene	11.974	91	11141931	104.46	ug/l	95
85) tert-Butylbenzene	12.415	134	1923907	105.27	ug/l	96
86) 1,2,4-Trimethylbenzene	12.481	105	13020037	113.26	ug/l	97
87) sec-Butylbenzene	12.756	105	14191167	107.85	ug/l	99
88) p-Isopropyltoluene	12.954	119	12025394	108.11	ug/l	99
89) 1,3-Dichlorobenzene	13.174	146	7391719	102.97	ug/l	99
90) 1,2,3-Trimethylbenzene	13.262	105	13386947	112.28	ug/L	99
91) 1,4-Dichlorobenzene	13.328	146	7615997	102.01	ug/l	99
92) n-Butylbenzene	13.614	91	11302763	112.68	ug/l	99
93) 1,2-Dichlorobenzene	13.933	146	7373053	102.57	ug/l	97
94) 1,2-Dibromo-3-chloropr...	15.133	157	1125546	104.36	ug/l	90
95) 1,2,4-Trichlorobenzene	16.464	180	5181852	113.37	ug/l	99
96) Hexachlorobutadiene	16.663	225	2419800	103.26	ug/l	95
97) Naphthalene	16.872	128	12728687	120.59	ug/l	100
98) 1,2,3-Trichlorobenzene	17.235	180	5065261	112.37	ug/l	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG010.D
Acq On : 4 Sep 2024 4:34 pm
Operator : DNguye
Sample : VOE2I049 4uL
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA
ALS Vial : 10 Sample Multiplier: 1

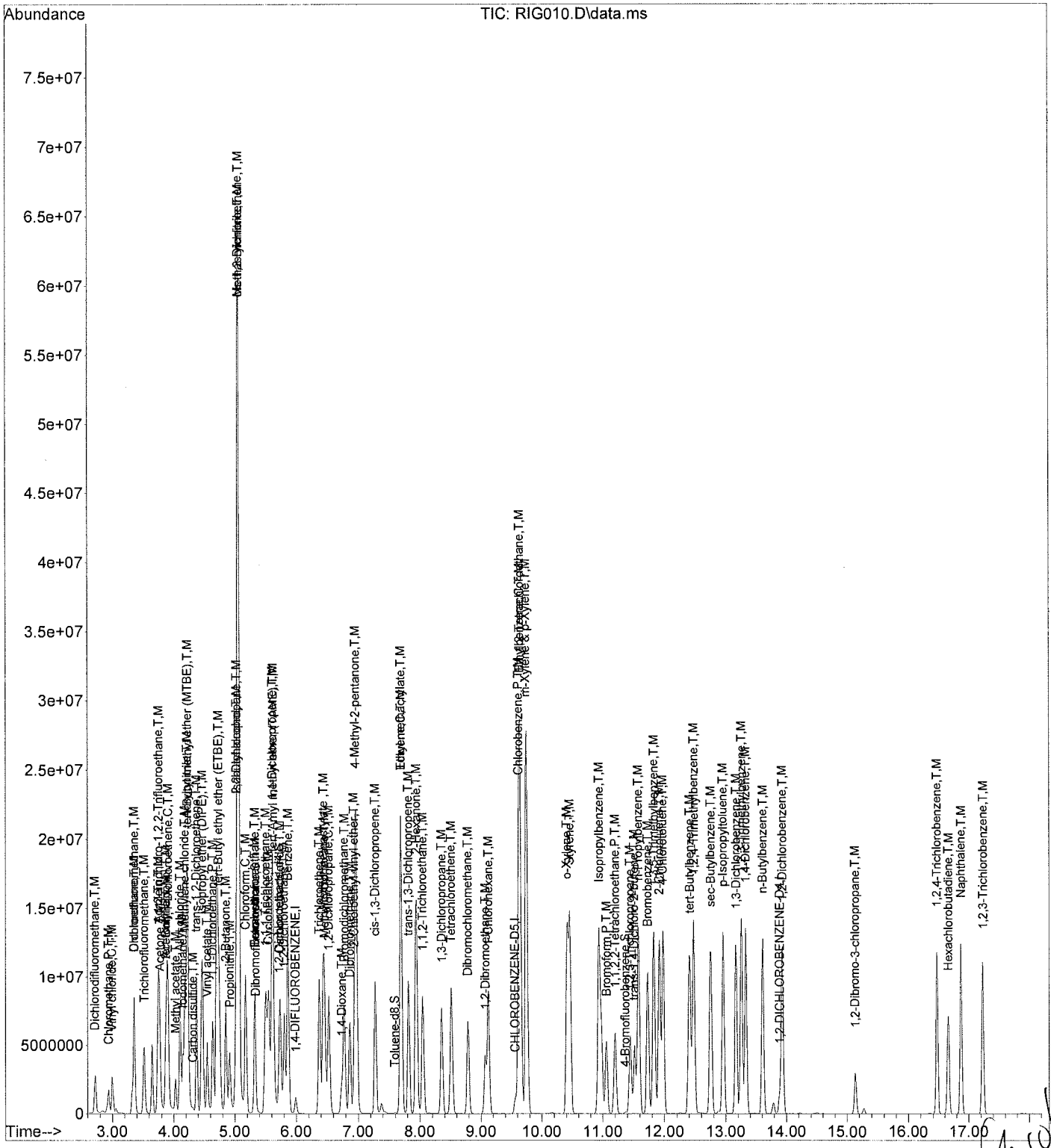
Quant Time: Sep 10 19:10:18 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG010.D
Acq On : 4 Sep 2024 4:34 pm
Operator : DNguye
Sample : VOE2I049 4uL
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 10 19:10:18 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG011.D
Acq On : 4 Sep 2024 4:59 pm
Operator : DNguye
Sample : VOE2I0410 8uL
Misc : 200ppb 8260/1000ppb KET-AA/5000ppb TBA
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 20:15:20 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	1211672	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	1016639	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	540087	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	13835	-0.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	-0.30%		
41) 1,2-Dichloroethane-d4	5.723	65	26205	0.34	ug/L	0.00
Spiked Amount 10.000			Recovery =	3.40%		
56) Toluene-d8	7.594	98	57437	0.40	ug/l	0.00
Spiked Amount 10.000			Recovery =	4.00%		
77) 4-Bromofluorobenzene	11.369	95	36990	0.63	ug/l	0.00
Spiked Amount 10.000			Recovery =	6.30%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	7085405	189.15	ug/l	100
3) Chloromethane	2.939	50	5232748	203.04	ug/l	99
4) Vinyl chloride	2.994	62	6249435	193.53	ug/l	93
6) Dichlorofluoromethane	3.357	67	15308102	193.10	ug/L	98
7) Chloroethane	3.346	64	3104597	184.69	ug/l	93
8) Trichlorofluoromethane	3.511	101	10999330	185.06	ug/l	97
9) Acrolein	3.753	56	4249279	1045.78	ug/l	95
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	6947142	200.76	ug/l	99
11) Acetone	3.775	43	13935574	904.58	ug/l	98
12) tert-Butyl alcohol	3.874	59	23802770	4985.94	ug/L	98
13) 1,1-Dichloroethene	3.907	61	14851205	201.91	ug/l	99
14) Acetonitrile	3.874	41	5148365	914.21	ug/L	94
15) Allyl chloride	4.105	76	3612529	185.79	ug/L	98
16) Iodomethane	4.149	142	10231199	200.09	ug/l	95
17) Methyl acetate	4.028	43	7118016	184.39	ug/L	99
18) Methylene chloride	4.182	49	12641944	185.61	ug/l	100
19) Acrylonitrile	4.215	53	17451324	1006.66	ug/l	98
20) tert-Butyl methyl ethe...	4.226	73	25348226	199.66	ug/L	95
22) trans-1,2-Dichloroethene	4.370	96	7797772	202.66	ug/l	99
23) Isopropyl ether (DIPE)	4.458	45	26896139	191.20	ug/l	96
24) Vinyl acetate	4.546	43	17638242	205.60	ug/l	99
25) 1,1-Dichloroethane	4.634	63	16332182	203.79	ug/l	99
26) tert-Butyl ethyl ether...	4.722	59	31522642	198.34	ug/l	96
27) 2-Butanone	4.854	72	4851928	963.82	ug/l	98
28) Propionitrile	4.920	54	12459014	2159.55	ug/L	96
29) Isobutyl alcohol	5.030	43	8899512	4147.27	ug/L	97
30) 2,2-Dichloropropane	5.030	77	16614130	209.90	ug/l	99
32) cis-1,2-Dichloroethene	5.063	96	9828845	216.15	ug/l	97
33) Chloroform	5.173	83	18627314	183.69	ug/l	99
34) Bromochloromethane	5.327	130	5319624	187.72	ug/l	97
35) Tetrahydrofuran	5.327	42	2976748	211.93	ug/L	96
37) 1,1,1-Trichloroethane	5.503	97	17528666	202.04	ug/l	98
38) Cyclohexane	5.547	84	10135621	229.02	ug/L	98
39) tert-Amyl methyl ether...	5.624	87	6223998	215.34	ug/l	94
40) 1,1-Dichloropropene	5.613	110	4096444	221.17	ug/L	98
42) Carbon tetrachloride	5.734	119	15238981	198.42	ug/L	96
43) 1,2-Dichloroethane	5.800	62	16434715	191.45	ug/L	100
44) Benzene	5.855	78	25545178	170.03	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG011.D
Acq On : 4 Sep 2024 4:59 pm
Operator : DNguye
Sample : VOE2I0410 8uL
Misc : 200ppb 8260/1000ppb KET-AA/5000ppb TBA
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 20:15:20 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Trichloroethene	6.372	130	8498872	206.65	ug/L	98
46) Methyl methacrylate	6.439	69	8381883	224.68	ug/L	99
47) Methylcyclohexane	6.461	83	10425455	240.80	ug/L	98
48) 1,2-Dichloropropane	6.527	63	8718165	212.42	ug/L	90
49) 1,4-Dioxane	6.736	88	916741	4245.61	ug/L	94
50) Bromodichloromethane	6.769	83	15067883	186.31	ug/L	100
51) Dibromomethane	6.868	93	6732195	199.28	ug/L	98
52) 2-Chloroethyl vinyl ether	6.934	63	3997451	221.95	ug/L	100
53) 4-Methyl-2-pentanone	6.945	43	36019266	693.76	ug/L	70
54) cis-1,3-Dichloropropene	7.275	75	15611178	223.65	ug/L	96
57) Ethyl methacrylate	7.693	69	11722590	227.33	ug/L	93
58) Toluene	7.682	91	27073856	169.34	ug/l	83
59) trans-1,3-Dichloropropene	7.814	75	15856830	211.95	ug/l	95
60) 2-Hexanone	7.924	43	29449205	817.38	ug/l	75
61) 1,1,2-Trichloroethane	8.045	97	8184797	197.42	ug/l	98
62) 1,3-Dichloropropane	8.353	76	13097838	203.70	ug/l	99
63) Tetrachloroethene	8.507	164	7348413	201.88	ug/l	98
64) Dibromochloromethane	8.783	129	11554416	184.31	ug/l	99
65) 1,2-Dibromoethane	9.069	107	8905997	202.26	ug/l	98
66) 1-Chlorohexane	9.124	91	10008480	222.88	ug/l	99
67) Chlorobenzene	9.619	112	21431784	197.92	ug/l	98
68) 1,1,1,2-Tetrachloroethane	9.652	131	9331673	191.23	ug/l	100
69) Ethylbenzene	9.630	91	30036680	165.67	ug/l	85
70) m-Xylene & p-Xylene	9.729	91	34352735	243.47	ug/l	56
71) o-Xylene	10.411	91	27225952	196.38	ug/l	93
72) Styrene	10.455	104	22402957	219.52	ug/l	98
73) Isopropylbenzene	10.929	105	28939873	194.24	ug/L	95
75) Bromoform	11.061	173	8531138	194.27	ug/l	99
76) 1,1,2,2-Tetrachloroethane	11.204	83	10472871	197.31	ug/l	98
78) 1,2,3-Trichloropropane	11.446	110	2940603	188.69	ug/l	97
79) trans-1,4-Dichloro-2-b...	11.523	53	4037198	210.79	ug/l	97
80) n-Propylbenzene	11.567	91	30930937	170.08	ug/l	89
81) Bromobenzene	11.732	156	9902059	201.56	ug/l	97
82) 1,3,5-Trimethylbenzene	11.820	105	25825127	207.16	ug/l	96
83) 2-Chlorotoluene	11.919	91	26237940	207.92	ug/l	93
84) 4-Chlorotoluene	11.974	91	22144474	189.63	ug/l	89
85) tert-Butylbenzene	12.414	134	4282695	214.05	ug/l	93
86) 1,2,4-Trimethylbenzene	12.469	105	25338953	201.33	ug/l	96
87) sec-Butylbenzene	12.744	105	27751567	192.63	ug/l	97
88) p-Isopropyltoluene	12.954	119	24402389	200.38	ug/l	98
89) 1,3-Dichlorobenzene	13.174	146	16176022	205.82	ug/l	99
90) 1,2,3-Trimethylbenzene	13.251	105	25609543	196.19	ug/L	94
91) 1,4-Dichlorobenzene	13.328	146	16701464	204.32	ug/l	99
92) n-Butylbenzene	13.603	91	23117443	210.51	ug/l	95
93) 1,2-Dichlorobenzene	13.933	146	15876136	201.74	ug/l	98
94) 1,2-Dibromo-3-chloropr...	15.133	157	2464277	208.71	ug/l	90
95) 1,2,4-Trichlorobenzene	16.464	180	11454213	228.89	ug/l	98
96) Hexachlorobutadiene	16.662	225	5287695	206.10	ug/l	96
97) Naphthalene	16.860	128	23290213	201.54	ug/l	93
98) 1,2,3-Trichlorobenzene	17.235	180	11140143	225.74	ug/l	100

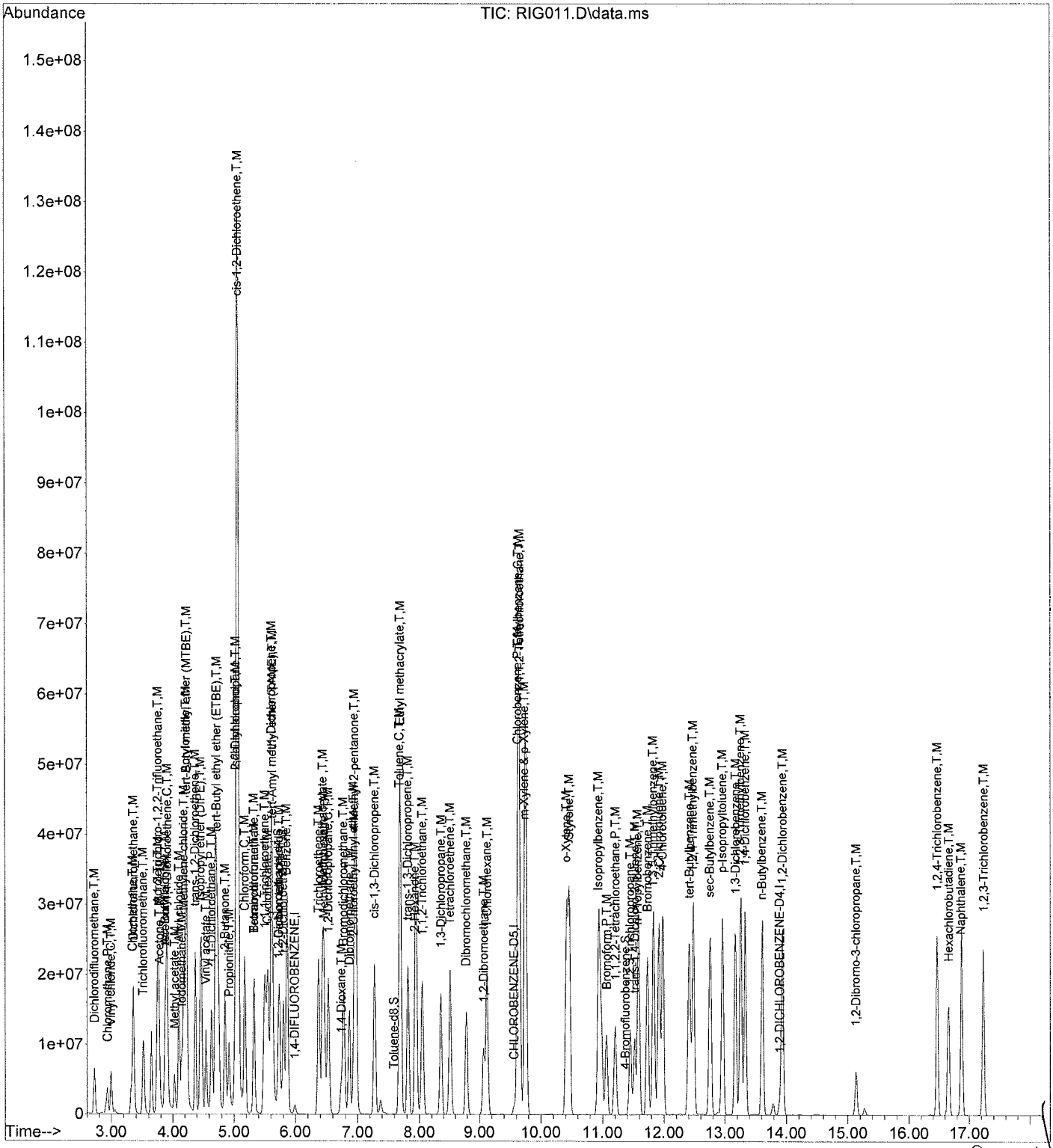
(#) = qualifier out of range (m) = manual integration (+) = signals summed

10/9/24

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I04\
Data File : RIG011.D
Acq On : 4 Sep 2024 4:59 pm
Operator : DNguye
Sample : VOE2I0410 8uL
Misc : 200ppb 8260/1000ppb KET-AA/5000ppb TBA
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 20:15:20 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



SECOND SOURCE VERIFICATION

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL
Lab Code : EMAX SDG No : ICAL
Lab File ID: RIG025 BFB Injection Date: 09/11/24
Instrument ID: E2 BFB Injection Time: 14:39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	24.887
75	30 - 60% of mass 95	52.670
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.482
173	Less than 2% of mass 174	0.757(.79)1
174	Greater than 50% of mass 95	96.322
175	5 - 9% of mass 174	7.308(7.59)1
176	95 - 101% % of mass 174	92.536(96.07)1
177	5 - 9% % of mass 176	6.033(6.52)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD200	IVOE2I0402	RIG026	09/11/24	15:16

CONTINUE_CALI8RATION - INIITAL CALI8RATION VERIFICATION

Instrument ID :E2
IC 8eginning DateTime :09/04/24 13:12
Spike Amount :10 PP8
CC/CV File :RIG026
IC File :RIG007

Column Spec :RTX-502.2 ID :0.32MM
IC Ending DateTime :09/04/24 16:59
HPChem Method :VOe2I04
Date_Time :09/11/24 15:16

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUDRO8ENZENE	10.000	0	997909	1	1	5.988	5.989	0				
	2	Dichlorodifluoromethane	10.177	1.8	313975	0.315	0.309	2.719	2.719	8.80				
	3	Chloromethane	11.285	12.8	246096	0.247	0.263	2.928	2.934	29.05	0.0070	0.2123		0.9994
	4	Vinyl chloride	10.561	5.6	280890	0.281	0.267	2.994	2.994	6.12				
	5	8romomethane	8.050	-19.5	128202	0.128	0.180	3.324	3.324	20.17	0.0034	0.1701	-0.0182	0.9998
	6	Dichlorofluoromethane	10.536	5.4	687921	0.689	0.654	3.357	3.357	8.24				
	7	Chlorgethane	9.875	-1.3	136722	0.137	0.139	3.357	3.353	12.50				
	8	Trichlorofluoromethane	10.613	6.1	519548	0.521	0.491	3.522	3.519	5.76				
5	9	Acrolein	51.524	3.0	172423	0.035	0.034	3.753	3.753	4.33				
	10	1,1,2-Trichloro-1,2,2-Trifluoroethane	10.854	8.5	309346	0.310	0.286	3.753	3.751	8.54				
5	11	Acetone	51.467	2.9	739584	0.148	0.158	3.776	3.775	24.60	0.0920	0.1261		0.9997
25	12	tert-8utyl alcohol	283.265	13.3	1113729	0.045	0.039	3.875	3.874	6.71				
	13	1,1-Dichloroethene	10.831	8.3	656149	0.658	0.607	3.908	3.907	7.70				
10	14	Acetonitrile	54.677	-45.3	253596	0.025	0.023	3.875	3.874	7.48				
	15	Allyl chloride	10.566	5.7	169214	0.170	0.160	4.106	4.106	10.63				
	16	Iodomethane	10.099	1.0	417154	0.418	0.360	4.150	4.149	16.09	-0.0086	0.4224		0.9977
	17	Methyl acetate	10.149	1.5	322675	0.323	0.319	4.029	4.029	14.63				
	18	Methylene chloride	10.445	4.4	585925	0.587	0.562	4.183	4.183	10.51				
5	19	Acrylonitrile	53.054	6.1	757478	0.152	0.143	4.216	4.216	5.32				
	20	tert-8utyl methyl ether (MT8E)	11.211	12.1	1172202	1.175	1.048	4.227	4.228	6.45				
	21	Carbon disulfide	8.893	-11.1	804838	0.807	0.907	4.315	4.315	9.28				
	22	trans-1,2-Dichloroethene	10.006	0.1	317102	0.318	0.318	4.381	4.372	8.16				
	23	Isopropyl ether (DIPE)	11.928	19.3	1381893	1.385	1.161	4.469	4.466	5.91				
	24	Vinyl acetate	11.927	19.3	842698	0.844	0.708	4.546	4.546	7.34				
	25	1,1-Dichloroethane	10.780	7.8	711569	0.713	0.661	4.634	4.635	6.76				
	26	tert-8utyl ethyl ether (ET8E)	11.870	18.7	1553721	1.557	1.312	4.733	4.735	9.35				
5	27	2-8utanone	45.930	-8.1	190427	0.038	0.042	4.854	4.854	8.13				
10	28	Propionitrile	113.526	13.5	539414	0.054	0.048	4.909	4.917	10.97				
20	29	Isobutyl alcohol	198.105	-0.9	350111	0.018	0.018	5.030	5.030	4.54				
	30	2,2-Dichloropropane	11.087	10.9	722794	0.724	0.653	5.030	5.026	5.50				
10	31	Methacrylonitrile	110.055	10.1	870630	0.087	0.079	5.063	5.063	6.39				
	32	cis-1,2-Dichloroethene	10.234	2.3	383276	0.384	0.375	5.063	5.063	7.77				
	33	Chloroform	10.105	1.0	844010	0.846	0.837	5.173	5.173	11.33				
	34	8romochloromethane	10.040	0.4	234338	0.235	0.234	5.327	5.327	6.82				
	35	Tetrahydrofuran	10.788	7.9	124793	0.125	0.116	5.327	5.324	4.75				
	36	Dibromofluoromethane	10.442	4.4	456033	0.457	0.540	5.338	5.338	37.96	0.0128	0.4254		0.9991
	37	1,1,1-Trichloroethane	10.979	9.8	784524	0.786	0.716	5.503	5.503	4.79				
	38	Cyclohexane	10.476	4.8	381850	0.383	0.365	5.547	5.547	12.30				
	39	tert-Amyl methyl ether (TAME)	10.801	8.0	257106	0.258	0.239	5.624	5.621	6.89				
	40	1,1-Dichloropropene	10.685	6.9	162999	0.163	0.153	5.613	5.612	8.92				
	41	1,2-Dichloroethane-d4	10.682	6.8	668614	0.670	0.627	5.723	5.723	5.16				
	42	Carbon tetrachloride	10.465	4.7	661955	0.663	0.634	5.734	5.735	6.23				
	43	1,2-Dichloroethane	11.131	11.3	787004	0.789	0.708	5.800	5.801	7.37				
	44	8enzene	10.390	3.9	1285661	1.288	1.240	5.866	5.866	5.93				
	45	Trichloroethene	9.749	-2.5	330226	0.331	0.339	6.373	6.373	4.58				
	46	Methyl methacrylate	10.088	0.9	309969	0.311	0.308	6.439	6.440	8.22				
	47	Methylcyclohexane	10.736	7.4	382831	0.384	0.357	6.461	6.457	10.98				
	48	1,2-Dichloropropane	10.076	0.8	340598	0.341	0.339	6.527	6.528	8.09				
20	49	1,4-Dioxane	239.758	19.9	42637	0.002	0.002	6.736	6.731	11.26				
	50	8romodichloromethane	10.084	0.8	671697	0.673	0.667	6.769	6.772	10.34				
	51	Dibromomethane	10.156	1.6	282595	0.283	0.279	6.868	6.865	9.98				
*	52	2-Chloroethyl vinyl ether	7.609	-23.9	112872	0.113	0.149	6.934	6.934	10.70	*			
5	53	4-Methyl-2-pentanone	55.580	11.2	2376584	0.476	0.428	6.967	6.961	10.82				
	54	cis-1,3-Dichloropropene	10.775	7.7	619434	0.621	0.576	7.275	7.275	10.67				
	55	CHLDRO8ENZENE-D5	10.000	0	816077	1	1	9.564	9.564	0				
	56	Toluene-d8	10.678	6.8	1239660	1.519	1.423	7.594	7.594	5.32				
	57	Ethyl methacrylate	10.489	4.9	434191	0.532	0.507	7.693	7.694	14.41				
	58	Toluene	10.553	5.5	1354374	1.660	1.573	7.693	7.693	4.73				
	59	trans-1,3-Dichloropropene	10.648	6.5	639500	0.784	0.736	7.814	7.815	9.45				
5	60	2-Hexanone	57.044	14.1	1649782	0.404	0.354	7.946	7.938	12.25				
	61	1,1,2-Trichloroethane	10.229	2.3	340434	0.417	0.408	8.045	8.047	3.85				
	62	1,3-Dichloropropane	10.592	5.9	546710	0.670	0.632	8.354	8.354	8.81				
	63	Tetrachloroethene	10.837	8.4	316669	0.388	0.358	8.508	8.512	8.43				
	64	Dibromochloromethane	9.670	-3.3	486659	0.596	0.617	8.783	8.783	10.61				
	65	1,2-Dibromoethane	10.323	3.2	364879	0.447	0.433	9.069	9.069	6.08				
	66	1-Chlorohexane	11.104	11.0	400289	0.491	0.442	9.124	9.124	12.22				
	67	Chlorobenzene	10.074	0.7	875716	1.073	1.065	9.619	9.620	4.29				
	68	1,1,1,2-Tetrachloroethane	10.030	0.3	392913	0.481	0.480	9.641	9.646	4.89				
	69	Ethylbenzene	10.983	9.8	1598495	1.959	1.783	9.641	9.641	7.03				
2	70	m-Xylene & p-Xylene	22.060	10.3	2498556	1.531	1.388	9.751	9.746	9.01				
	71	o-Xylene	11.285	12.8	1255916	1.539	1.364	10.423	10.413	12.23				
	72	Styrene	11.077	10.8	907446	1.112	1.004	10.467	10.460	13.14				
	73	Isopropylbenzene	11.198	12.0	1339289	1.641	1.465	10.940	10.941	14.04				
	74	1,2-DICHLORO8ENZENE-D4	10.000	0	435055	1	1	13.889	13.889	0				
	75	8romoform	10.174	1.7	359904	0.827	0.813	11.061	11.060	7.82				
	76	1,1,2,2-Tetrachloroethane	10.127	1.3	433001	0.995	0.983	11.204	11.203	3.79				
	77	4-8romofluorobenzene	10.637	6.4	502435	1.155	1.086	11.369	11.369	10.04				
	78	1,2,3-Trichloropropane	10.373	3.7	130223	0.299	0.289	11.446	11.447	4.33				
	79	trans-1,4-Dichloro-2-butene	11.729	17.3	180957	0.416	0.355	11.512	11.516	11.37				
	80	n-Propylbenzene	11.593	15.9	1698303	3.904	3.367	11.589	11.579	13.70				
	81	8romobenzene	11.392	13.9	450823	1.036	0.910	11.732	11.733	5.74				
	82	1,3,5-Trimethylbenzene	11.374	13.7	1142248	2.626	2.308	11.831	11.831	13.86				
	83	2-Chlorotoluene	11.474	14.7	1166324	2.681	2.336	11.919	11.919	11.37				
	84	4-Chlorotoluene	11.204	12.0	1053989	2.423	2.162	11.985	11.978	12.01				
	85	tert-8utylbenzene	10.969	9.7	176805	0.406	0.370	12.415	12.412	8.60				
	86	1,2,4-Trimethylbenzene	11.892	18.9	1205672	2.771	2.330	12.481	12.477	14.95				
	87	sec-8utylbenzene	10.847	8.5	1258826	2.893	2.667	12.756	12.752	8.60				
	88	p-Isopropyltoluene	11.066	10.7	1085622	2.495	2.255	12.954	12.954	9.38				
	89	1,3-Dichlorobenzene	10.316	3.2	653133	1.501	1.455	13.174	13.168	3.85				
	90	1,2,3-Trimethylbenzene	11.502	15.0	1209489	2.780	2.417	13.262	13.254	13.17				
	91	1,4-Dichlorobenzene	10.512	5.1	692205	1.591	1.513	13.328	13.328	7.56				
	92	n-8utylbenzene	10.809	8.1	956256	2.198	2.033	13.614	13.612	12.24				
	93	1,2-Dichlorobenzene	10.454	4.5	662715	1.523	1.457	13.933	13.933	7.09				
	94	1,2-Dibromo-3-chloropropane	9.991	-0.1	95034	0.218	0.219	15.144	15.134	8.03				
	95	1,2,4-Trichlorobenzene	11.616	16.2	468271	1.076	0.927	16.475	16.464	10.63				
	96	Hexachlorobutadiene	11.688	16.9	241558	0.555	0.475	16.663	16.660	8.43				
	97	Naphthalene	10.785	7.8	1004016	2.308	2.140	16.872	16.872	14.56				
	98	1,2,3-Trichlorobenzene	11.029	10.3	438452	1.008	0.914	17.235	17.228	10.38				

Spike Amount = Nominal Amount * M

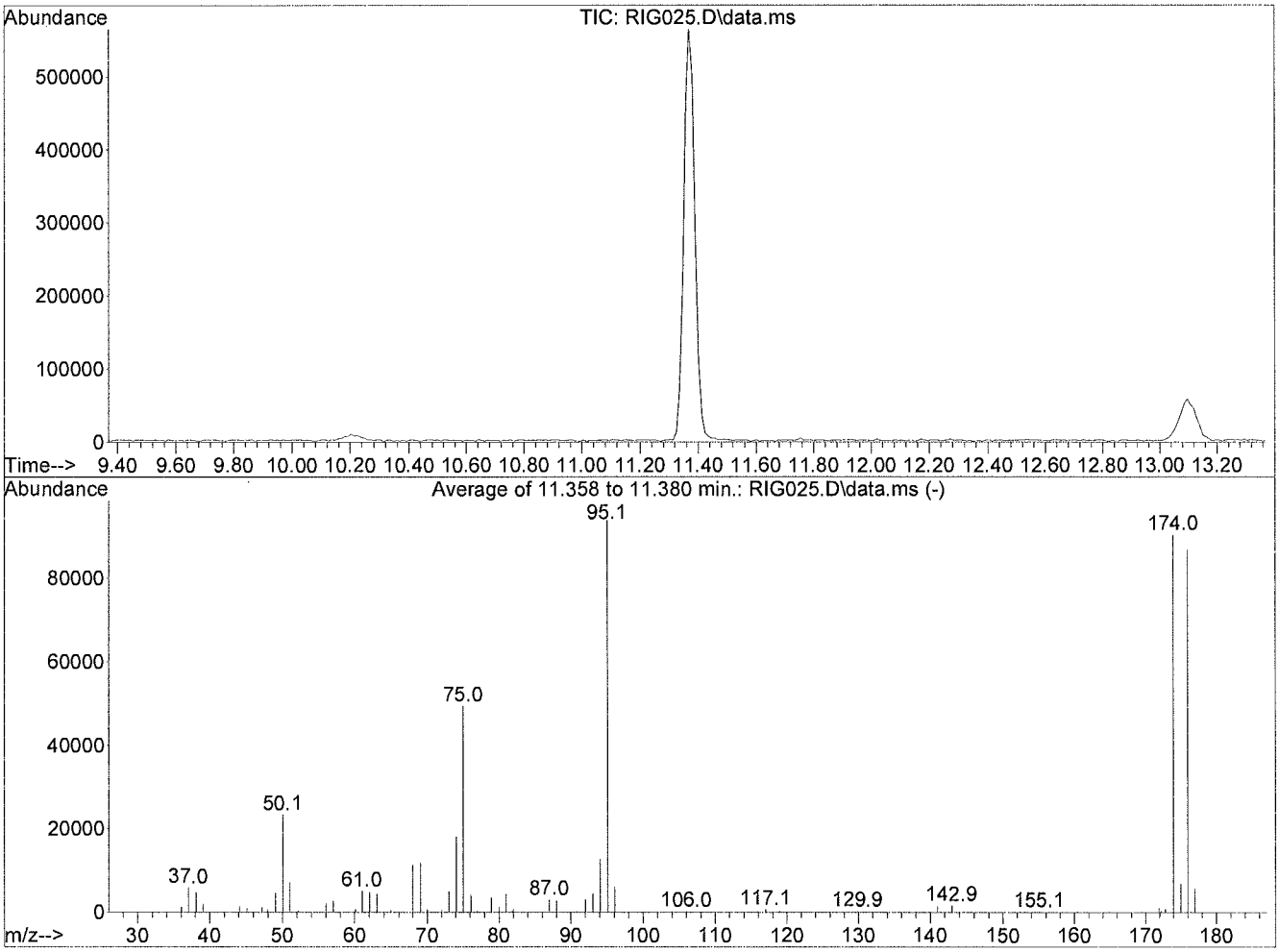
* Not valid for analysis.

10/9/24

Data Path : C:\msdchem\1\DATA\24I11\
Data File : RIG025.D
Acq On : 11 Sep 2024 2:39 pm
Operator : DNguye
Sample : BFBE2I04
Misc : T/CHK
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\VOE2I04.M
Title : METHOD 8260B 10mL
Last Update : Tue Sep 10 18:59:15 2024



AutoFind: Scans 797, 798, 799; Background Corrected with Scan 790

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.9	23347	PASS
75	95	30	60	52.7	49411	PASS
95	95	100	100	100.0	93813	PASS
96	95	5	9	6.5	6081	PASS
173	174	0.00	2	0.8	710	PASS
174	95	50	100	96.3	90363	PASS
175	174	5	9	7.6	6856	PASS
176	174	95	101	96.1	86811	PASS
177	176	5	9	6.5	5660	PASS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\24I11\
Data File : RIG026.D
Acq On : 11 Sep 2024 3:16 pm
Operator : DNguye
Sample : IVOE2I0402
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 03 16:22:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	114	0.00
2	T,M	Dichlorodifluoromethane	10.000	10.177	-1.8	114	0.00
3	P,T,M	Chloromethane	10.000	11.285	-12.9	123	0.00
4	C,T,M	Vinyl chloride	10.000	10.562	-5.6	119	0.00
5	T,M	Bromomethane	10.000	8.050	19.5	95	0.00
6	T,M	Dichlorofluoromethane	10.000	10.536	-5.4	122	0.00
7	T,M	Chloroethane	10.000	9.876	1.2	121	0.00
8	T,M	Trichlorofluoromethane	10.000	10.614	-6.1	116	0.00
9	T,M	Acrolein	50.000	51.525	-3.0	120	0.00
10	T,M	1,1,2-Trichloro-1,2,2-Trifl	10.000	10.855	-8.6	122	0.00
11	T,M	Acetone	50.000	51.468	-2.9	122	0.00
12	T,M	tert-Butyl alcohol	250.000	283.265	-13.3	127	0.00
13	C,T,M	1,1-Dichloroethene	10.000	10.832	-8.3	123	0.00
14	T,M	Acetonitrile	50.000	54.678	-9.4	129	0.00
15	T,M	Allyl chloride	10.000	10.567	-5.7	121	0.00
16	T,M	Iodomethane	10.000	10.100	-1.0	143	0.00
17	T,M	Methyl acetate	10.000	10.150	-1.5	123	0.00
18	T,M	Methylene chloride	10.000	10.445	-4.5	129	0.00
19	T,M	Acrylonitrile	50.000	53.054	-6.1	120	0.00
20	T,M	tert-Butyl methyl ether (MT	10.000	11.211	-12.1	125	0.00
21	T,M	Carbon disulfide	10.000	8.893	11.1	105	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.007	-0.1	118	0.01
23	T,M	Isopropyl ether (DIPE)	10.000	11.928	-19.3	135	0.00
24	T,M	Vinyl acetate	10.000	11.927	-19.3	135	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.781	-7.8	122	0.00
26	T,M	tert-Butyl ethyl ether (ETB	10.000	11.870	-18.7	132	0.00
27	T,M	2-Butanone	50.000	45.931	8.1	109	0.00
28	T,M	Propionitrile	100.000	113.526	-13.5	127	0.00
29	T,M	Isobutyl alcohol	200.000	198.105	0.9	115	0.00
30	T,M	2,2-Dichloropropane	10.000	11.088	-10.9	128	0.00
31	T,M	Methacrylonitrile	100.000	110.055	-10.1	122	0.00
32	T,M	cis-1,2-Dichloroethene	10.000	10.234	-2.3	116	0.00
33	C,T,M	Chloroform	10.000	10.106	-1.1	119	0.00
34	T,M	Bromochloromethane	10.000	10.041	-0.4	112	0.00
35	T,M	Tetrahydrofuran	10.000	10.788	-7.9	124	0.00
36	S	Dibromofluoromethane	10.000	10.443	-4.4	116	0.00
37	T,M	1,1,1-Trichloroethane	10.000	10.979	-9.8	124	0.00
38	T,M	Cyclohexane	10.000	10.476	-4.8	126	0.00
39	T,M	tert-Amyl methyl ether (TAM	10.000	10.801	-8.0	125	0.00
40	T,M	1,1-Dichloropropene	10.000	10.686	-6.9	122	0.00
41	S	1,2-Dichloroethane-d4	10.000	10.683	-6.8	124	0.00
42	T,M	Carbon tetrachloride	10.000	10.465	-4.6	118	0.00
43	T,M	1,2-Dichloroethane	10.000	11.132	-11.3	127	0.00
44	T,M	Benzene	10.000	10.390	-3.9	121	0.00
45	T,M	Trichloroethene	10.000	9.750	2.5	113	0.00
46	T,M	Methyl methacrylate	10.000	10.089	-0.9	114	0.00
47	T,M	Methylcyclohexane	10.000	10.737	-7.4	127	0.00
48	C,T,M	1,2-Dichloropropane	10.000	10.076	-0.8	117	0.00
49	T,M	1,4-Dioxane	200.000	239.758	-19.9	145	0.01
50	T,M	Bromodichloromethane	10.000	10.085	-0.9	120	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\24I11\
Data File : RIG026.D
Acq On : 11 Sep 2024 3:16 pm
Operator : DNguye
Sample : IVOE2I0402
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 03 16:22:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	Dibromomethane	10.000	10.157	-1.6	114	0.01
52	T,M	2-Chloroethyl vinyl ether	10.000	7.609	23.9#	83	0.00
53	T,M	4-Methyl-2-pentanone	50.000	55.580	-11.2	117	0.00
54	T,M	cis-1,3-Dichloropropene	10.000	10.775	-7.8	122	0.00
55	I	CHLOROBENZENE-D5	10.000	10.000	0.0	115	0.00
56	S	Toluene-d8	10.000	10.678	-6.8	124	0.00
57	T,M	Ethyl methacrylate	10.000	10.489	-4.9	116	0.00
58	C,T,M	Toluene	10.000	10.553	-5.5	120	0.00
59	T,M	trans-1,3-Dichloropropene	10.000	10.649	-6.5	122	0.00
60	T,M	2-Hexanone	50.000	57.044	-14.1	122	0.01
61	T,M	1,1,2-Trichloroethane	10.000	10.229	-2.3	115	0.00
62	T,M	1,3-Dichloropropane	10.000	10.592	-5.9	120	0.00
63	T,M	Tetrachloroethene	10.000	10.838	-8.4	123	-0.01
64	T,M	Dibromochloromethane	10.000	9.671	3.3	116	0.00
65	T,M	1,2-Dibromoethane	10.000	10.323	-3.2	118	0.00
66	T,M	1-Chlorohexane	10.000	11.105	-11.1	122	0.00
67	P,T,M	Chlorobenzene	10.000	10.074	-0.7	118	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.031	-0.3	118	0.00
69	C,T,M	Ethylbenzene	10.000	10.983	-9.8	123	0.00
70	T,M	m-Xylene & p-Xylene	20.000	22.061	-10.3	120	0.00
71	T,M	o-Xylene	10.000	11.286	-12.9	125	0.01
72	T,M	Styrene	10.000	11.077	-10.8	119	0.01
73	T,M	Isopropylbenzene	10.000	11.198	-12.0	120	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	111	0.00
75	P,T,M	Bromoform	10.000	10.175	-1.8	120	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	10.127	-1.3	118	0.00
77	S	4-Bromofluorobenzene	10.000	10.638	-6.4	124	0.00
78	T,M	1,2,3-Trichloropropane	10.000	10.373	-3.7	116	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	11.729	-17.3	125	0.00
80	T,M	n-Propylbenzene	10.000	11.593	-15.9	121	0.01
81	T,M	Bromobenzene	10.000	11.392	-13.9	127	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	11.375	-13.8	119	0.00
83	T,M	2-Chlorotoluene	10.000	11.474	-14.7	133	0.00
84	T,M	4-Chlorotoluene	10.000	11.205	-12.1	111	0.01
85	T,M	tert-Butylbenzene	10.000	10.970	-9.7	121	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	11.892	-18.9	122	0.00
87	T,M	sec-Butylbenzene	10.000	10.847	-8.5	120	0.00
88	T,M	p-Isopropyltoluene	10.000	11.067	-10.7	122	0.00
89	T,M	1,3-Dichlorobenzene	10.000	10.317	-3.2	116	0.01
90	T,M	1,2,3-Trimethylbenzene	10.000	11.502	-15.0	122	0.01
91	T,M	1,4-Dichlorobenzene	10.000	10.513	-5.1	118	0.00
92	T,M	n-Butylbenzene	10.000	10.810	-8.1	119	0.00
93	T,M	1,2-Dichlorobenzene	10.000	10.454	-4.5	120	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	9.992	0.1	110	0.01
95	T,M	1,2,4-Trichlorobenzene	10.000	11.616	-16.2	137	0.01
96	T,M	Hexachlorobutadiene	10.000	11.688	-16.9	133	0.00
97	T,M	Naphthalene	10.000	10.786	-7.9	119	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	11.029	-10.3	128	0.00

10/4/24

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\24I11\
Data File : RIG026.D
Acq On : 11 Sep 2024 3:16 pm
Operator : DNguye
Sample : IVOE2I0402
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 03 16:22:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	Amount	Calc.	%Dev	Area%	Dev(min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\24I11\
Data File : RIG026.D
Acq On : 11 Sep 2024 3:16 pm
Operator : DNguye
Sample : IVOE2I0402
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 03 16:22:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	114	0.00
2	T,M	Dichlorodifluoromethane	0.309	0.315	-1.9	114	0.00
3	P,T,M	Chloromethane	0.263	0.247	6.1	123	0.00
4	C,T,M	Vinyl chloride	0.267	0.281	-5.2	119	0.00
5	T,M	Bromomethane	0.180	0.128	28.9#	95	0.00
6	T,M	Dichlorofluoromethane	0.654	0.689	-5.4	122	0.00
7	T,M	Chloroethane	0.139	0.137	1.4	121	0.00
8	T,M	Trichlorofluoromethane	0.491	0.521	-6.1	116	0.00
9	T,M	Acrolein	0.034	0.035	-2.9	120	0.00
10	T,M	1,1,2-Trichloro-1,2,2-Trifl	0.286	0.310	-8.4	122	0.00
11	T,M	Acetone	0.158	0.148	6.3	122	0.00
12	T,M	tert-Butyl alcohol	0.039	0.045	-15.4	127	0.00
13	C,T,M	1,1-Dichloroethene	0.607	0.658	-8.4	123	0.00
14	T,M	Acetonitrile	0.046	0.051	-10.9	129	0.00
15	T,M	Allyl chloride	0.160	0.170	-6.3	121	0.00
16	T,M	Iodomethane	0.360	0.418	-16.1	143	0.00
17	T,M	Methyl acetate	0.319	0.323	-1.3	123	0.00
18	T,M	Methylene chloride	0.562	0.587	-4.4	129	0.00
19	T,M	Acrylonitrile	0.143	0.152	-6.3	120	0.00
20	T,M	tert-Butyl methyl ether (MT	1.048	1.175	-12.1	125	0.00
21	T,M	Carbon disulfide	0.907	0.807	11.0	105	0.00
22	T,M	trans-1,2-Dichloroethene	0.318	0.318	0.0	118	0.01
23	T,M	Isopropyl ether (DIPE)	1.161	1.385	-19.3	135	0.00
24	T,M	Vinyl acetate	0.708	0.844	-19.2	135	0.00
25	P,T,M	1,1-Dichloroethane	0.661	0.713	-7.9	122	0.00
26	T,M	tert-Butyl ethyl ether (ETB	1.312	1.557	-18.7	132	0.00
27	T,M	2-Butanone	0.042	0.038	9.5	109	0.00
28	T,M	Propionitrile	0.048	0.054	-12.5	127	0.00
29	T,M	Isobutyl alcohol	0.018	0.018	0.0	115	0.00
30	T,M	2,2-Dichloropropane	0.653	0.724	-10.9	128	0.00
31	T,M	Methacrylonitrile	0.079	0.087	-10.1	122	0.00
32	T,M	cis-1,2-Dichloroethene	0.375	0.384	-2.4	116	0.00
33	C,T,M	Chloroform	0.837	0.846	-1.1	119	0.00
34	T,M	Bromochloromethane	0.234	0.235	-0.4	112	0.00
35	T,M	Tetrahydrofuran	0.116	0.125	-7.8	124	0.00
36	S	Dibromofluoromethane	0.540	0.457	15.4	116	0.00
37	T,M	1,1,1-Trichloroethane	0.716	0.786	-9.8	124	0.00
38	T,M	Cyclohexane	0.365	0.383	-4.9	126	0.00
39	T,M	tert-Amyl methyl ether (TAM	0.239	0.258	-7.9	125	0.00
40	T,M	1,1-Dichloropropene	0.153	0.163	-6.5	122	0.00
41	S	1,2-Dichloroethane-d4	0.627	0.670	-6.9	124	0.00
42	T,M	Carbon tetrachloride	0.634	0.663	-4.6	118	0.00
43	T,M	1,2-Dichloroethane	0.708	0.789	-11.4	127	0.00
44	T,M	Benzene	1.240	1.288	-3.9	121	0.00
45	T,M	Trichloroethene	0.339	0.331	2.4	113	0.00
46	T,M	Methyl methacrylate	0.308	0.311	-1.0	114	0.00
47	T,M	Methylcyclohexane	0.357	0.384	-7.6	127	0.00
48	C,T,M	1,2-Dichloropropane	0.339	0.341	-0.6	117	0.00
49	T,M	1,4-Dioxane	0.002	0.002	0.0	145	0.01
50	T,M	Bromodichloromethane	0.667	0.673	-0.9	120	0.00

Data Path : C:\msdchem\1\DATA\24I11\
Data File : RIG026.D
Acq On : 11 Sep 2024 3:16 pm
Operator : DNguye
Sample : IVOE2I0402
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 03 16:22:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	Dibromomethane	0.279	0.283	-1.4	114	0.01
52	T,M	2-Chloroethyl vinyl ether	0.149	0.113	24.2#	83	0.00
53	T,M	4-Methyl-2-pentanone	0.428	0.476	-11.2	117	0.00
54	T,M	cis-1,3-Dichloropropene	0.576	0.621	-7.8	122	0.00
55	I	CHLOROBENZENE-D5	1.000	1.000	0.0	115	0.00
56	S	Toluene-d8	1.423	1.519	-6.7	124	0.00
57	T,M	Ethyl methacrylate	0.507	0.532	-4.9	116	0.00
58	C,T,M	Toluene	1.573	1.660	-5.5	120	0.00
59	T,M	trans-1,3-Dichloropropene	0.736	0.784	-6.5	122	0.00
60	T,M	2-Hexanone	0.354	0.404	-14.1	122	0.01
61	T,M	1,1,2-Trichloroethane	0.408	0.417	-2.2	115	0.00
62	T,M	1,3-Dichloropropane	0.632	0.670	-6.0	120	0.00
63	T,M	Tetrachloroethene	0.358	0.388	-8.4	123	-0.01
64	T,M	Dibromochloromethane	0.617	0.596	3.4	116	0.00
65	T,M	1,2-Dibromoethane	0.433	0.447	-3.2	118	0.00
66	T,M	1-Chlorohexane	0.442	0.491	-11.1	122	0.00
67	P,T,M	Chlorobenzene	1.065	1.073	-0.8	118	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.480	0.481	-0.2	118	0.00
69	C,T,M	Ethylbenzene	1.783	1.959	-9.9	123	0.00
70	T,M	m-Xylene & p-Xylene	1.388	1.531	-10.3	120	0.00
71	T,M	o-Xylene	1.364	1.539	-12.8	125	0.01
72	T,M	Styrene	1.004	1.112	-10.8	119	0.01
73	T,M	Isopropylbenzene	1.465	1.641	-12.0	120	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	111	0.00
75	P,T,M	Bromoform	0.813	0.827	-1.7	120	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.983	0.995	-1.2	118	0.00
77	S	4-Bromofluorobenzene	1.086	1.155	-6.4	124	0.00
78	T,M	1,2,3-Trichloropropane	0.289	0.299	-3.5	116	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.355	0.416	-17.2	125	0.00
80	T,M	n-Propylbenzene	3.367	3.904	-15.9	121	0.01
81	T,M	Bromobenzene	0.910	1.036	-13.8	127	0.00
82	T,M	1,3,5-Trimethylbenzene	2.308	2.626	-13.8	119	0.00
83	T,M	2-Chlorotoluene	2.336	2.681	-14.8	133	0.00
84	T,M	4-Chlorotoluene	2.162	2.423	-12.1	111	0.01
85	T,M	tert-Butylbenzene	0.370	0.406	-9.7	121	0.00
86	T,M	1,2,4-Trimethylbenzene	2.330	2.771	-18.9	122	0.00
87	T,M	sec-Butylbenzene	2.667	2.893	-8.5	120	0.00
88	T,M	p-Isopropyltoluene	2.255	2.495	-10.6	122	0.00
89	T,M	1,3-Dichlorobenzene	1.455	1.501	-3.2	116	0.01
90	T,M	1,2,3-Trimethylbenzene	2.417	2.780	-15.0	122	0.01
91	T,M	1,4-Dichlorobenzene	1.513	1.591	-5.2	118	0.00
92	T,M	n-Butylbenzene	2.033	2.198	-8.1	119	0.00
93	T,M	1,2-Dichlorobenzene	1.457	1.523	-4.5	120	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.219	0.218	0.5	110	0.01
95	T,M	1,2,4-Trichlorobenzene	0.927	1.076	-16.1	137	0.01
96	T,M	Hexachlorobutadiene	0.475	0.555	-16.8	133	0.00
97	T,M	Naphthalene	2.140	2.308	-7.9	119	0.00
98	T,M	1,2,3-Trichlorobenzene	0.914	1.008	-10.3	128	0.00

10/4/24

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\24I11\
Data File : RIG026.D
Acq On : 11 Sep 2024 3:16 pm
Operator : DNguye
Sample : IVOE2I0402
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 03 16:22:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

10/4/24

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I11\
Data File : RIG026.D
Acq On : 11 Sep 2024 3:16 pm
Operator : DNguye
Sample : IVOE2I0402
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 03 16:22:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	997909	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	816077	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	435055	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	456033	10.44	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.40%		
41) 1,2-Dichloroethane-d4	5.723	65	668614	10.68	ug/L	0.00
Spiked Amount 10.000			Recovery =	106.80%		
56) Toluene-d8	7.594	98	1239660	10.68	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.80%		
77) 4-Bromofluorobenzene	11.369	95	502435	10.64	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.40%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	313975	10.18	ug/l	99
3) Chloromethane	2.928	50	246096	11.29	ug/l	99
4) Vinyl chloride	2.994	62	280890	10.56	ug/l	95
5) Bromomethane	3.324	94	128202	8.05	ug/l	99
6) Dichlorofluoromethane	3.357	67	687921	10.54	ug/L	99
7) Chloroethane	3.357	64	136722	9.88	ug/l	96
8) Trichlorofluoromethane	3.522	101	519548	10.61	ug/l	99
9) Acrolein	3.753	56	172423	51.52	ug/l	99
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	309346	10.85	ug/l	98
11) Acetone	3.775	43	739584	51.47	ug/l	98
12) tert-Butyl alcohol	3.874	59	1113729	283.27	ug/L	97
13) 1,1-Dichloroethene	3.908	61	656149	10.83	ug/l	99
14) Acetonitrile	3.874	41	253596	54.68	ug/L	97
15) Allyl chloride	4.106	76	169214	10.57	ug/L	99
16) Iodomethane	4.150	142	417154	10.10	ug/l	99
17) Methyl acetate	4.029	43	322675	10.15	ug/L	96
18) Methylene chloride	4.183	49	585925	10.45	ug/l	93
19) Acrylonitrile	4.216	53	757478	53.05	ug/l	98
20) tert-Butyl methyl ethe...	4.227	73	1172202	11.21	ug/L	99
21) Carbon disulfide	4.315	76	804838	8.89	ug/l	99
22) trans-1,2-Dichloroethene	4.381	96	317102	10.01	ug/l	98
23) Isopropyl ether (DIPE)	4.469	45	1381893	11.93	ug/l	97
24) Vinyl acetate	4.546	43	842698	11.93	ug/l	98
25) 1,1-Dichloroethane	4.634	63	711569	10.78	ug/l	99
26) tert-Butyl ethyl ether...	4.733	59	1553721	11.87	ug/l	95
27) 2-Butanone	4.854	72	190427	45.93	ug/l	99
28) Propionitrile	4.909	54	539414	113.53	ug/L	100
29) Isobutyl alcohol	5.030	43	350111	198.11	ug/L	92
30) 2,2-Dichloropropane	5.030	77	722794	11.09	ug/l	99
31) Methacrylonitrile	5.063	52	870630	110.06	ug/L	92
32) cis-1,2-Dichloroethene	5.063	96	383276	10.23	ug/l	93
33) Chloroform	5.173	83	844010	10.11	ug/l	99
34) Bromochloromethane	5.327	130	234338	10.04	ug/l	95
35) Tetrahydrofuran	5.327	42	124793	10.79	ug/L	94
37) 1,1,1-Trichloroethane	5.503	97	784524	10.98	ug/l	98
38) Cyclohexane	5.547	84	381850	10.48	ug/L	99
39) tert-Amyl methyl ether...	5.624	87	257106	10.80	ug/l	96
40) 1,1-Dichloropropene	5.613	110	162999	10.69	ug/L	97

Data Path : C:\msdchem\1\DATA\24I11\
Data File : RIG026.D
Acq On : 11 Sep 2024 3:16 pm
Operator : DNguye
Sample : IVOE2I0402
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 03 16:22:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) Carbon tetrachloride	5.734	119	661955	10.47	ug/L	96
43) 1,2-Dichloroethane	5.800	62	787004	11.13	ug/L	100
44) Benzene	5.866	78	1285661	10.39	ug/L	98
45) Trichloroethene	6.373	130	330226	9.75	ug/L	94
46) Methyl methacrylate	6.439	69	309969	10.09	ug/L	80
47) Methylcyclohexane	6.461	83	382831	10.74	ug/L	94
48) 1,2-Dichloropropane	6.527	63	340598	10.08	ug/L	97
49) 1,4-Dioxane	6.736	88	42637	239.76	ug/L	89
50) Bromodichloromethane	6.769	83	671697	10.08	ug/L	99
51) Dibromomethane	6.868	93	282595	10.16	ug/L	97
52) 2-Chloroethyl vinyl ether	6.934	63	112872	7.61	ug/L	97
53) 4-Methyl-2-pentanone	6.967	43	2376584	55.58	ug/L	99
54) cis-1,3-Dichloropropene	7.275	75	619434	10.78	ug/L	94
57) Ethyl methacrylate	7.693	69	434191	10.49	ug/L	94
58) Toluene	7.693	91	1354374	10.55	ug/l	98
59) trans-1,3-Dichloropropene	7.814	75	639500	10.65	ug/l	92
60) 2-Hexanone	7.946	43	1649782	57.04	ug/l	97
61) 1,1,2-Trichloroethane	8.045	97	340434	10.23	ug/l	98
62) 1,3-Dichloropropane	8.354	76	546710	10.59	ug/l	100
63) Tetrachloroethene	8.508	164	316669	10.84	ug/l	98
64) Dibromochloromethane	8.783	129	486659	9.67	ug/l	99
65) 1,2-Dibromoethane	9.069	107	364879	10.32	ug/l	99
66) 1-Chlorohexane	9.124	91	400289	11.10	ug/l	98
67) Chlorobenzene	9.619	112	875716	10.07	ug/l	100
68) 1,1,1,2-Tetrachloroethane	9.641	131	392913	10.03	ug/l	100
69) Ethylbenzene	9.641	91	1598495	10.98	ug/l	98
70) m-Xylene & p-Xylene	9.751	91	2498556	22.06	ug/l	99
71) o-Xylene	10.423	91	1255916	11.29	ug/l	98
72) Styrene	10.467	104	907446	11.08	ug/l	99
73) Isopropylbenzene	10.940	105	1339289	11.20	ug/L	99
75) Bromoform	11.061	173	359904	10.17	ug/l	99
76) 1,1,2,2-Tetrachloroethane	11.204	83	433001	10.13	ug/l	99
78) 1,2,3-Trichloropropane	11.446	110	130223	10.37	ug/l	98
79) trans-1,4-Dichloro-2-b...	11.512	53	180957	11.73	ug/l	98
80) n-Propylbenzene	11.589	91	1698303	11.59	ug/l	99
81) Bromobenzene	11.732	156	450823	11.39	ug/l	89
82) 1,3,5-Trimethylbenzene	11.831	105	1142248	11.37	ug/l	99
83) 2-Chlorotoluene	11.919	91	1166324	11.47	ug/l	90
84) 4-Chlorotoluene	11.985	91	1053989	11.20	ug/l	97
85) tert-Butylbenzene	12.415	134	176805	10.97	ug/l	92
86) 1,2,4-Trimethylbenzene	12.481	105	1205672	11.89	ug/l	95
87) sec-Butylbenzene	12.756	105	1258826	10.85	ug/l	99
88) p-Isopropyltoluene	12.954	119	1085622	11.07	ug/l	99
89) 1,3-Dichlorobenzene	13.174	146	653133	10.32	ug/l	97
90) 1,2,3-Trimethylbenzene	13.262	105	1209489	11.50	ug/L	98
91) 1,4-Dichlorobenzene	13.328	146	692205	10.51	ug/l	97
92) n-Butylbenzene	13.614	91	956256	10.81	ug/l	99
93) 1,2-Dichlorobenzene	13.933	146	662715	10.45	ug/l	97
94) 1,2-Dibromo-3-chloropr...	15.144	157	95034	9.99	ug/l	96
95) 1,2,4-Trichlorobenzene	16.475	180	468271	11.62	ug/l	96
96) Hexachlorobutadiene	16.663	225	241558	11.69	ug/l	94
97) Naphthalene	16.872	128	1004016	10.79	ug/l	99
98) 1,2,3-Trichlorobenzene	17.235	180	438452	11.03	ug/l	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I11\
Data File : RIG026.D
Acq On : 11 Sep 2024 3:16 pm
Operator : DNguye
Sample : IVOE2I0402
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 03 16:22:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\24I11\
Data File : RIG026.D
Acq On : 11 Sep 2024 3:16 pm
Operator : DNguye
Sample : IVOE2I0402
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
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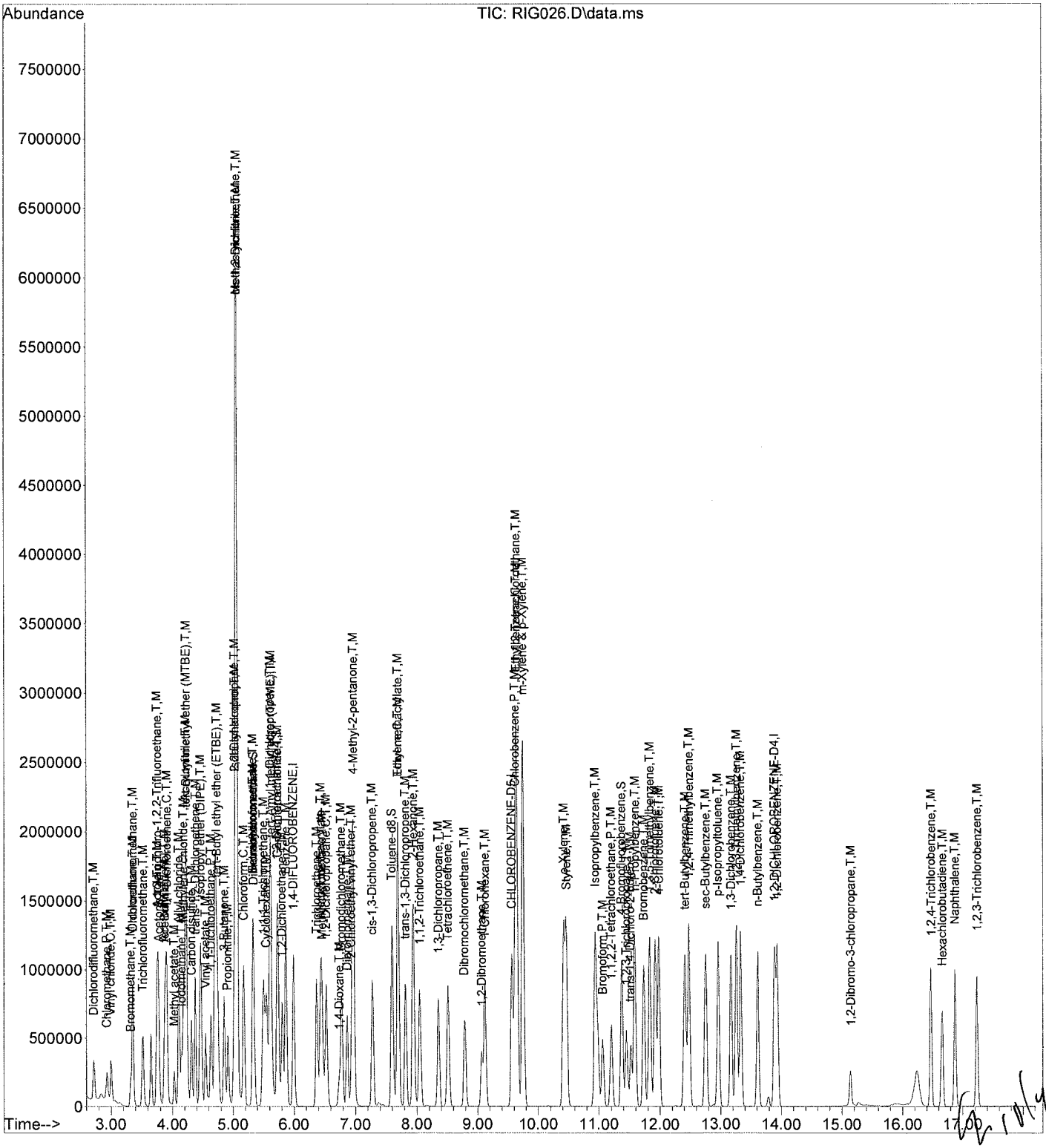
Quant Time: Oct 03 16:22:11 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



INITIAL CALIBRATIONS

FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RHV128 BFB Injection Date: 08/09/24

Instrument ID: 01New BFB Injection Time: 08:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	22.371
75	30 - 60% of mass 95	48.380
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.009
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	63.433
175	5 - 9% of mass 174	4.766(7.51)1
176	95 - 101% % of mass 174	63.900(100.74)1
177	5 - 9% % of mass 176	3.518(5.51)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	VO01H091	RHV129	08/09/24	17:28
2	VSTD0.5	VO01H092	RHV130	08/09/24	18:14
3	VSTD1	VO01H093	RHV131	08/09/24	18:45
4	VSTD2	VO01H094	RHV132	08/09/24	19:15
5	VSTD5	VO01H095	RHV133	08/09/24	19:46
6	VSTD10	VO01H096	RHV134	08/09/24	20:17
7	VSTD20	VO01H097	RHV135	08/09/24	20:47
8	VSTD30	VO01H098	RHV136	08/09/24	21:17
9	VSTD50	VO01H099	RHV137	08/09/24	21:47
10	VSTD100	VO01H0910	RHV138	08/09/24	22:17
11	VSTD50	IVO01H0901	RHV141	08/09/24	23:47

SC 9/6/24

Instrument ID :01New
Beginning DateTime :08/09/24 17:28
Spike Units :PPB
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09

M	IDX	Parameters	.3 17:28 RHV129	.5 18:14 RHV130	1 18:45 RHV131	2 19:15 RHV132	5 19:46 RHV133	10 20:17 RHV134	20 20:47 RHV135	30 21:17 RHV136	50 21:47 RHV137	100 22:17 RHV138	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5598
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	0.294	0.267	0.306	0.355	0.373	0.382	0.341	0.302	0.303	0.367	0.329	12.04	2.2409
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	------	------	0.198	0.243	0.240	0.256	0.235	0.215	0.227	0.293	0.239	11.82	2.5406
	6	Vinyl chloride	------	0.156	0.190	0.208	0.226	0.239	0.223	0.215	0.226	------	0.210	12.57	2.6789
	7	Bromomethane	------	0.184	0.164	0.185	0.189	0.191	0.184	0.176	0.180	0.224	0.186	8.61	3.2215
	8	Chloroethane	------	------	0.130	0.152	0.155	0.167	0.164	0.160	0.172	0.207	0.163	13.37	3.2780
	9	Dichlorofluoromethane	0.318	0.396	0.330	0.390	0.368	0.364	0.359	0.325	0.333	0.419	0.360	9.43	3.3422
	10	Trichlorofluoromethane	0.445	0.411	0.467	0.538	0.487	0.548	0.458	0.439	0.451	0.539	0.478	9.99	3.5541
5	11	Acrolein	------	------	0.008	0.009	0.010	0.010	0.010	0.010	0.011	0.013	0.010	14.81	4.0169
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.177	0.172	0.193	0.214	0.204	0.203	0.196	0.188	0.185	0.227	0.196	8.61	4.1334
5	13	Acetone	------	------	0.064	0.060	0.047	0.045	0.044	0.040	0.038	0.046	0.048	19.26	4.0965
	14	1,1-Dichloroethene	0.488	0.489	0.449	0.487	0.508	0.496	0.473	0.450	0.449	0.550	0.484	6.44	4.2548
25	15	tert-Butyl alcohol	------	0.014	0.010	0.013	0.015	0.014	0.014	0.012	0.013	0.015	0.013	12.10	4.3721
	16	Iodomethane	------	------	0.377	0.458	0.445	0.458	0.447	0.437	0.441	------	0.437	6.31	4.6629
	17	Methyl acetate	------	------	0.099	0.113	0.100	0.102	0.099	0.097	0.099	0.118	0.103	7.37	4.6835
	18	Methylene chloride	------	------	0.313	0.346	0.348	0.331	0.330	0.318	0.316	0.388	0.336	7.35	4.8854
	19	Carbon disulfide	------	------	0.758	0.794	0.829	0.885	0.883	0.876	------	------	0.838	6.33	4.9044
5	20	Acrylonitrile	------	0.040	0.035	0.034	0.038	0.039	0.041	0.041	0.040	0.049	0.040	11.32	5.0586
	21	tert-Butyl methyl ether (MTBE)	0.484	0.584	0.504	0.567	0.597	0.569	0.561	0.524	0.503	0.609	0.550	7.89	5.0949
	22	trans-1,2-Dichloroethene	0.408	0.450	0.410	0.451	0.467	0.453	0.433	0.421	0.418	0.496	0.441	6.34	5.2756
	23	Isopropyl ether (DIPE)	0.747	0.914	0.786	0.930	0.929	0.892	0.899	0.876	0.850	0.974	0.880	7.83	5.6919
	24	Vinyl acetate	------	------	0.258	0.297	0.326	0.339	0.338	0.309	0.320	0.385	0.321	11.40	5.8521
	25	1,1-Dichloroethane	0.494	0.584	0.490	0.548	0.556	0.540	0.541	0.523	0.517	0.608	0.540	6.83	5.8534
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	0.693	0.887	0.762	0.890	0.871	0.841	0.824	0.770	0.732	0.864	0.813	8.56	6.2652
5	28	2-Butanone	------	0.078	0.064	0.059	0.064	0.064	0.068	0.063	0.061	0.073	0.066	9.12	6.4397
	29	2,2-Dichloropropane	0.523	0.593	0.540	0.575	0.569	0.560	0.533	0.475	0.460	0.554	0.538	7.93	6.6504
	30	cis-1,2-Dichloroethene	0.281	0.356	0.307	0.348	0.348	0.349	0.337	0.334	0.333	0.405	0.340	9.52	6.7052
	31	Chloroform	------	0.746	0.623	0.657	0.642	0.622	0.573	0.518	0.501	0.590	0.608	12.21	6.9302
	32	Bromochloromethane	0.170	0.219	0.191	0.214	0.210	0.209	0.214	0.201	0.199	0.239	0.206	8.79	7.1690
	33	Tetrahydrofuran	------	------	------	0.040	0.044	0.033	0.036	0.032	0.033	0.039	0.037	11.65	7.2154
	34	Dibromofluoromethane	------	------	0.228	0.300	0.331	0.330	0.333	0.303	------	------	0.304	13.19	7.2427
	35	1,1,1-Trichloroethane	0.567	0.600	0.589	0.677	0.668	0.643	0.598	0.534	0.514	0.612	0.600	8.89	7.5186
	36	Cyclohexane	------	0.377	0.404	0.405	0.431	0.451	0.422	0.448	0.435	0.518	0.432	9.21	7.5376
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	0.164	0.155	0.141	0.172	0.165	0.165	0.165	0.163	0.159	0.195	0.164	8.22	7.7393
	39	Carbon tetrachloride	0.455	0.526	0.473	0.559	0.547	0.537	0.502	0.445	0.428	0.517	0.499	9.16	7.8934
	40	tert-Amyl methyl ether (TAME)	0.537	0.641	0.550	0.622	0.638	0.616	0.625	0.569	0.542	0.638	0.598	7.20	7.9082
	41	1,2-Dichloroethane-d4	------	0.236	0.244	0.281	0.295	0.299	0.295	0.244	------	------	0.270	10.30	7.9794
	42	Benzene	1.010	1.115	1.033	1.169	1.166	1.150	1.146	1.089	1.041	1.093	1.101	5.25	8.1453
	43	1,2-Dichloroethane	0.260	0.363	0.331	0.403	0.390	0.380	0.358	0.310	0.296	0.353	0.344	13.08	8.1201
	44	Trichloroethene	0.357	0.373	0.311	0.361	0.353	0.358	0.348	0.331	0.321	0.389	0.350	6.77	9.0827
	45	Methylcyclohexane	0.332	0.439	0.466	0.481	0.513	0.508	0.482	0.520	0.505	0.576	0.482	13.31	9.1761
	46	1,2-Dichloropropane	0.236	0.244	0.212	0.250	0.260	0.259	0.261	0.248	0.248	0.295	0.251	8.42	9.3642
	47	Bromodichloromethane	0.496	0.542	0.423	0.460	0.442	0.440	0.420	0.374	0.359	0.431	0.439	12.12	9.7405
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	11.23	9.7789
	49	Dibromomethane	------	0.150	0.129	0.149	0.143	0.144	0.142	0.128	0.124	0.150	0.140	7.18	9.8339
	50	2-Chloroethyl vinyl ether	------	------	0.062	0.068	0.080	0.077	0.085	0.081	0.080	0.096	0.079	13.01	10.2376
5	51	4-Methyl-2-pentanone	------	0.131	0.117	0.143	0.166	0.164	0.171	0.154	0.145	0.162	0.150	11.85	10.2833
	52	cis-1,3-Dichloropropene	0.400	0.436	0.389	0.461	0.477	0.469	0.467	0.434	0.418	0.488	0.444	7.60	10.6294
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7258
	54	Toluene-d8	------	1.100	1.053	1.248	1.330	1.303	1.278	1.245	------	------	1.222	8.56	11.0382
	55	Toluene	1.555	1.555	1.437	1.605	1.638	1.573	1.453	1.455	1.346	1.369	1.498	6.69	11.1731
	56	Ethyl methacrylate	------	------	0.177	0.245	0.276	0.269	0.273	0.267	0.263	------	0.253	13.78	11.4743
	57	trans-1,3-Dichloropropene	0.363	0.427	0.376	0.459	0.489	0.467	0.444	0.420	0.413	0.488	0.435	10.00	11.4902
	58	1,1,2-Trichloroethane	0.194	0.236	0.189	0.205	0.244	0.222	0.220	0.215	0.212	0.258	0.219	9.84	11.7598
5	59	2-Hexanone	------	------	0.068	0.092	0.120	0.123	0.125	0.118	0.113	0.133	0.111	19.21	11.7765
	60	1,3-Dichloropropane	0.339	0.404	0.332	0.401	0.422	0.401	0.399	0.377	0.379	0.453	0.391	9.24	12.2013
	61	Tetrachloroethene	0.370	0.377	0.312	0.341	0.357	0.333	0.312	0.315	0.311	0.376	0.340	8.13	12.3080
	62	Dibromochloromethane	0.268	0.307	0.274	0.302	0.305	0.302	0.288	0.268	0.265	0.323	0.290	7.03	12.6754
	63	1,2-Dibromoethane	0.214	0.207	0.192	0.234	0.237	0.222	0.222	0.216	0.209	0.257	0.221	8.26	13.0428
	64	1-Chlorohexane	0.751	0.724	0.651	0.718	0.720	0.688	0.661	0.660	0.640	0.735	0.695	5.71	13.3198
	65	Chlorobenzene	1.082	1.040	0.928	1.089	1.115	1.066	1.014	0.972	0.937	1.054	1.030	6.31	13.7954
	66	1,1,1,2-Tetrachloroethane	0.290	0.328	0.314	0.370	0.376	0.366	0.345	0.332	0.323	0.397	0.344	9.54	13.8724
	67	Ethylbenzene	2.008	1.922	1.791	2.055	2.067	1.983	1.821	1.697	1.538	------	1.876	9.54	13.8900
2	68	m-Xylene & p-Xylene	1.528	1.571	1.410	1.591	1.626	1.518	1.367	1.237	------	------	1.481	8.93	14.0303
	69	o-Xylene	1.498	1.486	1.362	1.570	1.624	1.537	1.412	1.334	1.209	1.246	1.428	9.71	14.8487
	70	Styrene	0.963	1.019	0.935	1.109	1.170	1.098	1.067	1.033	0.983	1.072	1.045	6.93	14.9213
	71	Isopropylbenzene	1.985	1.917	1.830	2.078	2.181	2.057	1.872	1.728	------	------	1.956	7.56	15.5303
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6932
	73	Bromoform	------	0.376	0.269	0.348	0.402	0.377	0.377	0.379	0.410	------	0.367	11.93	15.5692
	74	trans-1,4-Dichloro-2-butene	------	------	------	0.191	0.231	0.224	0.232	0.225	0.238	------	0.223	7.51	15.6316
	75	1,1,2,2-Tetrachloroethane	0.460	0.561	0.535	0.610	0.661	0.606	0.639	0.639	0.664	------	0.597	11.29	15.8686
	76	4-Bromofluorobenzene	------	1.390	1.021	1.263	1.333	1.267	1.303	1.304	------	------	1.269	9.24	16.0203
	77	1,2,3-Trichloropropane	------	0.244	0.179	0.227	0.239	0.210	0.219	0.210	0.231	------	0.220	9.42	16.1618
	78	n-Propylbenzene	7.567	6.929	6.113	6.581	6.854	6.362	5.996	5.951	5.583	5.634	6.357	9.90	16.3050
	79	Bromobenzene	0.894	0.895	0.868	0.938	0.992	0.935	0.922	0.936	0.976	1.272	0.963	11.94	16.3939
	80	1,3,5-Trimethylbenzene	4.576	4.567	3.999	4.333	4.564	4.102	3.906	3.860	3.838	4.232	4.198	7.15	16.6132
	81	2-Chlorotoluene	4.564	4.597	3.970	4.164	4.382	4.089	3.890	3.789	3.894	4.392	4.173	7.05	16.6487
	82	4-Chlorotoluene	3.871	3.608	3.320	3.679	3.843	3.527	3.314	3.363	3.295	3.827	3.565	6.57	16.7421
	83	tert-Butylbenzene	0.948	0.959	0.791	0.928	0.917	0.882	0.875	0.886	0.933	1.164	0.928	10.33	17.3006
	84	1,2,4-Trimethylbenzene	4.447	4.090	3.741	4.254	4.366	4.041	3.776	3.749	3.634	4.005	4.010	7.06	17.3643
	85	sec-Butylbenzene	6.545	6.419	5.647	5.896	6.288	5.756	5.371	5.189	4.780	4.731	5.662	11.41	17.6621
	86	p-Isopropyltoluene	5.535	5.175	4.648	5.172	5.348	4.885	4.630	4.432	4.129	4.240	4.820	9.96	17.8887
	87	1,3-Dichlorobenzene	2.269	2.110	1.787	1.923	2.095	1.957	1.882	1.851	1.844	2.222	1.994	8.46	18.0384
	88	1,2,3-Trimethylbenzene	4.048	4.258	3.772	4.188	4.333	4.012	3.750	3.534	3.376	3.632	3.890	8.36	18.1451
	89	1,4-Dichlorobenzene	2.157	2.027	1.747	1.944	1.979	1.894	1.841	1.773	1.783	2.137	1.928	7.64	18.1999
	90	n-Butylbenzene	5.407	5.018	4.310	4.829	4.796	4.561	4.150	3.867	3.573	3.613	4.412	13.97	18.5006
	91	1,2-Dichlorobenzene	1.635	1.734	1.465	1.679	1.775	1.646	1.608	1.513	1.521	1.844	1.642	7.38	18.7273
	92	1,2-Dibromo-3-chloropropane	------	0.074	0.073	0.093	0.103	0.100	0.104	0.094	0.098	------	0.093	13.33	19.7229
	93	1,2,4-Trichlorobenzene	1.191	1.246	0.938	1.132	1.163	1.119	1.109	1.030	1.009	1.220	1.116	8.77	20.8162
	94	Hexachlorobutadiene	0.799	0.758	0.701	0.716	0.764	0.746	0.711	0.672	0.658	0.800	0.732	6.72	20.9895
	95	Naphthalene	1.491	1.639	1.286	1.575	1.681	1.652	1.661	1.527	1.541	1.852	1.591	9.31	21.1673
	96	1,2,3-Trichlorobenzene	0.847	0.845	0.759	0.897	0.903	0.875	0.850	0.800	0.789	0.960	0.853	7.02	21.4829

Spike Amount = Nominal Amount * M
Ave_%RSD : 9.5 Max_%RSD : 19.3

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
13	Acetone	0.01114	0.04263	0.9952
59	2-Hexanone	-0.03118	0.12619	0.9976

SW
9/6/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :01New
Beginning DateTime :08/09/24 17:28
Spike Units :PPB
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25
Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09

M	IDX	Parameters	.3 17:28 RHV129	.5 18:14 RHV130	1 18:45 RHV131	2 19:15 RHV132	5 19:46 RHV133	10 20:17 RHV134	20 20:47 RHV135	30 21:17 RHV136	50 21:47 RHV137	100 22:17 RHV138	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5598
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	89	81	93	108	113	116	104	92	92	112	10.5	12.04	2.2409
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	------	------	83	102	100	107	98	90	95	123	8.2	11.82	2.5406
	6	Vinyl chloride	------	74	90	99	108	114	106	102	108	------	9.2	12.57	2.6789
	7	Bromomethane	------	99	88	99	102	103	99	95	97	120	5.3	8.61	3.2215
	8	Chloroethane	------	------	80	93	95	102	101	98	106	127	8.7	13.37	3.2780
	9	Dichlorofluoromethane	88	110	92	108	102	101	100	90	92	116	7.6	9.43	3.3422
	10	Trichlorofluoromethane	93	86	98	113	102	115	96	92	94	113	8.3	9.99	3.5541
5	11	Acrolein	------	------	80	90	100	100	100	100	110	130	8.8	14.81	4.0169
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	90	88	98	109	104	104	100	96	94	116	6.6	8.61	4.1334
5	13	Acetone	------	------	97	115	101	100	101	91	88	109	14.6	19.26	4.0965
	14	1,1-Dichloroethene	101	101	93	101	105	102	98	93	93	114	4.7	6.44	4.2548
25	15	tert-Butyl alcohol	------	108	77	100	115	108	108	92	100	115	9.4	12.10	4.3721
	16	Iodomethane	------	------	86	105	102	105	102	100	101	------	4.1	6.31	4.6629
	17	Methyl acetate	------	------	96	110	97	99	96	94	96	115	5.7	7.37	4.6835
	18	Methylene chloride	------	------	93	103	104	99	98	95	94	115	5.4	7.35	4.8854
	19	Carbon disulfide	------	------	90	95	99	106	105	105	------	------	5.2	6.33	4.9044
5	20	Acrylonitrile	------	100	88	85	95	98	102	102	100	122	6.9	11.32	5.0586
	21	tert-Butyl methyl ether (MTBE)	88	106	92	103	109	103	102	95	91	111	6.8	7.89	5.0949
	22	trans-1,2-Dichloroethene	93	102	93	102	106	103	98	95	95	112	5.1	6.34	5.2756
	23	Isopropyl ether (DIPE)	85	104	89	106	106	101	102	100	97	111	5.9	7.83	5.6919
	24	Vinyl acetate	------	------	80	93	102	106	105	96	100	120	7.9	11.40	5.8521
	25	1,1-Dichloroethane	91	108	91	101	103	100	100	97	96	113	5.1	6.83	5.8534
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	85	109	94	109	107	103	101	95	90	106	7.3	8.56	6.2652
5	28	2-Butanone	------	118	97	89	97	97	103	95	92	111	7.1	9.12	6.4397
	29	2,2-Dichloropropane	97	110	100	107	106	104	99	88	86	103	6	7.93	6.6504
	30	cis-1,2-Dichloroethene	83	105	90	102	102	103	99	98	98	119	6.3	9.52	6.7052
	31	Chloroform	------	123	102	108	106	102	94	85	82	97	9.1	12.21	6.9302
	32	Bromochloromethane	83	106	93	104	102	101	104	98	97	116	6.4	8.79	7.1690
	33	Tetrahydrofuran	------	------	------	108	119	99	97	86	89	105	10	11.65	7.2154
	34	Dibromofluoromethane	------	------	75	99	109	99	110	100	------	------	8.9	13.19	7.2427
	35	1,1,1-Trichloroethane	94	100	98	113	111	107	100	89	86	102	6.6	8.89	7.5186
	36	Cyclohexane	------	87	94	94	100	104	98	104	101	120	6.3	9.21	7.5376
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	10^	95	86	105	101	101	101	99	97	119	4.9	8.22	7.7395
	39	Carbon tetrachloride	91	105	95	112	110	108	101	89	89	104	7.8	9.16	7.8934
	40	tert-Amyl methyl ether (TAME)	90	107	92	104	107	103	105	95	91	107	6.5	7.20	7.9082
	41	1,2-Dichloroethane-d4	------	87	90	104	109	111	109	90	------	------	9.3	10.30	7.9794
	42	Benzene	92	101	94	106	106	104	104	99	95	99	4.4	5.25	8.1453
	43	1,2-Dichloroethane	76	106	96	117	113	110	104	90	86	103	10.5	13.08	8.1201
	44	Trichloroethene	102	107	89	103	101	102	99	95	92	111	5.1	6.77	9.0827
	45	Methylcyclohexane	69	91	97	100	106	105	100	108	105	120	8.8	13.31	9.1761
	46	1,2-Dichloropropane	94	97	84	100	104	103	104	99	99	118	5.5	8.42	9.3642
	47	Bromodichloromethane	113	123	96	105	101	100	96	85	82	98	8.5	12.12	9.7405
20	48	1,4-Dioxane	------	------	------	85	93	102	104	93	103	120	0	11.23	9.7789
	49	Dibromomethane	------	107	92	106	102	103	101	91	89	107	6.1	7.18	9.8339
	50	2-Chloroethyl vinyl ether	------	------	78	86	101	97	108	103	101	122	9	13.01	10.2376
5	51	4-Methyl-2-pentanone	------	87	78	95	111	109	114	103	97	108	9.7	11.85	10.2833
	52	cis-1,3-Dichloropropene	90	98	88	104	107	106	105	98	94	110	6.4	7.60	10.6294
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7258
	54	Toluene-d8	------	90	86	102	109	107	105	102	------	------	6.8	8.56	11.0382
	55	Toluene	104	104	96	107	109	105	97	97	90	91	5.8	6.69	11.1731
	56	Ethyl methacrylate	------	------	70	97	109	106	108	106	104	------	9.4	13.78	11.4743
	57	trans-1,3-Dichloropropene	83	98	86	106	112	107	102	97	95	112	8	10.00	11.4902
	58	1,1,2-Trichloroethane	89	108	86	94	111	101	100	98	97	118	7.5	9.84	11.7598
5	59	2-Hexanone	------	------	103	97	105	102	102	95	90	106	14.4	19.21	11.7765
	60	1,3-Dichloropropane	87	103	85	103	108	103	102	96	97	116	6.9	9.24	12.2013
	61	Tetrachloroethene	109	111	92	100	105	98	92	93	91	111	7	8.13	12.3080
	62	Dibromochloromethane	92	106	94	104	105	104	99	92	91	111	6.1	7.03	12.6754
	63	1,2-Dibromoethane	97	94	87	106	107	100	100	98	95	116	6.1	8.26	13.0428
	64	1-Chlorohexane	108	104	94	103	104	99	95	95	92	106	5	5.71	13.3198
	65	Chlorobenzene	105	101	90	106	108	103	98	94	91	102	5.2	6.31	13.7954
	66	1,1,1,2-Tetrachloroethane	84	95	91	108	109	106	100	97	94	115	7.8	9.54	13.8724
	67	Ethylbenzene	107	102	95	110	110	106	97	90	82	------	7.8	9.54	13.8900
2	68	m-Xylene & p-Xylene	103	106	95	107	110	102	92	84	------	------	7.2	8.93	14.0303
	69	o-Xylene	105	104	95	110	114	108	99	93	85	87	8.1	9.71	14.8487
	70	Styrene	92	98	89	106	112	105	102	99	94	103	5.6	6.93	14.9213
	71	Isopropylbenzene	101	98	94	106	112	105	96	88	------	------	6.1	7.56	15.5303
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6932
	73	Bromoform	------	102	73	95	110	103	103	103	112	------	8	11.93	15.5692
	74	trans-1,4-Dichloro-2-butene	------	------	------	86	104	100	104	101	107	------	5	7.51	15.6316
	75	1,1,2,2-Tetrachloroethane	77	94	90	102	111	102	107	107	111	------	8.8	11.29	15.8686
	76	4-Bromofluorobenzene	------	110	80	100	105	100	103	103	------	------	5.7	9.24	16.0203
	77	1,2,3-Trichloropropane	------	111	81	103	109	95	100	95	105	------	7	9.42	16.1618
	78	n-Propylbenzene	119	109	96	104	108	100	94	94	88	89	7.9	9.90	16.3050
	79	Bromobenzene	93	93	90	97	103	97	96	97	101	132	7.3	11.94	16.3939
	80	1,3,5-Trimethylbenzene	109	109	95	103	109	98	93	92	91	101	6.1	7.15	16.6132
	81	2-Chlorotoluene	109	110	95	100	105	98	93	91	93	105	6	7.05	16.6487
	82	4-Chlorotoluene	109	101	93	103	108	99	93	94	92	107	5.6	6.57	16.7421
	83	tert-Butylbenzene	102	103	85	100	99	95	94	95	101	125	6.3	10.33	17.3006
	84	1,2,4-Trimethylbenzene	111	102	93	106	109	102	94	93	91	100	5.7	7.06	17.3643
	85	sec-Butylbenzene	116	113	100	104	111	102	95	92	84	84	9.2	11.41	17.6621
	86	p-Isopropyltoluene	115	107	96	107	111	101	96	92	86	88	8.4	9.96	17.8887
	87	1,3-Dichlorobenzene	114	106	90	96	105	98	94	93	92	111	7.2	8.46	18.0384
	88	1,2,3-Trimethylbenzene	104	109	97	108	111	103	96	91	87	93	7.1	8.36	18.1451
	89	1,4-Dichlorobenzene	112	105	91	101	103	98	95	92	92	111	6.3	7.64	18.1999
	90	n-Butylbenzene	12[illegible]	114	98	109	109	103	94	88	81	82	11.6	13.27	18.5006
	91	1,2-Dichlorobenzene	100	106	89	102	108	100	98	93	93	112	5.7	7.38	18.7273
	92	1,2-Dibromo-3-chloropropane	------	80	78	100	111	108	112	101	105	------	9.8	13.33	19.7229
	93	1,2,4-Trichlorobenzene	107	112	84	101	104	100	99	92	90	109	6.7	8.77	20.8162
	94	Hexachlorobutadiene	109	104	96	98	104	102	97	92	90	109	5.6	6.72	20.9895
	95	Naphthalene	94	103	81	99	106	104	104	96	97	116	6.7	9.31	21.1673
	96	1,2,3-Trichlorobenzene	99	99	89	105	106	103	100	94	92	113	5.3	7.02	21.4829

For 8260 C
See
916/25

Compound List Report 01New

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
Total Cpnds : 96

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-DIFLUOROBENZENE	114	8.56	1.000	A	1	A	B
2	T	Chlorotrifluoroethylene	116	2.08	0.242	A	2	A	B
3	T	Dichlorodifluoromethane	85	2.24	0.262	A	1	A	B
4	T	2-Chloro-1,1,1-trifluoroethane	118	2.53	0.296	A	2	A	B
5	T	Chloromethane	50	2.54	0.297	A	1	A	B
6	T	Vinyl chloride	62	2.68	0.313	A	1	A	B
7	T	Bromomethane	94	3.21	0.375	A	1	A	B
8	T	Chloroethane	64	3.27	0.382	A	1	A	B
9	T	Dichlorofluoromethane	67	3.35	0.391	A	1	A	B
10	T	Trichlorofluoromethane	101	3.48	0.406	A	1	A	B
11	T	Acrolein	56	4.01	0.469	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	4.15	0.484	A	1	A	B
13	T	Acetone	43	4.10	0.479	L	1	A	B
14	T	1,1-Dichloroethene	61	4.25	0.496	A	2	A	B
15	T	tert-Butyl alcohol	59	4.37	0.510	A	1	A	B
16	T	Iodomethane	142	4.66	0.545	A	1	A	B
17	T	Methyl acetate	43	4.68	0.547	A	1	A	B
18	T	Methylene chloride	49	4.89	0.571	A	2	A	B
19	T	Carbon disulfide	76	4.90	0.573	A	1	A	B
20	T	Acrylonitrile	53	5.05	0.590	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	5.09	0.595	A	1	A	B
22	T	trans-1,2-Dichloroethene	61	5.27	0.616	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	5.69	0.664	A	1	A	B
24	T	Vinyl acetate	43	5.85	0.683	A	1	A	B
25	T	1,1-Dichloroethane	63	5.85	0.683	A	2	A	B
26	T	2-Butanol	45	6.17	0.721	L	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.26	0.732	A	1	A	B
28	T	2-Butanone	43	6.44	0.753	A	1	A	B
29	T	2,2-Dichloropropane	77	6.65	0.777	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	6.71	0.784	A	2	A	B
31	T	Chloroform	83	6.93	0.810	A	2	A	B
32	T	Bromochloromethane	49	7.17	0.837	A	2	A	B
33	T	Tetrahydrofuran	42	7.21	0.843	A	2	A	B
34	S	Dibromofluoromethane	111	7.24	0.846	A	2	A	B
35	T	1,1,1-Trichloroethane	97	7.51	0.877	A	2	A	B
36	T	Cyclohexane	84	7.54	0.881	A	1	A	B
37	T	2,2,4-Trimethylpentane	57	7.55	0.882	A	1	A	B
38	T	1,1-Dichloropropene	110	7.73	0.903	A	1	A	B
39	T	Carbon tetrachloride	119	7.89	0.922	A	1	A	B
40	T	tert-Amyl methyl ether (TAME)	73	7.91	0.924	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	7.98	0.933	A	1	A	B
42	T	Benzene	78	8.15	0.952	A	2	A	B
43	T	1,2-Dichloroethane	62	8.12	0.948	A	1	A	B
44	T	Trichloroethene	130	9.08	1.061	A	3	A	B
45	T	Methylcyclohexane	83	9.18	1.073	A	2	A	B
46	T	1,2-Dichloropropane	63	9.36	1.093	A	1	A	B
47	T	Bromodichloromethane	83	9.74	1.138	A	1	A	B
48	T	1,4-Dioxane	88	9.78	1.142	A	1	A	B
49	T	Dibromomethane	93	9.83	1.149	A	2	A	B
50	T	2-Chloroethyl vinyl ether	63	10.23	1.196	A	2	A	B
51	T	4-Methyl-2-pentanone	43	10.28	1.201	A	3	A	B
52	T	cis-1,3-Dichloropropene	75	10.63	1.242	A	1	A	B

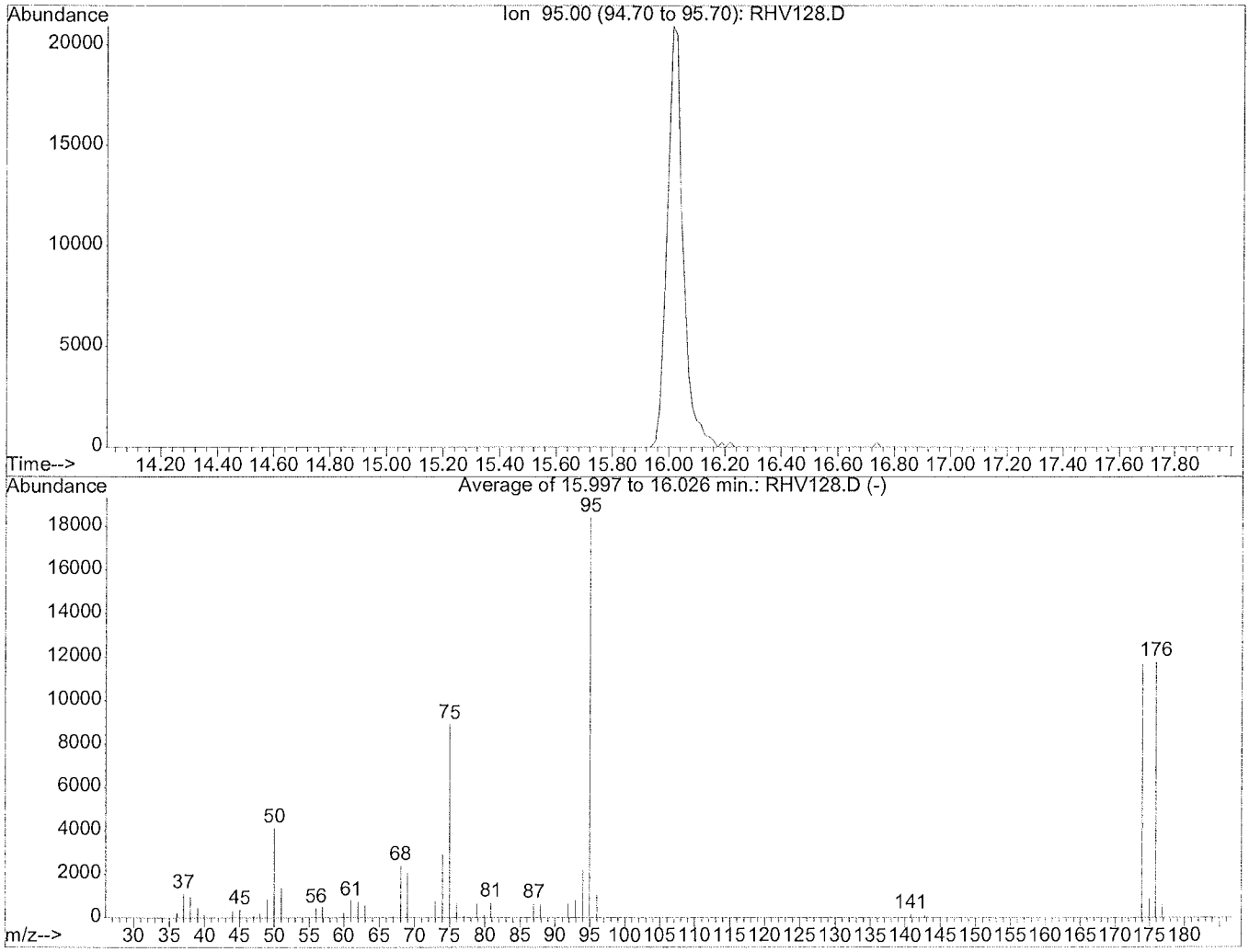
53	I	CHLOROBENZENE-D5	117	13.73	1.000	A	2	A	B
54	S	Toluene-d8	98	11.03	0.804	A	1	A	B
55	T	Toluene	91	11.17	0.813	A	1	A	B
56	T	Ethyl methacrylate	69	11.46	0.835	A	1	A	B
57	T	trans-1,3-Dichloropropene	75	11.48	0.836	A	1	A	B
58	T	1,1,2-Trichloroethane	97	11.76	0.856	A	2	A	B
59	T	2-Hexanone	43	11.76	0.856	L	1	A	B
60	T	1,3-Dichloropropane	76	12.20	0.889	A	1	A	B
61	T	Tetrachloroethene	164	12.31	0.896	A	3	A	B
62	T	Dibromochloromethane	129	12.68	0.923	A	1	A	B
63	T	1,2-Dibromoethane	107	13.03	0.949	A	1	A	B
64	T	1-Chlorohexane	91	13.32	0.970	A	1	A	B
65	P,M	Chlorobenzene	112	13.79	1.004	A	1	A	B
66	T	1,1,1,2-Tetrachloroethane	131	13.86	1.010	A	1	A	B
67	T	Ethylbenzene	91	13.89	1.012	A	1	A	B
68	T	m-Xylene & p-Xylene	91	14.03	1.022	A	1	A	B
69	T	o-Xylene	91	14.84	1.081	A	1	A	B
70	T	Styrene	104	14.92	1.086	A	2	A	B
71	T	Isopropylbenzene	105	15.52	1.131	A	3	A	B
72	I	1,2-DICHLOROBENZENE-D4	152	18.69	1.000	A	1	A	B
73	T	Bromoform	173	15.57	0.833	A	1	A	B
74	T	trans-1,4-Dichloro-2-butene	53	15.63	0.836	A	1	A	B
75	T	1,1,2,2-Tetrachloroethane	83	15.86	0.849	A	1	A	B
76	S	4-Bromofluorobenzene	95	16.01	0.857	A	2	A	B
77	T	1,2,3-Trichloropropane	110	16.16	0.864	A	1	A	B
78	T	n-Propylbenzene	91	16.31	0.872	A	2	A	B
79	T	Bromobenzene	156	16.40	0.877	A	1	A	B
80	T	1,3,5-Trimethylbenzene	105	16.60	0.888	A	2	A	B
81	T	2-Chlorotoluene	91	16.65	0.891	A	1	A	B
82	T	4-Chlorotoluene	91	16.74	0.895	A	1	A	B
83	T	tert-Butylbenzene	134	17.30	0.926	A	1	A	B
84	T	1,2,4-Trimethylbenzene	105	17.36	0.929	A	1	A	B
85	T	sec-Butylbenzene	105	17.66	0.945	A	1	A	B
86	T	p-Isopropyltoluene	119	17.88	0.956	A	2	A	B
87	T	1,3-Dichlorobenzene	146	18.04	0.965	A	2	A	B
88	T	1,2,3-Trimethylbenzene	105	18.15	0.971	A	2	A	B
89	T	1,4-Dichlorobenzene	146	18.19	0.973	A	2	A	B
90	T	n-Butylbenzene	91	18.50	0.990	A	2	A	B
91	T	1,2-Dichlorobenzene	146	18.72	1.002	A	1	A	B
92	T	1,2-Dibromo-3-chloropropane	157	19.72	1.055	A	1	A	B
93	T	1,2,4-Trichlorobenzene	180	20.81	1.113	A	2	A	B
94	T	Hexachlorobutadiene	225	20.99	1.123	A	1	A	B
95	T	Naphthalene	128	21.17	1.132	A	1	A	B
96	T	1,2,3-Trichlorobenzene	180	21.48	1.149	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO01H09.M Mon Aug 26 20:22:50 2024

SV
8/26/24

Data File : D:\HPCHEM\1\DATA\24H09\RHV128.D Vial: 1
Acq On : 9 Aug 2024 8:08 am Operator: DNguye
Sample : BFB01H09 Inst : 01New
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls



AutoFind: Scans 979, 980, 981; Background Corrected with Scan 973

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	4121	PASS
75	95	30	60	48.4	8912	PASS
95	95	100	100	100.0	18421	PASS
96	95	5	9	6.0	1107	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	63.4	11685	PASS
175	174	5	9	7.5	878	PASS
176	174	95	101	100.7	11771	PASS
177	176	5	9	5.5	648	PASS

RHV128.D VO01H09.M Tue Aug 27 13:41:53 2024 Su 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1105194	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	899301	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	307129	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	5367	0.16	ug/l	-0.01
Spiked Amount 10.000			Recovery = 1.60%			
41) 1,2-Dichloroethane-d4	7.98	65	4275	0.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 1.40%			
54) Toluene-d8	11.05	98	18909	0.17	ug/l	0.01
Spiked Amount 10.000			Recovery = 1.70%			
76) 4-Bromofluorobenzene	16.04	95	6868	0.18	ug/l	0.03
Spiked Amount 10.000			Recovery = 1.80%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.22	85	9737	0.27	ug/l	92
5) Chloromethane	2.55	50	7112	0.27	ug/l	76
6) Vinyl chloride	2.68	62	5866	0.25	ug/l	57
9) Dichlorofluoromethane	3.33	67	10549	0.26	ug/l	85
10) Trichlorofluoromethane	3.60	101	14770	0.28	ug/l	62
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	5882	0.27	ug/l	99
13) Acetone	4.09	43	20215	1.68	ug/l	93
14) 1,1-Dichloroethene	4.25	61	16192	0.30	ug/l	75
15) tert-Butyl alcohol	4.37	59	4486	3.02	ug/l	81
16) Iodomethane	4.67	142	12285	0.25	ug/l	93
18) Methylene chloride	4.87	49	12150	0.33	ug/l	91
20) Acrylonitrile	5.07	53	5456	1.24	ug/l	83
21) tert-Butyl methyl ether (M	5.10	73	16045	0.26	ug/l	99
22) trans-1,2-Dichloroethene	5.27	61	13527	0.28	ug/l	89
23) Isopropyl ether (DIPE)	5.69	45	24782	0.25	ug/l	94
25) 1,1-Dichloroethane	5.85	63	16379	0.27	ug/l	94
27) tert-Butyl ethyl ether (ET	6.27	59	22976	0.26	ug/l	97
28) 2-Butanone	6.47	43	9400	1.29	ug/l	70
29) 2,2-Dichloropropane	6.64	77	17336	0.29	ug/l	96
30) cis-1,2-Dichloroethene	6.70	96	9302	0.25	ug/l	92
31) Chloroform	6.92	83	27892	0.41	ug/l	95
32) Bromochloromethane	7.17	49	5648	0.25	ug/l	99
35) 1,1,1-Trichloroethane	7.53	97	18811	0.28	ug/l	93
36) Cyclohexane	7.54	84	8269	0.17	ug/l	89
38) 1,1-Dichloropropene	7.73	110	5427	0.30	ug/l	97
39) Carbon tetrachloride	7.88	119	15091	0.27	ug/l	89
40) tert-Amyl methyl ether (TA	7.90	73	17816	0.27	ug/l	92

(#) = qualifier out of range (m) = manual integration

SU 9/6/24

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	Benzene	8.15	78	33490	0.28	ug/l	96
43)	1,2-Dichloroethane	8.12	62	8604	0.23	ug/l	96
44)	Trichloroethene	9.09	130	11845	0.31	ug/l	92
45)	Methylcyclohexane	9.17	83	10995	0.21	ug/l	97
46)	1,2-Dichloropropane	9.36	63	7817	0.28	ug/l	93
47)	Bromodichloromethane	9.74	83	16439	0.34	ug/l	93
49)	Dibromomethane	9.83	93	3658	0.24	ug/l	87
51)	4-Methyl-2-pentanone	10.34	43	11071	0.67	ug/l	76
52)	cis-1,3-Dichloropropene	10.63	75	13250	0.27	ug/l	94
55)	Toluene	11.18	91	41950	0.31	ug/l	95
57)	trans-1,3-Dichloropropene	11.51	75	9783	0.25	ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	5233	0.27	ug/l	91
59)	2-Hexanone	11.94	43	3190	2.75	ug/l	67
60)	1,3-Dichloropropane	12.20	76	9156	0.26	ug/l	84
61)	Tetrachloroethene	12.31	164	9983	0.33	ug/l	98
62)	Dibromochloromethane	12.69	129	7234	0.28	ug/l	95
63)	1,2-Dibromoethane	13.05	107	5763	0.29	ug/l	81
64)	1-Chlorohexane	13.33	91	20274	0.32	ug/l	98
65)	Chlorobenzene	13.80	112	29198	0.32	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.88	131	7815	0.25	ug/l	90
67)	Ethylbenzene	13.89	91	54163	0.32	ug/l	99
68)	m-Xylene & p-Xylene	14.04	91	82438	0.62	ug/l	97
69)	o-Xylene	14.86	91	40424	0.31	ug/l	98
70)	Styrene	14.93	104	25970	0.28	ug/l	95
71)	Isopropylbenzene	15.54	105	53542	0.30	ug/l	97
73)	Bromoform	15.58	173	2273	0.20	ug/l	84
75)	1,1,2,2-Tetrachloroethane	15.88	83	4235	0.23	ug/l	100
78)	n-Propylbenzene	16.31	91	69725	0.36	ug/l	97
79)	Bromobenzene	16.40	156	8237	0.28	ug/l	96
80)	1,3,5-Trimethylbenzene	16.62	105	42163	0.33	ug/l	97
81)	2-Chlorotoluene	16.65	91	42056	0.33	ug/l	98
82)	4-Chlorotoluene	16.75	91	35667	0.33	ug/l	96
83)	tert-Butylbenzene	17.30	134	8739	0.31	ug/l	91
84)	1,2,4-Trimethylbenzene	17.37	105	40975	0.33	ug/l	98
85)	sec-Butylbenzene	17.67	105	60303	0.35	ug/l	97
86)	p-Isopropyltoluene	17.89	119	51002	0.34	ug/l	98
87)	1,3-Dichlorobenzene	18.04	146	20909	0.34	ug/l	95
88)	1,2,3-Trimethylbenzene	18.14	105	37294	0.31	ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	19871	0.34	ug/l	97
90)	n-Butylbenzene	18.50	91	49822	0.37	ug/l	98
91)	1,2-Dichlorobenzene	18.74	146	15061	0.30	ug/l	94

(#) = qualifier out of range (m) = manual integration
RHV129.D VO01H09.M Fri Aug 30 17:58:28 2024 Su 9/6/24

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

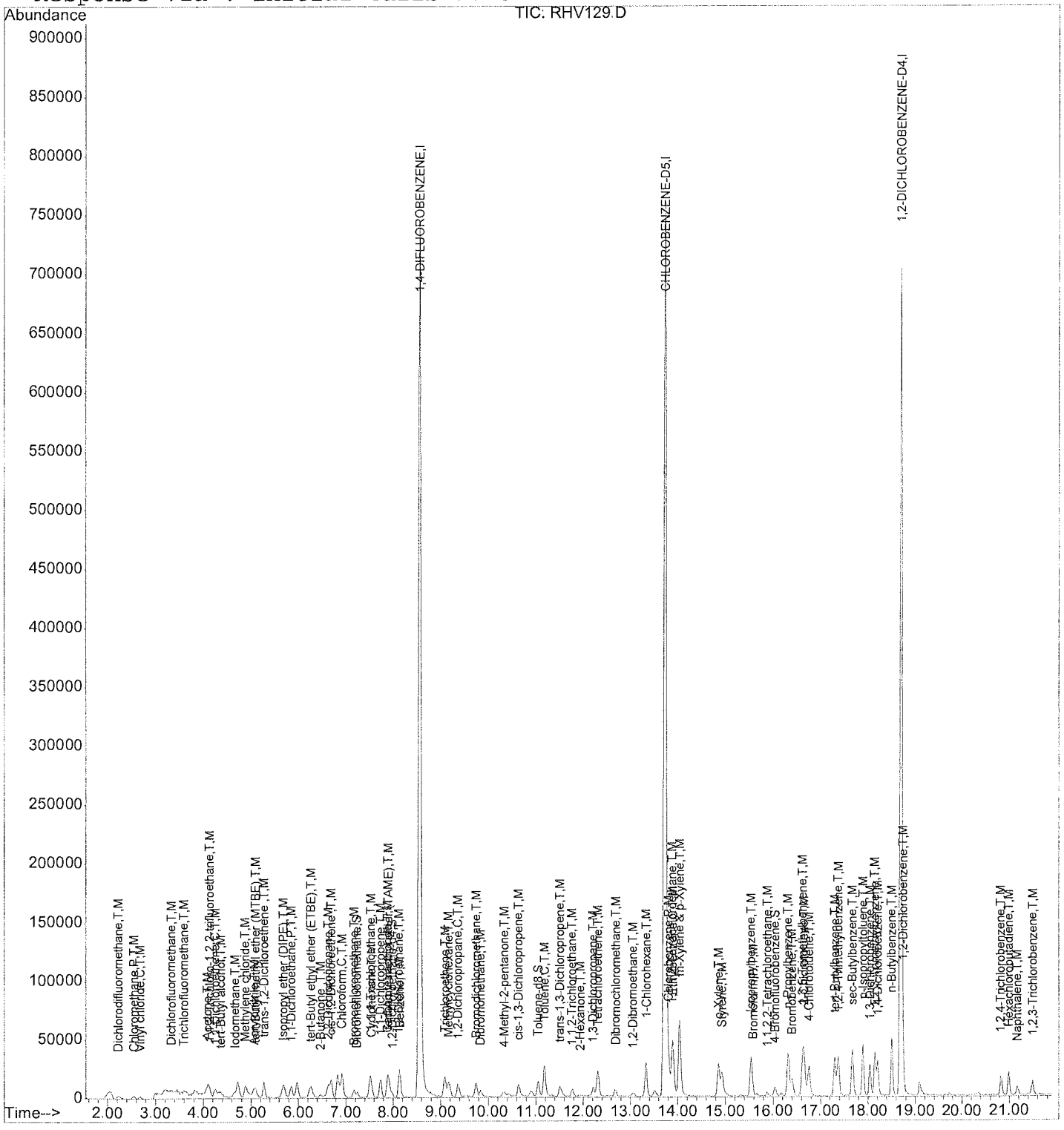
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
93)	1,2,4-Trichlorobenzene	20.81	180	10971	0.32	ug/l	89
94)	Hexachlorobutadiene	20.99	225	7363	0.33	ug/l	97
95)	Naphthalene	21.17	128	13737	0.28	ug/l	95
96)	1,2,3-Trichlorobenzene	21.49	180	7807	0.30	ug/l	98

SV 9/6/24

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SW 9/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	926593	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	791295	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	271625	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	11707	0.42	ug/l	0.02
Spiked Amount 10.000			Recovery = 4.20%			
41) 1,2-Dichloroethane-d4	7.97	65	10946	0.44	ug/l	-0.01
Spiked Amount 10.000			Recovery = 4.40%			
54) Toluene-d8	11.05	98	43520	0.45	ug/l	0.01
Spiked Amount 10.000			Recovery = 4.50%			
76) 4-Bromofluorobenzene	16.04	95	18873	0.55	ug/l	0.03
Spiked Amount 10.000			Recovery = 5.50%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	12363	0.41	ug/l	66
5) Chloromethane	2.54	50	7558	0.34	ug/l	77
6) Vinyl chloride	2.67	62	7222	0.37	ug/l	54
7) Bromomethane	3.21	94	8517	0.49	ug/l	81
8) Chloroethane	3.29	64	4728	0.31	ug/l	70
9) Dichlorofluoromethane	3.33	67	18350	0.55	ug/l	92
10) Trichlorofluoromethane	3.60	101	19043	0.43	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	7946	0.44	ug/l	98
13) Acetone	4.09	43	26960	4.21	ug/l	88
14) 1,1-Dichloroethene	4.25	61	22648	0.51	ug/l	78
15) tert-Butyl alcohol	4.37	59	16148	12.95	ug/l	98
16) Iodomethane	4.65	142	12433	0.31	ug/l	61
18) Methylene chloride	4.89	49	16675	0.54	ug/l	95
20) Acrylonitrile	5.07	53	9172	2.49	ug/l	96
21) tert-Butyl methyl ether (M	5.10	73	27071	0.53	ug/l	95
22) trans-1,2-Dichloroethene	5.27	61	20852	0.51	ug/l	100
23) Isopropyl ether (DIPE)	5.69	45	42344	0.52	ug/l	91
25) 1,1-Dichloroethane	5.85	63	27035	0.54	ug/l	96
27) tert-Butyl ethyl ether (ET	6.27	59	41112	0.55	ug/l	99
28) 2-Butanone	6.46	43	17957	2.94	ug/l	73
29) 2,2-Dichloropropane	6.65	77	27492	0.55	ug/l	95
30) cis-1,2-Dichloroethene	6.70	96	16499	0.52	ug/l	95
31) Chloroform	6.93	83	34568	0.61	ug/l	99
32) Bromochloromethane	7.17	49	10138	0.53	ug/l	92
35) 1,1,1-Trichloroethane	7.53	97	27785	0.50	ug/l	96
36) Cyclohexane	7.53	84	17446	0.44	ug/l	97
38) 1,1-Dichloropropene	7.75	110	7189	0.47	ug/l	95

(#) = qualifier out of range (m) = manual integration

SC 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Carbon tetrachloride	7.90	119	24352	0.53 ug/l	97
40)	tert-Amyl methyl ether (TA	7.91	73	29675	0.54 ug/l	100
42)	Benzene	8.15	78	51640	0.51 ug/l	96
43)	1,2-Dichloroethane	8.12	62	16819	0.53 ug/l	98
44)	Trichloroethene	9.09	130	17293	0.53 ug/l	94
45)	Methylcyclohexane	9.18	83	20321	0.45 ug/l	97
46)	1,2-Dichloropropane	9.37	63	11309	0.49 ug/l	92
47)	Bromodichloromethane	9.74	83	25096	0.62 ug/l	88
49)	Dibromomethane	9.85	93	6954	0.54 ug/l	93
51)	4-Methyl-2-pentanone	10.32	43	30397	2.18 ug/l	86
52)	cis-1,3-Dichloropropene	10.63	75	20197	0.49 ug/l	100
55)	Toluene	11.18	91	61515	0.52 ug/l	97
56)	Ethyl methacrylate	11.55	69	7690	0.38 ug/l	100
57)	trans-1,3-Dichloropropene	11.51	75	16890	0.49 ug/l	93
58)	1,1,2-Trichloroethane	11.77	97	9327	0.54 ug/l	94
59)	2-Hexanone	11.86	43	12268	3.70 ug/l	93
60)	1,3-Dichloropropane	12.20	76	15985	0.52 ug/l	97
61)	Tetrachloroethene	12.31	164	14906	0.55 ug/l	95
62)	Dibromochloromethane	12.68	129	12139	0.53 ug/l	89
63)	1,2-Dibromoethane	13.06	107	8192	0.47 ug/l	86
64)	1-Chlorohexane	13.33	91	28655	0.52 ug/l	97
65)	Chlorobenzene	13.80	112	41164	0.51 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	12966	0.48 ug/l	92
67)	Ethylbenzene	13.89	91	76034	0.51 ug/l	100
68)	m-Xylene & p-Xylene	14.04	91	124345	1.06 ug/l	95
69)	o-Xylene	14.86	91	58801	0.52 ug/l	98
70)	Styrene	14.93	104	40335	0.49 ug/l	99
71)	Isopropylbenzene	15.54	105	75865	0.49 ug/l	98
73)	Bromoform	15.58	173	5106	0.51 ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.67	53	2227	0.37 ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.88	83	7625	0.47 ug/l	100
77)	1,2,3-Trichloropropane	16.19	110	3311	0.55 ug/l	80
78)	n-Propylbenzene	16.31	91	94099	0.54 ug/l	98
79)	Bromobenzene	16.40	156	12161	0.47 ug/l	95
80)	1,3,5-Trimethylbenzene	16.62	105	62021	0.54 ug/l	99
81)	2-Chlorotoluene	16.65	91	62439	0.55 ug/l	99
82)	4-Chlorotoluene	16.75	91	49002	0.51 ug/l	94
83)	tert-Butylbenzene	17.30	134	13024	0.52 ug/l	95
84)	1,2,4-Trimethylbenzene	17.37	105	55543	0.51 ug/l	100
85)	sec-Butylbenzene	17.67	105	87172	0.57 ug/l	98
86)	p-Isopropyltoluene	17.89	119	70281	0.54 ug/l	98

(#) = qualifier out of range (m) = manual integration

SC 9/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
87)	1,3-Dichlorobenzene	18.04	146	28650	0.53	ug/l	95
88)	1,2,3-Trimethylbenzene	18.14	105	57835	0.55	ug/l	96
89)	1,4-Dichlorobenzene	18.20	146	27530	0.53	ug/l	96
90)	n-Butylbenzene	18.50	91	68146	0.57	ug/l	95
91)	1,2-Dichlorobenzene	18.74	146	23552	0.53	ug/l	95
92)	1,2-Dibromo-3-chloropropan	19.73	157	1003	0.40	ug/l	93
93)	1,2,4-Trichlorobenzene	20.83	180	16918	0.56	ug/l	96
94)	Hexachlorobutadiene	20.99	225	10289	0.52	ug/l	97
95)	Naphthalene	21.18	128	22266	0.52	ug/l	100
96)	1,2,3-Trichlorobenzene	21.49	180	11480	0.50	ug/l	94

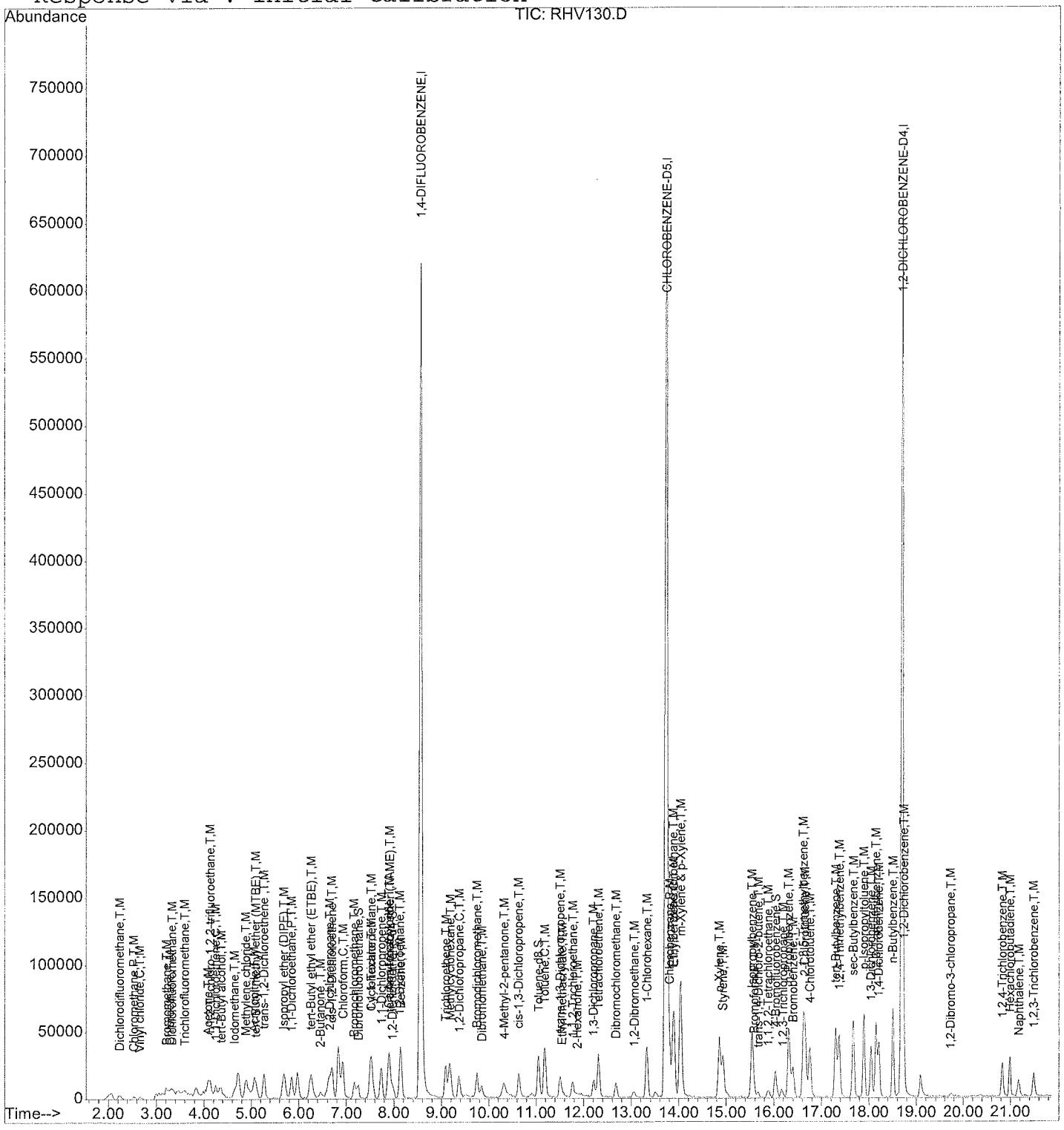
9/16/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Sa 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D Vial: 4
Acq On : 9 Aug 2024 6:45 pm Operator: DNguye
Sample : VO01H093 0.1/0.5 Inst : 01New
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	995321	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	821998	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	293785	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	22673	0.75	ug/l	0.00
Spiked Amount 10.000			Recovery =	7.50%		
41) 1,2-Dichloroethane-d4	7.98	65	24240	0.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.00%		
54) Toluene-d8	11.05	98	86586	0.86	ug/l	0.01
Spiked Amount 10.000			Recovery =	8.60%		
76) 4-Bromofluorobenzene	16.03	95	30002	0.80	ug/l	0.01
Spiked Amount 10.000			Recovery =	8.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	30466	0.93	ug/l	98
5) Chloromethane	2.56	50	19736	0.83	ug/l	91
6) Vinyl chloride	2.69	62	18921	0.90	ug/l	81
7) Bromomethane	3.23	94	16363	0.88	ug/l	90
8) Chloroethane	3.27	64	12940	0.80	ug/l	54
9) Dichlorofluoromethane	3.35	67	32855	0.92	ug/l	93
10) Trichlorofluoromethane	3.48	101	46525	0.98	ug/l	97
11) Acrolein	4.01	56	4025	4.01	ug/l	83
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	19202	0.98	ug/l	94
13) Acetone	4.10	43	31614	4.84	ug/l	92
14) 1,1-Dichloroethene	4.26	61	44721	0.93	ug/l	98
15) tert-Butyl alcohol	4.40	59	24804	18.52	ug/l	72
16) Iodomethane	4.66	142	37572	0.86	ug/l	96
17) Methyl acetate	4.69	43	9826	0.95	ug/l	74
18) Methylene chloride	4.89	49	31152	0.93	ug/l	96
19) Carbon disulfide	4.90	76	75491	0.91	ug/l	93
20) Acrylonitrile	5.06	53	17253	4.36	ug/l	94
21) tert-Butyl methyl ether (M	5.11	73	50189	0.92	ug/l	97
22) trans-1,2-Dichloroethene	5.29	61	40795	0.93	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	78248	0.89	ug/l	95
24) Vinyl acetate	5.86	43	25648	0.80	ug/l	92
25) 1,1-Dichloroethane	5.86	63	48765	0.91	ug/l	97
27) tert-Butyl ethyl ether (ET	6.28	59	75845	0.94	ug/l	99
28) 2-Butanone	6.46	43	31758	4.85	ug/l	83
29) 2,2-Dichloropropane	6.65	77	53766	1.00	ug/l	94
30) cis-1,2-Dichloroethene	6.71	96	30582	0.90	ug/l	97
31) Chloroform	6.93	83	61990	1.02	ug/l	99

(#) = qualifier out of range (m) = manual integration

SV 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D Vial: 4
Acq On : 9 Aug 2024 6:45 pm Operator: DNguye
Sample : VO01H093 0.1/0.5 Inst : 01New
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	18968	0.92 ug/l	91
35)	1,1,1-Trichloroethane	7.52	97	58634	0.98 ug/l	99
36)	Cyclohexane	7.54	84	40214	0.93 ug/l	95
38)	1,1-Dichloropropene	7.75	110	14068	0.86 ug/l	93
39)	Carbon tetrachloride	7.89	119	47111	0.95 ug/l	94
40)	tert-Amyl methyl ether (TA	7.91	73	54707	0.92 ug/l	97
42)	Benzene	8.15	78	102789	0.94 ug/l	98
43)	1,2-Dichloroethane	8.13	62	32983	0.96 ug/l	97
44)	Trichloroethene	9.09	130	30949	0.89 ug/l	97
45)	Methylcyclohexane	9.17	83	46423	0.97 ug/l	97
46)	1,2-Dichloropropane	9.37	63	21104	0.84 ug/l	98
47)	Bromodichloromethane	9.74	83	42128	0.96 ug/l	91
49)	Dibromomethane	9.85	93	12851	0.92 ug/l	96
50)	2-Chloroethyl vinyl ether	10.26	63	6191	0.79 ug/l	90
51)	4-Methyl-2-pentanone	10.31	43	58311	3.90 ug/l	96
52)	cis-1,3-Dichloropropene	10.63	75	38746	0.88 ug/l	95
55)	Toluene	11.18	91	118137	0.96 ug/l	99
56)	Ethyl methacrylate	11.52	69	14561	0.70 ug/l	90
57)	trans-1,3-Dichloropropene	11.51	75	30877	0.86 ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	15565	0.86 ug/l	96
59)	2-Hexanone	11.83	43	27746	5.15 ug/l	98
60)	1,3-Dichloropropane	12.22	76	27325	0.85 ug/l	99
61)	Tetrachloroethene	12.31	164	25662	0.92 ug/l	95
62)	Dibromochloromethane	12.68	129	22491	0.94 ug/l	99
63)	1,2-Dibromoethane	13.05	107	15774	0.87 ug/l	91
64)	1-Chlorohexane	13.33	91	53523	0.94 ug/l	97
65)	Chlorobenzene	13.80	112	76255	0.90 ug/l	97
66)	1,1,1,2-Tetrachloroethane	13.88	131	25787	0.91 ug/l	94
67)	Ethylbenzene	13.89	91	147217	0.95 ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	231851	1.90 ug/l	99
69)	o-Xylene	14.86	91	111932	0.95 ug/l	99
70)	Styrene	14.93	104	76846	0.89 ug/l	99
71)	Isopropylbenzene	15.54	105	150424	0.94 ug/l	99
73)	Bromoform	15.57	173	7909	0.73 ug/l	94
74)	trans-1,4-Dichloro-2-buten	15.66	53	3855	0.59 ug/l	75
75)	1,1,2,2-Tetrachloroethane	15.86	83	15709	0.90 ug/l	95
77)	1,2,3-Trichloropropane	16.17	110	5246	0.81 ug/l	100
78)	n-Propylbenzene	16.31	91	179592	0.96 ug/l	99
79)	Bromobenzene	16.41	156	25486	0.90 ug/l	96
80)	1,3,5-Trimethylbenzene	16.62	105	117474	0.95 ug/l	98
81)	2-Chlorotoluene	16.65	91	116646	0.95 ug/l	98

(#) = qualifier out of range (m) = manual integration

SW 8/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D
Acq On : 9 Aug 2024 6:45 pm
Sample : VO01H093 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024

Vial: 4
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	4-Chlorotoluene	16.75	91	97550	0.93	ug/l	97
83)	tert-Butylbenzene	17.30	134	23224	0.85	ug/l	97
84)	1,2,4-Trimethylbenzene	17.37	105	109893	0.93	ug/l	97
85)	sec-Butylbenzene	17.67	105	165895	1.00	ug/l	98
86)	p-Isopropyltoluene	17.89	119	136562	0.96	ug/l	100
87)	1,3-Dichlorobenzene	18.04	146	52499	0.90	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	110813	0.97	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	51315	0.91	ug/l	95
90)	n-Butylbenzene	18.50	91	126614	0.98	ug/l	98
91)	1,2-Dichlorobenzene	18.74	146	43042	0.89	ug/l	96
92)	1,2-Dibromo-3-chloropropan	19.72	157	2154	0.79	ug/l	89
93)	1,2,4-Trichlorobenzene	20.83	180	27564	0.84	ug/l	94
94)	Hexachlorobutadiene	20.99	225	20598	0.96	ug/l	95
95)	Naphthalene	21.17	128	37775	0.81	ug/l	97
96)	1,2,3-Trichlorobenzene	21.49	180	22299	0.89	ug/l	98

(#) = qualifier out of range (m) = manual integration

SM 9/6/24

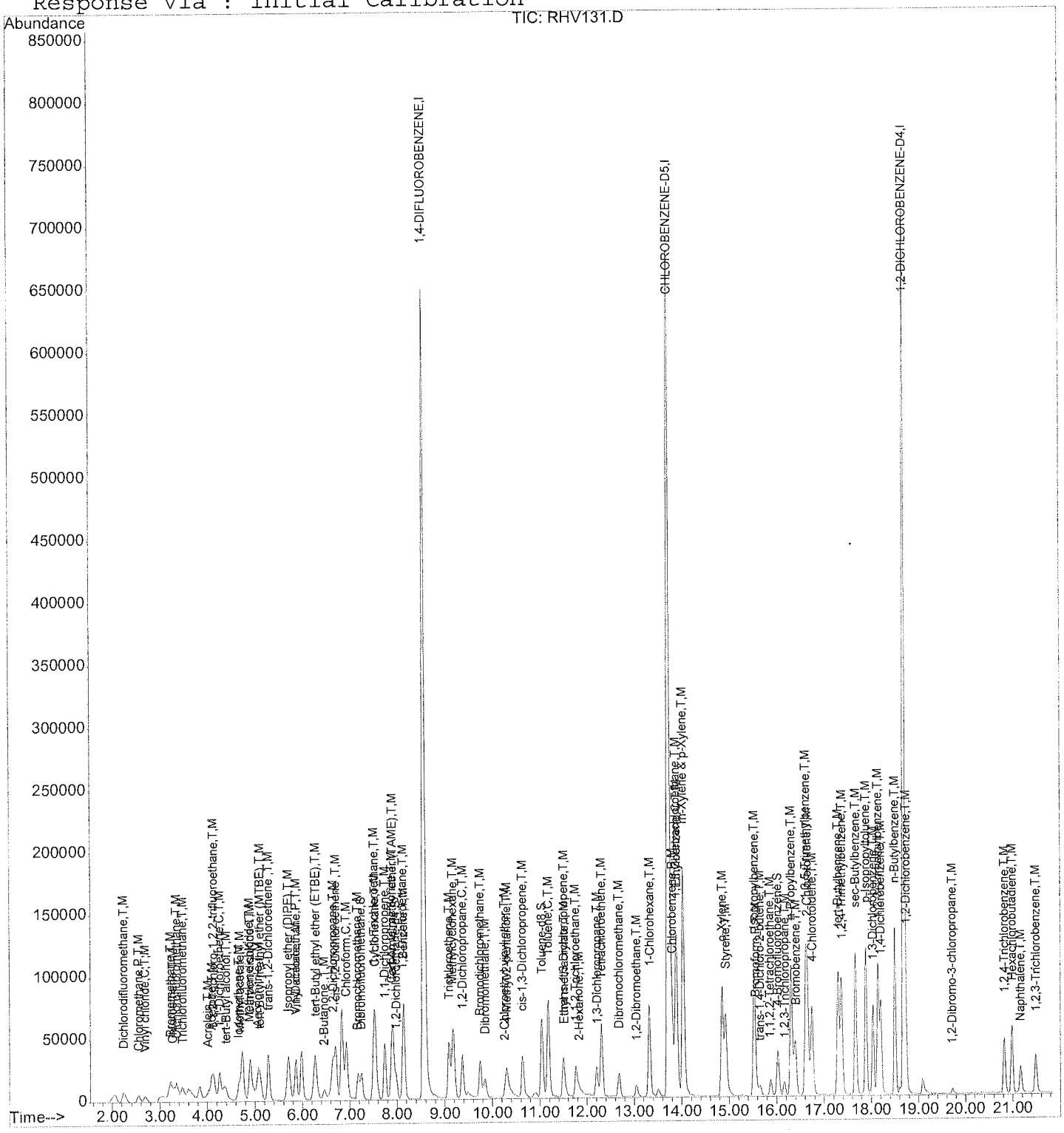
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D
Acq On : 9 Aug 2024 6:45 pm
Sample : VO01H093 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024

Vial: 4
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SM 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D Vial: 5
Acq On : 9 Aug 2024 7:15 pm Operator: DNguye
Sample : VO01H094 0.2/1.0 Inst : 01New
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	929341	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	773979	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	292349	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	55807	1.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	19.70%		
41) 1,2-Dichloroethane-d4	7.98	65	52153	2.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.80%		
54) Toluene-d8	11.03	98	193146	2.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.40%		
76) 4-Bromofluorobenzene	16.03	95	73870	1.99	ug/l	0.02
Spiked Amount 10.000			Recovery =	19.90%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	65972	2.16	ug/l	100
5) Chloromethane	2.54	50	45109	2.03	ug/l	88
6) Vinyl chloride	2.68	62	38629	1.98	ug/l	97
7) Bromomethane	3.23	94	34323	1.98	ug/l	92
8) Chloroethane	3.29	64	28277	1.86	ug/l	95
9) Dichlorofluoromethane	3.35	67	72578	2.17	ug/l	93
10) Trichlorofluoromethane	3.61	101	99914	2.25	ug/l	95
11) Acrolein	4.03	56	8713	9.30	ug/l	80
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	39758	2.18	ug/l	99
13) Acetone	4.10	43	56023	11.53	ug/l	94
14) 1,1-Dichloroethene	4.27	61	90464	2.01	ug/l	97
15) tert-Butyl alcohol	4.38	59	61420	49.12	ug/l	89
16) Iodomethane	4.67	142	85074	2.09	ug/l	100
17) Methyl acetate	4.71	43	21017	2.19	ug/l	88
18) Methylene chloride	4.89	49	64331	2.06	ug/l	98
19) Carbon disulfide	4.90	76	147578	1.90	ug/l	99
20) Acrylonitrile	5.08	53	31410	8.50	ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	105459	2.06	ug/l	93
22) trans-1,2-Dichloroethene	5.27	61	83911	2.05	ug/l	96
23) Isopropyl ether (DIPE)	5.69	45	172878	2.11	ug/l	95
24) Vinyl acetate	5.87	43	55134	1.85	ug/l	93
25) 1,1-Dichloroethane	5.85	63	101890	2.03	ug/l	98
27) tert-Butyl ethyl ether (ET	6.27	59	165369	2.19	ug/l	96
28) 2-Butanone	6.44	43	54809	8.96	ug/l	97
29) 2,2-Dichloropropane	6.65	77	106854	2.14	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	64694	2.05	ug/l	97
31) Chloroform	6.93	83	122203	2.16	ug/l	99

(#) = qualifier out of range (m) = manual integration

SC 9/4/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D Vial: 5
Acq On : 9 Aug 2024 7:15 pm Operator: DNguye
Sample : VO01H094 0.2/1.0 Inst : 01New
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	39762	2.07 ug/l	95
33)	Tetrahydrofuran	7.23	42	7343	2.15 ug/l	76
35)	1,1,1-Trichloroethane	7.52	97	125916	2.26 ug/l	97
36)	Cyclohexane	7.55	84	75239	1.87 ug/l	97
38)	1,1-Dichloropropene	7.75	110	32014	2.10 ug/l	97
39)	Carbon tetrachloride	7.89	119	103890	2.24 ug/l	98
40)	tert-Amyl methyl ether (TA	7.91	73	115634	2.08 ug/l	99
42)	Benzene	8.15	78	217291	2.12 ug/l	98
43)	1,2-Dichloroethane	8.13	62	74934	2.34 ug/l	94
44)	Trichloroethene	9.08	130	67124	2.06 ug/l	98
45)	Methylcyclohexane	9.18	83	89414	2.00 ug/l	99
46)	1,2-Dichloropropane	9.38	63	46427	1.99 ug/l	89
47)	Bromodichloromethane	9.75	83	85439	2.10 ug/l	97
48)	1,4-Dioxane	9.82	88	3945	34.11 ug/l	99
49)	Dibromomethane	9.82	93	27628	2.13 ug/l	97
50)	2-Chloroethyl vinyl ether	10.25	63	12684	1.73 ug/l	94
51)	4-Methyl-2-pentanone	10.29	43	132706	9.50 ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	85667	2.08 ug/l	100
55)	Toluene	11.18	91	248416	2.14 ug/l	100
56)	Ethyl methacrylate	11.49	69	37895	1.94 ug/l	94
57)	trans-1,3-Dichloropropene	11.49	75	71080	2.11 ug/l	99
58)	1,1,2-Trichloroethane	11.78	97	31742	1.87 ug/l	90
59)	2-Hexanone	11.81	43	70967	9.74 ug/l	95
60)	1,3-Dichloropropane	12.21	76	62124	2.05 ug/l	97
61)	Tetrachloroethene	12.31	164	52731	2.00 ug/l	98
62)	Dibromochloromethane	12.68	129	46698	2.08 ug/l	94
63)	1,2-Dibromoethane	13.05	107	36203	2.12 ug/l	98
64)	1-Chlorohexane	13.32	91	111167	2.07 ug/l	97
65)	Chlorobenzene	13.81	112	168518	2.11 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	57260	2.15 ug/l	96
67)	Ethylbenzene	13.89	91	318134	2.19 ug/l	100
68)	m-Xylene & p-Xylene	14.03	91	492634	4.30 ug/l	98
69)	o-Xylene	14.86	91	243021	2.20 ug/l	100
70)	Styrene	14.93	104	171716	2.12 ug/l	97
71)	Isopropylbenzene	15.54	105	321702	2.12 ug/l	100
73)	Bromoform	15.57	173	20333	1.89 ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.64	53	11156	1.71 ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.88	83	35677	2.04 ug/l	95
77)	1,2,3-Trichloropropane	16.16	110	13275	2.07 ug/l	93
78)	n-Propylbenzene	16.31	91	384796	2.07 ug/l	100
79)	Bromobenzene	16.40	156	54854	1.95 ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D
Acq On : 9 Aug 2024 7:15 pm
Sample : VO01H094 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 5
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	253323	2.06	ug/l	98
81)	2-Chlorotoluene	16.65	91	243448	2.00	ug/l	99
82)	4-Chlorotoluene	16.74	91	215125	2.06	ug/l	100
83)	tert-Butylbenzene	17.30	134	54261	2.00	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	248740	2.12	ug/l	98
85)	sec-Butylbenzene	17.67	105	344731	2.08	ug/l	99
86)	p-Isopropyltoluene	17.89	119	302431	2.15	ug/l	99
87)	1,3-Dichlorobenzene	18.04	146	112458	1.93	ug/l	95
88)	1,2,3-Trimethylbenzene	18.15	105	244867	2.15	ug/l	98
89)	1,4-Dichlorobenzene	18.21	146	113654	2.02	ug/l	98
90)	n-Butylbenzene	18.50	91	282361	2.19	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	98168	2.05	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.73	157	5426	2.01	ug/l	80
93)	1,2,4-Trichlorobenzene	20.83	180	66203	2.03	ug/l	97
94)	Hexachlorobutadiene	20.99	225	41854	1.95	ug/l	94
95)	Naphthalene	21.17	128	92074	1.98	ug/l	94
96)	1,2,3-Trichlorobenzene	21.48	180	52448	2.10	ug/l	92

(#) = qualifier out of range (m) = manual integration

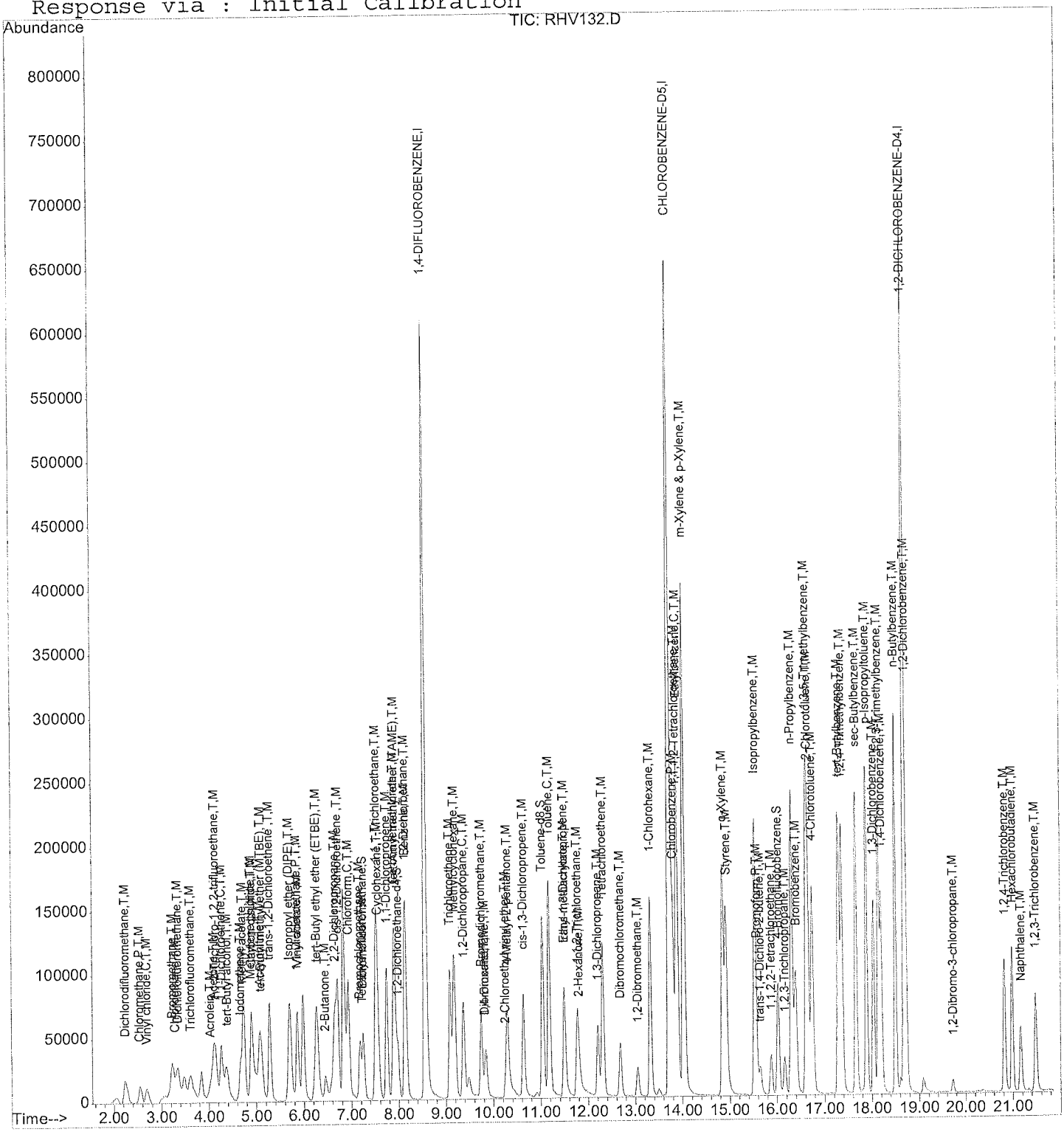
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D
Acq On : 9 Aug 2024 7:15 pm
Sample : VO01H094 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 5
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D
Acq On : 9 Aug 2024 7:46 pm
Sample : VO01H095 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 6
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	944867	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	782335	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	297857	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	156156	5.43	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.30%		
41) 1,2-Dichloroethane-d4	7.98	65	139228	5.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.50%		
54) Toluene-d8	11.03	98	520164	5.44	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.40%		
76) 4-Bromofluorobenzene	16.01	95	198471	5.25	ug/l	0.00
Spiked Amount 10.000			Recovery =	52.50%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	176344	5.67	ug/l	97
5) Chloromethane	2.55	50	113480	5.03	ug/l	96
6) Vinyl chloride	2.68	62	106845	5.37	ug/l	95
7) Bromomethane	3.23	94	89457	5.08	ug/l	93
8) Chloroethane	3.29	64	73010	4.73	ug/l	99
9) Dichlorofluoromethane	3.35	67	173930	5.11	ug/l	97
10) Trichlorofluoromethane	3.48	101	229883	5.09	ug/l	99
11) Acrolein	4.01	56	23263	24.43	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	96485	5.21	ug/l	100
13) Acetone	4.10	43	111900	25.17	ug/l	97
14) 1,1-Dichloroethene	4.26	61	240030	5.25	ug/l	99
15) tert-Butyl alcohol	4.37	59	179705	141.35	ug/l	99
16) Iodomethane	4.66	142	210193	5.09	ug/l	96
17) Methyl acetate	4.68	43	47344	4.85	ug/l	94
18) Methylene chloride	4.89	49	164275	5.17	ug/l	96
19) Carbon disulfide	4.92	76	391595	4.95	ug/l	98
20) Acrylonitrile	5.06	53	90738	24.16	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	282100	5.43	ug/l	100
22) trans-1,2-Dichloroethene	5.29	61	220434	5.29	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	438709	5.28	ug/l	99
24) Vinyl acetate	5.85	43	153880	5.07	ug/l	99
25) 1,1-Dichloroethane	5.86	63	262745	5.15	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	411440	5.35	ug/l	100
28) 2-Butanone	6.44	43	150643	24.22	ug/l	99
29) 2,2-Dichloropropane	6.66	77	268946	5.29	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	164584	5.12	ug/l	98
31) Chloroform	6.93	83	303402	5.28	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D
Acq On : 9 Aug 2024 7:46 pm
Sample : VO01H095 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 6
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	99406	5.10	ug/l	100
33)	Tetrahydrofuran	7.21	42	20729	5.97	ug/l	82
35)	1,1,1-Trichloroethane	7.52	97	315591	5.57	ug/l	99
36)	Cyclohexane	7.54	84	203812	4.99	ug/l	97
38)	1,1-Dichloropropene	7.75	110	77861	5.01	ug/l	98
39)	Carbon tetrachloride	7.89	119	258209	5.48	ug/l	98
40)	tert-Amyl methyl ether (TA	7.91	73	301526	5.34	ug/l	99
42)	Benzene	8.15	78	550624	5.29	ug/l	99
43)	1,2-Dichloroethane	8.12	62	184098	5.66	ug/l	100
44)	Trichloroethene	9.08	130	166925	5.04	ug/l	97
45)	Methylcyclohexane	9.18	83	242377	5.32	ug/l	99
46)	1,2-Dichloropropane	9.36	63	122908	5.17	ug/l	97
47)	Bromodichloromethane	9.74	83	208845	5.04	ug/l	99
48)	1,4-Dioxane	9.79	88	10959	93.21	ug/l	95
49)	Dibromomethane	9.83	93	67341	5.09	ug/l	92
50)	2-Chloroethyl vinyl ether	10.25	63	37832	5.09	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	392237	27.62	ug/l	99
52)	cis-1,3-Dichloropropene	10.63	75	225216	5.37	ug/l	100
55)	Toluene	11.17	91	640556	5.46	ug/l	99
56)	Ethyl methacrylate	11.48	69	108013	5.46	ug/l	99
57)	trans-1,3-Dichloropropene	11.49	75	191369	5.63	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	95428	5.56	ug/l	97
59)	2-Hexanone	11.77	43	234467	26.22	ug/l	97
60)	1,3-Dichloropropane	12.20	76	165246	5.40	ug/l	99
61)	Tetrachloroethene	12.31	164	139666	5.25	ug/l	98
62)	Dibromochloromethane	12.68	129	119480	5.26	ug/l	99
63)	1,2-Dibromoethane	13.05	107	92674	5.36	ug/l	100
64)	1-Chlorohexane	13.32	91	281821	5.18	ug/l	99
65)	Chlorobenzene	13.79	112	436346	5.42	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.88	131	146983	5.46	ug/l	99
67)	Ethylbenzene	13.89	91	808736	5.51	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	1271852	10.98	ug/l	100
69)	o-Xylene	14.86	91	635102	5.69	ug/l	97
70)	Styrene	14.92	104	457496	5.60	ug/l	100
71)	Isopropylbenzene	15.52	105	853174	5.58	ug/l	100
73)	Bromoform	15.57	173	59824	5.47	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	34382	5.17	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	98436	5.53	ug/l	98
77)	1,2,3-Trichloropropane	16.16	110	35532	5.43	ug/l	92
78)	n-Propylbenzene	16.31	91	1020830	5.39	ug/l	100
79)	Bromobenzene	16.40	156	147713	5.15	ug/l	99

(#) = qualifier out of range (m) = manual integration

SC 09/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D Vial: 6
Acq On : 9 Aug 2024 7:46 pm Operator: DNguye
Sample : VO01H095 0.5/2.5 Inst : 01New
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

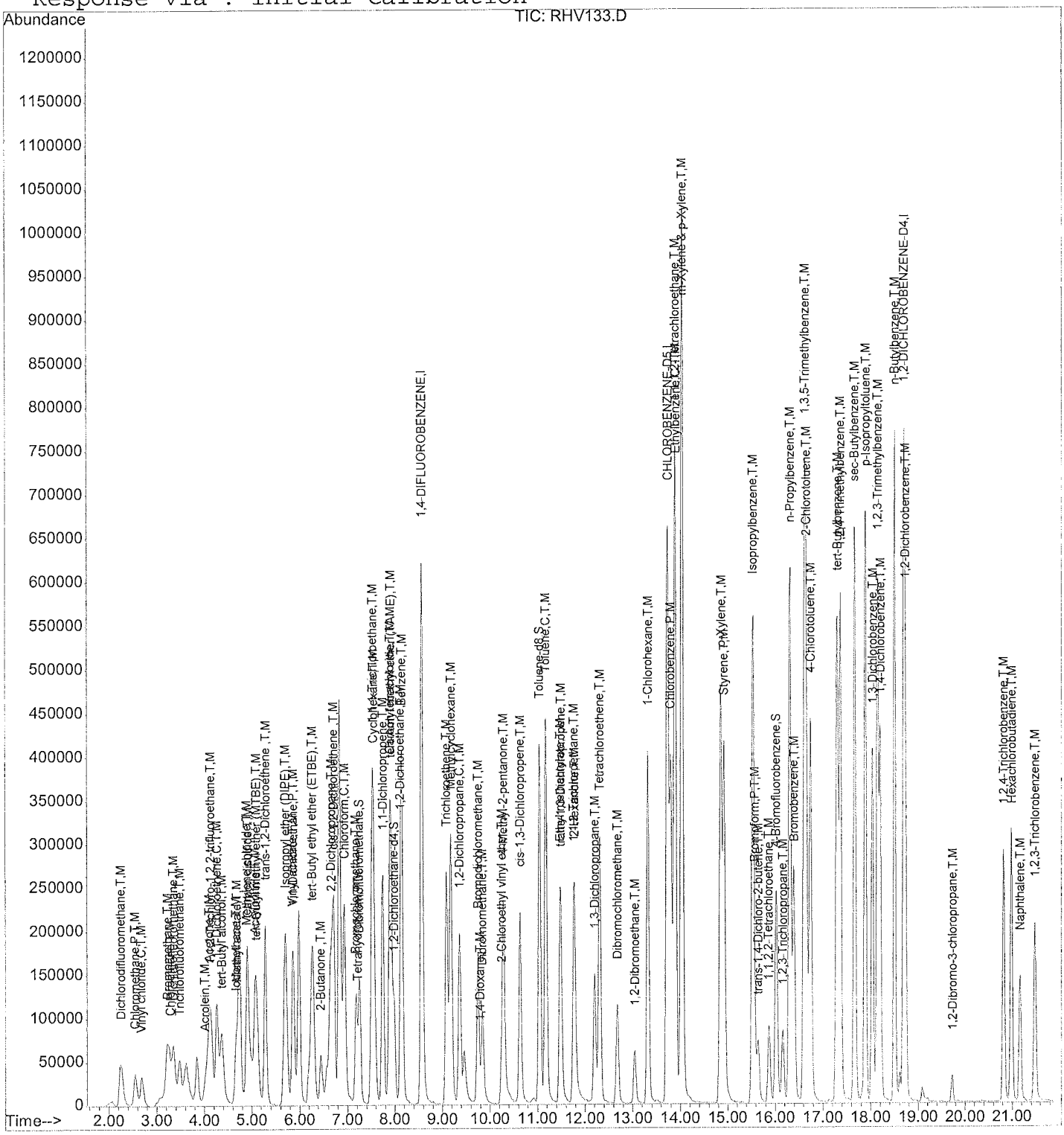
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	679737	5.44	ug/l	98
81)	2-Chlorotoluene	16.65	91	652654	5.25	ug/l	100
82)	4-Chlorotoluene	16.74	91	572332	5.39	ug/l	98
83)	tert-Butylbenzene	17.30	134	136532	4.94	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	650237	5.44	ug/l	100
85)	sec-Butylbenzene	17.66	105	936507	5.55	ug/l	100
86)	p-Isopropyltoluene	17.89	119	796468	5.55	ug/l	99
87)	1,3-Dichlorobenzene	18.04	146	312015	5.25	ug/l	99
88)	1,2,3-Trimethylbenzene	18.15	105	645332	5.57	ug/l	100
89)	1,4-Dichlorobenzene	18.20	146	294724	5.13	ug/l	97
90)	n-Butylbenzene	18.50	91	714305	5.43	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	264324	5.40	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.73	157	15407	5.59	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	173273	5.21	ug/l	99
94)	Hexachlorobutadiene	20.99	225	113734	5.21	ug/l	99
95)	Naphthalene	21.17	128	250291	5.28	ug/l	97
96)	1,2,3-Trichlorobenzene	21.48	180	134434	5.29	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D Vial: 6
Acq On : 9 Aug 2024 7:46 pm Operator: DNguye
Sample : VO01H095 0.5/2.5 Inst : 01New
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SM 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D
Acq On : 9 Aug 2024 8:17 pm
Sample : VO01H096 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 7
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	962079	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	831588	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	320498	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	317917	10.87	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.70%		
41) 1,2-Dichloroethane-d4	7.98	65	287348	11.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.50%		
54) Toluene-d8	11.03	98	1083309	10.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.60%		
76) 4-Bromofluorobenzene	16.01	95	405953	9.98	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.80%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	367558	11.61	ug/l	100
5) Chloromethane	2.54	50	246286	10.73	ug/l	100
6) Vinyl chloride	2.68	62	230246	11.37	ug/l	100
7) Bromomethane	3.21	94	183985	10.26	ug/l	100
8) Chloroethane	3.27	64	161113	10.25	ug/l	100
9) Dichlorofluoromethane	3.35	67	350297	10.11	ug/l	100
10) Trichlorofluoromethane	3.48	101	526820	11.45	ug/l	100
11) Acrolein	4.01	56	46359	47.82	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	195663	10.38	ug/l	100
13) Acetone	4.10	43	215012	49.81	ug/l	100
14) 1,1-Dichloroethene	4.25	61	476924	10.24	ug/l	100
15) tert-Butyl alcohol	4.37	59	335001	258.79	ug/l	100
16) Iodomethane	4.66	142	440198	10.46	ug/l	100
17) Methyl acetate	4.68	43	98398	9.89	ug/l	100
18) Methylene chloride	4.89	49	318119	9.83	ug/l	100
19) Carbon disulfide	4.90	76	851870	10.57	ug/l	100
20) Acrylonitrile	5.05	53	187795	49.11	ug/l	100
21) tert-Butyl methyl ether (M	5.09	73	547466	10.34	ug/l	100
22) trans-1,2-Dichloroethene	5.27	61	435508	10.27	ug/l	100
23) Isopropyl ether (DIPE)	5.69	45	857937	10.14	ug/l	100
24) Vinyl acetate	5.85	43	325682	10.54	ug/l	100
25) 1,1-Dichloroethane	5.85	63	519607	10.00	ug/l	100
27) tert-Butyl ethyl ether (ET	6.26	59	808757	10.33	ug/l	100
28) 2-Butanone	6.44	43	305798	48.28	ug/l	100
29) 2,2-Dichloropropane	6.65	77	538863	10.40	ug/l	100
30) cis-1,2-Dichloroethene	6.71	96	335591	10.26	ug/l	100
31) Chloroform	6.93	83	598324	10.23	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D Vial: 7
Acq On : 9 Aug 2024 8:17 pm Operator: DNguye
Sample : VO01H096 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	200895	10.11	ug/l	100
33)	Tetrahydrofuran	7.21	42	32034	9.06	ug/l	100
35)	1,1,1-Trichloroethane	7.51	97	618367	10.71	ug/l	100
36)	Cyclohexane	7.54	84	433940	10.44	ug/l	100
38)	1,1-Dichloropropene	7.73	110	158741	10.04	ug/l	100
39)	Carbon tetrachloride	7.89	119	516332	10.76	ug/l	100
40)	tert-Amyl methyl ether (TA	7.91	73	592996	10.31	ug/l	100
42)	Benzene	8.15	78	1106697	10.45	ug/l	100
43)	1,2-Dichloroethane	8.12	62	365537	11.03	ug/l	100
44)	Trichloroethene	9.08	130	344897	10.23	ug/l	100
45)	Methylcyclohexane	9.18	83	488415	10.53	ug/l	100
46)	1,2-Dichloropropane	9.36	63	249523	10.32	ug/l	100
47)	Bromodichloromethane	9.75	83	423474	10.03	ug/l	100
48)	1,4-Dioxane	9.78	88	24332	203.24	ug/l	100
49)	Dibromomethane	9.83	93	138344	10.28	ug/l	100
50)	2-Chloroethyl vinyl ether	10.23	63	73857	9.76	ug/l	100
51)	4-Methyl-2-pentanone	10.28	43	788348	54.51	ug/l	100
52)	cis-1,3-Dichloropropene	10.63	75	451018	10.56	ug/l	100
55)	Toluene	11.17	91	1307968	10.50	ug/l	100
56)	Ethyl methacrylate	11.46	69	223328	10.63	ug/l	100
57)	trans-1,3-Dichloropropene	11.48	75	388371	10.75	ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	184365	10.10	ug/l	100
59)	2-Hexanone	11.76	43	509587	51.03	ug/l	100
60)	1,3-Dichloropropane	12.20	76	333447	10.26	ug/l	100
61)	Tetrachloroethene	12.31	164	277290	9.80	ug/l	100
62)	Dibromochloromethane	12.68	129	250854	10.39	ug/l	100
63)	1,2-Dibromoethane	13.03	107	184590	10.04	ug/l	100
64)	1-Chlorohexane	13.32	91	572517	9.91	ug/l	100
65)	Chlorobenzene	13.79	112	886613	10.35	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	304261	10.64	ug/l	100
67)	Ethylbenzene	13.89	91	1648829	10.57	ug/l	100
68)	m-Xylene & p-Xylene	14.03	91	2525052	20.50	ug/l	100
69)	o-Xylene	14.84	91	1277808	10.76	ug/l	100
70)	Styrene	14.92	104	912792	10.50	ug/l	100
71)	Isopropylbenzene	15.52	105	1710871	10.52	ug/l	100
73)	Bromoform	15.57	173	120818	10.26	ug/l	100
74)	trans-1,4-Dichloro-2-buten	15.63	53	71724	10.02	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.86	83	194330	10.15	ug/l	100
77)	1,2,3-Trichloropropane	16.16	110	67329	9.56	ug/l	100
78)	n-Propylbenzene	16.31	91	2038997	10.01	ug/l	100
79)	Bromobenzene	16.40	156	299740	9.71	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D Vial: 7
Acq On : 9 Aug 2024 8:17 pm Operator: DNguye
Sample : VO01H096 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1314569	9.77	ug/l	100
81)	2-Chlorotoluene	16.65	91	1310655	9.80	ug/l	100
82)	4-Chlorotoluene	16.74	91	1130456	9.89	ug/l	100
83)	tert-Butylbenzene	17.30	134	282803	9.51	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	1295259	10.08	ug/l	100
85)	sec-Butylbenzene	17.66	105	1844631	10.16	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1565765	10.14	ug/l	100
87)	1,3-Dichlorobenzene	18.04	146	627224	9.81	ug/l	100
88)	1,2,3-Trimethylbenzene	18.15	105	1285939	10.31	ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	607095	9.82	ug/l	100
90)	n-Butylbenzene	18.50	91	1461921	10.34	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	527594	10.03	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	32206	10.86	ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	358763	10.03	ug/l	100
94)	Hexachlorobutadiene	20.99	225	239251	10.19	ug/l	100
95)	Naphthalene	21.17	128	529576	10.39	ug/l	100
96)	1,2,3-Trichlorobenzene	21.48	180	280464	10.26	ug/l	100

SC 09/6/24

(#) = qualifier out of range (m) = manual integration

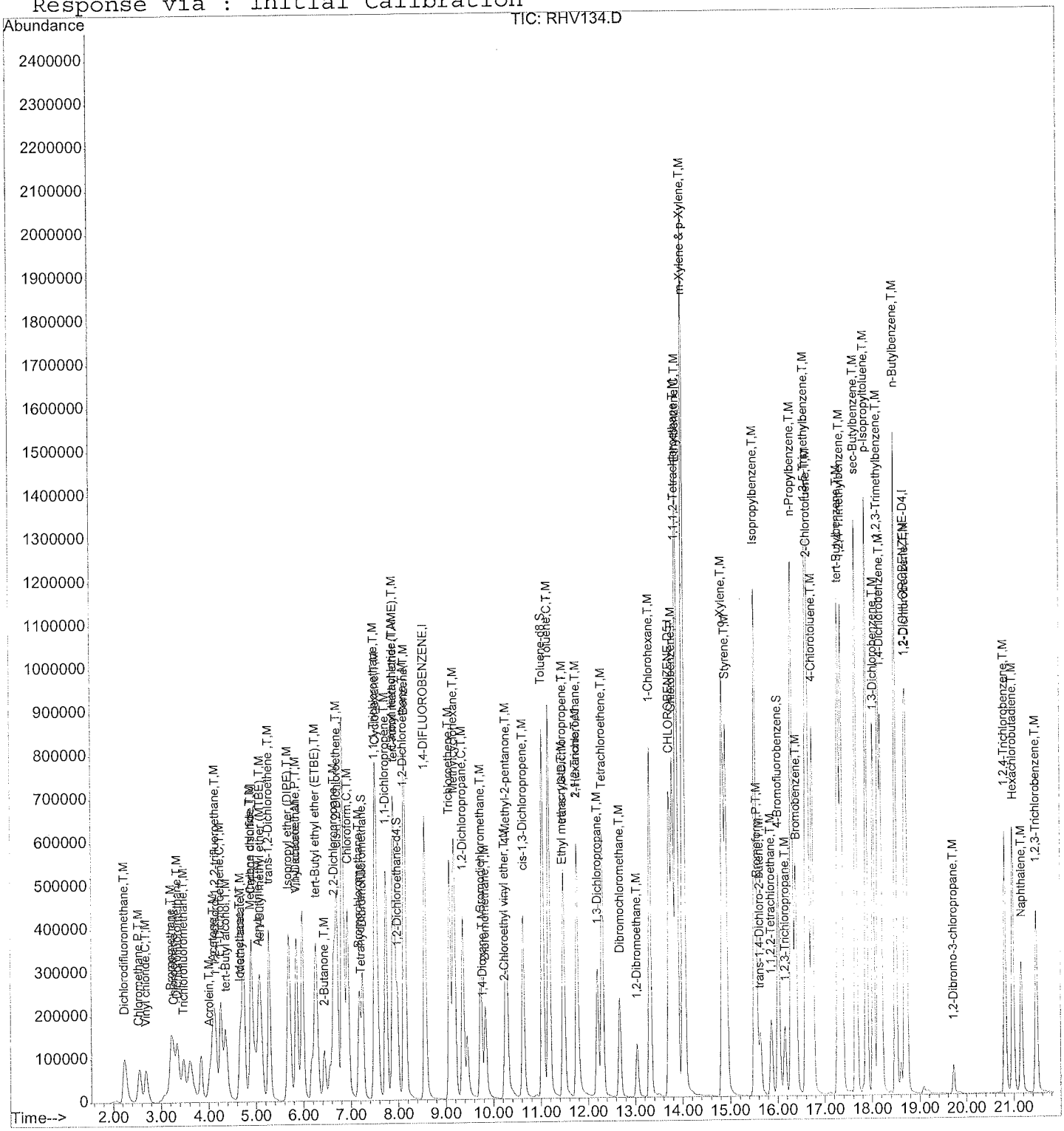
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D
Acq On : 9 Aug 2024 8:17 pm
Sample : VO01H096 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 7
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1150883	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1018537	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	384694	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	765356	21.87	ug/l	0.00
Spiked Amount 10.000			Recovery = 218.70%			
41) 1,2-Dichloroethane-d4	7.97	65	677959	21.79	ug/l	-0.01
Spiked Amount 10.000			Recovery = 217.90%			
54) Toluene-d8	11.03	98	2602667	20.91	ug/l	0.00
Spiked Amount 10.000			Recovery = 209.10%			
76) 4-Bromofluorobenzene	16.01	95	1002851	20.55	ug/l	0.00
Spiked Amount 10.000			Recovery = 205.50%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	785678	20.75	ug/l	97
5) Chloromethane	2.54	50	541646	19.73	ug/l	98
6) Vinyl chloride	2.67	62	513628	21.21	ug/l	94
7) Bromomethane	3.23	94	422952	19.72	ug/l	97
8) Chloroethane	3.27	64	377247	20.07	ug/l	97
9) Dichlorofluoromethane	3.35	67	827118	19.95	ug/l	99
10) Trichlorofluoromethane	3.60	101	1055028	19.17	ug/l	94
11) Acrolein	4.01	56	111080	95.77	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	450807	20.00	ug/l	98
13) Acetone	4.09	43	506208	100.56	ug/l	96
14) 1,1-Dichloroethene	4.25	61	1089229	19.56	ug/l	97
15) tert-Butyl alcohol	4.37	59	830279	536.18	ug/l	97
16) Iodomethane	4.67	142	1029215	20.44	ug/l	96
17) Methyl acetate	4.68	43	228998	19.24	ug/l	99
18) Methylene chloride	4.89	49	759786	19.63	ug/l	98
19) Carbon disulfide	4.90	76	2032344	21.08	ug/l	100
20) Acrylonitrile	5.05	53	476585	104.20	ug/l	99
21) tert-Butyl methyl ether (M	5.08	73	1291834	20.40	ug/l	98
22) trans-1,2-Dichloroethene	5.27	61	997435	19.67	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	2069096	20.44	ug/l	98
24) Vinyl acetate	5.85	43	777719	21.03	ug/l	97
25) 1,1-Dichloroethane	5.85	63	1245038	20.03	ug/l	99
27) tert-Butyl ethyl ether (ET	6.27	59	1896011	20.25	ug/l	99
28) 2-Butanone	6.43	43	776970	102.54	ug/l	100
29) 2,2-Dichloropropane	6.65	77	1227491	19.81	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	776590	19.85	ug/l	97
31) Chloroform	6.93	83	1319238	18.85	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	491878	20.70 ug/l	98
33)	Tetrahydrofuran	7.21	42	81729	19.32 ug/l	94
35)	1,1,1-Trichloroethane	7.51	97	1375586	19.92 ug/l	99
36)	Cyclohexane	7.54	84	970280	19.51 ug/l	99
38)	1,1-Dichloropropene	7.73	110	379669	20.07 ug/l	100
39)	Carbon tetrachloride	7.90	119	1155219	20.12 ug/l	100
40)	tert-Amyl methyl ether (TA	7.91	73	1437980	20.90 ug/l	100
42)	Benzene	8.15	78	2636933	20.81 ug/l	100
43)	1,2-Dichloroethane	8.12	62	823275	20.77 ug/l	97
44)	Trichloroethene	9.08	130	802073	19.89 ug/l	99
45)	Methylcyclohexane	9.17	83	1109057	19.99 ug/l	98
46)	1,2-Dichloropropane	9.36	63	601312	20.78 ug/l	97
47)	Bromodichloromethane	9.73	83	966732	19.15 ug/l	99
48)	1,4-Dioxane	9.77	88	59642	416.46 ug/l	88
49)	Dibromomethane	9.83	93	326433	20.27 ug/l	98
50)	2-Chloroethyl vinyl ether	10.23	63	196401	21.69 ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	1965955	113.64 ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	1075089	21.05 ug/l	99
55)	Toluene	11.17	91	2960512	19.40 ug/l	99
56)	Ethyl methacrylate	11.46	69	556104	21.61 ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	903478	20.41 ug/l	99
58)	1,1,2-Trichloroethane	11.76	97	448543	20.06 ug/l	99
59)	2-Hexanone	11.76	43	1275894	101.74 ug/l	97
60)	1,3-Dichloropropane	12.19	76	812582	20.41 ug/l	99
61)	Tetrachloroethene	12.31	164	635772	18.34 ug/l	99
62)	Dibromochloromethane	12.66	129	586615	19.85 ug/l	100
63)	1,2-Dibromoethane	13.03	107	453234	20.14 ug/l	99
64)	1-Chlorohexane	13.32	91	1346564	19.02 ug/l	99
65)	Chlorobenzene	13.79	112	2065952	19.69 ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	703194	20.07 ug/l	99
67)	Ethylbenzene	13.88	91	3709861	19.42 ug/l	97
68)	m-Xylene & p-Xylene	14.03	91	5569365	36.92 ug/l	97
69)	o-Xylene	14.84	91	2875405	19.77 ug/l	100
70)	Styrene	14.92	104	2174056	20.43 ug/l	97
71)	Isopropylbenzene	15.52	105	3813167	19.14 ug/l	99
73)	Bromoform	15.57	173	289936	20.52 ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	178121	20.73 ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	491863	21.41 ug/l	96
77)	1,2,3-Trichloropropane	16.14	110	168364	19.91 ug/l	96
78)	n-Propylbenzene	16.29	91	4613231	18.86 ug/l	99
79)	Bromobenzene	16.38	156	709263	19.15 ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

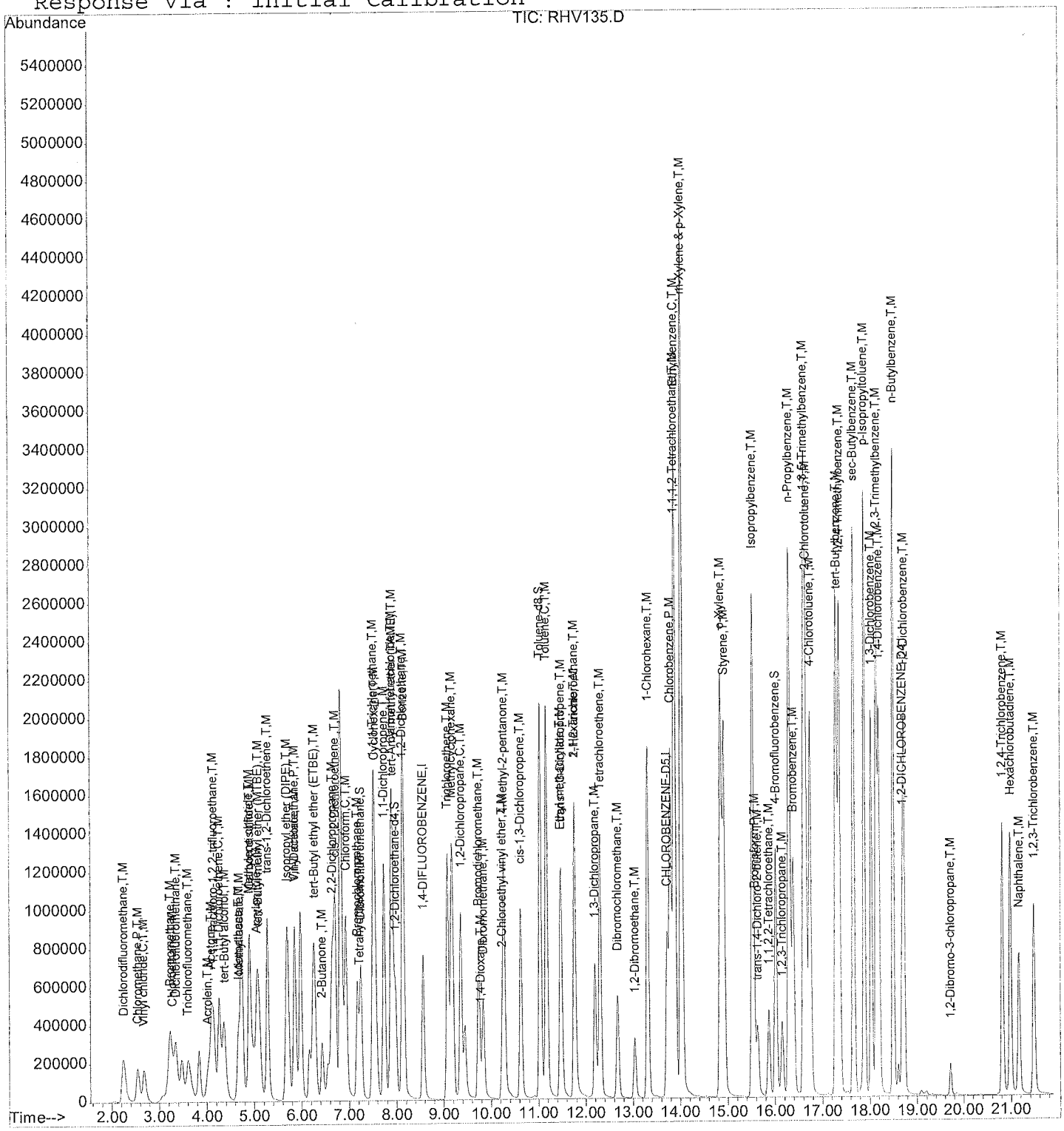
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.60	105	3005426	18.61	ug/l	97
81) 2-Chlorotoluene	16.65	91	2992664	18.64	ug/l	98
82) 4-Chlorotoluene	16.74	91	2549486	18.59	ug/l	98
83) tert-Butylbenzene	17.30	134	673296	18.85	ug/l	99
84) 1,2,4-Trimethylbenzene	17.36	105	2904957	18.83	ug/l	97
85) sec-Butylbenzene	17.66	105	4132246	18.97	ug/l	99
86) p-Isopropyltoluene	17.88	119	3562034	19.21	ug/l	99
87) 1,3-Dichlorobenzene	18.03	146	1447912	18.88	ug/l	99
88) 1,2,3-Trimethylbenzene	18.14	105	2885446	19.28	ug/l	97
89) 1,4-Dichlorobenzene	18.19	146	1416710	19.10	ug/l	99
90) n-Butylbenzene	18.50	91	3192652	18.81	ug/l	98
91) 1,2-Dichlorobenzene	18.72	146	1237082	19.58	ug/l	99
92) 1,2-Dibromo-3-chloropropan	19.72	157	79839	22.44	ug/l	99
93) 1,2,4-Trichlorobenzene	20.81	180	853446	19.88	ug/l	100
94) Hexachlorobutadiene	20.99	225	547118	19.42	ug/l	100
95) Naphthalene	21.17	128	1278083	20.89	ug/l	98
96) 1,2,3-Trichlorobenzene	21.48	180	653907	19.94	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1461385	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	1212032	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	417210	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	1328233	29.89	ug/l	0.00
Spiked Amount 10.000			Recovery =	298.90%		
41) 1,2-Dichloroethane-d4	7.98	65	1070237	27.09	ug/l	0.00
Spiked Amount 10.000			Recovery =	270.90%		
54) Toluene-d8	11.03	98	4525292	30.55	ug/l	0.00
Spiked Amount 10.000			Recovery =	305.50%		
76) 4-Bromofluorobenzene	16.01	95	1632018	30.83	ug/l	0.00
Spiked Amount 10.000			Recovery =	308.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	1325069	27.55	ug/l	99
5) Chloromethane	2.54	50	944572	27.10	ug/l	98
6) Vinyl chloride	2.69	62	942460	30.65	ug/l	99
7) Bromomethane	3.23	94	770930	28.31	ug/l	94
8) Chloroethane	3.29	64	700835	29.36	ug/l	92
9) Dichlorofluoromethane	3.35	67	1425385	27.07	ug/l	99
10) Trichlorofluoromethane	3.48	101	1922790	27.51	ug/l	99
11) Acrolein	4.03	56	217539	147.71	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	822034	28.72	ug/l	98
13) Acetone	4.10	43	866792	136.51	ug/l	94
14) 1,1-Dichloroethene	4.25	61	1973543	27.91	ug/l	95
15) tert-Butyl alcohol	4.37	59	1338284	680.61	ug/l	99
16) Iodomethane	4.66	142	1915115	29.96	ug/l	91
17) Methyl acetate	4.68	43	425400	28.15	ug/l	98
18) Methylene chloride	4.89	49	1394981	28.38	ug/l	97
19) Carbon disulfide	4.90	76	3839603	31.37	ug/l	100
20) Acrylonitrile	5.05	53	901212	155.17	ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	2295214	28.54	ug/l	94
22) trans-1,2-Dichloroethene	5.27	61	1846052	28.66	ug/l	96
23) Isopropyl ether (DIPE)	5.70	45	3839771	29.87	ug/l	99
24) Vinyl acetate	5.85	43	1354892	28.85	ug/l	96
25) 1,1-Dichloroethane	5.85	63	2294729	29.08	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	3377877	28.42	ug/l	99
28) 2-Butanone	6.43	43	1385103	143.96	ug/l	99
29) 2,2-Dichloropropane	6.65	77	2083192	26.48	ug/l	98
30) cis-1,2-Dichloroethene	6.71	96	1462643	29.45	ug/l	94
31) Chloroform	6.93	83	2272439	25.57	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	881140	29.20	ug/l	99
33)	Tetrahydrofuran	7.21	42	141560	26.35	ug/l	93
35)	1,1,1-Trichloroethane	7.52	97	2341349	26.70	ug/l	99
36)	Cyclohexane	7.54	84	1962879	31.08	ug/l	100
38)	1,1-Dichloropropene	7.75	110	712914	29.67	ug/l	99
39)	Carbon tetrachloride	7.89	119	1951070	26.76	ug/l	99
40)	tert-Amyl methyl ether (TA	7.91	73	2495207	28.56	ug/l	100
42)	Benzene	8.15	78	4773208	29.66	ug/l	99
43)	1,2-Dichloroethane	8.12	62	1359635	27.02	ug/l	99
44)	Trichloroethene	9.08	130	1450073	28.32	ug/l	98
45)	Methylcyclohexane	9.18	83	2278446	32.34	ug/l	97
46)	1,2-Dichloropropane	9.36	63	1087666	29.61	ug/l	92
47)	Bromodichloromethane	9.75	83	1641626	25.61	ug/l	100
48)	1,4-Dioxane	9.77	88	101171	556.34	ug/l	88
49)	Dibromomethane	9.83	93	563077	27.54	ug/l	97
50)	2-Chloroethyl vinyl ether	10.23	63	353243	30.72	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	3374776	153.63	ug/l	97
52)	cis-1,3-Dichloropropene	10.63	75	1903847	29.35	ug/l	97
55)	Toluene	11.17	91	5289587	29.13	ug/l	97
56)	Ethyl methacrylate	11.45	69	969178	31.64	ug/l	93
57)	trans-1,3-Dichloropropene	11.48	75	1528669	29.02	ug/l	97
58)	1,1,2-Trichloroethane	11.76	97	782516	29.41	ug/l	98
59)	2-Hexanone	11.76	43	2150018	143.04	ug/l	96
60)	1,3-Dichloropropane	12.20	76	1372065	28.96	ug/l	99
61)	Tetrachloroethene	12.31	164	1145792	27.78	ug/l	97
62)	Dibromochloromethane	12.68	129	974891	27.72	ug/l	99
63)	1,2-Dibromoethane	13.03	107	784356	29.28	ug/l	98
64)	1-Chlorohexane	13.32	91	2398148	28.47	ug/l	99
65)	Chlorobenzene	13.79	112	3536039	28.33	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	1207456	28.97	ug/l	99
67)	Ethylbenzene	13.89	91	6169157	27.14	ug/l	95
68)	m-Xylene & p-Xylene	14.03	91	8994205	50.10	ug/l	91
69)	o-Xylene	14.84	91	4849057	28.02	ug/l	97
70)	Styrene	14.92	104	3756223	29.66	ug/l	96
71)	Isopropylbenzene	15.52	105	6282009	26.50	ug/l	98
73)	Bromoform	15.57	173	474486	30.97	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	281511	30.21	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	799846	32.10	ug/l	97
77)	1,2,3-Trichloropropane	16.16	110	263192	28.70	ug/l	97
78)	n-Propylbenzene	16.31	91	7448579	28.08	ug/l	97
79)	Bromobenzene	16.40	156	1170949	29.15	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	4831297	27.59	ug/l	95
81)	2-Chlorotoluene	16.65	91	4742897	27.24	ug/l	97
82)	4-Chlorotoluene	16.74	91	4208682	28.30	ug/l	96
83)	tert-Butylbenzene	17.30	134	1108973	28.63	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	4692017	28.04	ug/l	95
85)	sec-Butylbenzene	17.66	105	6494824	27.49	ug/l	98
86)	p-Isopropyltoluene	17.89	119	5547663	27.59	ug/l	98
87)	1,3-Dichlorobenzene	18.04	146	2316340	27.84	ug/l	99
88)	1,2,3-Trimethylbenzene	18.15	105	4423835	27.26	ug/l	95
89)	1,4-Dichlorobenzene	18.20	146	2218767	27.58	ug/l	99
90)	n-Butylbenzene	18.50	91	4839886	26.29	ug/l	96
91)	1,2-Dichlorobenzene	18.72	146	1893356	27.64	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.73	157	117545	30.46	ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	1289347	27.70	ug/l	99
94)	Hexachlorobutadiene	20.99	225	840674	27.51	ug/l	99
95)	Naphthalene	21.17	128	1911419	28.80	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	1000796	28.14	ug/l	98

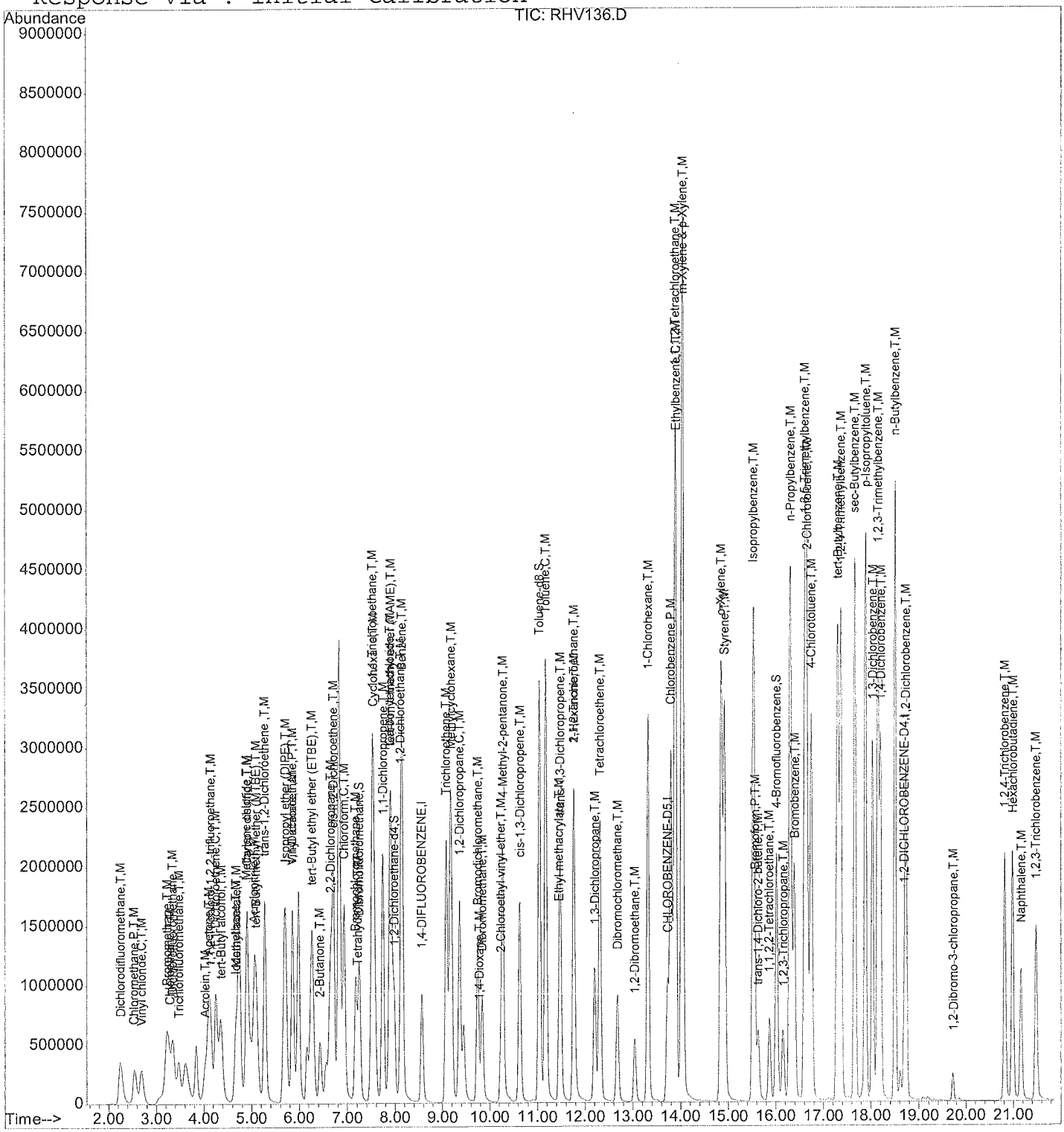
SC

(#) = qualifier out of range (m) = manual integration
RHV136.D VO01H09.M Fri Aug 30 18:37:29 2024 9/6/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1550082	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1272626	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	398203	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	551	0.01	ug/l	-0.01
Spiked Amount 10.000			Recovery =	0.10%		
41) 1,2-Dichloroethane-d4	0.00	65	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
54) Toluene-d8	11.03	98	13898	0.09	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.90%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.23	85	2346897	46.01	ug/l	95
5) Chloromethane	2.53	50	1762845	47.68	ug/l	98
6) Vinyl chloride	2.67	62	1751063	53.69	ug/l	97
7) Bromomethane	3.21	94	1398868	48.43	ug/l	95
8) Chloroethane	3.27	64	1331488	52.58	ug/l	90
9) Dichlorofluoromethane	3.33	67	2577952	46.16	ug/l	99
10) Trichlorofluoromethane	3.60	101	3493896	47.13	ug/l	98
11) Acrolein	4.01	56	420047	268.90	ug/l	90
12) 1,1,2-Trichloro-1,2,2-trif	4.12	151	1433660	47.22	ug/l	100
13) Acetone	4.09	43	1465054	219.08	ug/l	93
14) 1,1-Dichloroethene	4.25	61	3480047	46.40	ug/l	94
15) tert-Butyl alcohol	4.35	59	2530967	1213.52	ug/l	97
16) Iodomethane	4.65	142	3415106	50.36	ug/l	89
17) Methyl acetate	4.67	43	765906	47.78	ug/l	96
18) Methylene chloride	4.87	49	2452149	47.04	ug/l	96
20) Acrylonitrile	5.05	53	1559155	253.09	ug/l	98
21) tert-Butyl methyl ether (M	5.10	73	3901741	45.74	ug/l	93
22) trans-1,2-Dichloroethene	5.27	61	3241205	47.45	ug/l	93
23) Isopropyl ether (DIPE)	5.69	45	6590087	48.33	ug/l	100
24) Vinyl acetate	5.84	43	2483809	49.87	ug/l	96
25) 1,1-Dichloroethane	5.85	63	4004425	47.83	ug/l	99
27) tert-Butyl ethyl ether (ET	6.25	59	5674608	45.01	ug/l	98
28) 2-Butanone	6.43	43	2357347	230.99	ug/l	99
29) 2,2-Dichloropropane	6.65	77	3567287	42.75	ug/l	98
30) cis-1,2-Dichloroethene	6.70	96	2584295	49.05	ug/l	92
31) Chloroform	6.92	83	3884727	41.21	ug/l	97
32) Bromochloromethane	7.17	49	1538605	48.08	ug/l	99

(#) = qualifier out of range (m) = manual integration

RHV137.D VO01H09.M Fri Aug 30 18:39:11 2024 Page 1

08/26/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D
Acq On : 9 Aug 2024 9:47 pm
Sample : VO01H099 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024

Vial: 10
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) Tetrahydrofuran	7.21	42	258978	45.45 ug/l	93
35) 1,1,1-Trichloroethane	7.51	97	3980715	42.79 ug/l	98
36) Cyclohexane	7.52	84	3368126	50.28 ug/l	99
38) 1,1-Dichloropropene	7.73	110	1234976	48.46 ug/l	99
39) Carbon tetrachloride	7.90	119	3320517	42.94 ug/l	98
40) tert-Amyl methyl ether (TA	7.91	73	4201292	45.33 ug/l	99
42) Benzene	8.13	78	8069673	47.28 ug/l	98
43) 1,2-Dichloroethane	8.12	62	2294253	42.98 ug/l	98
44) Trichloroethene	9.08	130	2486450	45.79 ug/l	97
45) Methylcyclohexane	9.17	83	3912492	52.36 ug/l	97
46) 1,2-Dichloropropane	9.36	63	1922116	49.33 ug/l	89
47) Bromodichloromethane	9.73	83	2782210	40.92 ug/l	99
48) 1,4-Dioxane	9.76	88	198113	1027.09 ug/l	93
49) Dibromomethane	9.82	93	963297	44.42 ug/l	95
50) 2-Chloroethyl vinyl ether	10.22	63	623578	51.12 ug/l	98
51) 4-Methyl-2-pentanone	10.26	43	5634001	241.80 ug/l	96
52) cis-1,3-Dichloropropene	10.62	75	3238872	47.08 ug/l	97
55) Toluene	11.17	91	8563343	44.91 ug/l	93
56) Ethyl methacrylate	11.45	69	1671329	51.97 ug/l	94
57) trans-1,3-Dichloropropene	11.48	75	2629177	47.54 ug/l	96
58) 1,1,2-Trichloroethane	11.74	97	1347520	48.24 ug/l	99
59) 2-Hexanone	11.76	43	3580157	225.40 ug/l	94
60) 1,3-Dichloropropane	12.19	76	2409049	48.43 ug/l	100
61) Tetrachloroethene	12.31	164	1975797	45.62 ug/l	97
62) Dibromochloromethane	12.66	129	1687823	45.70 ug/l	99
63) 1,2-Dibromoethane	13.03	107	1330569	47.31 ug/l	96
64) 1-Chlorohexane	13.32	91	4073611	46.06 ug/l	98
65) Chlorobenzene	13.79	112	5965334	45.51 ug/l	97
66) 1,1,1,2-Tetrachloroethane	13.86	131	2052970	46.90 ug/l	100
67) Ethylbenzene	13.88	91	9788973	41.01 ug/l	90
69) o-Xylene	14.84	91	7695449	42.35 ug/l	94
70) Styrene	14.92	104	6256463	47.05 ug/l	97
73) Bromoform	15.57	173	817115	55.88 ug/l	98
74) trans-1,4-Dichloro-2-buten	15.63	53	474241	53.32 ug/l	98
75) 1,1,2,2-Tetrachloroethane	15.86	83	1321811	55.58 ug/l	98
77) 1,2,3-Trichloropropane	16.14	110	460433	52.61 ug/l	94
78) n-Propylbenzene	16.29	91	11115890	43.91 ug/l	93
79) Bromobenzene	16.38	156	1942250	50.66 ug/l	100
80) 1,3,5-Trimethylbenzene	16.60	105	7640705	45.71 ug/l	92
81) 2-Chlorotoluene	16.65	91	7752421	46.65 ug/l	94
82) 4-Chlorotoluene	16.74	91	6559965	46.21 ug/l	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

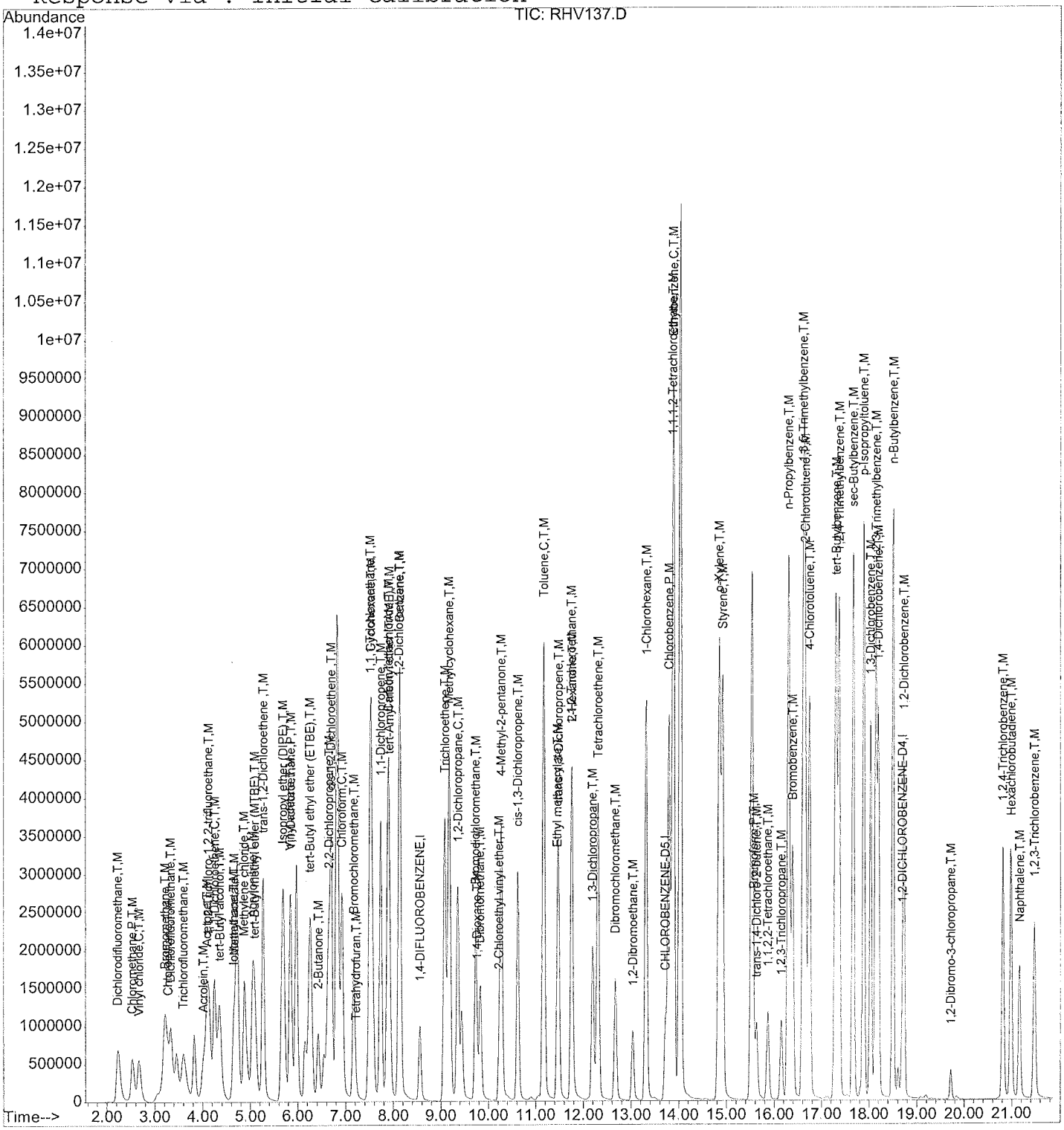
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83)	tert-Butylbenzene	17.30	134	1857054	50.24	ug/l	97
84)	1,2,4-Trimethylbenzene	17.36	105	7235456	45.31	ug/l	90
85)	sec-Butylbenzene	17.66	105	9517579	42.21	ug/l	93
86)	p-Isopropyltoluene	17.88	119	8220752	42.84	ug/l	95
87)	1,3-Dichlorobenzene	18.03	146	3672185	46.25	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	6721285	43.39	ug/l	93
89)	1,4-Dichlorobenzene	18.19	146	3550594	46.24	ug/l	99
90)	n-Butylbenzene	18.50	91	7113798	40.49	ug/l	91
91)	1,2-Dichlorobenzene	18.72	146	3029323	46.33	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	196035	53.22	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	2009206	45.22	ug/l	100
94)	Hexachlorobutadiene	20.99	225	1310067	44.92	ug/l	99
95)	Naphthalene	21.17	128	3067753	48.44	ug/l	98
96)	1,2,3-Trichlorobenzene	21.48	180	1571867	46.30	ug/l	97

(#) = qualifier out of range (m) = manual integration
RHV137.D VO01H09.M Fri Aug 30 18:39:12 2024 Page 3

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1270873	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	1026209	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	289170	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	0.00	111	0	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
41) 1,2-Dichloroethane-d4	0.00	65	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
54) Toluene-d8	11.05	98	4989	0.04	ug/l	0.01
Spiked Amount 10.000			Recovery =	0.40%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	4670381	111.67	ug/l	96
5) Chloromethane	2.53	50	3722515	122.79	ug/l	98
7) Bromomethane	3.21	94	2840980	119.96	ug/l	97
8) Chloroethane	3.27	64	2633367	126.84	ug/l	91
9) Dichlorofluoromethane	3.35	67	5323040	116.25	ug/l	100
10) Trichlorofluoromethane	3.61	101	6852447	112.74	ug/l	98
11) Acrolein	4.01	56	842414	657.76	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	2886728	115.96	ug/l	99
13) Acetone	4.09	43	2953626	542.52	ug/l	92
14) 1,1-Dichloroethene	4.25	61	6983489	113.56	ug/l	94
15) tert-Butyl alcohol	4.37	59	4804777	2809.87	ug/l	99
17) Methyl acetate	4.68	43	1495299	113.78	ug/l	95
18) Methylene chloride	4.89	49	4936369	115.49	ug/l	95
20) Acrylonitrile	5.05	53	3140183	621.71	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	7734124	110.59	ug/l	94
22) trans-1,2-Dichloroethene	5.27	61	6301340	112.51	ug/l	91
23) Isopropyl ether (DIPE)	5.69	45	12384481	110.77	ug/l	95
24) Vinyl acetate	5.85	43	4887040	119.68	ug/l	95
25) 1,1-Dichloroethane	5.85	63	7723208	112.53	ug/l	98
27) tert-Butyl ethyl ether (ET	6.27	59	10982001	106.24	ug/l	96
28) 2-Butanone	6.43	43	4661661	557.14	ug/l	99
29) 2,2-Dichloropropane	6.65	77	7038809	102.88	ug/l	97
30) cis-1,2-Dichloroethene	6.71	96	5150285	119.23	ug/l	90
31) Chloroform	6.93	83	7500896	97.05	ug/l	94
32) Bromochloromethane	7.17	49	3031909	115.55	ug/l	99
33) Tetrahydrofuran	7.21	42	500929	107.23	ug/l	95
35) 1,1,1-Trichloroethane	7.51	97	7775386	101.94	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
36)	Cyclohexane	7.54	84	6580294	119.81	ug/l		99
38)	1,1-Dichloropropene	7.73	110	2477702	118.58	ug/l		98
39)	Carbon tetrachloride	7.89	119	6568334	103.61	ug/l		99
40)	tert-Amyl methyl ether (TA	7.91	73	8112654	106.77	ug/l		98
42)	Benzene	8.15	78	13888654	99.25	ug/l		93
43)	1,2-Dichloroethane	8.12	62	4483500	102.46	ug/l		97
44)	Trichloroethene	9.08	130	4941326	110.99	ug/l		97
45)	Methylcyclohexane	9.18	83	7314408	119.40	ug/l		96
46)	1,2-Dichloropropane	9.36	63	3752082	117.45	ug/l		92
47)	Bromodichloromethane	9.73	83	5473913	98.19	ug/l		99
48)	1,4-Dioxane	9.76	88	380626	2406.83	ug/l		90
49)	Dibromomethane	9.83	93	1910399	107.45	ug/l		96
50)	2-Chloroethyl vinyl ether	10.22	63	1218626	121.85	ug/l		99
51)	4-Methyl-2-pentanone	10.26	43	10267105	537.45	ug/l		92
52)	cis-1,3-Dichloropropene	10.62	75	6202577	109.96	ug/l		94
55)	Toluene	11.17	91	14043908	91.33	ug/l		84
57)	trans-1,3-Dichloropropene	11.48	75	5011355	112.36	ug/l		94
58)	1,1,2-Trichloroethane	11.74	97	2647712	117.55	ug/l		99
59)	2-Hexanone	11.76	43	6801833	527.70	ug/l		92
60)	1,3-Dichloropropane	12.19	76	4651210	115.96	ug/l		98
61)	Tetrachloroethene	12.31	164	3854409	110.36	ug/l		97
62)	Dibromochloromethane	12.66	129	3318617	111.43	ug/l		97
63)	1,2-Dibromoethane	13.03	107	2639320	116.39	ug/l		97
64)	1-Chlorohexane	13.31	91	7538336	105.71	ug/l		95
65)	Chlorobenzene	13.79	112	10817556	102.35	ug/l		91
66)	1,1,1,2-Tetrachloroethane	13.88	131	4072316	115.38	ug/l		100
69)	o-Xylene	14.84	91	12785500	87.27	ug/l		83
70)	Styrene	14.91	104	10999980	102.59	ug/l		97
78)	n-Propylbenzene	16.31	91	16291269	88.62	ug/l		80
79)	Bromobenzene	16.38	156	3679164	132.16	ug/l		98
80)	1,3,5-Trimethylbenzene	16.62	105	12237227	100.82	ug/l		84
81)	2-Chlorotoluene	16.65	91	12699107	105.23	ug/l		87
82)	4-Chlorotoluene	16.74	91	11067133	107.36	ug/l		85
83)	tert-Butylbenzene	17.30	134	3365411	125.37	ug/l		94
84)	1,2,4-Trimethylbenzene	17.36	105	11581107	99.87	ug/l		79
85)	sec-Butylbenzene	17.66	105	13681920	83.56	ug/l		80
86)	p-Isopropyltoluene	17.89	119	12260360	87.97	ug/l		85
87)	1,3-Dichlorobenzene	18.04	146	6425754	111.44	ug/l		96
88)	1,2,3-Trimethylbenzene	18.14	105	10502610	93.36	ug/l	#	84
89)	1,4-Dichlorobenzene	18.20	146	6178768	110.82	ug/l		95
90)	n-Butylbenzene	18.50	91	10448826	81.89	ug/l		82

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
91)	1,2-Dichlorobenzene	18.72	146	5331830	112.29	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	3527937	109.34	ug/l	99
94)	Hexachlorobutadiene	20.99	225	2314021	109.25	ug/l	99
95)	Naphthalene	21.15	128	5355694	116.45	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	2776515	112.62	ug/l	98

(#) = qualifier out of range (m) = manual integration

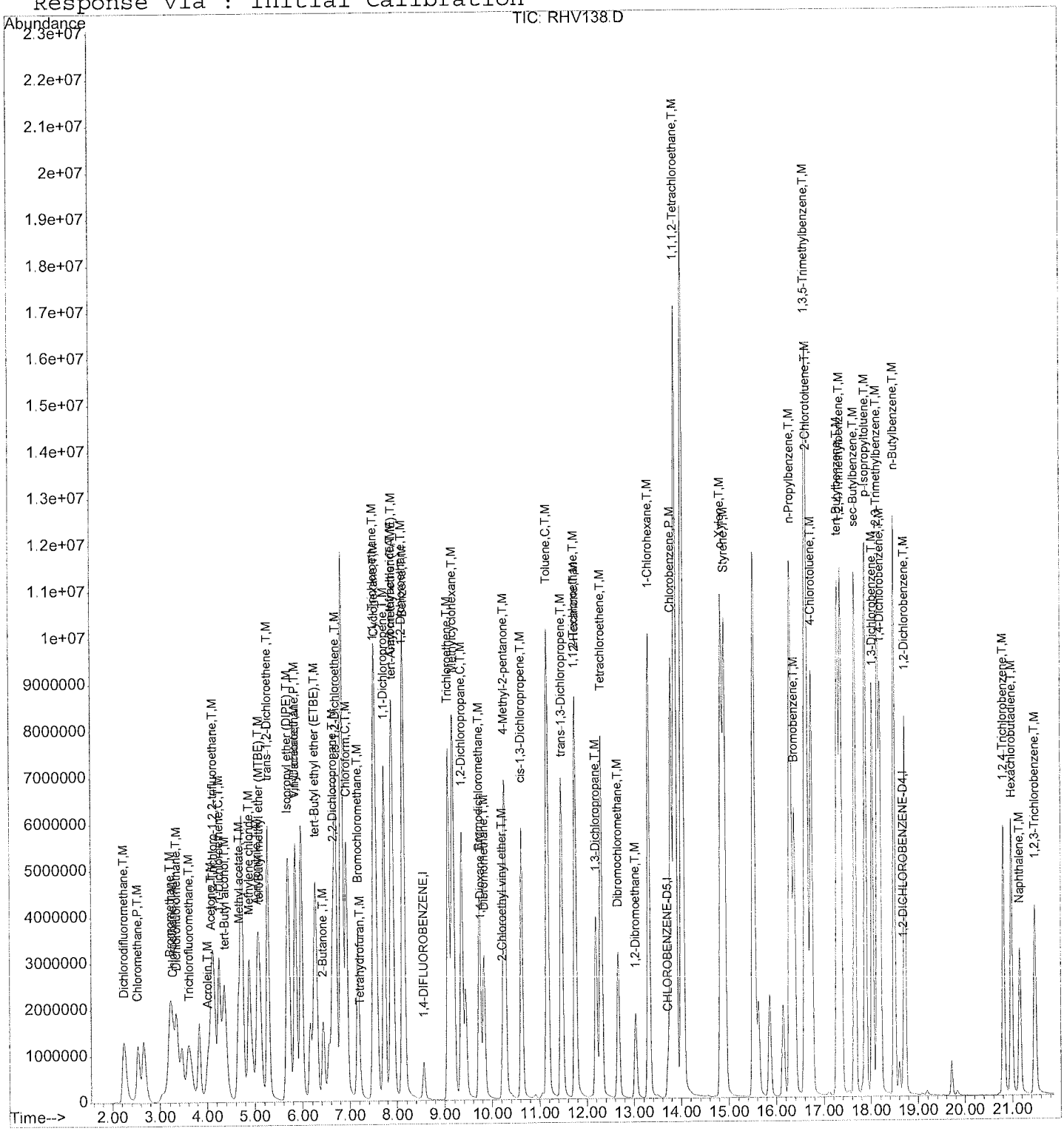
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D
Acq On : 9 Aug 2024 10:17 pm
Sample : VO01H0910 10/50
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024

Vial: 11
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01New
IC_Beginning DateTime :08/09/24 17:28
Spike Amount :10 PPB
CC/CV File :RHV141
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09
Date_Time :08/09/24 23:47

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1458016	1	1	8.561	8.560	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane	8.562	-14.4	410825	0.282	0.329	2.239	2.241	12.04				
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane	11.811	18.1	410805	0.282	0.239	2.553	2.541	11.82				
	6	Vinyl chloride	11.830	18.3	362949	0.249	0.210	2.695	2.679	12.57				
	7	Bromomethane	11.618	16.2	315660	0.216	0.186	3.227	3.221	8.61				
	8	Chloroethane	12.384	23.8	294990	0.202	0.163	3.272	3.278	13.37				
	9	Dichlorofluoromethane	9.814	-1.9	515590	0.354	0.360	3.346	3.342	9.43				
	10	Trichlorofluoromethane	9.253	-7.5	645259	0.443	0.478	3.613	3.554	9.99				
5	11	Acrolein	56.857	13.7	83543	0.011	0.010	4.027	4.017	14.81				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	8.849	-11.5	252752	0.173	0.196	4.131	4.133	8.61				
5	13	Acetone	45.730	-8.5	300505	0.041	0.048	4.102	4.096	19.26	0.0111	0.0426		0.9952
	14	1,1-Dichloroethene	9.776	-2.2	689726	0.473	0.484	4.264	4.255	6.44				
25	15	tert-Butyl alcohol	222.068	-11.2	435647	0.012	0.013	4.368	4.372	12.10				
	16	Iodomethane	11.013	10.1	702444	0.482	0.437	4.664	4.663	6.31				
	17	Methyl acetate	10.258	2.6	154672	0.106	0.103	4.679	4.683	7.37				
	18	Methylene chloride	10.356	3.6	507851	0.348	0.336	4.887	4.885	7.35				
	19	Carbon disulfide	10.975	9.8	1340359	0.919	0.838	4.902	4.904	6.33				
5	20	Acrylonitrile	53.508	7.0	310061	0.043	0.040	5.050	5.059	11.32				
	21	tert-Butyl methyl ether (MTBE)	9.805	-1.9	786741	0.540	0.550	5.094	5.095	7.89				
	22	trans-1,2-Dichloroethene	10.226	2.3	657080	0.451	0.441	5.272	5.276	6.34				
	23	Isopropyl ether (DIPE)	10.918	9.2	1400453	0.961	0.880	5.687	5.692	7.83				
	24	Vinyl acetate	10.710	7.1	501747	0.344	0.321	5.850	5.852	11.40				
	25	1,1-Dichloroethane	10.517	5.2	828152	0.568	0.540	5.850	5.853	6.83				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	9.977	-0.2	1183255	0.812	0.813	6.265	6.265	8.56				
5	28	2-Butanone	45.670	-8.7	438405	0.060	0.066	6.442	6.440	9.12				
	29	2,2-Dichloropropane	8.837	-11.6	693615	0.476	0.538	6.650	6.650	7.93				
	30	cis-1,2-Dichloroethene	10.682	6.8	529401	0.363	0.340	6.709	6.705	9.52				
	31	Chloroform	9.141	-8.6	810614	0.556	0.608	6.931	6.930	12.21				
	32	Bromochloromethane	10.320	3.2	310687	0.213	0.206	7.168	7.169	8.79				
	33	Tetrahydrofuran	8.018	-19.8	42975	0.029	0.037	7.213	7.215	11.65				
	34	Dibromofluoromethane	10.058	0.6	445940	0.306	0.304	7.242	7.243	13.19				
	35	1,1,1-Trichloroethane	8.951	-10.5	783252	0.537	0.600	7.509	7.519	8.89				
	36	Cyclohexane	9.904	-1.0	624073	0.428	0.432	7.538	7.538	9.21				
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene	9.832	-1.7	235706	0.162	0.164	7.731	7.739	8.22				
	39	Carbon tetrachloride	8.793	-12.1	639597	0.439	0.499	7.894	7.893	9.16				
	40	tert-Amyl methyl ether (TAME)	10.160	1.6	885635	0.607	0.598	7.894	7.908	7.20				
	41	1,2-Dichloroethane-d4	8.954	-10.5	352943	0.242	0.270	7.968	7.979	10.30				
	42	Benzene	11.047	10.5	1773569	1.216	1.101	8.146	8.145	5.25				
	43	1,2-Dichloroethane	9.025	-9.8	453115	0.311	0.344	8.116	8.120	13.08				
	44	Trichloroethene	10.012	0.1	511419	0.351	0.350	9.079	9.083	6.77				
	45	Methylcyclohexane	9.800	-2.0	688803	0.472	0.482	9.168	9.176	13.31				
	46	1,2-Dichloropropane	10.763	7.6	394503	0.271	0.251	9.361	9.364	8.42				
	47	Bromodichloromethane	8.826	-11.7	564519	0.387	0.439	9.731	9.741	12.12				
20	48	1,4-Dioxane	188.765	-5.6	34248	0.001	0.001	9.790	9.779	11.23				
	49	Dibromomethane	9.554	-4.5	194884	0.134	0.140	9.820	9.834	7.18				
	50	2-Chloroethyl vinyl ether	10.125	1.3	116170	0.080	0.079	10.235	10.238	13.01				
5	51	4-Methyl-2-pentanone	50.701	1.4	1111189	0.152	0.150	10.264	10.283	11.85				
	52	cis-1,3-Dichloropropene	9.896	-1.0	640446	0.439	0.444	10.620	10.629	7.60				
	53	CHLOROBENZENE-D5	10.000	0	1207297	1	1	13.716	13.726	0				
	54	Toluene-d8	10.351	3.5	1527415	1.265	1.222	11.035	11.038	8.56				
	55	Toluene	10.603	6.0	1918259	1.589	1.498	11.168	11.173	6.69				
	56	Ethyl methacrylate	10.127	1.3	308968	0.256	0.253	11.464	11.474	13.78				
	57	trans-1,3-Dichloropropene	9.640	-3.6	505830	0.419	0.435	11.479	11.490	10.00				
	58	1,1,2-Trichloroethane	9.957	-0.4	263881	0.219	0.219	11.746	11.760	9.84				
5	59	2-Hexanone	45.591	-8.8	656965	0.109	0.111	11.761	11.776	19.21	-0.0312	0.1262		0.9976
	60	1,3-Dichloropropane	9.946	-0.5	469386	0.389	0.391	12.190	12.201	9.24				
	61	Tetrachloroethene	9.317	-6.8	382862	0.317	0.340	12.294	12.308	8.13				
	62	Dibromochloromethane	9.227	-7.7	323283	0.268	0.290	12.664	12.675	7.03				
	63	1,2-Dibromoethane	9.750	-2.5	260128	0.215	0.221	13.035	13.043	8.26				
	64	1-Chlorohexane	9.480	-5.2	795389	0.659	0.695	13.316	13.320	5.71				
	65	Chlorobenzene	10.174	1.7	1265090	1.048	1.030	13.790	13.795	6.31				
	66	1,1,1,2-Tetrachloroethane	9.822	-1.8	407851	0.338	0.344	13.864	13.872	9.54				
	67	Ethylbenzene	9.808	-1.9	2221146	1.840	1.876	13.879	13.890	9.54				
2	68	m-Xylene & p-Xylene	18.778	-6.1	3357661	1.391	1.481	14.027	14.030	8.93				
	69	o-Xylene	9.874	-1.3	1702007	1.410	1.428	14.842	14.849	9.71				
	70	Styrene	10.081	0.8	1271745	1.053	1.045	14.916	14.921	6.93				
	71	Isopropylbenzene	9.475	-5.2	2237530	1.853	1.956	15.524	15.530	7.56				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	390071	1	1	18.679	18.693	0				
	73	Bromoform	10.403	4.0	149023	0.382	0.367	15.568	15.569	11.93				
	74	trans-1,4-Dichloro-2-butene	9.266	-7.3	80729	0.207	0.223	15.627	15.632	7.51				
	75	1,1,2,2-Tetrachloroethane	11.077	10.8	258076	0.662	0.597	15.864	15.869	11.29				
	76	4-Bromofluorobenzene	10.193	1.9	504433	1.293	1.269	16.013	16.020	9.24				
	77	1,2,3-Trichloropropane	10.112	1.1	86704	0.222	0.220	16.146	16.162	9.42				
	78	n-Propylbenzene	10.643	6.4	2639309	6.766	6.357	16.294	16.305	9.90				
	79	Bromobenzene	10.386	3.9	390060	1.000	0.963	16.383	16.394	11.94				
	80	1,3,5-Trimethylbenzene	10.378	3.8	1699332	4.356	4.198	16.605	16.613	7.15				
	81	2-Chlorotoluene	10.446	4.5	1700484	4.359	4.173	16.635	16.649	7.05				
	82	4-Chlorotoluene	9.973	-0.3	1386824	3.555	3.565	16.738	16.742	6.57				
	83	tert-Butylbenzene	10.467	4.7	379037	0.972	0.928	17.287	17.301	10.33				
	84	1,2,4-Trimethylbenzene	10.417	4.2	1629540	4.178	4.010	17.361	17.364	7.06				
	85	sec-Butylbenzene	10.482	4.8	2315214	5.935	5.662	17.657	17.662	11.41				
	86	p-Isopropyltoluene	10.350	3.5	1945839	4.988	4.820	17.879	17.889	9.96				
	87	1,3-Dichlorobenzene	10.149	1.5	789417	2.024	1.994	18.027	18.038	8.46				
	88	1,2,3-Trimethylbenzene	10.267	2.7	1558138	3.994	3.890	18.131	18.145	8.36				
	89	1,4-Dichlorobenzene	10.222	2.2	768840	1.971	1.928	18.190	18.200	7.64				
	90	n-Butylbenzene	10.013	0.1	1723405	4.418	4.412	18.487	18.501	13.97				
	91	1,2-Dichlorobenzene	10.110	1.1	647540	1.660	1.642	18.724	18.727	7.38				
	92	1,2-Dibromo-3-chloropropane	10.513	5.1	37937	0.097	0.093	19.716	19.723	13.33				
	93	1,2,4-Trichlorobenzene	9.794	-2.1	426286	1.093	1.116	20.813	20.816	8.77				
	94	Hexachlorobutadiene	9.724	-2.8	277847	0.712	0.732	20.976	20.990	6.72				
	95	Naphthalene	9.749	-2.5	604845	1.551	1.591	21.153	21.167	9.31				
	96	1,2,3-Trichlorobenzene	9.676	-3.2	321802	0.825	0.853	21.479	21.483	7.02				

Spike Amount = Nominal Amount * M

SC 24/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	152	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	8.562	14.4	112	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	11.812	-18.1	167	0.01
6	C,T,M	Vinyl chloride	10.000	11.830	-18.3	158	0.01
7	T,M	Bromomethane	10.000	11.618	-16.2	172	0.02
8	T,M	Chloroethane	10.000	12.385	-23.8#	183	0.00
9	T,M	Dichlorofluoromethane	10.000	9.815	1.9	147	0.00
10	T,M	Trichlorofluoromethane	10.000	9.254	7.5	122	0.13
11	T,M	Acrolein	50.000	56.858	-13.7	180	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	8.850	11.5	129	-0.02
13	T,M	Acetone	50.000	45.731	8.5	140	0.00
14	C,T,M	1,1-Dichloroethene	10.000	9.776	2.2	145	0.01
15	T,M	tert-Butyl alcohol	250.000	222.069	11.2	130	0.00
16	T,M	Iodomethane	10.000	11.013	-10.1	160	0.00
17	T,M	Methyl acetate	10.000	10.258	-2.6	157	0.00
18	T,M	Methylene chloride	10.000	10.357	-3.6	160	0.00
19	T,M	Carbon disulfide	10.000	10.976	-9.8	157	0.00
20	T,M	Acrylonitrile	50.000	53.509	-7.0	165	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	9.806	1.9	144	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.226	-2.3	151	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.918	-9.2	163	0.00
24	T,M	Vinyl acetate	10.000	10.710	-7.1	154	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.517	-5.2	159	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.01
27	T,M	tert-Butyl ethyl ether (ETB	10.000	9.977	0.2	146	0.00
28	T,M	2-Butanone	50.000	45.670	8.7	143	0.00
29	T,M	2,2-Dichloropropane	10.000	8.837	11.6	129	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.683	-6.8	158	0.00
31	C,T,M	Chloroform	10.000	9.142	8.6	135	0.00
32	T,M	Bromochloromethane	10.000	10.321	-3.2	155	0.00
33	T,M	Tetrahydrofuran	10.000	8.019	19.8	134	0.00
34	S	Dibromofluoromethane	10.000	10.058	-0.6	140	0.00
35	T,M	1,1,1-Trichloroethane	10.000	8.951	10.5	127	0.00
36	T,M	Cyclohexane	10.000	9.904	1.0	144	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.01
38	T,M	1,1-Dichloropropene	10.000	9.833	1.7	148	0.00
39	T,M	Carbon tetrachloride	10.000	8.794	12.1	124	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.160	-1.6	149	-0.02
41	S	1,2-Dichloroethane-d4	10.000	8.954	10.5	123	-0.01

(#) = Out of Range

SA 8/16/24

Evaluated From ICV (IVO01H0902) File ID: RHV147

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M Benzene	10.000	11.048	-10.5	160	0.00
43	T,M 1,2-Dichloroethane	10.000	9.026	9.7	124	0.00
44	T,M Trichloroethene	10.000	10.012	-0.1	148	0.00
45	T,M Methylcyclohexane	10.000	9.801	2.0	141	-0.01
46	C,T,M 1,2-Dichloropropane	10.000	10.764	-7.6	158	0.00
47	T,M Bromodichloromethane	10.000	8.826	11.7	133	-0.01
48	T,M 1,4-Dioxane	200.000	188.765	5.6	141	0.02
49	T,M Dibromomethane	10.000	9.555	4.5	141	-0.01
50	T,M 2-Chloroethyl vinyl ether	10.000	10.125	-1.3	157	0.00
51	T,M 4-Methyl-2-pentanone	50.000	50.701	-1.4	141	-0.01
52	T,M cis-1,3-Dichloropropene	10.000	9.896	1.0	142	-0.01
53	I CHLOROBENZENE-D5	10.000	10.000	0.0	145	-0.01
54	S Toluene-d8	10.000	10.351	-3.5	141	0.00
55	C,T,M Toluene	10.000	10.604	-6.0	147	0.00
56	T,M Ethyl methacrylate	10.000	10.128	-1.3	138	0.00
57	T,M trans-1,3-Dichloropropene	10.000	9.640	3.6	130	0.00
58	T,M 1,1,2-Trichloroethane	10.000	9.958	0.4	143	-0.01
59	T,M 2-Hexanone	50.000	45.591	8.8	129	0.00
60	T,M 1,3-Dichloropropane	10.000	9.947	0.5	141	-0.01
61	T,M Tetrachloroethene	10.000	9.318	6.8	138	-0.01
62	T,M Dibromochloromethane	10.000	9.227	7.7	129	-0.01
63	T,M 1,2-Dibromoethane	10.000	9.750	2.5	141	0.00
64	T,M 1-Chlorohexane	10.000	9.480	5.2	139	0.00
65	P,M Chlorobenzene	10.000	10.175	-1.8	143	0.00
66	T,M 1,1,1,2-Tetrachloroethane	10.000	9.822	1.8	134	0.00
67	C,T,M Ethylbenzene	10.000	9.808	1.9	135	-0.01
68	T,M m-Xylene & p-Xylene	20.000	18.778	6.1	133	0.00
69	T,M o-Xylene	10.000	9.875	1.3	133	0.00
70	T,M Styrene	10.000	10.081	-0.8	139	0.00
71	T,M Isopropylbenzene	10.000	9.475	5.3	131	0.00
72	I 1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	122	-0.01
73	P,T,M Bromoform	10.000	10.403	-4.0	123	0.00
74	T,M trans-1,4-Dichloro-2-butene	10.000	9.266	7.3	113	0.00
75	T,M 1,1,2,2-Tetrachloroethane	10.000	11.077	-10.8	133	0.00
76	S 4-Bromofluorobenzene	10.000	10.193	-1.9	124	0.00
77	T,M 1,2,3-Trichloropropane	10.000	10.113	-1.1	129	-0.01
78	T,M n-Propylbenzene	10.000	10.644	-6.4	129	-0.01
79	T,M Bromobenzene	10.000	10.387	-3.9	130	-0.01
80	T,M 1,3,5-Trimethylbenzene	10.000	10.379	-3.8	129	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	10.446	-4.5	130	-0.01
82	T,M	4-Chlorotoluene	10.000	9.974	0.3	123	0.00
83	T,M	tert-Butylbenzene	10.000	10.468	-4.7	134	-0.01
84	T,M	1,2,4-Trimethylbenzene	10.000	10.417	-4.2	126	0.00
85	T,M	sec-Butylbenzene	10.000	10.483	-4.8	126	0.00
86	T,M	p-Isopropyltoluene	10.000	10.350	-3.5	124	0.00
87	T,M	1,3-Dichlorobenzene	10.000	10.149	-1.5	126	-0.01
88	T,M	1,2,3-Trimethylbenzene	10.000	10.268	-2.7	121	-0.01
89	T,M	1,4-Dichlorobenzene	10.000	10.222	-2.2	127	0.00
90	T,M	n-Butylbenzene	10.000	10.013	-0.1	118	-0.01
91	T,M	1,2-Dichlorobenzene	10.000	10.110	-1.1	123	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.513	-5.1	118	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	9.794	2.1	119	0.00
94	T,M	Hexachlorobutadiene	10.000	9.724	2.8	116	-0.01
95	T,M	Naphthalene	10.000	9.749	2.5	114	-0.01
96	T,M	1,2,3-Trichlorobenzene	10.000	9.677	3.2	115	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	152	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.282	14.3	112	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.282	-18.0	167	0.01
6	C,T,M	Vinyl chloride	0.210	0.249	-18.6	158	0.01
7	T,M	Bromomethane	0.186	0.216	-16.1	172	0.02
8	T,M	Chloroethane	0.163	0.202	-23.9#	183	0.00
9	T,M	Dichlorofluoromethane	0.360	0.354	1.7	147	0.00
10	T,M	Trichlorofluoromethane	0.478	0.443	7.3	122	0.13
11	T,M	Acrolein	0.010	0.011	-10.0	180	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.173	11.7	129	-0.02
13	T,M	Acetone	0.048	0.041	14.6	140	0.00
14	C,T,M	1,1-Dichloroethene	0.484	0.473	2.3	145	0.01
15	T,M	tert-Butyl alcohol	0.013	0.012	7.7	130	0.00
16	T,M	Iodomethane	0.437	0.482	-10.3	160	0.00
17	T,M	Methyl acetate	0.103	0.106	-2.9	157	0.00
18	T,M	Methylene chloride	0.336	0.348	-3.6	160	0.00
19	T,M	Carbon disulfide	0.838	0.919	-9.7	157	0.00
20	T,M	Acrylonitrile	0.040	0.043	-7.5	165	0.00
21	T,M	tert-Butyl methyl ether (MT	0.550	0.540	1.8	144	0.00
22	T,M	trans-1,2-Dichloroethene	0.441	0.451	-2.3	151	0.00
23	T,M	Isopropyl ether (DIPE)	0.880	0.961	-9.2	163	0.00
24	T,M	Vinyl acetate	0.321	0.344	-7.2	154	0.00
25	P,T,M	1,1-Dichloroethane	0.540	0.568	-5.2	159	0.00
26	T,M	2-Butanol	0.000	0.010	0.0	0#	-0.01
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.812	0.1	146	0.00
28	T,M	2-Butanone	0.066	0.060	9.1	143	0.00
29	T,M	2,2-Dichloropropane	0.538	0.476	11.5	129	0.00
30	T,M	cis-1,2-Dichloroethene	0.340	0.363	-6.8	158	0.00
31	C,T,M	Chloroform	0.608	0.556	8.6	135	0.00
32	T,M	Bromochloromethane	0.206	0.213	-3.4	155	0.00
33	T,M	Tetrahydrofuran	0.037	0.029	21.6#	134	0.00
34	S	Dibromofluoromethane	0.304	0.306	-0.7	140	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.537	10.5	127	0.00
36	T,M	Cyclohexane	0.432	0.428	0.9	144	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.021	0.0	0#	-0.01
38	T,M	1,1-Dichloropropene	0.164	0.162	1.2	148	0.00
39	T,M	Carbon tetrachloride	0.499	0.439	12.0	124	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.607	-1.5	149	-0.02
41	S	1,2-Dichloroethane-d4	0.270	0.242	10.4	123	-0.01

(#) = Out of Range

sc 8/26/24

* RF evaluated From ICV (IV001H0902) File ID: RHV103

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M Benzene	1.101	1.216	-10.4	160	0.00
43	T,M 1,2-Dichloroethane	0.344	0.311	9.6	124	0.00
44	T,M Trichloroethene	0.350	0.351	-0.3	148	0.00
45	T,M Methylcyclohexane	0.482	0.472	2.1	141	-0.01
46	C,T,M 1,2-Dichloropropane	0.251	0.271	-8.0	158	0.00
47	T,M Bromodichloromethane	0.439	0.387	11.8	133	-0.01
48	T,M 1,4-Dioxane	0.001	0.001	0.0	141	0.02
49	T,M Dibromomethane	0.140	0.134	4.3	141	-0.01
50	T,M 2-Chloroethyl vinyl ether	0.079	0.080	-1.3	157	0.00
51	T,M 4-Methyl-2-pentanone	0.150	0.152	-1.3	141	-0.01
52	T,M cis-1,3-Dichloropropene	0.444	0.439	1.1	142	-0.01
53	I CHLOROBENZENE-D5	1.000	1.000	0.0	145	-0.01
54	S Toluene-d8	1.222	1.265	-3.5	141	0.00
55	C,T,M Toluene	1.498	1.589	-6.1	147	0.00
56	T,M Ethyl methacrylate	0.253	0.256	-1.2	138	0.00
57	T,M trans-1,3-Dichloropropene	0.435	0.419	3.7	130	0.00
58	T,M 1,1,2-Trichloroethane	0.219	0.219	0.0	143	-0.01
59	T,M 2-Hexanone	0.111	0.109	1.8	129	0.00
60	T,M 1,3-Dichloropropane	0.391	0.389	0.5	141	-0.01
61	T,M Tetrachloroethene	0.340	0.317	6.8	138	-0.01
62	T,M Dibromochloromethane	0.290	0.268	7.6	129	-0.01
63	T,M 1,2-Dibromoethane	0.221	0.215	2.7	141	0.00
64	T,M 1-Chlorohexane	0.695	0.659	5.2	139	0.00
65	P,M Chlorobenzene	1.030	1.048	-1.7	143	0.00
66	T,M 1,1,1,2-Tetrachloroethane	0.344	0.338	1.7	134	0.00
67	C,T,M Ethylbenzene	1.876	1.840	1.9	135	-0.01
68	T,M m-Xylene & p-Xylene	1.481	1.391	6.1	133	0.00
69	T,M o-Xylene	1.428	1.410	1.3	133	0.00
70	T,M Styrene	1.045	1.053	-0.8	139	0.00
71	T,M Isopropylbenzene	1.956	1.853	5.3	131	0.00
72	I 1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	122	-0.01
73	P,T,M Bromoform	0.367	0.382	-4.1	123	0.00
74	T,M trans-1,4-Dichloro-2-butene	0.223	0.207	7.2	113	0.00
75	T,M 1,1,2,2-Tetrachloroethane	0.597	0.662	-10.9	133	0.00
76	S 4-Bromofluorobenzene	1.269	1.293	-1.9	124	0.00
77	T,M 1,2,3-Trichloropropane	0.220	0.222	-0.9	129	-0.01
78	T,M n-Propylbenzene	6.357	6.766	-6.4	129	-0.01
79	T,M Bromobenzene	0.963	1.000	-3.8	130	-0.01
80	T,M 1,3,5-Trimethylbenzene	4.198	4.356	-3.8	129	0.00

(#) = Out of Range

9/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	4.359	-4.5	130	-0.01
82	T,M	4-Chlorotoluene	3.565	3.555	0.3	123	0.00
83	T,M	tert-Butylbenzene	0.928	0.972	-4.7	134	-0.01
84	T,M	1,2,4-Trimethylbenzene	4.010	4.178	-4.2	126	0.00
85	T,M	sec-Butylbenzene	5.662	5.935	-4.8	126	0.00
86	T,M	p-Isopropyltoluene	4.820	4.988	-3.5	124	0.00
87	T,M	1,3-Dichlorobenzene	1.994	2.024	-1.5	126	-0.01
88	T,M	1,2,3-Trimethylbenzene	3.890	3.994	-2.7	121	-0.01
89	T,M	1,4-Dichlorobenzene	1.928	1.971	-2.2	127	0.00
90	T,M	n-Butylbenzene	4.412	4.418	-0.1	118	-0.01
91	T,M	1,2-Dichlorobenzene	1.642	1.660	-1.1	123	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.097	-4.3	118	0.00
93	T,M	1,2,4-Trichlorobenzene	1.116	1.093	2.1	119	0.00
94	T,M	Hexachlorobutadiene	0.732	0.712	2.7	116	-0.01
95	T,M	Naphthalene	1.591	1.551	2.5	114	-0.01
96	T,M	1,2,3-Trichlorobenzene	0.853	0.825	3.3	115	0.00

Sm 9/6/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1458016	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1207297	10.00	ug/l	-0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	390071	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	445940	10.06	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.60%			
41) 1,2-Dichloroethane-d4	7.97	65	352943	8.95	ug/l	-0.01
Spiked Amount 10.000			Recovery = 89.50%			
54) Toluene-d8	11.03	98	1527415	10.35	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.50%			
76) 4-Bromofluorobenzene	16.01	95	504433	10.19	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.90%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	410825	8.56	ug/l	96
5) Chloromethane	2.55	50	410805	11.81	ug/l	98
6) Vinyl chloride	2.69	62	362949	11.83	ug/l	97
7) Bromomethane	3.23	94	315660	11.62	ug/l	96
8) Chloroethane	3.27	64	294990	12.38	ug/l	87
9) Dichlorofluoromethane	3.35	67	515590	9.81	ug/l	99
10) Trichlorofluoromethane	3.61	101	645259	9.25	ug/l	99
11) Acrolein	4.03	56	83543	56.86	ug/l	88
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	252752	8.85	ug/l	100
13) Acetone	4.10	43	300505	45.73	ug/l	87
14) 1,1-Dichloroethene	4.26	61	689726	9.78	ug/l	93
15) tert-Butyl alcohol	4.37	59	435647	222.07	ug/l	100
16) Iodomethane	4.66	142	702444	11.01	ug/l	88
17) Methyl acetate	4.68	43	154672	10.26	ug/l	94
18) Methylene chloride	4.89	49	507851	10.36	ug/l	96
19) Carbon disulfide	4.90	76	1340359	10.98	ug/l	100
20) Acrylonitrile	5.05	53	310061	53.51	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	786741	9.81	ug/l	92
22) trans-1,2-Dichloroethene	5.27	61	657080	10.23	ug/l	94
23) Isopropyl ether (DIPE)	5.69	45	1400453	10.92	ug/l	99
24) Vinyl acetate	5.85	43	501747	10.71	ug/l	96
25) 1,1-Dichloroethane	5.85	63	828152	10.52	ug/l	98
27) tert-Butyl ethyl ether (ET	6.26	59	1183255	9.98	ug/l	99
28) 2-Butanone	6.44	43	438405	45.67	ug/l	98
29) 2,2-Dichloropropane	6.65	77	693615	8.84	ug/l	96
30) cis-1,2-Dichloroethene	6.71	96	529401	10.68	ug/l	93
31) Chloroform	6.93	83	810614	9.14	ug/l	97

(#) = qualifier out of range (m) = manual integration

09/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	310687	10.32	ug/l	99
33)	Tetrahydrofuran	7.21	42	42975	8.02	ug/l	90
35)	1,1,1-Trichloroethane	7.51	97	783252	8.95	ug/l	99
36)	Cyclohexane	7.54	84	624073	9.90	ug/l	99
38)	1,1-Dichloropropene	7.73	110	235706	9.83	ug/l	99
39)	Carbon tetrachloride	7.89	119	639597	8.79	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	885635	10.16	ug/l	99
42)	Benzene	8.15	78	1773569	11.05	ug/l	98
43)	1,2-Dichloroethane	8.12	62	453115	9.03	ug/l	98
44)	Trichloroethene	9.08	130	511419	10.01	ug/l	97
45)	Methylcyclohexane	9.17	83	688803	9.80	ug/l	97
46)	1,2-Dichloropropane	9.36	63	394503	10.76	ug/l	86
47)	Bromodichloromethane	9.73	83	564519	8.83	ug/l	100
48)	1,4-Dioxane	9.79	88	34248	188.77	ug/l	94
49)	Dibromomethane	9.82	93	194884	9.55	ug/l	98
50)	2-Chloroethyl vinyl ether	10.23	63	116170	10.13	ug/l	97
51)	4-Methyl-2-pentanone	10.26	43	1111189	50.70	ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	640446	9.90	ug/l	99
55)	Toluene	11.17	91	1918259	10.60	ug/l	99
56)	Ethyl methacrylate	11.46	69	308968	10.13	ug/l	93
57)	trans-1,3-Dichloropropene	11.48	75	505830	9.64	ug/l	98
58)	1,1,2-Trichloroethane	11.75	97	263881	9.96	ug/l	98
59)	2-Hexanone	11.76	43	656965	45.59	ug/l	94
60)	1,3-Dichloropropane	12.19	76	469386	9.95	ug/l	99
61)	Tetrachloroethene	12.29	164	382862	9.32	ug/l	97
62)	Dibromochloromethane	12.66	129	323283	9.23	ug/l	100
63)	1,2-Dibromoethane	13.03	107	260128	9.75	ug/l	99
64)	1-Chlorohexane	13.32	91	795389	9.48	ug/l	99
65)	Chlorobenzene	13.79	112	1265090	10.17	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	407851	9.82	ug/l	98
67)	Ethylbenzene	13.88	91	2221146	9.81	ug/l	97
68)	m-Xylene & p-Xylene	14.03	91	3357661	18.78	ug/l	96
69)	o-Xylene	14.84	91	1702007	9.87	ug/l	98
70)	Styrene	14.92	104	1271745	10.08	ug/l	96
71)	Isopropylbenzene	15.52	105	2237530	9.47	ug/l	98
73)	Bromoform	15.57	173	149023	10.40	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	80729	9.27	ug/l	97
75)	1,1,2,2-Tetrachloroethane	15.86	83	258076	11.08	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	86704	10.11	ug/l	99
78)	n-Propylbenzene	16.29	91	2639309	10.64	ug/l	98
79)	Bromobenzene	16.38	156	390060	10.39	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

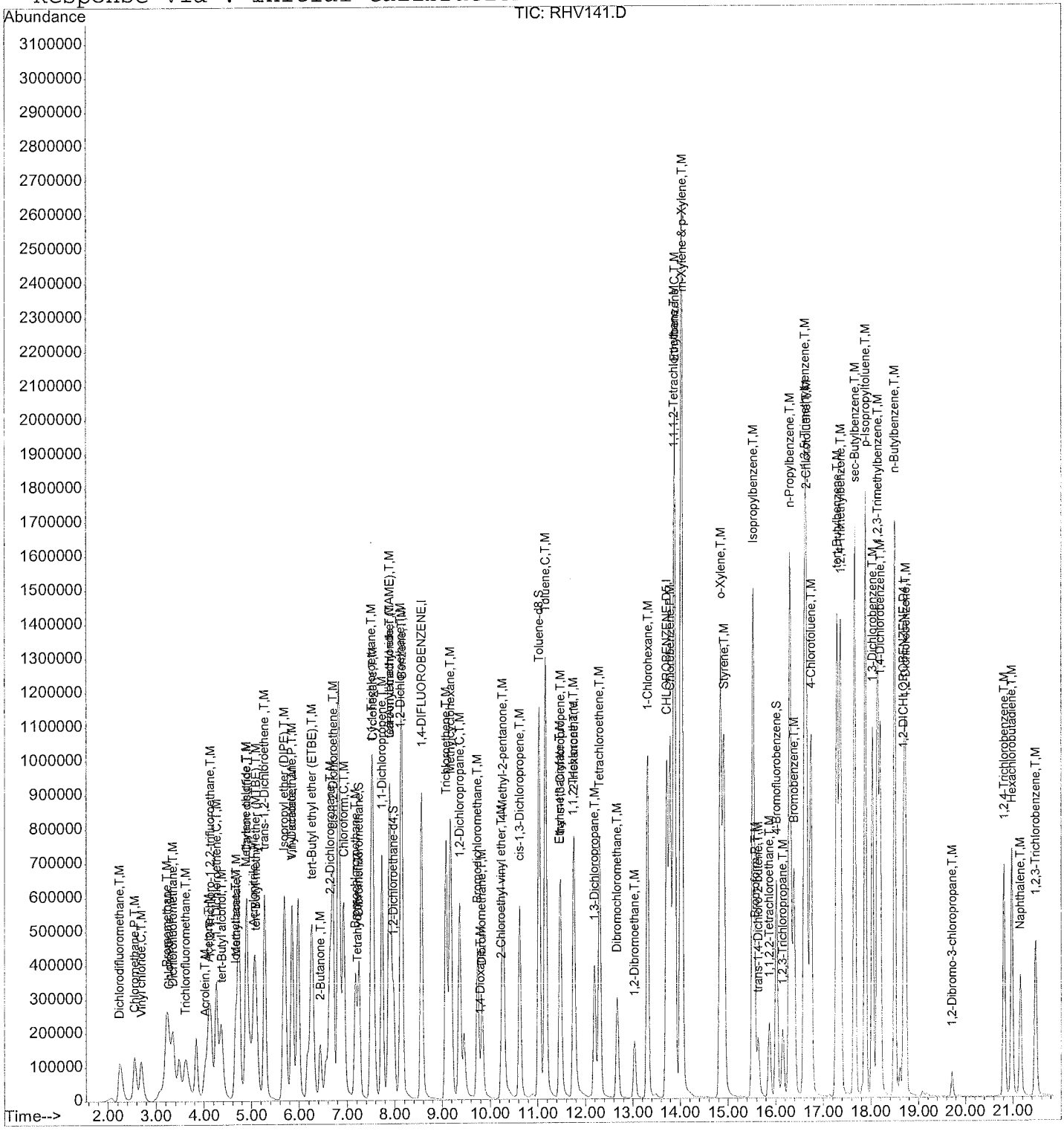
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.61	105	1699332	10.38	ug/l	96
81)	2-Chlorotoluene	16.63	91	1700484	10.45	ug/l	96
82)	4-Chlorotoluene	16.74	91	1386824	9.97	ug/l	97
83)	tert-Butylbenzene	17.29	134	379037	10.47	ug/l	89
84)	1,2,4-Trimethylbenzene	17.36	105	1629540	10.42	ug/l	95
85)	sec-Butylbenzene	17.66	105	2315214	10.48	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1945839	10.35	ug/l	98
87)	1,3-Dichlorobenzene	18.03	146	789417	10.15	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	1558138	10.27	ug/l	98
89)	1,4-Dichlorobenzene	18.19	146	768840	10.22	ug/l	99
90)	n-Butylbenzene	18.49	91	1723405	10.01	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	647540	10.11	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.72	157	37937	10.51	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	426286	9.79	ug/l	97
94)	Hexachlorobutadiene	20.98	225	277847	9.72	ug/l	97
95)	Naphthalene	21.15	128	604845	9.75	ug/l	100
96)	1,2,3-Trichlorobenzene	21.48	180	321802	9.68	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RHV145 BFB Injection Date: 08/13/24

Instrument ID: 01New BFB Injection Time: 15:24

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.567
75	30 - 60% of mass 95	48.649
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.418
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	72.564
175	5 - 9% of mass 174	4.820(6.64)1
176	95 - 101% % of mass 174	71.637(98.72)1
177	5 - 9% % of mass 176	4.061(5.67)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD50	IVO01H0902	RHV147	08/13/24	16:44

SC
8/16/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01New
IC_Beginning DateTime :08/09/24 17:28
Spike Amount :10 PPB
CC/CV File :RHV147
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09
Date_Time :08/13/24 16:44

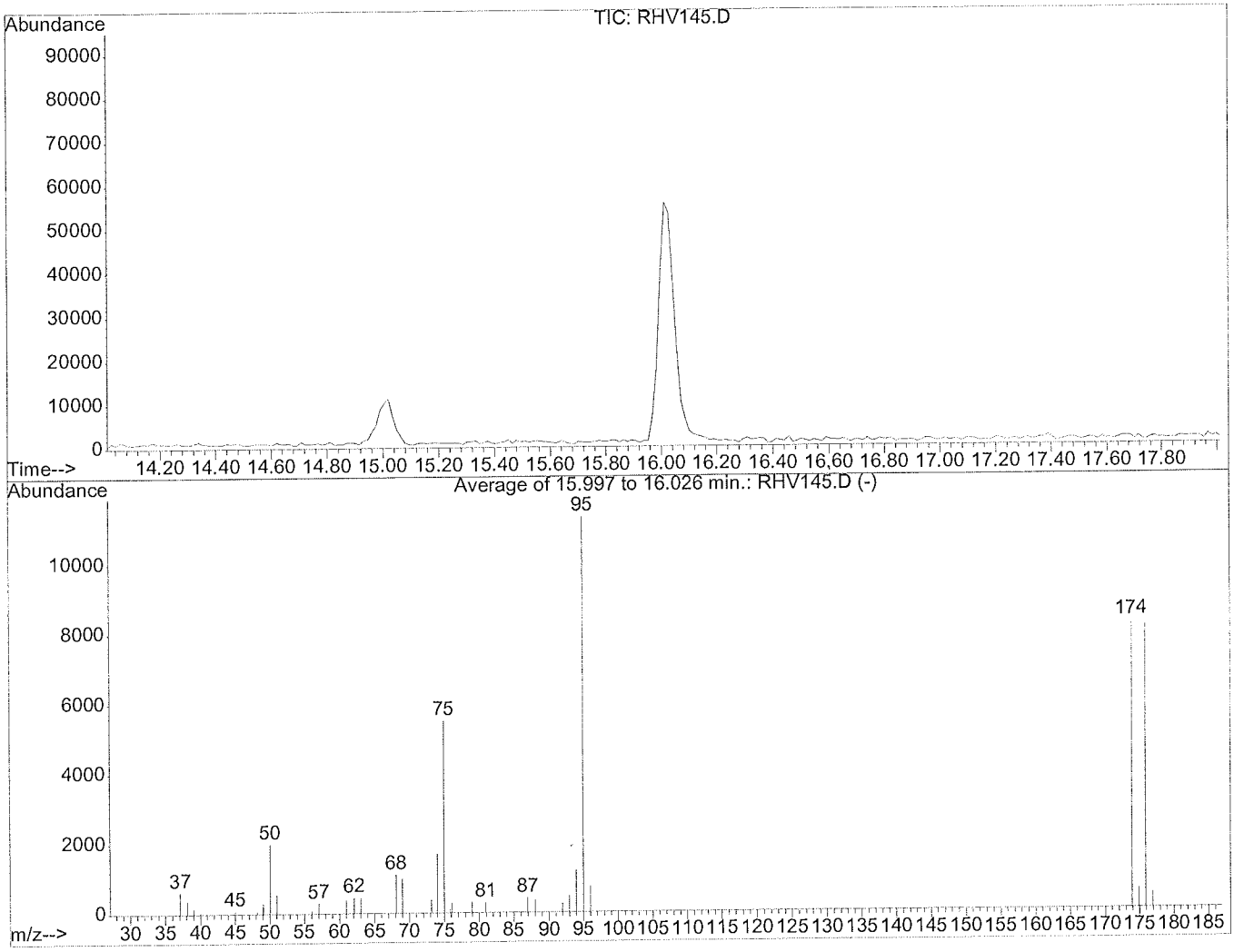
M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1270191	1	1	8.561	8.560	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane												
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane												
	6	Vinyl chloride												
	7	Bromomethane												
	8	Chloroethane	9.018	-9.8	187127	0.147	0.163	3.273	3.278	13.37				
	9	Dichlorofluoromethane												
	10	Trichlorofluoromethane												
5	11	Acrolein												
	12	1,1,2-Trichloro-1,2,2-trifluoroethane												
5	13	Acetone												
	14	1,1-Dichloroethene												
25	15	tert-Butyl alcohol												
	16	Iodomethane												
	17	Methyl acetate												
	18	Methylene chloride												
	19	Carbon disulfide												
5	20	Acrylonitrile												
	21	tert-Butyl methyl ether (MTBE)												
	22	trans-1,2-Dichloroethene												
	23	Isopropyl ether (DIPE)												
	24	Vinyl acetate												
	25	1,1-Dichloroethane												
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)												
5	28	2-Butanone												
	29	2,2-Dichloropropane												
	30	cis-1,2-Dichloroethene												
	31	Chloroform												
	32	Bromochloromethane												
	33	Tetrahydrofuran												
	34	Dibromofluoromethane	10.429	4.3	402823	0.317	0.304	7.243	7.243	13.19				
	35	1,1,1-Trichloroethane												
	36	Cyclohexane												
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene												
	39	Carbon tetrachloride												
	40	tert-Amyl methyl ether (TAME)												
	41	1,2-Dichloroethane-d4	9.454	-5.5	324659	0.256	0.270	7.969	7.979	10.30				
	42	Benzene												
	43	1,2-Dichloroethane												
	44	Trichloroethene												
	45	Methylcyclohexane												
	46	1,2-Dichloropropane												
	47	Bromodichloromethane												
20	48	1,4-Dioxane												
	49	Dibromomethane												
	50	2-Chloroethyl vinyl ether												
5	51	4-Methyl-2-pentanone												
	52	cis-1,3-Dichloropropene												
	53	CHLOROBENZENE-D5	10.000	0	1068412	1	1	13.716	13.726	0				
	54	Toluene-d8	10.902	9.0	1423776	1.333	1.222	11.035	11.038	8.56				
	55	Toluene												
	56	Ethyl methacrylate												
	57	trans-1,3-Dichloropropene												
	58	1,1,2-Trichloroethane												
5	59	2-Hexanone												
	60	1,3-Dichloropropane												
	61	Tetrachloroethene												
	62	Dibromochloromethane												
	63	1,2-Dibromoethane												
	64	1-Chlorohexane												
	65	Chlorobenzene												
	66	1,1,1,2-Tetrachloroethane												
	67	Ethylbenzene												
2	68	m-Xylene & p-Xylene												
	69	o-Xylene												
	70	Styrene												
	71	Isopropylbenzene												
	72	1,2-DICHLOROBENZENE-D4	10.000	0	439346	1	1	18.679	18.693	0				
	73	Bromoform												
	74	trans-1,4-Dichloro-2-butene												
	75	1,1,2,2-Tetrachloroethane												
	76	4-Bromofluorobenzene	9.531	-4.7	531274	1.209	1.269	16.013	16.020	9.24				
	77	1,2,3-Trichloropropane												
	78	n-Propylbenzene												
	79	Bromobenzene												
	80	1,3,5-Trimethylbenzene												
	81	2-Chlorotoluene												
	82	4-Chlorotoluene												
	83	tert-Butylbenzene												
	84	1,2,4-Trimethylbenzene												
	85	sec-Butylbenzene												
	86	p-Isopropyltoluene												
	87	1,3-Dichlorobenzene												
	88	1,2,3-Trimethylbenzene												
	89	1,4-Dichlorobenzene												
	90	n-Butylbenzene												
	91	1,2-Dichlorobenzene												
	92	1,2-Dibromo-3-chloropropane												
	93	1,2,4-Trichlorobenzene												
	94	Hexachlorobutadiene												
	95	Naphthalene												
	96	1,2,3-Trichlorobenzene												

Spike Amount = Nominal Amount * M

SV
9/6/24

Data File : D:\HPCHEM\1\DATA\24H13\RHV145.D
Acq On : 13 Aug 2024 3:24 pm
Sample : BFB01H10
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye
Inst : 01New
Multiplr: 1.00



AutoFind: Scans 979, 980, 981; Background Corrected with Scan 973

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	1990	PASS
75	95	30	60	48.6	5511	PASS
95	95	100	100	100.0	11328	PASS
96	95	5	9	6.4	727	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	72.6	8220	PASS
175	174	5	9	6.6	546	PASS
176	174	95	101	98.7	8115	PASS
177	176	5	9	5.7	460	PASS

RHV145.D VO01H09.M Fri Sep 06 16:25:53 2024 SC 9/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	132	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	0.000	100.0#	0	-2.24#
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	0.000	100.0#	0	-2.54#
6	C,T,M	Vinyl chloride	10.000	0.000	100.0#	0	-2.68#
7	T,M	Bromomethane	10.000	0.000	100.0#	0	-3.21#
8	T,M	Chloroethane	10.000	9.018	9.8	116	0.00
9	T,M	Dichlorofluoromethane	10.000	0.000	100.0#	0	-3.35#
10	T,M	Trichlorofluoromethane	10.000	0.000	100.0#	0	-3.48#
11	T,M	Acrolein	50.000	0.000	100.0#	0	-4.01#
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	0.000	100.0#	0	-4.15#
13	T,M	Acetone	50.000	-2.613	105.2#	0	-4.10#
14	C,T,M	1,1-Dichloroethene	10.000	0.000	100.0#	0	-4.25#
15	T,M	tert-Butyl alcohol	250.000	0.000	100.0#	0	-4.37#
16	T,M	Iodomethane	10.000	0.000	100.0#	0	-4.66#
17	T,M	Methyl acetate	10.000	0.000	100.0#	0	-4.68#
18	T,M	Methylene chloride	10.000	0.000	100.0#	0	-4.89#
19	T,M	Carbon disulfide	10.000	0.000	100.0#	0	-4.90#
20	T,M	Acrylonitrile	50.000	0.000	100.0#	0	-5.05#
21	T,M	tert-Butyl methyl ether (MT	10.000	0.000	100.0#	0	-5.09#
22	T,M	trans-1,2-Dichloroethene	10.000	0.000	100.0#	0	-5.27#
23	T,M	Isopropyl ether (DIPE)	10.000	0.000	100.0#	0	-5.69#
24	T,M	Vinyl acetate	10.000	0.000	100.0#	0	-5.85#
25	P,T,M	1,1-Dichloroethane	10.000	0.000	100.0#	0	-5.85#
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-6.17#
27	T,M	tert-Butyl ethyl ether (ETB	10.000	0.000	100.0#	0	-6.26#
28	T,M	2-Butanone	50.000	0.000	100.0#	0	-6.44#
29	T,M	2,2-Dichloropropane	10.000	0.000	100.0#	0	-6.65#
30	T,M	cis-1,2-Dichloroethene	10.000	0.000	100.0#	0	-6.71#
31	C,T,M	Chloroform	10.000	0.000	100.0#	0	-6.93#
32	T,M	Bromochloromethane	10.000	0.000	100.0#	0	-7.17#
33	T,M	Tetrahydrofuran	10.000	0.000	100.0#	0	-7.21#
34	S	Dibromofluoromethane	10.000	10.429	-4.3	127	0.00
35	T,M	1,1,1-Trichloroethane	10.000	0.000	100.0#	0	-7.51#
36	T,M	Cyclohexane	10.000	0.000	100.0#	0	-7.54#
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-7.55#
38	T,M	1,1-Dichloropropene	10.000	0.000	100.0#	0	-7.73#
39	T,M	Carbon tetrachloride	10.000	0.000	100.0#	0	-7.89#
40	T,M	tert-Amyl methyl ether (TAM	10.000	0.000	100.0#	0	-7.91#
41	S	1,2-Dichloroethane-d4	10.000	9.454	5.5	113	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	0.000	100.0#	0	-8.15#
43	T,M	1,2-Dichloroethane	10.000	0.000	100.0#	0	-8.12#
44	T,M	Trichloroethene	10.000	0.000	100.0#	0	-9.08#
45	T,M	Methylcyclohexane	10.000	0.000	100.0#	0	-9.18#
46	C,T,M	1,2-Dichloropropane	10.000	0.000	100.0#	0	-9.36#
47	T,M	Bromodichloromethane	10.000	0.000	100.0#	0	-9.74#
48	T,M	1,4-Dioxane	200.000	0.000	100.0#	0	-9.78#
49	T,M	Dibromomethane	10.000	0.000	100.0#	0	-9.83#
50	T,M	2-Chloroethyl vinyl ether	10.000	0.000	100.0#	0	-10.23#
51	T,M	4-Methyl-2-pentanone	50.000	0.000	100.0#	0	-10.28#
52	T,M	cis-1,3-Dichloropropene	10.000	0.000	100.0#	0	-10.63#
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	128	-0.01
54	S	Toluene-d8	10.000	10.903	-9.0	131	0.00
55	C,T,M	Toluene	10.000	0.000	100.0#	0	-11.17#
56	T,M	Ethyl methacrylate	10.000	0.000	100.0#	0	-11.46#
57	T,M	trans-1,3-Dichloropropene	10.000	0.000	100.0#	0	-11.48#
58	T,M	1,1,2-Trichloroethane	10.000	0.000	100.0#	0	-11.76#
59	T,M	2-Hexanone	50.000	2.471	95.1#	0	-11.76#
60	T,M	1,3-Dichloropropane	10.000	0.000	100.0#	0	-12.20#
61	T,M	Tetrachloroethene	10.000	0.000	100.0#	0	-12.31#
62	T,M	Dibromochloromethane	10.000	0.000	100.0#	0	-12.68#
63	T,M	1,2-Dibromoethane	10.000	0.000	100.0#	0	-13.03#
64	T,M	1-Chlorohexane	10.000	0.000	100.0#	0	-13.32#
65	P,M	Chlorobenzene	10.000	0.000	100.0#	0	-13.79#
66	T,M	1,1,1,2-Tetrachloroethane	10.000	0.000	100.0#	0	-13.86#
67	C,T,M	Ethylbenzene	10.000	0.000	100.0#	0	-13.89#
68	T,M	m-Xylene & p-Xylene	20.000	0.000	100.0#	0	-14.03#
69	T,M	o-Xylene	10.000	0.000	100.0#	0	-14.84#
70	T,M	Styrene	10.000	0.000	100.0#	0	-14.92#
71	T,M	Isopropylbenzene	10.000	0.000	100.0#	0	-15.52#
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	137	-0.01
73	P,T,M	Bromoform	10.000	0.000	100.0#	0	-15.57#
74	T,M	trans-1,4-Dichloro-2-butene	10.000	0.000	100.0#	0	-15.63#
75	T,M	1,1,2,2-Tetrachloroethane	10.000	0.000	100.0#	0	-15.86#
76	S	4-Bromofluorobenzene	10.000	9.531	4.7	131	0.00
77	T,M	1,2,3-Trichloropropane	10.000	0.000	100.0#	0	-16.16#
78	T,M	n-Propylbenzene	10.000	0.000	100.0#	0	-16.31#
79	T,M	Bromobenzene	10.000	0.000	100.0#	0	-16.40#
80	T,M	1,3,5-Trimethylbenzene	10.000	0.000	100.0#	0	-16.60#

(#) = Out of Range

9/16/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D
Acq On : 13 Aug 2024 4:44 pm
Sample : IVO01H0902 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 3
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	0.000	100.0#	0	-16.65#
82	T,M	4-Chlorotoluene	10.000	0.000	100.0#	0	-16.74#
83	T,M	tert-Butylbenzene	10.000	0.000	100.0#	0	-17.30#
84	T,M	1,2,4-Trimethylbenzene	10.000	0.000	100.0#	0	-17.36#
85	T,M	sec-Butylbenzene	10.000	0.000	100.0#	0	-17.66#
86	T,M	p-Isopropyltoluene	10.000	0.000	100.0#	0	-17.88#
87	T,M	1,3-Dichlorobenzene	10.000	0.000	100.0#	0	-18.04#
88	T,M	1,2,3-Trimethylbenzene	10.000	0.000	100.0#	0	-18.15#
89	T,M	1,4-Dichlorobenzene	10.000	0.000	100.0#	0	-18.19#
90	T,M	n-Butylbenzene	10.000	0.000	100.0#	0	-18.50#
91	T,M	1,2-Dichlorobenzene	10.000	0.000	100.0#	0	-18.72#
92	T,M	1,2-Dibromo-3-chloropropane	10.000	0.000	100.0#	0	-19.72#
93	T,M	1,2,4-Trichlorobenzene	10.000	0.000	100.0#	0	-20.81#
94	T,M	Hexachlorobutadiene	10.000	0.000	100.0#	0	-20.99#
95	T,M	Naphthalene	10.000	0.000	100.0#	0	-21.17#
96	T,M	1,2,3-Trichlorobenzene	10.000	0.000	100.0#	0	-21.48#

S 9/6/24

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	132	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.000	100.0#	0#	-2.24#
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.000#	100.0#	0#	-2.54#
6	C,T,M	Vinyl chloride	0.210	0.000	100.0#	0#	-2.68#
7	T,M	Bromomethane	0.186	0.000	100.0#	0#	-3.21#
8	T,M	Chloroethane	0.163	0.147	9.8	116	0.00
9	T,M	Dichlorofluoromethane	0.360	0.000	100.0#	0#	-3.35#
10	T,M	Trichlorofluoromethane	0.478	0.000	100.0#	0#	-3.48#
11	T,M	Acrolein	0.010	0.000	100.0#	0#	-4.01#
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.000	100.0#	0#	-4.15#
13	T,M	Acetone	0.048	0.000	100.0#	0#	-4.10#
14	C,T,M	1,1-Dichloroethene	0.484	0.000	100.0#	0#	-4.25#
15	T,M	tert-Butyl alcohol	0.013	0.000	100.0#	0#	-4.37#
16	T,M	Iodomethane	0.437	0.000	100.0#	0#	-4.66#
17	T,M	Methyl acetate	0.103	0.000	100.0#	0#	-4.68#
18	T,M	Methylene chloride	0.336	0.000	100.0#	0#	-4.89#
19	T,M	Carbon disulfide	0.838	0.000	100.0#	0#	-4.90#
20	T,M	Acrylonitrile	0.040	0.000	100.0#	0#	-5.05#
21	T,M	tert-Butyl methyl ether (MT	0.550	0.000	100.0#	0#	-5.09#
22	T,M	trans-1,2-Dichloroethene	0.441	0.000	100.0#	0#	-5.27#
23	T,M	Isopropyl ether (DIPE)	0.880	0.000	100.0#	0#	-5.69#
24	T,M	Vinyl acetate	0.321	0.000	100.0#	0#	-5.85#
25	P,T,M	1,1-Dichloroethane	0.540	0.000#	100.0#	0#	-5.85#
26	T,M	2-Butanol	0.000	0.000	0.0	0#	-6.17#
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.000	100.0#	0#	-6.26#
28	T,M	2-Butanone	0.066	0.000	100.0#	0#	-6.44#
29	T,M	2,2-Dichloropropane	0.538	0.000	100.0#	0#	-6.65#
30	T,M	cis-1,2-Dichloroethene	0.340	0.000	100.0#	0#	-6.71#
31	C,T,M	Chloroform	0.608	0.000	100.0#	0#	-6.93#
32	T,M	Bromochloromethane	0.206	0.000	100.0#	0#	-7.17#
33	T,M	Tetrahydrofuran	0.037	0.000	100.0#	0#	-7.21#
34	S	Dibromofluoromethane	0.304	0.317	-4.3	127	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.000	100.0#	0#	-7.51#
36	T,M	Cyclohexane	0.432	0.000	100.0#	0#	-7.54#
37	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	-7.55#
38	T,M	1,1-Dichloropropene	0.164	0.000	100.0#	0#	-7.73#
39	T,M	Carbon tetrachloride	0.499	0.000	100.0#	0#	-7.89#
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.000	100.0#	0#	-7.91#
41	S	1,2-Dichloroethane-d4	0.270	0.256	5.2	113	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	0.000	100.0#	0#	-8.15#
43	T,M	1,2-Dichloroethane	0.344	0.000	100.0#	0#	-8.12#
44	T,M	Trichloroethene	0.350	0.000	100.0#	0#	-9.08#
45	T,M	Methylcyclohexane	0.482	0.000	100.0#	0#	-9.18#
46	C,T,M	1,2-Dichloropropane	0.251	0.000	100.0#	0#	-9.36#
47	T,M	Bromodichloromethane	0.439	0.000	100.0#	0#	-9.74#
48	T,M	1,4-Dioxane	0.001	0.000	100.0#	0#	-9.78#
49	T,M	Dibromomethane	0.140	0.000	100.0#	0#	-9.83#
50	T,M	2-Chloroethyl vinyl ether	0.079	0.000	100.0#	0#	-10.23#
51	T,M	4-Methyl-2-pentanone	0.150	0.000	100.0#	0#	-10.28#
52	T,M	cis-1,3-Dichloropropene	0.444	0.000	100.0#	0#	-10.63#
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	128	-0.01
54	S	Toluene-d8	1.222	1.333	-9.1	131	0.00
55	C,T,M	Toluene	1.498	0.000	100.0#	0#	-11.17#
56	T,M	Ethyl methacrylate	0.253	0.000	100.0#	0#	-11.46#
57	T,M	trans-1,3-Dichloropropene	0.435	0.000	100.0#	0#	-11.48#
58	T,M	1,1,2-Trichloroethane	0.219	0.000	100.0#	0#	-11.76#
59	T,M	2-Hexanone	0.111	0.000	100.0#	0#	-11.76#
60	T,M	1,3-Dichloropropane	0.391	0.000	100.0#	0#	-12.20#
61	T,M	Tetrachloroethene	0.340	0.000	100.0#	0#	-12.31#
62	T,M	Dibromochloromethane	0.290	0.000	100.0#	0#	-12.68#
63	T,M	1,2-Dibromoethane	0.221	0.000	100.0#	0#	-13.03#
64	T,M	1-Chlorohexane	0.695	0.000	100.0#	0#	-13.32#
65	P,M	Chlorobenzene	1.030	0.000#	100.0#	0#	-13.79#
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.000	100.0#	0#	-13.86#
67	C,T,M	Ethylbenzene	1.876	0.000	100.0#	0#	-13.89#
68	T,M	m-Xylene & p-Xylene	1.481	0.000	100.0#	0#	-14.03#
69	T,M	o-Xylene	1.428	0.000	100.0#	0#	-14.84#
70	T,M	Styrene	1.045	0.000	100.0#	0#	-14.92#
71	T,M	Isopropylbenzene	1.956	0.000	100.0#	0#	-15.52#
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	137	-0.01
73	P,T,M	Bromoform	0.367	0.000#	100.0#	0#	-15.57#
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.000	100.0#	0#	-15.63#
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.000	100.0#	0#	-15.86#
76	S	4-Bromofluorobenzene	1.269	1.209	4.7	131	0.00
77	T,M	1,2,3-Trichloropropane	0.220	0.000	100.0#	0#	-16.16#
78	T,M	n-Propylbenzene	6.357	0.000	100.0#	0#	-16.31#
79	T,M	Bromobenzene	0.963	0.000	100.0#	0#	-16.40#
80	T,M	1,3,5-Trimethylbenzene	4.198	0.000	100.0#	0#	-16.60#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	0.000	100.0#	0#	-16.65#
82	T,M	4-Chlorotoluene	3.565	0.000	100.0#	0#	-16.74#
83	T,M	tert-Butylbenzene	0.928	0.000	100.0#	0#	-17.30#
84	T,M	1,2,4-Trimethylbenzene	4.010	0.000	100.0#	0#	-17.36#
85	T,M	sec-Butylbenzene	5.662	0.000	100.0#	0#	-17.66#
86	T,M	p-Isopropyltoluene	4.820	0.000	100.0#	0#	-17.88#
87	T,M	1,3-Dichlorobenzene	1.994	0.000	100.0#	0#	-18.04#
88	T,M	1,2,3-Trimethylbenzene	3.890	0.000	100.0#	0#	-18.15#
89	T,M	1,4-Dichlorobenzene	1.928	0.000	100.0#	0#	-18.19#
90	T,M	n-Butylbenzene	4.412	0.000	100.0#	0#	-18.50#
91	T,M	1,2-Dichlorobenzene	1.642	0.000	100.0#	0#	-18.72#
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.000	100.0#	0#	-19.72#
93	T,M	1,2,4-Trichlorobenzene	1.116	0.000	100.0#	0#	-20.81#
94	T,M	Hexachlorobutadiene	0.732	0.000	100.0#	0#	-20.99#
95	T,M	Naphthalene	1.591	0.000	100.0#	0#	-21.17#
96	T,M	1,2,3-Trichlorobenzene	0.853	0.000	100.0#	0#	-21.48#

SC 09/6/24

(#) = Out of Range SPCC's out = 4 CCC's out = 6

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 6 16:06 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

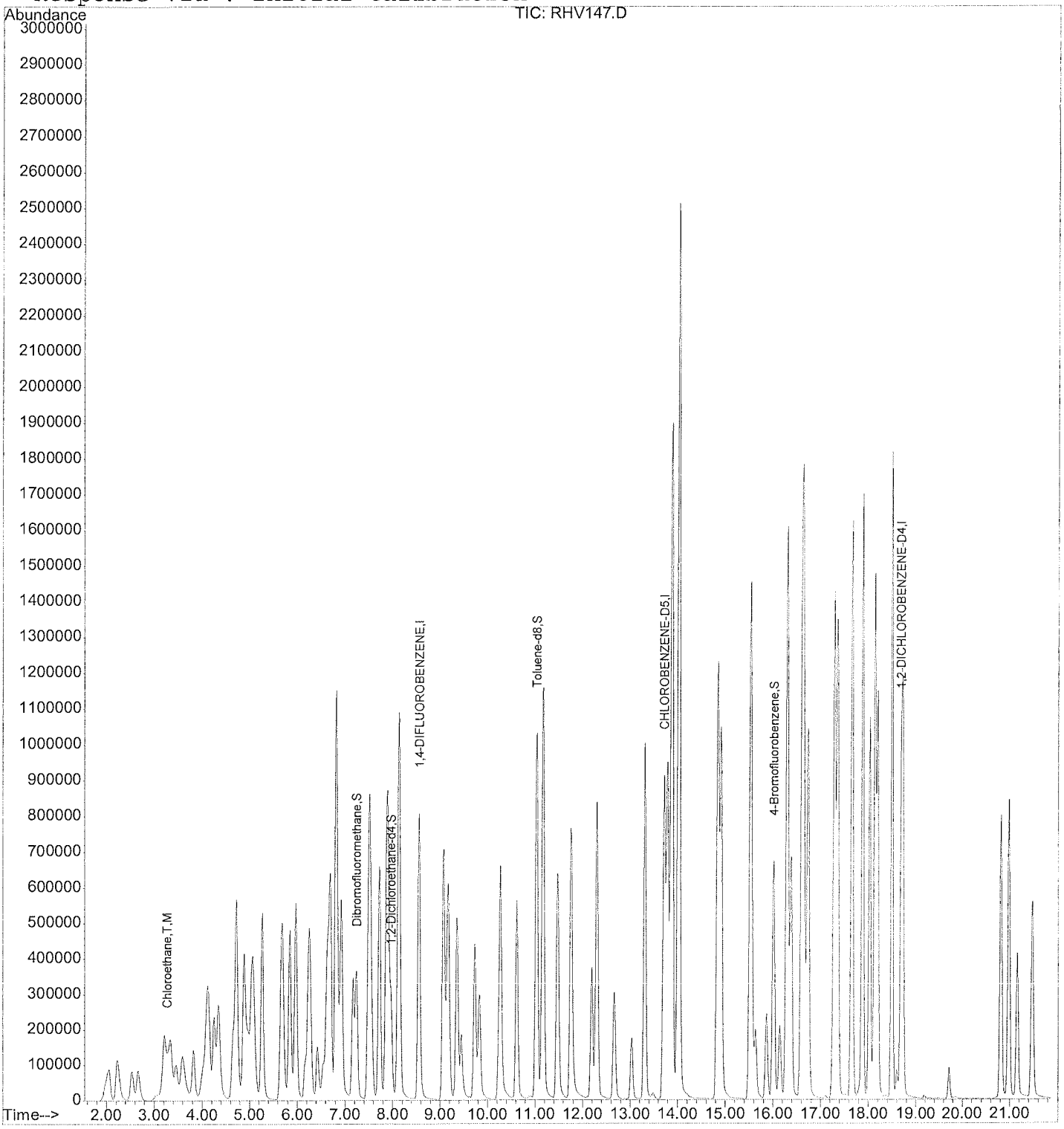
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1270191	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1068412	10.00	ug/l	-0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	439346	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	402823	10.43	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.30%			
41) 1,2-Dichloroethane-d4	7.97	65	324659	9.45	ug/l	-0.01
Spiked Amount 10.000			Recovery = 94.50%			
54) Toluene-d8	11.03	98	1423776	10.90	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.00%			
76) 4-Bromofluorobenzene	16.01	95	531274	9.53	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.30%			
Target Compounds						Qvalue
8) Chloroethane	3.27	64	187127	9.02	ug/l	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 6 16:06 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



DAILY CALIBRATIONS

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SDG No : 24I020
Lab File ID: RIG070 BFB Injection Date: 09/14/24
Instrument ID: E2 BFB Injection Time: 15:40

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	23.841
75	30 - 60% of mass 95	54.380
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.813
173	Less than 2% of mass 174	0.731(.74)1
174	Greater than 50% of mass 95	98.690
175	5 - 9% of mass 174	7.121(7.22)1
176	95 - 101% % of mass 174	95.450(96.72)1
177	5 - 9% % of mass 176	6.049(6.34)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CVOE2I0403	RIG071	09/14/24	16:24
2	LCS1W	VOE2I07X	RIG073	09/14/24	17:37
3	LCD1W	VOE2I07C	RIG074	09/14/24	18:02
4	MBLK1W	VOE2I07B	RIG076	09/14/24	18:51
5	MW02-GW090524	24I020-01	RIG086	09/14/24	22:58
6	FD02-GW090524	24I020-02	RIG087	09/14/24	23:23
7	MW12D-GW090524	24I020-03	RIG088	09/14/24	23:47
8	MW34B-GW090524	24I020-04	RIG089	09/15/24	00:12
9	MW17S-GW090524	24I020-05	RIG090	09/15/24	00:36
10	MW17D-GW090524	24I020-06	RIG091	09/15/24	01:01
11	MW34C-GW090524	24I020-07	RIG092	09/15/24	01:25
12	MW06-GW090524	24I020-08	RIG093	09/15/24	01:50
13	MW37S-GW090624	24I020-09	RIG094	09/15/24	02:15
14	MW37D-GW090624	24I020-10	RIG095	09/15/24	02:39
15	MW36-GW090624	24I020-11	RIG096	09/15/24	03:04
16	MW01D-GW090624	24I020-12	RIG097	09/15/24	03:28

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RIG007
Instrument ID: E2

Project: VA SALT LAKE CITY
SDG No: 24I020
Date Analyzed: 09/04/24
Time Analyzed: 15:19

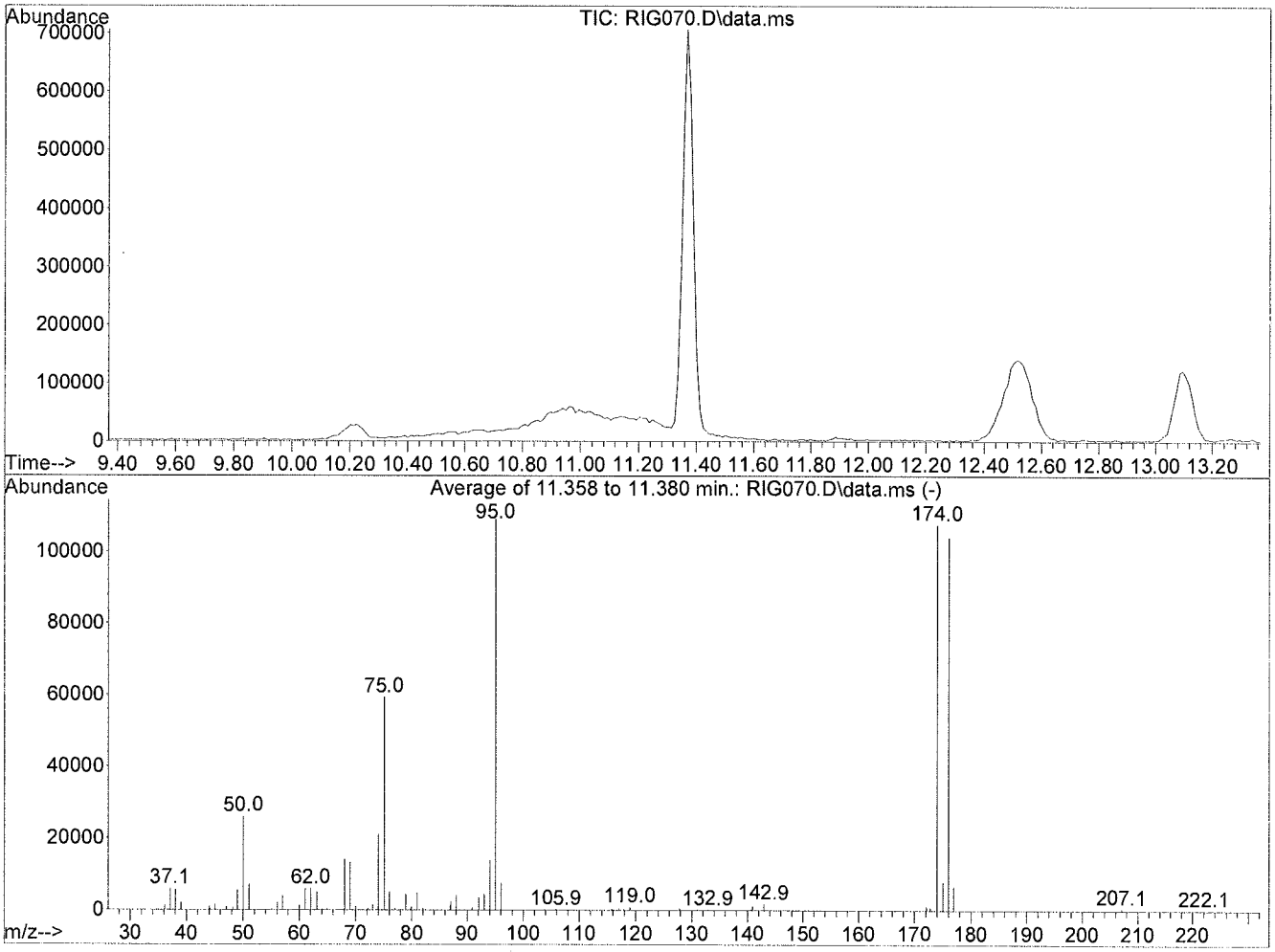
	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	872251	5.99	708785	9.56	391856	13.89
	UPPER LIMIT	1744502	6.16	1417570	9.73	783712	14.06
	LOWER LIMIT	436126	5.82	354393	9.39	195928	13.72
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	1067029	5.99	927898	9.56	535392	13.89
2	LCS1W	1142090	5.99	983966	9.56	564943	13.89
3	LCD1W	1180057	5.99	1012794	9.56	568393	13.89
4	MBLK1W	1033421	5.99	870646	9.56	475813	13.89
5	MW02-GW090524	901696	5.99	764614	9.56	406076	13.89
6	FD02-GW090524	844035	5.99	752439	9.56	405116	13.89
7	MW12D-GW090524	849728	5.99	725990	9.56	385710	13.89
8	MW34B-GW090524	829908	5.99	723094	9.56	384994	13.89
9	MW17S-GW090524	818438	5.99	704350	9.56	386192	13.89
10	MW17D-GW090524	816304	5.99	695426	9.56	377207	13.89
11	MW34C-GW090524	808619	5.99	700329	9.56	374140	13.89
12	MW06-GW090524	787324	5.99	701263	9.56	365976	13.89
13	MW37S-GW090624	790530	5.99	693049	9.56	363214	13.89
14	MW37D-GW090624	809875	5.99	703300	9.56	382410	13.89
15	MW36-GW090624	788868	5.99	696581	9.56	370600	13.89
16	MW01D-GW090624	771305	5.99	675562	9.56	363313	13.89

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG070.D
Acq On : 14 Sep 2024 3:40 pm
Operator : DNguye
Sample : BFBE2I07
Misc : T/CHK
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\VOE2I04.M
Title : METHOD 8260B 10mL
Last Update : Tue Sep 10 18:59:15 2024



AutoFind: Scans 797, 798, 799; Background Corrected with Scan 791

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.8	26013	PASS
75	95	30	60	54.4	59333	PASS
95	95	100	100	100.0	109109	PASS
96	95	5	9	6.8	7434	PASS
173	174	0.00	2	0.7	798	PASS
174	95	50	100	98.7	107680	PASS
175	174	5	9	7.2	7770	PASS
176	174	95	101	96.7	104144	PASS
177	176	5	9	6.3	6600	PASS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG071.D
Acq On : 14 Sep 2024 4:24 pm
Operator : DNguye
Sample : CVOE2I0403
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 16:06:00 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.		%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000		0.0	122	0.00
2	T,M	Dichlorodifluoromethane	10.000	8.434		15.7	101	0.00
3	P,T,M	Chloromethane	10.000	10.015		-0.2	117	0.00
4	C,T,M	Vinyl chloride	10.000	10.391		-3.9	125	0.00
5	T,M	Bromomethane	10.000	7.187		28.1#	92	0.00
6	T,M	Dichlorofluoromethane	10.000	9.754		2.5	121	0.00
7	T,M	Chloroethane	10.000	9.110		8.9	120	0.00
8	T,M	Trichlorofluoromethane	10.000	8.734		12.7	102	0.00
9	T,M	Acrolein	50.000	31.235		37.5#	78	0.00
10	T,M	1,1,2-Trichloro-1,2,2-Trifl	10.000	7.786		22.1#	93	0.00
11	T,M	Acetone	50.000	42.166		15.7	110	0.00
12	T,M	tert-Butyl alcohol	250.000	248.189		0.7	119	0.00
13	C,T,M	1,1-Dichloroethene	10.000	8.399		16.0	102	0.00
14	T,M	Acetonitrile	50.000	45.578		8.8	115	0.00
15	T,M	Allyl chloride	10.000	8.652		13.5	106	0.00
16	T,M	Iodomethane	10.000	7.858		21.4#	119	0.00
17	T,M	Methyl acetate	10.000	7.798		22.0#	101	0.00
18	T,M	Methylene chloride	10.000	7.885		21.2#	104	0.00
19	T,M	Acrylonitrile	50.000	40.400		19.2	98	0.00
20	T,M	tert-Butyl methyl ether (MT	10.000	9.247		7.5	110	0.00
21	T,M	Carbon disulfide	10.000	7.482		25.2#	94	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	8.393		16.1	106	0.01
23	T,M	Isopropyl ether (DIPE)	10.000	8.869		11.3	107	0.00
24	T,M	Vinyl acetate	10.000	7.075		29.3#	86	0.00
25	P,T,M	1,1-Dichloroethane	10.000	9.065		9.4	110	0.00
26	T,M	tert-Butyl ethyl ether (ETB	10.000	9.928		0.7	118	0.00
27	T,M	2-Butanone	50.000	44.247		11.5	113	0.00
28	T,M	Propionitrile	100.000	87.488		12.5	105	0.00
29	T,M	Isobutyl alcohol	200.000	164.729		17.6	102	0.00
30	T,M	2,2-Dichloropropane	10.000	7.735		22.6#	96	0.00
31	T,M	Methacrylonitrile	100.000	83.522		16.5	99	0.00
32	T,M	cis-1,2-Dichloroethene	10.000	8.987		10.1	109	0.00
33	C,T,M	Chloroform	10.000	8.378		16.2	105	0.00
34	T,M	Bromochloromethane	10.000	8.722		12.8	104	0.00
35	T,M	Tetrahydrofuran	10.000	8.160		18.4	100	0.00
36	S	Dibromofluoromethane	10.000	10.394		-3.9	123	0.00
37	T,M	1,1,1-Trichloroethane	10.000	9.020		9.8	109	0.00
38	T,M	Cyclohexane	10.000	8.708		12.9	112	0.00
39	T,M	tert-Amyl methyl ether (TAM	10.000	9.151		8.5	114	0.00
40	T,M	1,1-Dichloropropene	10.000	8.272		17.3	101	0.00
41	S	1,2-Dichloroethane-d4	10.000	10.705		-7.1	133	0.00
42	T,M	Carbon tetrachloride	10.000	8.458		15.4	102	0.00
43	T,M	1,2-Dichloroethane	10.000	9.145		8.6	112	0.00
44	T,M	Benzene	10.000	8.917		10.8	111	0.00
45	T,M	Trichloroethene	10.000	8.433		15.7	104	0.00
46	T,M	Methyl methacrylate	10.000	8.615		13.8	104	0.00
47	T,M	Methylcyclohexane	10.000	8.718		12.8	110	0.00
48	C,T,M	1,2-Dichloropropane	10.000	8.840		11.6	110	0.00
49	T,M	1,4-Dioxane	200.000	262.376		-31.2#	170	0.00
50	T,M	Bromodichloromethane	10.000	8.657		13.4	110	0.01

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG071.D
Acq On : 14 Sep 2024 4:24 pm
Operator : DNguye
Sample : CVOE2I0403
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 16:06:00 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	Dibromomethane	10.000	8.683	13.2	104	0.00
52	T,M	2-Chloroethyl vinyl ether	10.000	5.651	43.5#	66	0.00
53	T,M	4-Methyl-2-pentanone	50.000	42.940	14.1	97	0.00
54	T,M	cis-1,3-Dichloropropene	10.000	8.625	13.8	105	0.00
55	I	CHLOROBENZENE-D5	10.000	10.000	0.0	131	0.00
56	S	Toluene-d8	10.000	10.349	-3.5	136	0.00
57	T,M	Ethyl methacrylate	10.000	8.024	19.8	101	0.00
58	C,T,M	Toluene	10.000	8.272	17.3	107	0.00
59	T,M	trans-1,3-Dichloropropene	10.000	8.028	19.7	104	0.00
60	T,M	2-Hexanone	50.000	41.563	16.9	101	0.01
61	T,M	1,1,2-Trichloroethane	10.000	8.366	16.3	107	0.00
62	T,M	1,3-Dichloropropane	10.000	8.469	15.3	109	0.00
63	T,M	Tetrachloroethene	10.000	8.378	16.2	108	0.00
64	T,M	Dibromochloromethane	10.000	7.324	26.8#	100	0.01
65	T,M	1,2-Dibromoethane	10.000	7.658	23.4#	100	0.00
66	T,M	1-Chlorohexane	10.000	7.808	21.9#	97	0.00
67	P,T,M	Chlorobenzene	10.000	7.783	22.2#	103	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	8.212	17.9	110	0.01
69	C,T,M	Ethylbenzene	10.000	8.375	16.3	107	0.00
70	T,M	m-Xylene & p-Xylene	20.000	17.332	13.3	108	0.00
71	T,M	o-Xylene	10.000	8.849	11.5	112	0.01
72	T,M	Styrene	10.000	8.686	13.1	106	0.01
73	T,M	Isopropylbenzene	10.000	8.397	16.0	102	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	137	0.00
75	P,T,M	Bromoform	10.000	6.820	31.8#	99	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	7.349	26.5#	106	0.00
77	S	4-Bromofluorobenzene	10.000	10.417	-4.2	149	0.00
78	T,M	1,2,3-Trichloropropane	10.000	7.263	27.4#	100	0.01
79	T,M	trans-1,4-Dichloro-2-butene	10.000	6.398	36.0#	84	0.01
80	T,M	n-Propylbenzene	10.000	8.401	16.0	108	0.01
81	T,M	Bromobenzene	10.000	8.418	15.8	115	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	8.151	18.5	105	0.00
83	T,M	2-Chlorotoluene	10.000	8.293	17.1	118	0.00
84	T,M	4-Chlorotoluene	10.000	8.280	17.2	101	0.01
85	T,M	tert-Butylbenzene	10.000	8.009	19.9	108	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	8.377	16.2	106	0.00
87	T,M	sec-Butylbenzene	10.000	7.420	25.8#	101	0.00
88	T,M	p-Isopropyltoluene	10.000	7.528	24.7#	103	0.00
89	T,M	1,3-Dichlorobenzene	10.000	7.922	20.8#	110	0.01
90	T,M	1,2,3-Trimethylbenzene	10.000	8.575	14.3	111	0.01
91	T,M	1,4-Dichlorobenzene	10.000	7.857	21.4#	109	0.00
92	T,M	n-Butylbenzene	10.000	7.395	26.1#	100	0.00
93	T,M	1,2-Dichlorobenzene	10.000	7.871	21.3#	111	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	7.740	22.6#	105	0.01
95	T,M	1,2,4-Trichlorobenzene	10.000	8.571	14.3	125	0.00
96	T,M	Hexachlorobutadiene	10.000	7.220	27.8#	101	0.00
97	T,M	Naphthalene	10.000	8.395	16.1	114	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	8.312	16.9	118	0.00

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG071.D
Acq On : 14 Sep 2024 4:24 pm
Operator : DNguye
Sample : CVOE2I0403
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 16:06:00 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	Amount	Calc.	%Dev	Area%	Dev(min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG071.D
Acq On : 14 Sep 2024 4:24 pm
Operator : DNguye
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Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	122	0.00
2	T,M	Dichlorodifluoromethane	0.309	0.261	15.5	101	0.00
3	P,T,M	Chloromethane	0.263	0.220	16.3	117	0.00
4	C,T,M	Vinyl chloride	0.267	0.277	-3.7	125	0.00
5	T,M	Bromomethane	0.180	0.116	35.6#	92	0.00
6	T,M	Dichlorofluoromethane	0.654	0.638	2.4	121	0.00
7	T,M	Chloroethane	0.139	0.126	9.4	120	0.00
8	T,M	Trichlorofluoromethane	0.491	0.428	12.8	102	0.00
9	T,M	Acrolein	0.034	0.021	38.2#	78	0.00
10	T,M	1,1,2-Trichloro-1,2,2-Trifl	0.286	0.222	22.4#	93	0.00
11	T,M	Acetone	0.158	0.125	20.9#	110	0.00
12	T,M	tert-Butyl alcohol	0.039	0.039	0.0	119	0.00
13	C,T,M	1,1-Dichloroethene	0.607	0.510	16.0	102	0.00
14	T,M	Acetonitrile	0.046	0.042	8.7	115	0.00
15	T,M	Allyl chloride	0.160	0.139	13.1	106	0.00
16	T,M	Iodomethane	0.360	0.323	10.3	119	0.00
17	T,M	Methyl acetate	0.319	0.248	22.3#	101	0.00
18	T,M	Methylene chloride	0.562	0.443	21.2#	104	0.00
19	T,M	Acrylonitrile	0.143	0.116	18.9	98	0.00
20	T,M	tert-Butyl methyl ether (MT	1.048	0.969	7.5	110	0.00
21	T,M	Carbon disulfide	0.907	0.679	25.1#	94	0.00
22	T,M	trans-1,2-Dichloroethene	0.318	0.267	16.0	106	0.01
23	T,M	Isopropyl ether (DIPE)	1.161	1.030	11.3	107	0.00
24	T,M	Vinyl acetate	0.708	0.501	29.2#	86	0.00
25	P,T,M	1,1-Dichloroethane	0.661	0.600	9.2	110	0.00
26	T,M	tert-Butyl ethyl ether (ETB	1.312	1.302	0.8	118	0.00
27	T,M	2-Butanone	0.042	0.037	11.9	113	0.00
28	T,M	Propionitrile	0.048	0.042	12.5	105	0.00
29	T,M	Isobutyl alcohol	0.018	0.015	16.7	102	0.00
30	T,M	2,2-Dichloropropane	0.653	0.505	22.7#	96	0.00
31	T,M	Methacrylonitrile	0.079	0.066	16.5	99	0.00
32	T,M	cis-1,2-Dichloroethene	0.375	0.337	10.1	109	0.00
33	C,T,M	Chloroform	0.837	0.701	16.2	105	0.00
34	T,M	Bromochloromethane	0.234	0.204	12.8	104	0.00
35	T,M	Tetrahydrofuran	0.116	0.095	18.1	100	0.00
36	S	Dibromofluoromethane	0.540	0.455	15.7	123	0.00
37	T,M	1,1,1-Trichloroethane	0.716	0.646	9.8	109	0.00
38	T,M	Cyclohexane	0.365	0.318	12.9	112	0.00
39	T,M	tert-Amyl methyl ether (TAM	0.239	0.218	8.8	114	0.00
40	T,M	1,1-Dichloropropene	0.153	0.126	17.6	101	0.00
41	S	1,2-Dichloroethane-d4	0.627	0.671	-7.0	133	0.00
42	T,M	Carbon tetrachloride	0.634	0.536	15.5	102	0.00
43	T,M	1,2-Dichloroethane	0.708	0.648	8.5	112	0.00
44	T,M	Benzene	1.240	1.106	10.8	111	0.00
45	T,M	Trichloroethene	0.339	0.286	15.6	104	0.00
46	T,M	Methyl methacrylate	0.308	0.265	14.0	104	0.00
47	T,M	Methylcyclohexane	0.357	0.312	12.6	110	0.00
48	C,T,M	1,2-Dichloropropane	0.339	0.299	11.8	110	0.00
49	T,M	1,4-Dioxane	0.002	0.002	0.0	170	0.00
50	T,M	Bromodichloromethane	0.667	0.578	13.3	110	0.01

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG071.D
Acq On : 14 Sep 2024 4:24 pm
Operator : DNguye
Sample : CVOE2I0403
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 16:06:00 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	Dibromomethane	0.279	0.242	13.3	104	0.00
52	T,M	2-Chloroethyl vinyl ether	0.149	0.084	43.6#	66	0.00
53	T,M	4-Methyl-2-pentanone	0.428	0.368	14.0	97	0.00
54	T,M	cis-1,3-Dichloropropene	0.576	0.497	13.7	105	0.00
55	I	CHLOROBENZENE-D5	1.000	1.000	0.0	131	0.00
56	S	Toluene-d8	1.423	1.472	-3.4	136	0.00
57	T,M	Ethyl methacrylate	0.507	0.407	19.7	101	0.00
58	C,T,M	Toluene	1.573	1.301	17.3	107	0.00
59	T,M	trans-1,3-Dichloropropene	0.736	0.591	19.7	104	0.00
60	T,M	2-Hexanone	0.354	0.295	16.7	101	0.01
61	T,M	1,1,2-Trichloroethane	0.408	0.341	16.4	107	0.00
62	T,M	1,3-Dichloropropane	0.632	0.536	15.2	109	0.00
63	T,M	Tetrachloroethene	0.358	0.300	16.2	108	0.00
64	T,M	Dibromochloromethane	0.617	0.452	26.7#	100	0.01
65	T,M	1,2-Dibromoethane	0.433	0.332	23.3#	100	0.00
66	T,M	1-Chlorohexane	0.442	0.345	21.9#	97	0.00
67	P,T,M	Chlorobenzene	1.065	0.829	22.2#	103	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.480	0.394	17.9	110	0.01
69	C,T,M	Ethylbenzene	1.783	1.493	16.3	107	0.00
70	T,M	m-Xylene & p-Xylene	1.388	1.203	13.3	108	0.00
71	T,M	o-Xylene	1.364	1.207	11.5	112	0.01
72	T,M	Styrene	1.004	0.872	13.1	106	0.01
73	T,M	Isopropylbenzene	1.465	1.231	16.0	102	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	137	0.00
75	P,T,M	Bromoform	0.813	0.554	31.9#	99	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.983	0.722	26.6#	106	0.00
77	S	4-Bromofluorobenzene	1.086	1.131	-4.1	149	0.00
78	T,M	1,2,3-Trichloropropane	0.289	0.210	27.3#	100	0.01
79	T,M	trans-1,4-Dichloro-2-butene	0.355	0.227	36.1#	84	0.01
80	T,M	n-Propylbenzene	3.367	2.829	16.0	108	0.01
81	T,M	Bromobenzene	0.910	0.766	15.8	115	0.00
82	T,M	1,3,5-Trimethylbenzene	2.308	1.881	18.5	105	0.00
83	T,M	2-Chlorotoluene	2.336	1.938	17.0	118	0.00
84	T,M	4-Chlorotoluene	2.162	1.790	17.2	101	0.01
85	T,M	tert-Butylbenzene	0.370	0.297	19.7	108	0.00
86	T,M	1,2,4-Trimethylbenzene	2.330	1.952	16.2	106	0.00
87	T,M	sec-Butylbenzene	2.667	1.979	25.8#	101	0.00
88	T,M	p-Isopropyltoluene	2.255	1.697	24.7#	103	0.00
89	T,M	1,3-Dichlorobenzene	1.455	1.153	20.8#	110	0.01
90	T,M	1,2,3-Trimethylbenzene	2.417	2.073	14.2	111	0.01
91	T,M	1,4-Dichlorobenzene	1.513	1.189	21.4#	109	0.00
92	T,M	n-Butylbenzene	2.033	1.504	26.0#	100	0.00
93	T,M	1,2-Dichlorobenzene	1.457	1.147	21.3#	111	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.219	0.169	22.8#	105	0.01
95	T,M	1,2,4-Trichlorobenzene	0.927	0.794	14.3	125	0.00
96	T,M	Hexachlorobutadiene	0.475	0.343	27.8#	101	0.00
97	T,M	Naphthalene	2.140	1.796	16.1	114	0.00
98	T,M	1,2,3-Trichlorobenzene	0.914	0.760	16.8	118	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG071.D
Acq On : 14 Sep 2024 4:24 pm
Operator : DNguye
Sample : CVOE2I0403
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 16:06:00 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG071.D
Acq On : 14 Sep 2024 4:24 pm
Operator : DNguye
Sample : CVOE2I0403
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 16:06:00 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-DIFLUOROBENZENE	5.987	114	1067029	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	9.564	117	927898	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	13.889	152	535392	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.338	111	485405	10.39	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.90%		
41) 1,2-Dichloroethane-d4	5.723	65	716387	10.70	ug/L	0.00
Spiked Amount 10.000			Recovery =	107.00%		
56) Toluene-d8	7.594	98	1366069	10.35	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.50%		
77) 4-Bromofluorobenzene	11.369	95	605483	10.42	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.20%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	278202	8.43	ug/l	99
3) Chloromethane	2.928	50	234369	10.02	ug/l	99
4) Vinyl chloride	2.994	62	295484	10.39	ug/l	97
5) Bromomethane	3.324	94	123974	7.19	ug/l	95
6) Dichlorofluoromethane	3.357	67	680978	9.75	ug/L	97
7) Chloroethane	3.357	64	134859	9.11	ug/l	93
8) Trichlorofluoromethane	3.522	101	457180	8.73	ug/l	98
9) Acrolein	3.753	56	111767	31.24	ug/l	97
10) 1,1,2-Trichloro-1,2,2-...	3.753	151	237250	7.79	ug/l	98
11) Acetone	3.775	43	665626	42.17	ug/l	99
12) tert-Butyl alcohol	3.875	59	1043406	248.19	ug/L	98
13) 1,1-Dichloroethene	3.908	61	544000	8.40	ug/l	99
14) Acetonitrile	3.875	41	226032	45.58	ug/L	98
15) Allyl chloride	4.106	76	148154	8.65	ug/L	99
16) Iodomethane	4.150	142	345017	7.86	ug/l	95
17) Methyl acetate	4.029	43	265072	7.80	ug/L	98
18) Methylene chloride	4.183	49	472980	7.89	ug/l	97
19) Acrylonitrile	4.216	53	616757	40.40	ug/l	97
20) tert-Butyl methyl ethe...	4.227	73	1033759	9.25	ug/L	99
21) Carbon disulfide	4.315	76	723991	7.48	ug/l	99
22) trans-1,2-Dichloroethene	4.381	96	284399	8.39	ug/l	98
23) Isopropyl ether (DIPE)	4.469	45	1098704	8.87	ug/l	98
24) Vinyl acetate	4.546	43	534479	7.07	ug/l	99
25) 1,1-Dichloroethane	4.634	63	639784	9.07	ug/l	99
26) tert-Butyl ethyl ether...	4.733	59	1389581	9.93	ug/l	96
27) 2-Butanone	4.854	72	196151	44.25	ug/l	100
28) Propionitrile	4.909	54	444486	87.49	ug/L	96
29) Isobutyl alcohol	5.030	43	311290	164.73	ug/L	99
30) 2,2-Dichloropropane	5.030	77	539190	7.74	ug/l	98
31) Methacrylonitrile	5.063	52	706492	83.52	ug/L	87
32) cis-1,2-Dichloroethene	5.063	96	359872	8.99	ug/l	99
33) Chloroform	5.173	83	748121	8.38	ug/l	99
34) Bromochloromethane	5.327	130	217663	8.72	ug/l	94
35) Tetrahydrofuran	5.327	42	100935	8.16	ug/L	97
37) 1,1,1-Trichloroethane	5.503	97	689182	9.02	ug/l	99
38) Cyclohexane	5.547	84	339360	8.71	ug/L	100
39) tert-Amyl methyl ether...	5.624	87	232905	9.15	ug/l	97
40) 1,1-Dichloropropene	5.613	110	134926	8.27	ug/L	97

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG071.D
Acq On : 14 Sep 2024 4:24 pm
Operator : DNguye
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Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 16:06:00 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) Carbon tetrachloride	5.734	119	572073	8.46	ug/L	95
43) 1,2-Dichloroethane	5.800	62	691336	9.15	ug/L	99
44) Benzene	5.866	78	1179765	8.92	ug/L	97
45) Trichloroethene	6.373	130	305409	8.43	ug/L	97
46) Methyl methacrylate	6.439	69	283031	8.62	ug/L	100
47) Methylcyclohexane	6.461	83	332397	8.72	ug/L	99
48) 1,2-Dichloropropane	6.527	63	319489	8.84	ug/L	96
49) 1,4-Dioxane	6.725	88	49891	262.38	ug/L	85
50) Bromodichloromethane	6.780	83	616524	8.66	ug/L	98
51) Dibromomethane	6.857	93	258333	8.68	ug/L	97
52) 2-Chloroethyl vinyl ether	6.934	63	89631	5.65	ug/L	97
53) 4-Methyl-2-pentanone	6.967	43	1963255	42.94	ug/L	96
54) cis-1,3-Dichloropropene	7.275	75	530178	8.63	ug/L	98
57) Ethyl methacrylate	7.693	69	377631	8.02	ug/L	95
58) Toluene	7.693	91	1207100	8.27	ug/l	99
59) trans-1,3-Dichloropropene	7.814	75	548198	8.03	ug/l	95
60) 2-Hexanone	7.946	43	1366754	41.56	ug/l	99
61) 1,1,2-Trichloroethane	8.045	97	316569	8.37	ug/l	99
62) 1,3-Dichloropropane	8.354	76	497022	8.47	ug/l	100
63) Tetrachloroethene	8.519	164	278360	8.38	ug/l	96
64) Dibromochloromethane	8.794	129	419069	7.32	ug/l	97
65) 1,2-Dibromoethane	9.069	107	307776	7.66	ug/l	99
66) 1-Chlorohexane	9.124	91	319996	7.81	ug/l	97
67) Chlorobenzene	9.619	112	769244	7.78	ug/l	100
68) 1,1,1,2-Tetrachloroethane	9.652	131	365753	8.21	ug/l	99
69) Ethylbenzene	9.641	91	1385809	8.37	ug/l	98
70) m-Xylene & p-Xylene	9.751	91	2231974	17.33	ug/l	96
71) o-Xylene	10.423	91	1119711	8.85	ug/l	98
72) Styrene	10.467	104	809091	8.69	ug/l	99
73) Isopropylbenzene	10.940	105	1141832	8.40	ug/L	99
75) Bromoform	11.061	173	296864	6.82	ug/l	99
76) 1,1,2,2-Tetrachloroethane	11.204	83	386678	7.35	ug/l	98
78) 1,2,3-Trichloropropane	11.457	110	112201	7.26	ug/l	92
79) trans-1,4-Dichloro-2-b...	11.523	53	121467	6.40	ug/l	91
80) n-Propylbenzene	11.589	91	1514476	8.40	ug/l	99
81) Bromobenzene	11.732	156	409972	8.42	ug/l	88
82) 1,3,5-Trimethylbenzene	11.831	105	1007265	8.15	ug/l	99
83) 2-Chlorotoluene	11.919	91	1037409	8.29	ug/l	92
84) 4-Chlorotoluene	11.985	91	958477	8.28	ug/l	96
85) tert-Butylbenzene	12.415	134	158857	8.01	ug/l	90
86) 1,2,4-Trimethylbenzene	12.481	105	1045125	8.38	ug/l	96
87) sec-Butylbenzene	12.756	105	1059654	7.42	ug/l	100
88) p-Isopropyltoluene	12.954	119	908747	7.53	ug/l	99
89) 1,3-Dichlorobenzene	13.174	146	617172	7.92	ug/l	98
90) 1,2,3-Trimethylbenzene	13.262	105	1109619	8.58	ug/L	99
91) 1,4-Dichlorobenzene	13.328	146	636685	7.86	ug/l	98
92) n-Butylbenzene	13.614	91	805004	7.39	ug/l	99
93) 1,2-Dichlorobenzene	13.933	146	614036	7.87	ug/l	98
94) 1,2-Dibromo-3-chloropr...	15.144	157	90592	7.74	ug/l	93
95) 1,2,4-Trichlorobenzene	16.464	180	425216	8.57	ug/l	98
96) Hexachlorobutadiene	16.663	225	183629	7.22	ug/l	89
97) Naphthalene	16.872	128	961690	8.39	ug/l	100
98) 1,2,3-Trichlorobenzene	17.235	180	406642	8.31	ug/l	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG071.D
Acq On : 14 Sep 2024 4:24 pm
Operator : DNguye
Sample : CVOE2I0403
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

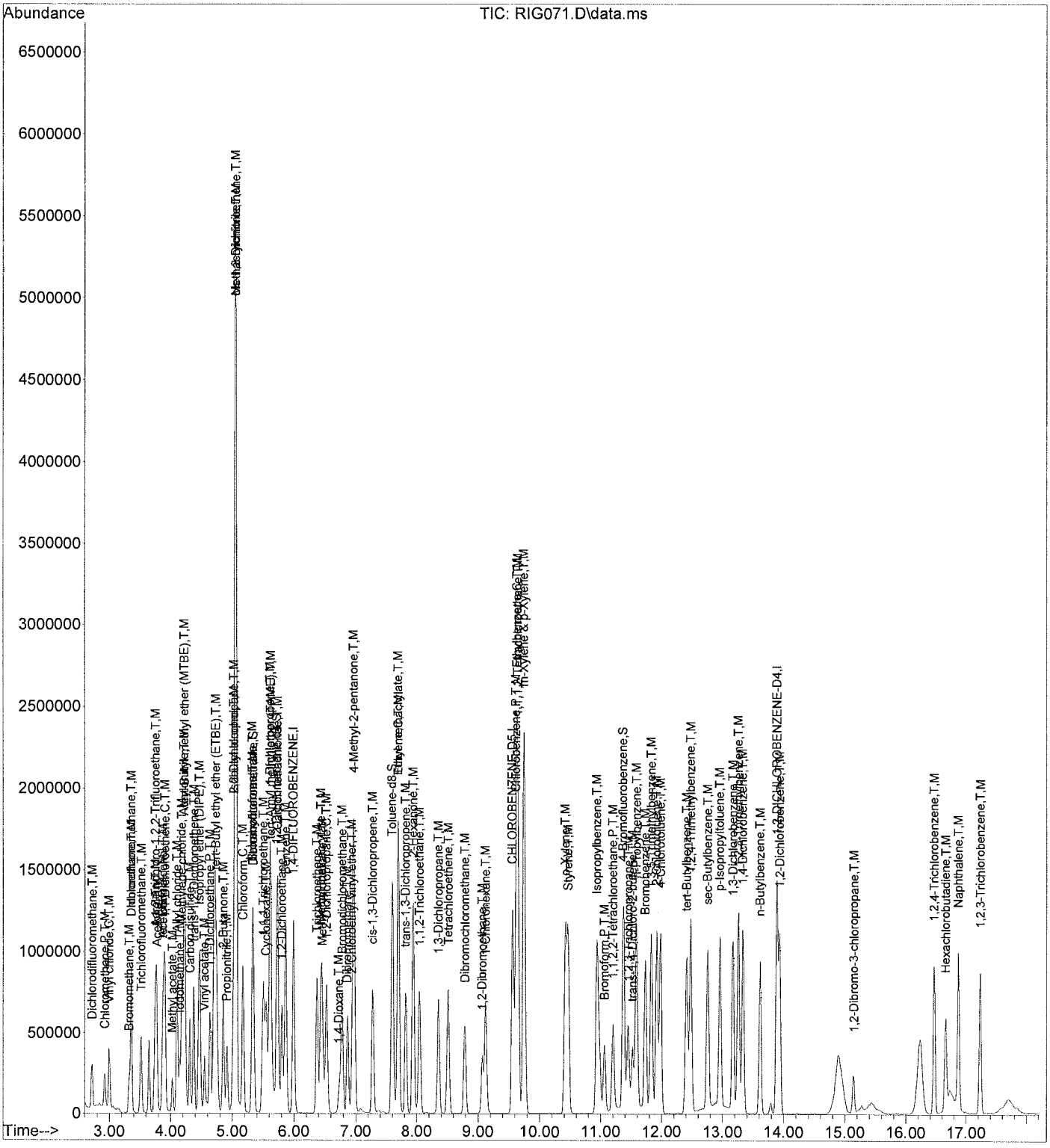
Quant Time: Oct 08 16:06:00 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\24I14\
Data File : RIG071.D
Acq On : 14 Sep 2024 4:24 pm
Operator : DNguye
Sample : CVOE2I0403
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 16:06:00 2024
Quant Method : C:\msdchem\1\METHODS\VOE2I04.M
Quant Title : METHOD 8260B 10mL
QLast Update : Tue Sep 10 18:59:15 2024
Response via : Initial Calibration



FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SDG No : 24I020
Lab File ID: RIV395 BFB Injection Date: 09/19/24
Instrument ID: 01 BFB Injection Time: 09:0B

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	23.459
75	30 - 60% of mass 95	45.611
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.119
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	6B.308
175	5 - 9% of mass 174	4.072(5.96)1
176	95 - 101% % of mass 174	6B.868(100.82)1
177	5 - 9% % of mass 176	4.079(5.92)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CVO01H0930	RIV396	09/19/24	10:21
2	LCS2W	VO01I15L	RIV397	09/19/24	10:50
3	LCD2W	VO01I15C	RIV398	09/19/24	11:21
4	MBLK2W	VO01I15B	RIV400	09/19/24	12:20
5	MW04-GW090524	24I020-18	RIV409	09/19/24	16:51
6	MW02-GW090524	24I020-01I	RIV410	09/19/24	17:20
7	FD02-GW090524	24I020-02I	RIV411	09/19/24	17:50

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RHV134
Instrument ID: 01

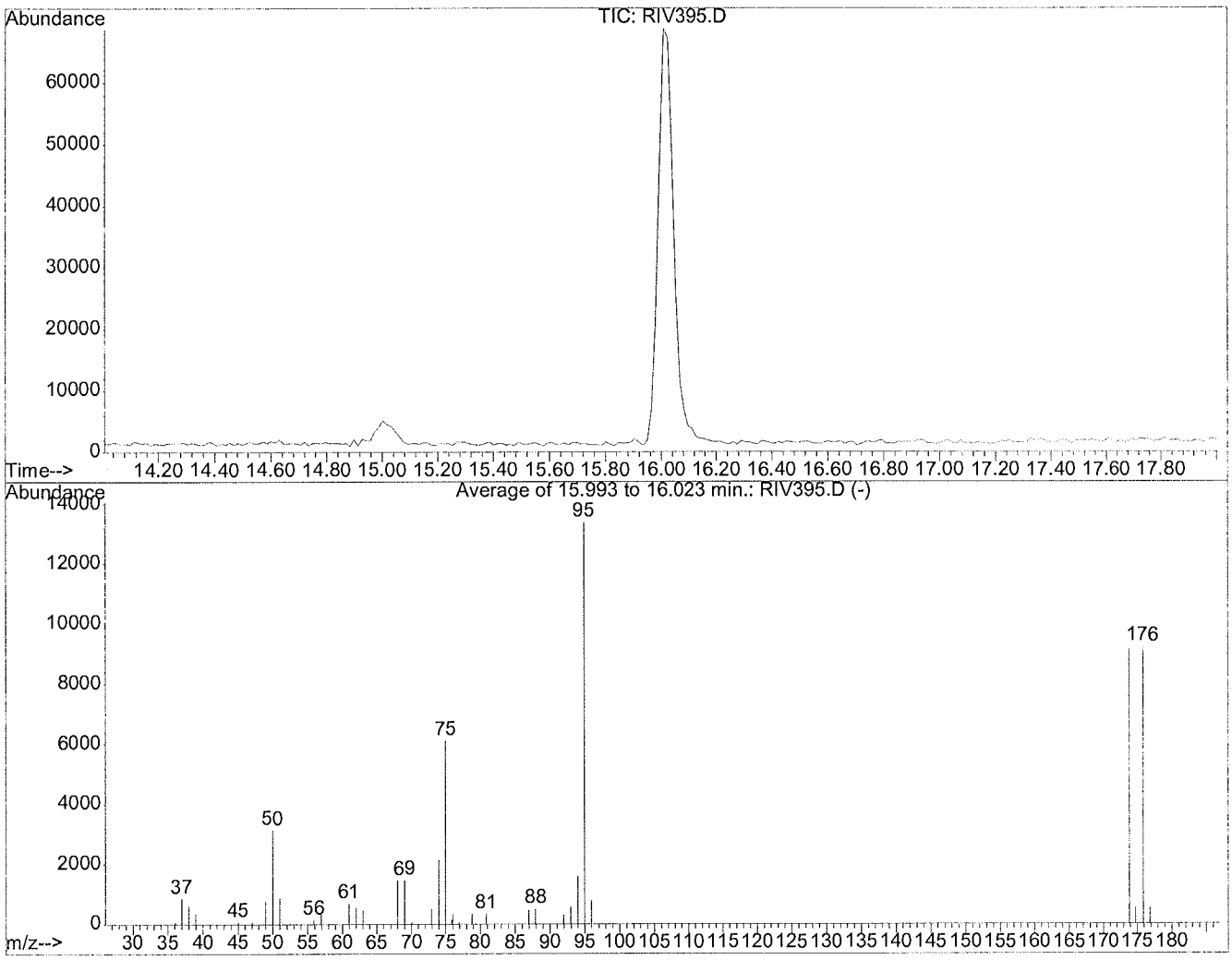
Project: VA SALT LAKE CITY
SDG No: 24I020
Date Analyzed: 08/09/24
Time Analyzed: 20:17

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	962079	8.56	831588	13.73	320498	18.69
	UPPER LIMIT	1924158	8.73	1663176	13.90	640996	18.86
	LOWER LIMIT	481040	8.39	415794	13.56	160249	18.52
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	851860	8.56	680800	13.71	281026	18.67
2	LCS2W	954562	8.56	752201	13.71	320598	18.67
3	LCD2W	939947	8.56	746783	13.71	312904	18.69
4	MBLK2W	919111	8.56	742284	13.71	290314	18.69
5	MW04-GW090524	960473	8.56	758334	13.71	284435	18.69
6	MW02-GW090524	990728	8.56	747392	13.71	286124	18.69
7	FD02-GW090524	1003636	8.56	782732	13.71	295887	18.69

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data File : D:\HPCHEM\1\DATA\24I19\RIV395.D
Acq On : 19 Sep 2024 9:08 am
Sample : BFB01I15
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye/CLi
Inst : 01
Multiplr: 1.00



AutoFind: Scans 978, 979, 980; Background Corrected with Scan 972

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.5	3140	PASS
75	95	30	60	45.6	6105	PASS
95	95	100	100	100.0	13385	PASS
96	95	5	9	6.1	819	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	68.3	9143	PASS
175	174	5	9	6.0	545	PASS
176	174	95	101	100.8	9218	PASS
177	176	5	9	5.9	546	PASS

RIV395.D VO01H09.M Fri Sep 27 13:16:38 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIV396.D Vial: 2
Acq On : 19 Sep 2024 10:21 am Operator: DNguye/CLingl
Sample : CVO01H0930 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	89	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	8.329	16.7	64	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	11.084	-10.8	91	0.01
6	C,T,M	Vinyl chloride	10.000	10.558	-5.6	82	0.01
7	T,M	Bromomethane	10.000	8.484	15.2	73	0.02
8	T,M	Chloroethane	10.000	10.274	-2.7	89	-0.03
9	T,M	Dichlorofluoromethane	10.000	11.404	-14.0	100	0.02
10	T,M	Trichlorofluoromethane	10.000	6.642	33.6#	51	0.15
11	T,M	Acrolein	50.000	44.085	11.8	82	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	8.785	12.1	75	0.00
13	T,M	Acetone	50.000	46.738	6.5	83	-0.01
14	C,T,M	1,1-Dichloroethene	10.000	8.668	13.3	75	0.00
15	T,M	tert-Butyl alcohol	250.000	221.683	11.3	76	0.00
16	T,M	Iodomethane	10.000	8.562	14.4	72	-0.01
17	T,M	Methyl acetate	10.000	10.522	-5.2	94	0.00
18	T,M	Methylene chloride	10.000	11.218	-12.2	101	-0.02
19	T,M	Carbon disulfide	10.000	10.188	-1.9	85	0.00
20	T,M	Acrylonitrile	50.000	61.723	-23.4#	111	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.069	-0.7	86	-0.02
22	T,M	trans-1,2-Dichloroethene	10.000	9.454	5.5	81	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	12.673	-26.7#	111	0.00
24	T,M	Vinyl acetate	10.000	7.678	23.2#	65	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.950	-9.5	97	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.839	-8.4	93	-0.02
28	T,M	2-Butanone	50.000	54.515	-9.0	100	-0.02
29	T,M	2,2-Dichloropropane	10.000	9.264	7.4	79	-0.02
30	T,M	cis-1,2-Dichloroethene	10.000	10.147	-1.5	88	-0.02
31	C,T,M	Chloroform	10.000	9.486	5.1	82	-0.02
32	T,M	Bromochloromethane	10.000	11.311	-13.1	99	0.00
33	T,M	Tetrahydrofuran	10.000	9.625	3.8	94	0.01
34	S	Dibromofluoromethane	10.000	9.522	4.8	78	0.00
35	T,M	1,1,1-Trichloroethane	10.000	8.544	14.6	71	0.00
36	T,M	Cyclohexane	10.000	10.635	-6.3	90	-0.02
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.03
38	T,M	1,1-Dichloropropene	10.000	8.415	15.9	74	0.00
39	T,M	Carbon tetrachloride	10.000	7.525	24.7#	62	-0.02
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.359	-3.6	89	-0.02
41	S	1,2-Dichloroethane-d4	10.000	8.734	12.7	70	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIV396.D Vial: 2
Acq On : 19 Sep 2024 10:21 am Operator: DNguye/CLingl
Sample : CVO01H0930 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	10.502	-5.0	89	-0.02
43	T,M	1,2-Dichloroethane	10.000	8.877	11.2	71	0.00
44	T,M	Trichloroethene	10.000	8.605	13.9	74	0.00
45	T,M	Methylcyclohexane	10.000	10.839	-8.4	91	-0.02
46	C,T,M	1,2-Dichloropropane	10.000	11.953	-19.5	103	-0.02
47	T,M	Bromodichloromethane	10.000	9.413	5.9	83	-0.02
48	T,M	1,4-Dioxane	200.000	173.240	13.4	75	0.01
49	T,M	Dibromomethane	10.000	9.085	9.1	78	-0.02
50	T,M	2-Chloroethyl vinyl ether	10.000	14.620	-46.2#	133	-0.02
51	T,M	4-Methyl-2-pentanone	50.000	66.890	-33.8#	109	-0.01
52	T,M	cis-1,3-Dichloropropene	10.000	10.471	-4.7	88	-0.02
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	82	-0.02
54	S	Toluene-d8	10.000	10.563	-5.6	81	-0.02
55	C,T,M	Toluene	10.000	10.509	-5.1	82	0.00
56	T,M	Ethyl methacrylate	10.000	11.823	-18.2	91	-0.02
57	T,M	trans-1,3-Dichloropropene	10.000	10.504	-5.0	80	0.00
58	T,M	1,1,2-Trichloroethane	10.000	11.217	-12.2	91	-0.02
59	T,M	2-Hexanone	50.000	60.081	-20.2#	97	0.00
60	T,M	1,3-Dichloropropane	10.000	11.257	-12.6	90	-0.02
61	T,M	Tetrachloroethene	10.000	8.849	11.5	74	-0.02
62	T,M	Dibromochloromethane	10.000	9.794	2.1	77	-0.02
63	T,M	1,2-Dibromoethane	10.000	9.904	1.0	81	0.00
64	T,M	1-Chlorohexane	10.000	9.422	5.8	78	-0.02
65	P,M	Chlorobenzene	10.000	10.186	-1.9	81	0.00
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.547	-5.5	81	0.00
67	C,T,M	Ethylbenzene	10.000	10.099	-1.0	78	-0.02
68	T,M	m-Xylene & p-Xylene	20.000	18.770	6.2	75	-0.02
69	T,M	o-Xylene	10.000	10.289	-2.9	78	0.00
70	T,M	Styrene	10.000	11.260	-12.6	88	-0.02
71	T,M	Isopropylbenzene	10.000	9.974	0.3	78	0.00
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	88	-0.02
73	P,T,M	Bromoform	10.000	9.246	7.5	79	-0.02
74	T,M	trans-1,4-Dichloro-2-butene	10.000	9.192	8.1	80	0.00
75	T,M	1,1,2,2-Tetrachloroethane	10.000	11.153	-11.5	96	0.00
76	S	4-Bromofluorobenzene	10.000	9.356	6.4	82	0.00
77	T,M	1,2,3-Trichloropropane	10.000	8.652	13.5	79	-0.02
78	T,M	n-Propylbenzene	10.000	9.636	3.6	84	-0.02
79	T,M	Bromobenzene	10.000	9.724	2.8	88	-0.02
80	T,M	1,3,5-Trimethylbenzene	10.000	9.021	9.8	81	0.00

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24I19\RIV396.D Vial: 2
Acq On : 19 Sep 2024 10:21 am Operator: DNguye/CLingl
Sample : CVO01H0930 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	8.843	11.6	79	-0.02
82	T,M	4-Chlorotoluene	10.000	9.437	5.6	84	-0.02
83	T,M	tert-Butylbenzene	10.000	9.170	8.3	85	-0.02
84	T,M	1,2,4-Trimethylbenzene	10.000	9.277	7.2	81	0.00
85	T,M	sec-Butylbenzene	10.000	9.701	3.0	84	0.00
86	T,M	p-Isopropyltoluene	10.000	9.008	9.9	78	0.00
87	T,M	1,3-Dichlorobenzene	10.000	9.323	6.8	83	-0.02
88	T,M	1,2,3-Trimethylbenzene	10.000	9.261	7.4	79	-0.02
89	T,M	1,4-Dichlorobenzene	10.000	9.345	6.5	83	0.00
90	T,M	n-Butylbenzene	10.000	9.160	8.4	78	-0.02
91	T,M	1,2-Dichlorobenzene	10.000	9.421	5.8	82	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.647	-6.5	86	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	9.849	1.5	86	0.00
94	T,M	Hexachlorobutadiene	10.000	8.523	14.8	73	-0.02
95	T,M	Naphthalene	10.000	9.561	4.4	81	-0.02
96	T,M	1,2,3-Trichlorobenzene	10.000	10.244	-2.4	88	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIV396.D Vial: 2
Acq On : 19 Sep 2024 10:21 am Operator: DNguye/CLingl
Sample : CVO01H0930 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	89	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.274	16.7	64	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.264	-10.5	91	0.01
6	C,T,M	Vinyl chloride	0.210	0.222	-5.7	82	0.01
7	T,M	Bromomethane	0.186	0.158	15.1	73	0.02
8	T,M	Chloroethane	0.163	0.168	-3.1	89	-0.03
9	T,M	Dichlorofluoromethane	0.360	0.411	-14.2	100	0.02
10	T,M	Trichlorofluoromethane	0.478	0.318	33.5#	51	0.15
11	T,M	Acrolein	0.010	0.009	10.0	82	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.172	12.2	75	0.00
13	T,M	Acetone	0.048	0.042	12.5	83	-0.01
14	C,T,M	1,1-Dichloroethene	0.484	0.419	13.4	75	0.00
15	T,M	tert-Butyl alcohol	0.013	0.012	7.7	76	0.00
16	T,M	Iodomethane	0.437	0.375	14.2	72	-0.01
17	T,M	Methyl acetate	0.103	0.109	-5.8	94	0.00
18	T,M	Methylene chloride	0.336	0.377	-12.2	101	-0.02
19	T,M	Carbon disulfide	0.838	0.853	-1.8	85	0.00
20	T,M	Acrylonitrile	0.040	0.049	-22.5#	111	0.00
21	T,M	tert-Butyl methyl ether (MT	0.550	0.554	-0.7	86	-0.02
22	T,M	trans-1,2-Dichloroethene	0.441	0.417	5.4	81	0.00
23	T,M	Isopropyl ether (DIPE)	0.880	1.115	-26.7#	111	0.00
24	T,M	Vinyl acetate	0.321	0.247	23.1#	65	0.00
25	P,T,M	1,1-Dichloroethane	0.540	0.591	-9.4	97	0.00
26	T,M	2-Butanol	0.000	0.009	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.882	-8.5	93	-0.02
28	T,M	2-Butanone	0.066	0.072	-9.1	100	-0.02
29	T,M	2,2-Dichloropropane	0.538	0.499	7.2	79	-0.02
30	T,M	cis-1,2-Dichloroethene	0.340	0.345	-1.5	88	-0.02
31	C,T,M	Chloroform	0.608	0.577	5.1	82	-0.02
32	T,M	Bromochloromethane	0.206	0.234	-13.6	99	0.00
33	T,M	Tetrahydrofuran	0.037	0.035	5.4	94	0.01
34	S	Dibromofluoromethane	0.304	0.290	4.6	78	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.513	14.5	71	0.00
36	T,M	Cyclohexane	0.432	0.460	-6.5	90	-0.02
37	T,M	2,2,4-Trimethylpentane	0.000	0.024	0.0	0#	-0.03
38	T,M	1,1-Dichloropropene	0.164	0.138	15.9	74	0.00
39	T,M	Carbon tetrachloride	0.499	0.375	24.8#	62	-0.02
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.619	-3.5	89	-0.02
41	S	1,2-Dichloroethane-d4	0.270	0.236	12.6	70	-0.02

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24I19\RIV396.D Vial: 2
Acq On : 19 Sep 2024 10:21 am Operator: DNguye/CLingl
Sample : CVO01H0930 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	1.156	-5.0	89	-0.02
43	T,M	1,2-Dichloroethane	0.344	0.306	11.0	71	0.00
44	T,M	Trichloroethene	0.350	0.301	14.0	74	0.00
45	T,M	Methylcyclohexane	0.482	0.522	-8.3	91	-0.02
46	C,T,M	1,2-Dichloropropane	0.251	0.300	-19.5	103	-0.02
47	T,M	Bromodichloromethane	0.439	0.413	5.9	83	-0.02
48	T,M	1,4-Dioxane	0.001	0.001	0.0	75	0.01
49	T,M	Dibromomethane	0.140	0.127	9.3	78	-0.02
50	T,M	2-Chloroethyl vinyl ether	0.079	0.115	-45.6#	133	-0.02
51	T,M	4-Methyl-2-pentanone	0.150	0.201	-34.0#	109	-0.01
52	T,M	cis-1,3-Dichloropropene	0.444	0.465	-4.7	88	-0.02
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	82	-0.02
54	S	Toluene-d8	1.222	1.291	-5.6	81	-0.02
55	C,T,M	Toluene	1.498	1.575	-5.1	82	0.00
56	T,M	Ethyl methacrylate	0.253	0.299	-18.2	91	-0.02
57	T,M	trans-1,3-Dichloropropene	0.435	0.457	-5.1	80	0.00
58	T,M	1,1,2-Trichloroethane	0.219	0.246	-12.3	91	-0.02
59	T,M	2-Hexanone	0.111	0.145	-30.6#	97	0.00
60	T,M	1,3-Dichloropropane	0.391	0.440	-12.5	90	-0.02
61	T,M	Tetrachloroethene	0.340	0.301	11.5	74	-0.02
62	T,M	Dibromochloromethane	0.290	0.284	2.1	77	-0.02
63	T,M	1,2-Dibromoethane	0.221	0.219	0.9	81	0.00
64	T,M	1-Chlorohexane	0.695	0.655	5.8	78	-0.02
65	P,M	Chlorobenzene	1.030	1.049	-1.8	81	0.00
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.363	-5.5	81	0.00
67	C,T,M	Ethylbenzene	1.876	1.894	-1.0	78	-0.02
68	T,M	m-Xylene & p-Xylene	1.481	1.390	6.1	75	-0.02
69	T,M	o-Xylene	1.428	1.469	-2.9	78	0.00
70	T,M	Styrene	1.045	1.177	-12.6	88	-0.02
71	T,M	Isopropylbenzene	1.956	1.951	0.3	78	0.00
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	88	-0.02
73	P,T,M	Bromoform	0.367	0.340	7.4	79	-0.02
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.205	8.1	80	0.00
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.666	-11.6	96	0.00
76	S	4-Bromofluorobenzene	1.269	1.187	6.5	82	0.00
77	T,M	1,2,3-Trichloropropane	0.220	0.190	13.6	79	-0.02
78	T,M	n-Propylbenzene	6.357	6.125	3.6	84	-0.02
79	T,M	Bromobenzene	0.963	0.936	2.8	88	-0.02
80	T,M	1,3,5-Trimethylbenzene	4.198	3.787	9.8	81	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIV396.D Vial: 2
Acq On : 19 Sep 2024 10:21 am Operator: DNguye/CLingl
Sample : CVO01H0930 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	3.690	11.6	79	-0.02
82	T,M	4-Chlorotoluene	3.565	3.364	5.6	84	-0.02
83	T,M	tert-Butylbenzene	0.928	0.851	8.3	85	-0.02
84	T,M	1,2,4-Trimethylbenzene	4.010	3.720	7.2	81	0.00
85	T,M	sec-Butylbenzene	5.662	5.493	3.0	84	0.00
86	T,M	p-Isopropyltoluene	4.820	4.342	9.9	78	0.00
87	T,M	1,3-Dichlorobenzene	1.994	1.859	6.8	83	-0.02
88	T,M	1,2,3-Trimethylbenzene	3.890	3.603	7.4	79	-0.02
89	T,M	1,4-Dichlorobenzene	1.928	1.802	6.5	83	0.00
90	T,M	n-Butylbenzene	4.412	4.042	8.4	78	-0.02
91	T,M	1,2-Dichlorobenzene	1.642	1.547	5.8	82	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.098	-5.4	86	0.00
93	T,M	1,2,4-Trichlorobenzene	1.116	1.099	1.5	86	0.00
94	T,M	Hexachlorobutadiene	0.732	0.624	14.8	73	-0.02
95	T,M	Naphthalene	1.591	1.521	4.4	81	-0.02
96	T,M	1,2,3-Trichlorobenzene	0.853	0.873	-2.3	88	0.00

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIV396.D Vial: 2
Acq On : 19 Sep 2024 10:21 am Operator: DNguye/CLingl
Sample : CVO01H0930 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 10:43 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	851860	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	680800	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	281026	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	246654	9.52	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.20%			
41) 1,2-Dichloroethane-d4	7.97	65	201145	8.73	ug/l	-0.02
Spiked Amount 10.000			Recovery = 87.30%			
54) Toluene-d8	11.02	98	878944	10.56	ug/l	-0.02
Spiked Amount 10.000			Recovery = 105.60%			
76) 4-Bromofluorobenzene	16.01	95	333594	9.36	ug/l	0.00
Spiked Amount 10.000			Recovery = 93.60%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	233479	8.33	ug/l	99
5) Chloromethane	2.55	50	225219	11.08	ug/l	99
6) Vinyl chloride	2.69	62	189246	10.56	ug/l	99
7) Bromomethane	3.23	94	134677	8.48	ug/l	99
8) Chloroethane	3.24	64	142973	10.27	ug/l	92
9) Dichlorofluoromethane	3.36	67	350020	11.40	ug/l	97
10) Trichlorofluoromethane	3.63	101	270591	6.64	ug/l	98
11) Acrolein	4.01	56	37846	44.09	ug/l	75
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	146598	8.79	ug/l	97
13) Acetone	4.09	43	179232	46.74	ug/l	90
14) 1,1-Dichloroethene	4.25	61	357298	8.67	ug/l	72
15) tert-Butyl alcohol	4.37	59	254089	221.68	ug/l	97
16) Iodomethane	4.65	142	319054	8.56	ug/l	86
17) Methyl acetate	4.68	43	92688	10.52	ug/l	96
18) Methylene chloride	4.87	49	321396	11.22	ug/l	96
19) Carbon disulfide	4.90	76	726890	10.19	ug/l	99
20) Acrylonitrile	5.05	53	208967	61.72	ug/l	97
21) tert-Butyl methyl ether (M	5.08	73	472010	10.07	ug/l	95
22) trans-1,2-Dichloroethene	5.27	61	354928	9.45	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	949757	12.67	ug/l	93
24) Vinyl acetate	5.85	43	210145	7.68	ug/l	99
25) 1,1-Dichloroethane	5.85	63	503756	10.95	ug/l	98
27) tert-Butyl ethyl ether (ET	6.25	59	751038	10.84	ug/l	99
28) 2-Butanone	6.43	43	305744	54.51	ug/l	98
29) 2,2-Dichloropropane	6.63	77	424836	9.26	ug/l	97
30) cis-1,2-Dichloroethene	6.69	96	293803	10.15	ug/l	99
31) Chloroform	6.92	83	491452	9.49	ug/l	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I19\RIV396.D Vial: 2
Acq On : 19 Sep 2024 10:21 am Operator: DNguye/CLingl
Sample : CVO01H0930 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 10:43 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	198933	11.31	ug/l	83
33)	Tetrahydrofuran	7.23	42	30139	9.63	ug/l	95
35)	1,1,1-Trichloroethane	7.51	97	436787	8.54	ug/l	97
36)	Cyclohexane	7.52	84	391533	10.64	ug/l	100
38)	1,1-Dichloropropene	7.73	110	117852	8.41	ug/l	99
39)	Carbon tetrachloride	7.88	119	319762	7.52	ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	527561	10.36	ug/l	97
42)	Benzene	8.13	78	985060	10.50	ug/l	100
43)	1,2-Dichloroethane	8.11	62	260387	8.88	ug/l	98
44)	Trichloroethene	9.08	130	256811	8.61	ug/l	95
45)	Methylcyclohexane	9.17	83	445078	10.84	ug/l	97
46)	1,2-Dichloropropane	9.34	63	255962	11.95	ug/l	79
47)	Bromodichloromethane	9.73	83	351766	9.41	ug/l	98
48)	1,4-Dioxane	9.79	88	18364	173.24	ug/l	90
49)	Dibromomethane	9.82	93	108269	9.09	ug/l	97
50)	2-Chloroethyl vinyl ether	10.22	63	98003	14.62	ug/l	95
51)	4-Methyl-2-pentanone	10.26	43	856523	66.89	ug/l	96
52)	cis-1,3-Dichloropropene	10.62	75	395923	10.47	ug/l	99
55)	Toluene	11.17	91	1072029	10.51	ug/l	98
56)	Ethyl methacrylate	11.45	69	203393	11.82	ug/l	99
57)	trans-1,3-Dichloropropene	11.48	75	310802	10.50	ug/l	98
58)	1,1,2-Trichloroethane	11.74	97	167624	11.22	ug/l	96
59)	2-Hexanone	11.76	43	494952	60.08	ug/l	98
60)	1,3-Dichloropropane	12.19	76	299557	11.26	ug/l	100
61)	Tetrachloroethene	12.29	164	205029	8.85	ug/l	95
62)	Dibromochloromethane	12.66	129	193496	9.79	ug/l	100
63)	1,2-Dibromoethane	13.03	107	149003	9.90	ug/l	98
64)	1-Chlorohexane	13.30	91	445775	9.42	ug/l	98
65)	Chlorobenzene	13.79	112	714158	10.19	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	246954	10.55	ug/l	99
67)	Ethylbenzene	13.88	91	1289621	10.10	ug/l	99
68)	m-Xylene & p-Xylene	14.01	91	1892549	18.77	ug/l	99
69)	o-Xylene	14.84	91	1000017	10.29	ug/l	99
70)	Styrene	14.90	104	801024	11.26	ug/l	94
71)	Isopropylbenzene	15.52	105	1328262	9.97	ug/l	99
73)	Bromoform	15.55	173	95420	9.25	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.62	53	57692	9.19	ug/l	89
75)	1,1,2,2-Tetrachloroethane	15.86	83	187201	11.15	ug/l	96
77)	1,2,3-Trichloropropane	16.14	110	53445	8.65	ug/l	87
78)	n-Propylbenzene	16.29	91	1721416	9.64	ug/l	98
79)	Bromobenzene	16.38	156	263095	9.72	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I19\RIV396.D Vial: 2
Acq On : 19 Sep 2024 10:21 am Operator: DNguye/CLingl
Sample : CVO01H0930 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 10:43 2024 Quant Results File: VO01H09.RES

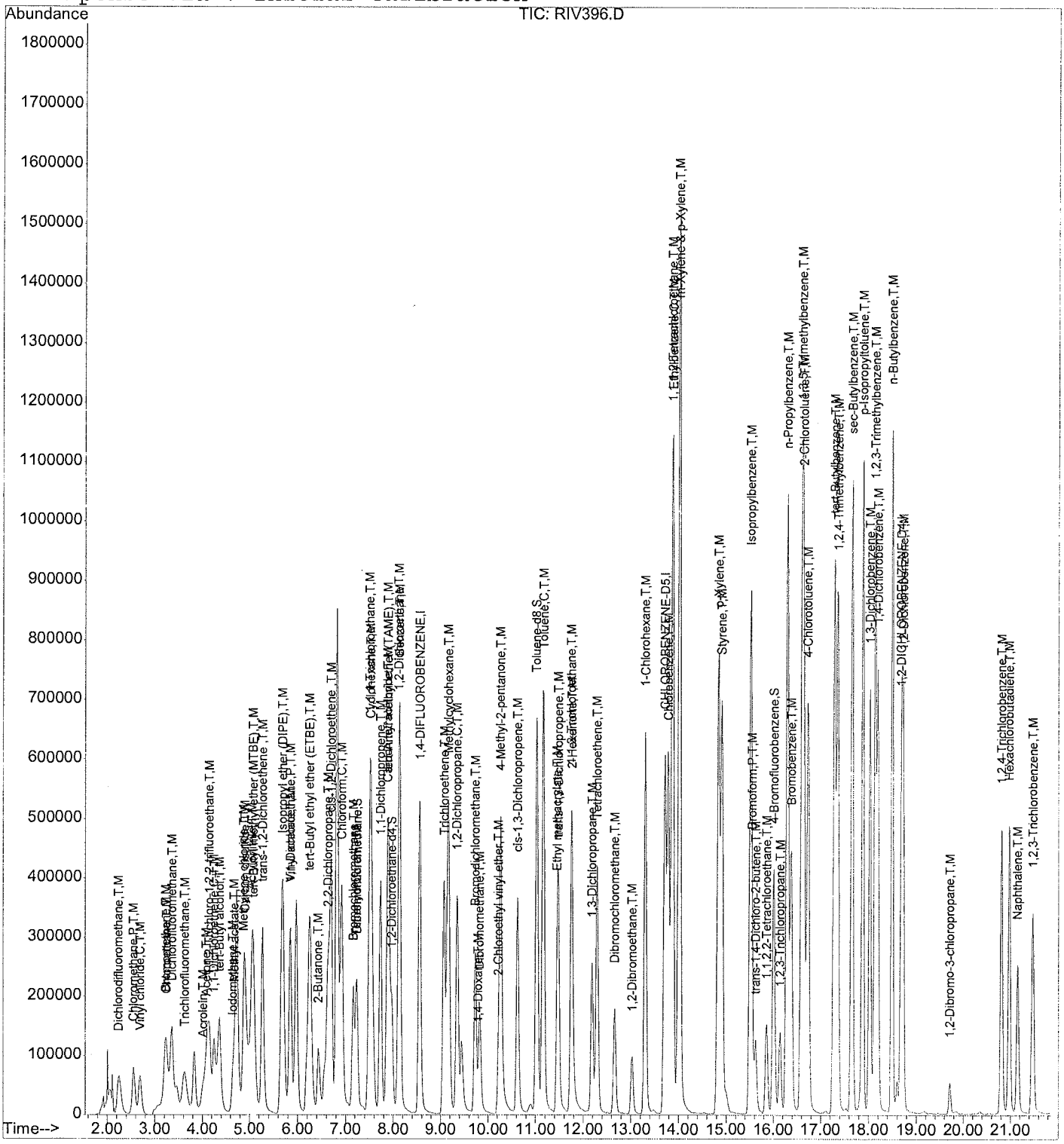
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1064179	9.02	ug/l	98
81)	2-Chlorotoluene	16.63	91	1037071	8.84	ug/l	98
82)	4-Chlorotoluene	16.72	91	945356	9.44	ug/l	96
83)	tert-Butylbenzene	17.28	134	239229	9.17	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	1045530	9.28	ug/l	98
85)	sec-Butylbenzene	17.65	105	1543650	9.70	ug/l	99
86)	p-Isopropyltoluene	17.87	119	1220096	9.01	ug/l	97
87)	1,3-Dichlorobenzene	18.02	146	522436	9.32	ug/l	96
88)	1,2,3-Trimethylbenzene	18.13	105	1012514	9.26	ug/l	98
89)	1,4-Dichlorobenzene	18.19	146	506384	9.35	ug/l	97
90)	n-Butylbenzene	18.48	91	1135827	9.16	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	434734	9.42	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.71	157	27679	10.65	ug/l	95
93)	1,2,4-Trichlorobenzene	20.81	180	308833	9.85	ug/l	96
94)	Hexachlorobutadiene	20.97	225	175436	8.52	ug/l	97
95)	Naphthalene	21.15	128	427335	9.56	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	245441	10.24	ug/l	94

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I19\RIV396.D Vial: 2
Acq On : 19 Sep 2024 10:21 am Operator: DNguye/CLing
Sample : CVO01H0930 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 19 10:43 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SDG No : 24I020
Lab File ID: RIV422 8FB Injection Date: 09/20/24
Instrument ID: 01 BF8 Injection Time: 11:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	20.580
75	30 - 60% of mass 95	42.391
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.567
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	69.389
175	5 - 9% of mass 174	5.266(7.59)1
176	95 - 101% % of mass 174	67.174(96.81)1
177	5 - 9% % of mass 176	4.176(6.22)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CV001H0931	RIV423	09/20/24	12:12
2	LCD3W	V001I16C	RIV425	09/20/24	13:12
3	MBLK3W	V001I168	RIV427	09/20/24	14:12
4	LCS3W	V001I16X	RIV428	09/20/24	14:42
5	TB01-GW090624	24I020-19	RIV429	09/20/24	15:12
6	MW38S-GW090624	24I020-16	RIV430	09/20/24	15:42
7	MW08B-GW090624	24I020-13N	RIV434	09/20/24	17:43
8	MW34D-GW090624	24I020-14	RIV435	09/20/24	18:13
9	MW34A-GW090624	24I020-15	RIV436	09/20/24	18:43
10	MW38D-GW090624	24I020-17	RIV437	09/20/24	19:13
11	MW38S-GW090624MS	24I020-16M	RIV438	09/20/24	19:42
12	MW38S-GW090624MSD	24I020-16S	RIV439	09/20/24	20:12

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RHV134
Instrument ID: 01

Project: VA SALT LAKE CITY
SDG No: 24I020
Date Analyzed: 08/09/24
Time Analyzed: 20:17

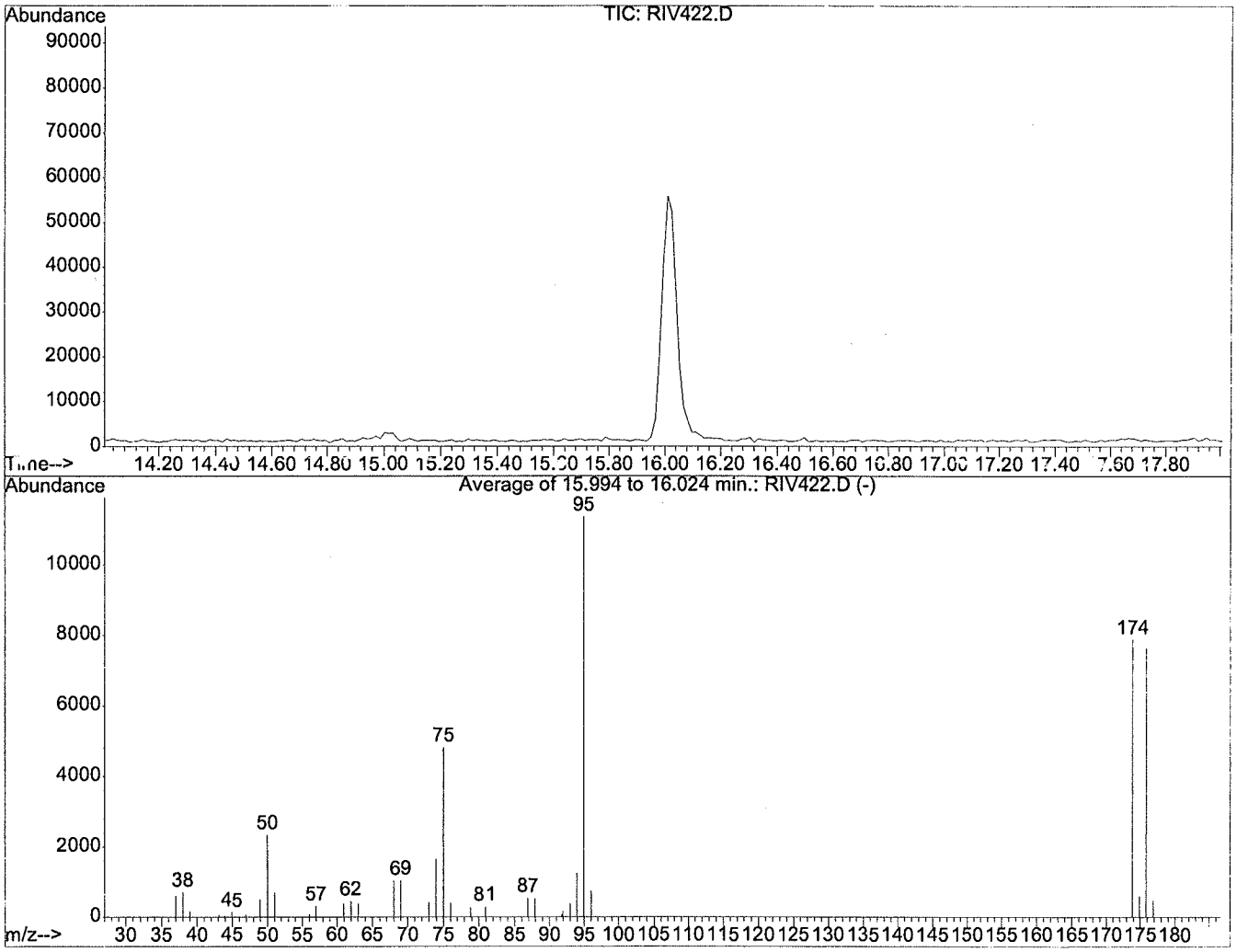
	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	962079	8.56	831588	13.73	320498	18.69
	UPPER LIMIT	1924158	8.73	1663176	13.90	640996	18.86
	LOWER LIMIT	481040	8.39	415794	13.56	160249	18.52
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	780400	8.56	616452	13.71	236056	18.69
2	LCD3W	820600	8.56	623961	13.71	233867	18.68
3	MBLK3W	844583	8.56	660877	13.71	243874	18.69
4	LCS3W	837261	8.56	637053	13.71	237720	18.67
5	TB01-GW090624	858839	8.56	660843	13.71	257182	18.69
6	MW38S-GW090624	830193	8.56	666682	13.71	250961	18.69
7	MW08B-GW090624	774820	8.56	612518	13.71	231825	18.69
8	MW34D-GW090624	764590	8.56	598755	13.71	227166	18.69
9	MW34A-GW090624	746198	8.56	593966	13.71	224928	18.69
10	MW38D-GW090624	737689	8.56	595230	13.71	229846	18.69
11	MW38S-GW090624MS	689978	8.56	566525	13.71	229880	18.69
12	MW38S-GW090624MSD	690339	8.56	556749	13.71	222732	18.69

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

BFB

Data File : D:\HPCHEM\1\DATA\24I20\RIV422.D
Acq On : 20 Sep 2024 11:33 am
Sample : BFB01I16
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye/CLi
Inst : 01
Multiplr: 1.00



AutoFind: Scans 978, 979, 980; Background Corrected with Scan 972

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	2341	PASS
75	95	30	60	42.4	4822	PASS
95	95	100	100	100.0	11375	PASS
96	95	5	9	6.6	747	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	69.4	7893	PASS
175	174	5	9	7.6	599	PASS
176	174	95	101	96.8	7641	PASS
177	176	5	9	6.2	475	PASS

RIV422.D VO01H09.M Tue Oct 01 10:42:06 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I20\RIV423.D Vial: 2
Acq On : 20 Sep 2024 12:12 pm Operator: DNguye/CLingl
Sample : CVO01H0931 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	81	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	8.160	18.4	57	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	11.566	-15.7	87	0.02
6	C,T,M	Vinyl chloride	10.000	11.485	-14.8	82	0.02
7	T,M	Bromomethane	10.000	9.265	7.3	73	0.02
8	T,M	Chloroethane	10.000	11.000	-10.0	87	0.02
9	T,M	Dichlorofluoromethane	10.000	12.062	-20.6#	97	0.02
10	T,M	Trichlorofluoromethane	10.000	6.851	31.5#	49	0.13
11	T,M	Acrolein	50.000	50.967	-1.9	86	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.560	4.4	75	0.00
13	T,M	Acetone	50.000	51.023	-2.0	83	-0.01
14	C,T,M	1,1-Dichloroethene	10.000	8.792	12.1	70	0.00
15	T,M	tert-Butyl alcohol	250.000	242.705	2.9	76	0.00
16	T,M	Iodomethane	10.000	8.953	10.5	69	0.00
17	T,M	Methyl acetate	10.000	12.638	-26.4#	104	0.00
18	T,M	Methylene chloride	10.000	11.637	-16.4	96	0.00
19	T,M	Carbon disulfide	10.000	10.740	-7.4	82	0.00
20	T,M	Acrylonitrile	50.000	71.165	-42.3#	118	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	11.073	-10.7	87	-0.02
22	T,M	trans-1,2-Dichloroethene	10.000	9.721	2.8	77	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	13.755	-37.6#	110	0.00
24	T,M	Vinyl acetate	10.000	8.266	17.3	64	0.00
25	P,T,M	1,1-Dichloroethane	10.000	11.356	-13.6	92	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	11.590	-15.9	91	-0.02
28	T,M	2-Butanone	50.000	62.874	-25.7#	106	-0.02
29	T,M	2,2-Dichloropropane	10.000	9.165	8.4	71	-0.02
30	T,M	cis-1,2-Dichloroethene	10.000	10.834	-8.3	86	-0.02
31	C,T,M	Chloroform	10.000	9.671	3.3	77	-0.02
32	T,M	Bromochloromethane	10.000	12.143	-21.4#	97	0.00
33	T,M	Tetrahydrofuran	10.000	10.333	-3.3	93	0.01
34	S	Dibromofluoromethane	10.000	9.442	5.6	70	0.00
35	T,M	1,1,1-Trichloroethane	10.000	8.403	16.0	64	0.00
36	T,M	Cyclohexane	10.000	12.120	-21.2#	94	-0.02
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.03
38	T,M	1,1-Dichloropropene	10.000	8.871	11.3	72	0.00
39	T,M	Carbon tetrachloride	10.000	7.592	24.1#	57	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	11.609	-16.1	91	-0.02
41	S	1,2-Dichloroethane-d4	10.000	8.555	14.5	63	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I20\RIV423.D Vial: 2
Acq On : 20 Sep 2024 12:12 pm Operator: DNguye/CLingl
Sample : CVO01H0931 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	10.945	-9.5	85	-0.02
43	T,M	1,2-Dichloroethane	10.000	8.746	12.5	64	0.00
44	T,M	Trichloroethene	10.000	9.178	8.2	73	0.00
45	T,M	Methylcyclohexane	10.000	12.491	-24.9#	96	-0.01
46	C,T,M	1,2-Dichloropropane	10.000	12.884	-28.8#	101	0.00
47	T,M	Bromodichloromethane	10.000	9.640	3.6	78	-0.01
48	T,M	1,4-Dioxane	200.000	177.910	11.0	71	0.01
49	T,M	Dibromomethane	10.000	9.774	2.3	77	-0.01
50	T,M	2-Chloroethyl vinyl ether	10.000	16.011	-60.1#	133	-0.02
51	T,M	4-Methyl-2-pentanone	50.000	74.249	-48.5#	110	-0.01
52	T,M	cis-1,3-Dichloropropene	10.000	10.859	-8.6	83	-0.02
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	74	-0.02
54	S	Toluene-d8	10.000	10.711	-7.1	74	-0.02
55	C,T,M	Toluene	10.000	10.883	-8.8	77	0.00
56	T,M	Ethyl methacrylate	10.000	13.313	-33.1#	93	-0.02
57	T,M	trans-1,3-Dichloropropene	10.000	10.566	-5.7	73	0.00
58	T,M	1,1,2-Trichloroethane	10.000	12.157	-21.6#	89	-0.02
59	T,M	2-Hexanone	50.000	69.355	-38.7#	102	0.00
60	T,M	1,3-Dichloropropane	10.000	11.746	-17.5	85	-0.02
61	T,M	Tetrachloroethene	10.000	9.115	8.8	69	-0.02
62	T,M	Dibromochloromethane	10.000	10.527	-5.3	75	-0.02
63	T,M	1,2-Dibromoethane	10.000	10.602	-6.0	78	0.00
64	T,M	1-Chlorohexane	10.000	9.767	2.3	73	-0.02
65	P,M	Chlorobenzene	10.000	10.711	-7.1	77	0.00
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.996	-10.0	77	0.00
67	C,T,M	Ethylbenzene	10.000	10.320	-3.2	72	-0.02
68	T,M	m-Xylene & p-Xylene	20.000	19.125	4.4	69	-0.02
69	T,M	o-Xylene	10.000	10.415	-4.1	72	0.00
70	T,M	Styrene	10.000	11.544	-15.4	81	0.00
71	T,M	Isopropylbenzene	10.000	10.070	-0.7	71	0.00
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	74	0.00
73	P,T,M	Bromoform	10.000	10.348	-3.5	74	0.00
74	T,M	trans-1,4-Dichloro-2-butene	10.000	10.458	-4.6	77	0.00
75	T,M	1,1,2,2-Tetrachloroethane	10.000	12.574	-25.7#	91	0.00
76	S	4-Bromofluorobenzene	10.000	9.508	4.9	70	0.00
77	T,M	1,2,3-Trichloropropane	10.000	9.965	0.4	77	-0.02
78	T,M	n-Propylbenzene	10.000	9.640	3.6	71	-0.02
79	T,M	Bromobenzene	10.000	9.814	1.9	74	-0.02
80	T,M	1,3,5-Trimethylbenzene	10.000	9.266	7.3	70	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I20\RIV423.D Vial: 2
Acq On : 20 Sep 2024 12:12 pm Operator: DNguye/CLingl
Sample : CVO01H0931 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	9.002	10.0	68	-0.02
82	T,M	4-Chlorotoluene	10.000	9.874	1.3	73	0.00
83	T,M	tert-Butylbenzene	10.000	9.515	4.8	74	-0.02
84	T,M	1,2,4-Trimethylbenzene	10.000	9.323	6.8	68	0.00
85	T,M	sec-Butylbenzene	10.000	9.940	0.6	72	0.00
86	T,M	p-Isopropyltoluene	10.000	9.156	8.4	67	0.00
87	T,M	1,3-Dichlorobenzene	10.000	9.788	2.1	73	-0.02
88	T,M	1,2,3-Trimethylbenzene	10.000	9.752	2.5	70	-0.02
89	T,M	1,4-Dichlorobenzene	10.000	9.779	2.2	73	0.00
90	T,M	n-Butylbenzene	10.000	9.377	6.2	67	0.00
91	T,M	1,2-Dichlorobenzene	10.000	10.126	-1.3	74	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.764	-7.6	73	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	10.402	-4.0	76	0.00
94	T,M	Hexachlorobutadiene	10.000	8.963	10.4	65	0.00
95	T,M	Naphthalene	10.000	9.554	4.5	68	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	10.337	-3.4	74	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I20\RIV423.D Vial: 2
Acq On : 20 Sep 2024 12:12 pm Operator: DNguye/CLingl
Sample : CVO01H0931 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	81	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.269	18.2	57	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.276	-15.5	87	0.02
6	C,T,M	Vinyl chloride	0.210	0.242	-15.2	82	0.02
7	T,M	Bromomethane	0.186	0.173	7.0	73	0.02
8	T,M	Chloroethane	0.163	0.180	-10.4	87	0.02
9	T,M	Dichlorofluoromethane	0.360	0.435	-20.8#	97	0.02
10	T,M	Trichlorofluoromethane	0.478	0.328	31.4#	49#	0.13
11	T,M	Acrolein	0.010	0.010	0.0	86	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.187	4.6	75	0.00
13	T,M	Acetone	0.048	0.046	4.2	83	-0.01
14	C,T,M	1,1-Dichloroethene	0.484	0.425	12.2	70	0.00
15	T,M	tert-Butyl alcohol	0.013	0.013	0.0	76	0.00
16	T,M	Iodomethane	0.437	0.392	10.3	69	0.00
17	T,M	Methyl acetate	0.103	0.131	-27.2#	104	0.00
18	T,M	Methylene chloride	0.336	0.391	-16.4	96	0.00
19	T,M	Carbon disulfide	0.838	0.900	-7.4	82	0.00
20	T,M	Acrylonitrile	0.040	0.057	-42.5#	118	0.00
21	T,M	tert-Butyl methyl ether (MT	0.550	0.609	-10.7	87	-0.02
22	T,M	trans-1,2-Dichloroethene	0.441	0.428	2.9	77	0.00
23	T,M	Isopropyl ether (DIPE)	0.880	1.210	-37.5#	110	0.00
24	T,M	Vinyl acetate	0.321	0.266	17.1	64	0.00
25	P,T,M	1,1-Dichloroethane	0.540	0.613	-13.5	92	0.00
26	T,M	2-Butanol	0.000	0.010	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.943	-16.0	91	-0.02
28	T,M	2-Butanone	0.066	0.083	-25.8#	106	-0.02
29	T,M	2,2-Dichloropropane	0.538	0.493	8.4	71	-0.02
30	T,M	cis-1,2-Dichloroethene	0.340	0.368	-8.2	86	-0.02
31	C,T,M	Chloroform	0.608	0.588	3.3	77	-0.02
32	T,M	Bromochloromethane	0.206	0.251	-21.8#	97	0.00
33	T,M	Tetrahydrofuran	0.037	0.038	-2.7	93	0.01
34	S	Dibromofluoromethane	0.304	0.287	5.6	70	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.504	16.0	64	0.00
36	T,M	Cyclohexane	0.432	0.524	-21.3#	94	-0.02
37	T,M	2,2,4-Trimethylpentane	0.000	0.027	0.0	0#	-0.03
38	T,M	1,1-Dichloropropene	0.164	0.146	11.0	72	0.00
39	T,M	Carbon tetrachloride	0.499	0.379	24.0#	57	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.694	-16.1	91	-0.02
41	S	1,2-Dichloroethane-d4	0.270	0.231	14.4	63	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I20\RIV423.D Vial: 2
Acq On : 20 Sep 2024 12:12 pm Operator: DNguye/CLingl
Sample : CVO01H0931 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	1.205	-9.4	85	-0.02
43	T,M	1,2-Dichloroethane	0.344	0.301	12.5	64	0.00
44	T,M	Trichloroethene	0.350	0.322	8.0	73	0.00
45	T,M	Methylcyclohexane	0.482	0.602	-24.9#	96	-0.01
46	C,T,M	1,2-Dichloropropane	0.251	0.324	-29.1#	101	0.00
47	T,M	Bromodichloromethane	0.439	0.423	3.6	78	-0.01
48	T,M	1,4-Dioxane	0.001	0.001	0.0	71	0.01
49	T,M	Dibromomethane	0.140	0.137	2.1	77	-0.01
50	T,M	2-Chloroethyl vinyl ether	0.079	0.126	-59.5#	133	-0.02
51	T,M	4-Methyl-2-pentanone	0.150	0.223	-48.7#	110	-0.01
52	T,M	cis-1,3-Dichloropropene	0.444	0.482	-8.6	83	-0.02
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	74	-0.02
54	S	Toluene-d8	1.222	1.309	-7.1	74	-0.02
55	C,T,M	Toluene	1.498	1.631	-8.9	77	0.00
56	T,M	Ethyl methacrylate	0.253	0.336	-32.8#	93	-0.02
57	T,M	trans-1,3-Dichloropropene	0.435	0.459	-5.5	73	0.00
58	T,M	1,1,2-Trichloroethane	0.219	0.267	-21.9#	89	-0.02
59	T,M	2-Hexanone	0.111	0.169	-52.3#	102	0.00
60	T,M	1,3-Dichloropropane	0.391	0.459	-17.4	85	-0.02
61	T,M	Tetrachloroethene	0.340	0.310	8.8	69	-0.02
62	T,M	Dibromochloromethane	0.290	0.305	-5.2	75	-0.02
63	T,M	1,2-Dibromoethane	0.221	0.234	-5.9	78	0.00
64	T,M	1-Chlorohexane	0.695	0.679	2.3	73	-0.02
65	P,M	Chlorobenzene	1.030	1.103	-7.1	77	0.00
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.378	-9.9	77	0.00
67	C,T,M	Ethylbenzene	1.876	1.936	-3.2	72	-0.02
68	T,M	m-Xylene & p-Xylene	1.481	1.416	4.4	69	-0.02
69	T,M	o-Xylene	1.428	1.487	-4.1	72	0.00
70	T,M	Styrene	1.045	1.206	-15.4	81	0.00
71	T,M	Isopropylbenzene	1.956	1.970	-0.7	71	0.00
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	74	0.00
73	P,T,M	Bromoform	0.367	0.380	-3.5	74	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.234	-4.9	77	0.00
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.751	-25.8#	91	0.00
76	S	4-Bromofluorobenzene	1.269	1.206	5.0	70	0.00
77	T,M	1,2,3-Trichloropropane	0.220	0.219	0.5	77	-0.02
78	T,M	n-Propylbenzene	6.357	6.128	3.6	71	-0.02
79	T,M	Bromobenzene	0.963	0.945	1.9	74	-0.02
80	T,M	1,3,5-Trimethylbenzene	4.198	3.889	7.4	70	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I20\RIV423.D Vial: 2
Acq On : 20 Sep 2024 12:12 pm Operator: DNguye/CLingl
Sample : CVO01H0931 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	3.757	10.0	68	-0.02
82	T,M	4-Chlorotoluene	3.565	3.520	1.3	73	0.00
83	T,M	tert-Butylbenzene	0.928	0.883	4.8	74	-0.02
84	T,M	1,2,4-Trimethylbenzene	4.010	3.739	6.8	68	0.00
85	T,M	sec-Butylbenzene	5.662	5.628	0.6	72	0.00
86	T,M	p-Isopropyltoluene	4.820	4.413	8.4	67	0.00
87	T,M	1,3-Dichlorobenzene	1.994	1.952	2.1	73	-0.02
88	T,M	1,2,3-Trimethylbenzene	3.890	3.794	2.5	70	-0.02
89	T,M	1,4-Dichlorobenzene	1.928	1.886	2.2	73	0.00
90	T,M	n-Butylbenzene	4.412	4.137	6.2	67	0.00
91	T,M	1,2-Dichlorobenzene	1.642	1.663	-1.3	74	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.100	-7.5	73	0.00
93	T,M	1,2,4-Trichlorobenzene	1.116	1.161	-4.0	76	0.00
94	T,M	Hexachlorobutadiene	0.732	0.657	10.2	65	0.00
95	T,M	Naphthalene	1.591	1.520	4.5	68	0.00
96	T,M	1,2,3-Trichlorobenzene	0.853	0.881	-3.3	74	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV423.D Vial: 2
Acq On : 20 Sep 2024 12:12 pm Operator: DNguye/CLingl
Sample : CVO01H0931 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 20 12:34 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	780400	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	616452	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	236056	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	224056	9.44	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.40%		
41) 1,2-Dichloroethane-d4	7.97	65	180496	8.56	ug/l	-0.02
Spiked Amount 10.000			Recovery =	85.60%		
54) Toluene-d8	11.02	98	807058	10.71	ug/l	-0.02
Spiked Amount 10.000			Recovery =	107.10%		
76) 4-Bromofluorobenzene	16.01	95	284764	9.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.10%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	209553	8.16	ug/l	96
5) Chloromethane	2.56	50	215315	11.57	ug/l	100
6) Vinyl chloride	2.70	62	188587	11.48	ug/l	99
7) Bromomethane	3.23	94	134735	9.26	ug/l	96
8) Chloroethane	3.29	64	140236	11.00	ug/l	91
9) Dichlorofluoromethane	3.36	67	339144	12.06	ug/l	95
10) Trichlorofluoromethane	3.61	101	255721	6.85	ug/l	97
11) Acrolein	4.01	56	40083	50.97	ug/l	75
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	146140	9.56	ug/l	96
13) Acetone	4.09	43	178451	51.02	ug/l	87
14) 1,1-Dichloroethene	4.25	61	331999	8.79	ug/l	71
15) tert-Butyl alcohol	4.37	59	254848	242.71	ug/l	95
16) Iodomethane	4.66	142	305671	8.95	ug/l	83
17) Methyl acetate	4.68	43	101988	12.64	ug/l	98
18) Methylene chloride	4.89	49	305432	11.64	ug/l	98
19) Carbon disulfide	4.90	76	702004	10.74	ug/l	100
20) Acrylonitrile	5.05	53	220722	71.17	ug/l	95
21) tert-Butyl methyl ether (M	5.08	73	475498	11.07	ug/l	93
22) trans-1,2-Dichloroethene	5.27	61	334327	9.72	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	944382	13.76	ug/l	94
24) Vinyl acetate	5.85	43	207268	8.27	ug/l	99
25) 1,1-Dichloroethane	5.85	63	478611	11.36	ug/l	98
27) tert-Butyl ethyl ether (ET	6.23	59	735699	11.59	ug/l	98
28) 2-Butanone	6.43	43	323045	62.87	ug/l	98
29) 2,2-Dichloropropane	6.63	77	385031	9.16	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	287375	10.83	ug/l	97
31) Chloroform	6.92	83	459014	9.67	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV423.D Vial: 2
Acq On : 20 Sep 2024 12:12 pm Operator: DNguye/CLingl
Sample : CVO01H0931 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 20 12:34 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	195648	12.14 ug/l	84
33)	Tetrahydrofuran	7.23	42	29642	10.33 ug/l	97
35)	1,1,1-Trichloroethane	7.51	97	393553	8.40 ug/l	98
36)	Cyclohexane	7.52	84	408757	12.12 ug/l	98
38)	1,1-Dichloropropene	7.73	110	113815	8.87 ug/l	99
39)	Carbon tetrachloride	7.89	119	295541	7.59 ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	541652	11.61 ug/l	96
42)	Benzene	8.13	78	940461	10.94 ug/l	99
43)	1,2-Dichloroethane	8.12	62	235030	8.75 ug/l	98
44)	Trichloroethene	9.08	130	250925	9.18 ug/l	97
45)	Methylcyclohexane	9.17	83	469894	12.49 ug/l	97
46)	1,2-Dichloropropane	9.36	63	252754	12.88 ug/l	76
47)	Bromodichloromethane	9.73	83	330007	9.64 ug/l	97
48)	1,4-Dioxane	9.79	88	17277	177.91 ug/l	86
49)	Dibromomethane	9.82	93	106710	9.77 ug/l	93
50)	2-Chloroethyl vinyl ether	10.22	63	98325	16.01 ug/l	93
51)	4-Methyl-2-pentanone	10.26	43	871000	74.25 ug/l	97
52)	cis-1,3-Dichloropropene	10.62	75	376150	10.86 ug/l	100
55)	Toluene	11.17	91	1005269	10.88 ug/l	98
56)	Ethyl methacrylate	11.45	69	207373	13.31 ug/l	96
57)	trans-1,3-Dichloropropene	11.48	75	283077	10.57 ug/l	96
58)	1,1,2-Trichloroethane	11.74	97	164488	12.16 ug/l	97
59)	2-Hexanone	11.76	43	520315	69.36 ug/l	100
60)	1,3-Dichloropropane	12.19	76	283029	11.75 ug/l	98
61)	Tetrachloroethene	12.29	164	191233	9.11 ug/l	94
62)	Dibromochloromethane	12.66	129	188326	10.53 ug/l	99
63)	1,2-Dibromoethane	13.03	107	144422	10.60 ug/l	99
64)	1-Chlorohexane	13.30	91	418406	9.77 ug/l	99
65)	Chlorobenzene	13.79	112	680000	10.71 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	233146	11.00 ug/l	99
67)	Ethylbenzene	13.88	91	1193321	10.32 ug/l	99
68)	m-Xylene & p-Xylene	14.01	91	1746090	19.12 ug/l	98
69)	o-Xylene	14.84	91	916602	10.41 ug/l	99
70)	Styrene	14.91	104	743604	11.54 ug/l	94
71)	Isopropylbenzene	15.52	105	1214241	10.07 ug/l	99
73)	Bromoform	15.56	173	89706	10.35 ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.62	53	55135	10.46 ug/l	81
75)	1,1,2,2-Tetrachloroethane	15.86	83	177275	12.57 ug/l	97
77)	1,2,3-Trichloropropane	16.14	110	51703	9.96 ug/l	87
78)	n-Propylbenzene	16.29	91	1446524	9.64 ug/l	99
79)	Bromobenzene	16.38	156	223034	9.81 ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIV423.D Vial: 2
Acq On : 20 Sep 2024 12:12 pm Operator: DNguye/CLingl
Sample : CVO01H0931 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 20 12:34 2024 Quant Results File: VO01H09.RES

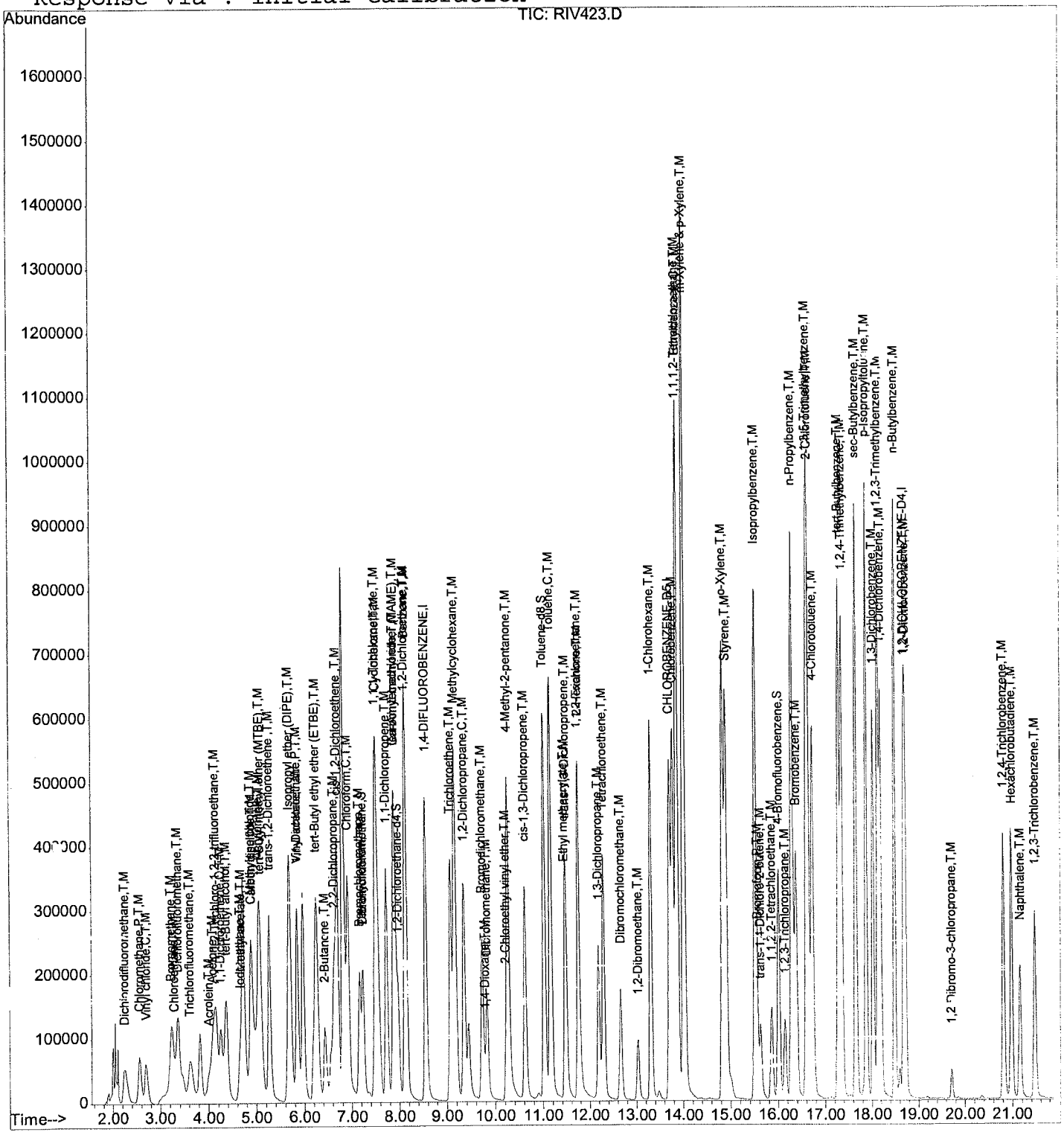
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	918087	9.27 ug/l	97
81)	2-Chlorotoluene	16.63	91	886780	9.00 ug/l	93
82)	4-Chlorotoluene	16.73	91	830832	9.87 ug/l	99
83)	tert-Butylbenzene	17.28	134	208504	9.52 ug/l	97
84)	1,2,4-Trimethylbenzene	17.36	105	882564	9.32 ug/l	98
85)	sec-Butylbenzene	17.65	105	1328613	9.94 ug/l	99
86)	p-Isopropyltoluene	17.88	119	1041639	9.16 ug/l	97
87)	1,3-Dichlorobenzene	18.02	146	460705	9.79 ug/l	96
88)	1,2,3-Trimethylbenzene	18.13	105	895583	9.75 ug/l	98
89)	1,4-Dichlorobenzene	18.19	146	445103	9.79 ug/l	96
90)	n-Butylbenzene	18.50	91	976662	9.38 ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	392491	10.13 ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.71	157	23505	10.76 ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	273988	10.40 ug/l	97
94)	Hexachlorobutadiene	20.98	225	154981	8.96 ug/l	96
95)	Naphthalene	21.16	128	358696	9.55 ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	208028	10.34 ug/l	96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I20\RIV423.D Vial: 2
Acq On : 20 Sep 2024 12:12 pm Operator: DNguye/CLing
Sample : CVO01H0931 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 20 12:34 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



ANALYTICAL LOGS

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG for VOLATILES

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

R Vary ED amount

Book #:	AE2-01
Instrument No.:	E2
Analytical Sequence:	24I04
Method File:	VOE2T04
Analytical Batch:	VOE2I04 & 46 CL 10/3/24

INITIAL CALIBRATION REFERENCE			
DATE	9/4/24		
ICAL ID	VOE2I04		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2	SVI-45-25-01	R	150
DCC Gas	-27-02		150
DCC KETONE	-31-02		150
DCC 8260	-31-01		150
BFB	-01-01	1	50
IS/SURR. IS	-31-03	5	20
IS/SURR. SS	-07-02	A	250
ICV/LCS CS2	-25-02	.4	125
ICV/LCS Gas	-26-02	.4	125
ICV/LCS KETONE	-21-03	2	250
ICV/LCS 3ad 8260	-26-03	2	50
	SVI-23-85-02	2	50
Data File Folder	24I04		
	LOT #	Syringe Lot #	
pH strip		MSV-03-04-12-4	
Chlorine strip		-0215-5	
Methanol		-02-23	
$NaHSO_4$		-01-11	
Reagent Water	MSV4-23-001		
Sand			

SOP #
☑ EMAX-8260 Rev. No. 11
☑ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☑ 10-mL Purge
☐ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☐ pH <2. Outliers indicated on analytical sequence.
☐ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TOE2	

Analyzed By: DH

Date: 9/4/24

Disposed By: DH

Date Disposed: 9/5/24

Injection Log

Directory: C:\msdchem\1\DATA\24I04

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	Rig001.d	1.	BFBE2I01	T/CHK	4 Sep 2024 12:22
2	2	Rig002.d	1.	VOE2I041 0.012	0.3ppb 8260/1.5pp...	4 Sep 2024 13:12
3	3	Rig003.d	1.	VOE2I042 0.02	0.5ppb 8260/2.5pp...	4 Sep 2024 13:38
4	4	Rig004.d	1.	VOE2I043 0.04	1.0ppb 8260/5.0pp...	4 Sep 2024 14:03
5	5	Rig005.d	1.	VOE2I044 0.08	2.0ppb 8260/10ppb...	4 Sep 2024 14:28
6	6	Rig006.d	1.	VOE2I045 0.2	5.0ppb 8260/25ppb...	4 Sep 2024 14:54
7	7	Rig007.d	1.	VOE2I046 0.4	10ppb 8260/50ppb ...	4 Sep 2024 15:19
8	8	Rig008.d	1.	VOE2I047 1.2uL	20ppb 8260/100ppb...	4 Sep 2024 15:44
9	9	Rig009.d	1.	VOE2I048 2uL	50ppb 8260/250pb ...	4 Sep 2024 16:09
10	10	Rig010.d	1.	VOE2I049 4uL	100ppb 8260/500pp...	4 Sep 2024 16:34
11	11	Rig011.d	1.	VOE2I0410 8uL	200ppb 8260/1000p...	4 Sep 2024 16:59
12	12	Rig012.d	1.	RINSE		4 Sep 2024 17:25
13	13	Rig013.d	1.	RINSE		4 Sep 2024 17:50
14		Rig014.d	1.	No MS or GC data present		

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: AE2-01
Instrument No.: E2
Analytical Sequence: 24I11
Method File: ~~VOE2I11~~ E2I04 EL 10/3/24
Analytical Batch: IVOE2I04I02

SOP #	
☑	EMAX-8260 Rev. No. 11
☑	EMAX-8260C Rev. No. 1
☐	EMAX-8260SIM Rev. No. 1
☐	EMAX-M8260SIM Rev. No. 0
☐	EMAX-TCPSIM Rev. No. 2
☐	EMAX-624 Rev. No. 6
☐	EMAX-624.1 Rev. No. 1

PURGE AMOUNT	
☐	5-mL Purge
☐	10-mL Purge
☑	25-mL Purge

SAMPLE MATRIX	
☐	Soil (refer to sample weight log)
☑	Water
☐	pH <2. Outliers indicated on analytical sequence.
☐	Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐	pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE

DATE	9/4/24
ICAL ID	VOE2I04

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-45-25-01	.4	250
DCC	-27-02	.4	
DCC	-31-02	.4	
DCC	-31-01	.4	
BFB	-01-01	1	25
IS/SURR.	-33-01	5	20
ICV/LCS	-25-02	.4	50/25
ICV/LCS	-26-02	.4	
ICV/LCS	-21-02 -23-03	2 2	
ICV/LCS	SVI-23-85-02	2	
Data File Folder	24F11		

	LOT #	Syringe Lot #
pH strip		MSV-03-0412-5
Chlorine strip		-02-05-05
Methanol		-0315
$NaHSO_4$		-01-11
Reagent Water	MSV-23-001	
Sand		

ELECTRONIC DATA ARCHIVAL

Location	Date
HPCHEM_VOA/TOE2	

Analyzed By: DH
Date: 9/11/24
Disposed By: DH
Date Disposed: 9/12/24

Injection Log

Directory: C:\msdchem\1\DATA\24I11

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	Rig025.d	1.	BFBE2I04	T/CHK	11 Sep 2024 14:39
2	2	Rig026.d	1.	IVOE2I0402	10ppb 8260/50ppb ...	11 Sep 2024 15:16
3	1	Rig027.d	1.	RISE	T/CHK	11 Sep 2024 16:53
4	2	Rig028.d	1.	RISE	10mL	11 Sep 2024 20:18

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments: * Varied Amounts

* ICV (1V001H0901) not evaluated for chloroethane only - compound to be evaluated from ICV (1V001H0902)

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24H09
Method File:	V001H09
Analytical Batch:	V001H096

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☐ Water
☐ pH <2. Outliers indicated on analytical sequence.
☐ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☑ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE

DATE	8/9/24
ICAL ID	V001H09

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2	SVI-45-19-01	*	250
DCC GAS	-15-03		250
DCC 4ADD	-06-02		250
DCC 8260	-21-01		50
DCC KET	-19-02		250
BFB	-01-01	1	50
IS/SURR. IS	SVI-43-95-01	1	250
IS/SURR. SS	-45-07-02	*	250
ICV/LCS CS2	-43-79-02	1	250
ICV/LCS GAS	-45-06-01	1	250
ICV/LCS 3ADD	-43-81-03	5	50
ICV/LCS KET	-45-21-03	5	250
ICV/LCS 8260	-43-78-03	5	50
Data File Folder	24H09		

	LOT #	Syringe Lot #
pH strip	N/A	MSV-03-09-12-4
Chlorine strip		-01-12-6
Methanol		-03-23
$NaHSO_4$		-02-24
Reagent Water	RW4-23-001	
Sand		

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: [signature]
Date: 8/9/24
Disposed By: [signature]
Date Disposed: 8/10/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24H09

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RHV128.D	1.	BFB01H09	T/CHK	9 Aug 2024 08:08
2	2	RHV129.D	1.	VO01H091 0.03/0.15	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	9 Aug 2024 17:28
3	3	RHV130.D	1.	VO01H092 0.05/0.25	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	9 Aug 2024 18:14
4	4	RHV131.D	1.	VO01H093 0.1/0.5	1ppb 8260/5ppb KET-AA/25ppb TBA	9 Aug 2024 18:45
5	5	RHV132.D	1.	VO01H094 0.2/1.0	2ppb 8260/10ppb KET-AA/50ppb TBA	9 Aug 2024 19:15
6	6	RHV133.D	1.	VO01H095 0.5/2.5	5ppb 8260/25ppb KET-AA/125ppb TBA	9 Aug 2024 19:46
7	7	RHV134.D	1.	VO01H096 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	9 Aug 2024 20:17
8	8	RHV135.D	1.	VO01H097 2.0/10	20ppb 8260/100ppb KET-AA/500ppb TBA	9 Aug 2024 20:47
9	9	RHV136.D	1.	VO01H098 3.0/15	30ppb 8260/150ppb KET-AA/750ppb TBA	9 Aug 2024 21:17
10	10	RHV137.D	1.	VO01H099 5.0/25	50ppb 8260/250ppb KET-AA/1250ppb TBA	9 Aug 2024 21:47
11	11	RHV138.D	1.	VO01H0910 10/50	100ppb 8260/500ppb KET-AA/2500ppb TBA	9 Aug 2024 22:17
12	12	RHV139.D	1.	RINSE		9 Aug 2024 22:47
13	13	RHV140.D	1.	RINSE		9 Aug 2024 23:17
14	14	RHV141.D	1.	IVO01H0901 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	9 Aug 2024 23:47
15	15	RHV142.D	1.	RINSE		10 Aug 2024 00:17
16	16	RHV143.D	1.	LOD1	0.2ppb 8260/4.0ppb KET-AA/5.0ppb TBA	10 Aug 2024 00:48
17	17	RHV144.D	1.	LOD2	0.3ppb 8260/4.0ppb KET-AA/5.0ppb TBA	10 Aug 2024 01:18

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: A01-076
Instrument No.: 01
Analytical Sequence: 24H13
Method File: V001H09
Analytical Batch: CV001H0901

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1

PURGE AMOUNT
☐ 5 mL Purge
☐ 10-mL Purge
☑ 25-mL Purge

SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	V001H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SV1-45-19-01	1	
DCC	-15-03	1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-19-02	5	50/250
BFB	-01-01	1	
IS/SURR.	SV1-43-78-01	5	
ICV/LCS	-43-79-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03 -45-21-03	5 5	
ICV/LCS	-43-78-03	5	
Data File Folder	24H13		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-04-12-4	
Chlorine strip	301902	↓ -6	
Methanol			
$NaHSO_4$			
Reagent Water	EW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: DM
Date: 8/13/24
Disposed By: DM
Date Disposed: 8/14/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24H13

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RHV145.D	1.	BFB01H10	T/CHK	13 Aug 2024 15:24
2	1	RHV146.D	1.	CVO01H0901	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 16:12
3	3	RHV147.D	1.	IVO01H0902 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 16:44
4	4	RHV148.D	1.	VO01H10L	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 17:17
5	5	RHV149.D	1.	RINSE	25mL	13 Aug 2024 17:49
6	6	RHV150.D	1.	VO01H10B	25mL	13 Aug 2024 18:21
7	7	RHV151.D	1.	24H006-12	25mL	13 Aug 2024 18:53
8	8	RHV152.D	1.	24H006-11	25mL	13 Aug 2024 19:25
9	9	RHV153.D	1.	24H006-10	25mL	13 Aug 2024 19:57
10	10	RHV154.D	1.	24H006-01	25mL	13 Aug 2024 20:29
11	11	RHV155.D	1.	24H006-02	25mL	13 Aug 2024 21:00
12	12	RHV156.D	1.	24H006-03	25mL	13 Aug 2024 21:31
13	13	RHV157.D	1.	24H006-04	25mL	13 Aug 2024 22:02
14	14	RHV158.D	1.	24H006-05	25mL	13 Aug 2024 22:33
15	15	RHV159.D	1.	24H006-06	25mL	13 Aug 2024 23:04
16	16	RHV160.D	1.	24H006-07	25mL	13 Aug 2024 23:35
17	17	RHV161.D	1.	24H006-08	25mL	14 Aug 2024 00:05
18	18	RHV162.D	1.	24H006-09	25mL	14 Aug 2024 00:35
19	19	RHV163.D	1.	24H006-01M	25mL	14 Aug 2024 01:06
20	20	RHV164.D	1.	24H006-01S	25mL	14 Aug 2024 01:36
21	21	RHV165.D	1.	EVO01H0901	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 02:06
22	22	RHV166.D	1.	EVO01H09011	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 02:36
23	23	RHV167.D	1.	EVO01H09012	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 03:06

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: AE2-01
Instrument No.: E2
Analytical Sequence: 24I14
Method File: VOE2I014
Analytical Batch: VOE2I0403

INITIAL CALIBRATION REFERENCE	
DATE	9/4/24
ICAL ID	VOE2I014

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVL-45-25-01	.4	250
DCC	-27-02	.4	
DCC	-31-02	.4	
DCC	-31-01	.4	
BFB	-9-01	1	50
IS/SURR.	-22-01	5	20
ICV/LCS	-52-02	.4	50/250
ICV/LCS	-26-02	.4	
ICV/LCS	-21-02	2	
ICV/LCS	SVL-23-85-02	2	
Data File Folder	24I14		

	LOT #	Syringe Lot #
pH strip	HC439975	MSV-03-0412-4
Chlorine strip	301902	↓ -13-3
Methanol		
$NaHSO_4$		
Reagent Water	RWH-23-001	
Sand		

SOP #
☑ EMAX-8260 Rev. No. 11
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TOE2	

Analyzed By: DH
Date: 9/14/24
Disposed By: DH
Date Disposed: 9/15/24

Injection Log

Directory: C:\msdchem\1\DATA\24I14

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	Rig070.d	1.	BFBE2I07	T/CHK	14 Sep 2024 15:40
2	2	Rig071.d	1.	CVOE2I0403	10ppb 8260/50ppb ...	14 Sep 2024 16:24
3	3	Rig072.d	1.	VOE2I07L	10ppb 8260/50ppb ...	14 Sep 2024 17:13
4	4	Rig073.d	1.	VOE2I07X	10ppb 8260/50ppb ...	14 Sep 2024 17:37
5	5	Rig074.d	1.	VOE2I07C	10ppb 8260/50ppb ...	14 Sep 2024 18:02
6	6	Rig075.d	1.	RINSE	10.0mL	14 Sep 2024 18:26
7	7	Rig076.d	1.	VOE2I07B	10.0mL	14 Sep 2024 18:51
8	8	Rig077.d	1.	24I055-01	10.0mL	14 Sep 2024 19:15
9	9	Rig078.d	1.	24I055-02	10.0mL	14 Sep 2024 19:40
10	10	Rig079.d	1.	24I055-03	10.0mL	14 Sep 2024 20:04
11	11	Rig080.d	1.	24I055-04	10.0mL	14 Sep 2024 20:29
12	12	Rig081.d	1.	24I055-05	10.0mL	14 Sep 2024 20:54
13	13	Rig082.d	1.	24I055-06	10.0mL	14 Sep 2024 21:19
14	14	Rig083.d	1.	24I055-07	10.0mL	14 Sep 2024 21:43
15	15	Rig084.d	1.	24H168-02N	10.0mL	14 Sep 2024 22:08
16	16	Rig085.d	1.	24H168-04N	10.0mL	14 Sep 2024 22:33
17	17	Rig086.d	1.	24I020-01	10.0mL	14 Sep 2024 22:58
18	18	Rig087.d	1.	24I020-02	10.0mL	14 Sep 2024 23:23
19	19	Rig088.d	1.	24I020-03	10.0mL	14 Sep 2024 23:47
20	20	Rig089.d	1.	24I020-04	10.0mL	15 Sep 2024 00:12
21	21	Rig090.d	1.	24I020-05	10.0mL	15 Sep 2024 00:36
22	22	Rig091.d	1.	24I020-06	10.0mL	15 Sep 2024 01:01
23	23	Rig092.d	1.	24I020-07	10.0mL	15 Sep 2024 01:25
24	24	Rig093.d	1.	24I020-08	10.0mL	15 Sep 2024 01:50
25	25	Rig094.d	1.	24I020-09	10.0mL	15 Sep 2024 02:15
26	26	Rig095.d	1.	24I020-10	10.0mL	15 Sep 2024 02:39
27	27	Rig096.d	1.	24I020-11	10.0mL	15 Sep 2024 03:04
28	28	Rig097.d	1.	24I020-12	10.0mL	15 Sep 2024 03:28
29	29	Rig098.d	1.	24I020-13	10.0mL	15 Sep 2024 03:53

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
VOLATILES

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-077
Instrument No.:	01
Analytical Sequence:	24I19
Method File:	V001H09
Analytical Batch:	CV001H0930

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	V001H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SV1-45-19-01 -15-03	1 1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-19-02	5	
BFB	-01-01	1	50/250
IS/SURR.	SV1-45-29-03	5	
ICV/LCS	-43-74-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03 -45-21-03	5 5	
ICV/LCS	-43-78-03	5	
Data File Folder	24I19		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-09-12-4	
Chlorine strip	301902	↓ -6	
Methanol			
$NaHSO_4$			
Reagent Water	RW4-23-001		
Sand			

SOP #
☑ EMAX-8260 Rev. No. 10
☑ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1

PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge

SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By:	CL/[illegible]
Date:	9/19/24
Disposed By:	CL
Date Disposed:	9/20/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24I19

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RIV395.D	1.	BFB01I15	T/CHK	19 Sep 2024 09:08
2	2	RIV396.D	1.	CVO01H0930	10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 10:21
3	3	RIV397.D	1.	VO01I15L	10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 10:50
4	4	RIV398.D	1.	VO01I15C	10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 11:21
5	5	RIV399.D	1.	RINSE	25mL	19 Sep 2024 11:51
6	6	RIV400.D	1.	VO01I15B	25mL	19 Sep 2024 12:20
7	7	RIV401.D	1.	24I067-08	25mL	19 Sep 2024 12:50
8	8	RIV402.D	1.	24I030-14	25mL	19 Sep 2024 13:21
9	9	RIV403.D	1.	24I030-12	25mL	19 Sep 2024 13:51
10	10	RIV404.D	1.	24I078-01	25mL	19 Sep 2024 14:21
11	11	RIV405.D	1.	24I030-01	25mL	19 Sep 2024 14:50
12	12	RIV406.D	1.	24I030-02	25mL	19 Sep 2024 15:20
13	13	RIV407.D	1.	24I030-03	25mL	19 Sep 2024 15:50
14	14	RIV408.D	1.	24I030-04	25mL	19 Sep 2024 16:21
15	15	RIV409.D	1.	24I020-18	25mL	19 Sep 2024 16:51
16	16	RIV410.D	1.	24I020-01I 10X	2.5mL	19 Sep 2024 17:20
17	17	RIV411.D	1.	24I020-02I 10X	2.5mL	19 Sep 2024 17:50
18	18	RIV412.D	1.	24I067-06	25mL	19 Sep 2024 18:20
19	19	RIV413.D	1.	24I067-07	25mL	19 Sep 2024 18:50
20	20	RIV414.D	1.	24I030-05	25mL	19 Sep 2024 19:20
21	21	RIV415.D	1.	24I030-07	25mL	19 Sep 2024 19:50
22	22	RIV416.D	1.	24I030-08	25mL	19 Sep 2024 20:20
23	23	RIV417.D	1.	24I030-09	25mL	19 Sep 2024 20:49
24	24	RIV418.D	1.	EVO01H0930	10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 21:19
25	25	RIV419.D	1.	EVO01H09301	10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 21:49
26	26	RIV420.D	1.	EVO01H09302	10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 22:19
27	27	RIV421.D	1.	RINSE	25mL	19 Sep 2024 22:49

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-077
Instrument No.:	01
Analytical Sequence:	24I20
Method File:	V001H09
Analytical Batch:	CV001H0931

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	VO01H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SV1-45-19-01 -15-03	1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-19-02	5	
BFB	-01-01	1	50/250
IS/SURR.	SV1-45-29-03	5	
ICV/LCS	-43-74-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03 -45-21-03	5 5	
ICV/LCS	-43-78-03	5	
Data File Folder	24I20		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-09-12-4	
Chlorine strip	301902	↓ -6	
Methanol			
NaHSO			
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: CL/[illegible]
Date: 9/20/24
Disposed By: CL
Date Disposed: 9/21/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24I20

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RIV422.D	1.	BFB01I16	T/CHK	20 Sep 2024 11:33
2	2	RIV423.D	1.	CVO01H0931	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Sep 2024 12:12
3	3	RIV424.D	1.	VO01I16L	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Sep 2024 12:42
4	4	RIV425.D	1.	VO01I16C	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Sep 2024 13:12
5	5	RIV426.D	1.	RINSE	25mL	20 Sep 2024 13:42
6	6	RIV427.D	1.	VO01I16B	25mL	20 Sep 2024 14:12
7	7	RIV428.D	1.	VO01I16X	25mL	20 Sep 2024 14:42
8	8	RIV429.D	1.	24I020-19	25mL	20 Sep 2024 15:12
9	9	RIV430.D	1.	24I020-16	25mL	20 Sep 2024 15:42
10	10	RIV431.D	1.	24I030-06	25mL	20 Sep 2024 16:12
11	11	RIV432.D	1.	24I030-10	25mL	20 Sep 2024 16:42
12	12	RIV433.D	1.	24I030-13	25mL	20 Sep 2024 17:12
13	13	RIV434.D	1.	24I020-13N	25mL	20 Sep 2024 17:43
14	14	RIV435.D	1.	24I020-14	25mL	20 Sep 2024 18:13
15	15	RIV436.D	1.	24I020-15	25mL	20 Sep 2024 18:43
16	16	RIV437.D	1.	24I020-17	25mL	20 Sep 2024 19:13
17	17	RIV438.D	1.	24I020-16M	25mL	20 Sep 2024 19:42
18	18	RIV439.D	1.	24I020-16S	25mL	20 Sep 2024 20:12
19	19	RIV440.D	1.	24I030-06M	25mL	20 Sep 2024 20:42
20	20	RIV441.D	1.	24I030-06S	25mL	20 Sep 2024 21:12
21	21	RIV442.D	1.	24I030-11	25mL	20 Sep 2024 21:42
22	22	RIV443.D	1.	24I044-02	25mL	20 Sep 2024 22:12
23	23	RIV444.D	1.	24I044-03	25mL	20 Sep 2024 22:42
24	24	RIV445.D	1.	24I044-04	25mL	20 Sep 2024 23:12
25	25	RIV446.D	1.	EVO01H0931	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Sep 2024 23:41
26	26	RIV447.D	1.	EVO01H09311	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Sep 2024 00:11
27	27	RIV448.D	1.	EVO01H09312	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Sep 2024 00:41
28	28	RIV449.D	1.	RINSE	25mL	21 Sep 2024 01:11

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 10-24-2024
EMAX Batch No.: 24I027

Attn: Cherie Zakowski

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202

Subject: Laboratory Report
Project: VA SALT LAKE CITY

Enclosed is the Laboratory report for samples received on 09/10/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
MW05R-GW090824	I027-01	09/08/24	WATER	VOCS BY 8260C
MW15D-GW090824	I027-02	09/08/24	WATER	VOCS BY 8260C
MW15S-GW090824	I027-03	09/08/24	WATER	VOCS BY 8260C
MW16D-GW090824	I027-04	09/08/24	WATER	VOCS BY 8260C
MW16S-GW090824	I027-05	09/08/24	WATER	VOCS BY 8260C
FD04-GW090824	I027-06	09/08/24	WATER	VOCS BY 8260C
MW21-GW090824	I027-07	09/08/24	WATER	VOCS BY 8260C
MW22-GW090824	I027-08	09/08/24	WATER	VOCS BY 8260C
MW24-GW090824	I027-09	09/08/24	WATER	VOCS BY 8260C
MW26A-GW090824	I027-10	09/08/24	WATER	VOCS BY 8260C
MW26D-GW090824	I027-11	09/08/24	WATER	VOCS BY 8260C
MW30RA-GW090824	I027-12	09/08/24	WATER	VOCS BY 8260C
MW30RB-GW090824	I027-13	09/08/24	WATER	VOCS BY 8260C
MW32A-GW090824	I027-14	09/08/24	WATER	VOCS BY 8260C
TB03-GW090924	I027-15	09/09/24	WATER	VOCS BY 8260C

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912023-25
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

CHAIN OF CUSTODY

EMAX Laboratories, Inc.	3051 Fujita St, Torrance, CA 90505 Tel # : 310-618-8889 FAX#: 310-618-0818 Email: info@emaxlabs.com	PO NUMBER: SAMPLE STORAGE	EMAX CONTROL NO. 24I027 PROJECT CODE: 275859

CLIENT : CDM SMITH

PROJECT : 700 S 1600 E PCE Plume

COORDINATOR Cherie Zakowski

TEI 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com

SEND REPORT TO

COMPANY CDM Smith

ADDRESS 555 17th St Ste 500

Denver, CO 80201

EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sl	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

ANALYSIS REQUIRED: VOCs (8260C); Anions (Cl, SO4); Nitrate/Nitrite (SM4500-NO3E); Alkalinity (SM2320B); TOC (SW9060); TDS (SM 2540C); Dissolved Gases (RSK-175)

TAT
- ☐ Rush __24__hrs.
- ☐ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☑ 21 days

LAB	SAMPLE ID CLIENT	LOCATION	SAMPLING DATE	SAMPLING TIME	CONTAINER NO.	CONTAINER SIZE	CONTAINER TYPE	MATRIX CODE	QC	PRESERVATIVE CODE: VOCs (8260C) HCl	Anions (Cl, SO4) IC	Nitrate/Nitrite (SM4500-NO3E) HS	Alkalinity (SM2320B) IC	TOC (SW9060) HS	TDS (SM 2540C) IC	Dissolved Gases (RSK-175) HCl	COMMENTS
1	MW05R-GW090824	MW05R	09/08/24	1636	3	40mL	VOA	GW		X							
2	MW15D-GW090824	MW15D	09/08/24	1040	3	40mL	VOA	GW		X							
3	MW15S-GW090824	MW15S	09/08/24	1018	3	40mL	VOA	GW		X							
4	MW16D-GW090824	MW16D	09/08/24	1145	3	40mL	VOA	GW		X							
5	MW16S-GW090824	MW16S	09/08/24	1232	3	40mL	VOA	GW		X							
6	FD04-GW090824	—	09/08/24	1237	3	40mL	VOA	GW		X							
7	MW21-GW090824	MW21	09/08/24	1431	3	40mL	VOA	GW		X							
8	MW22-GW090824	MW22	09/08/24	1542	3	40mL	VOA	GW		X							
9	MW24-GW090824	MW24	09/08/24	0954	3	40mL	VOA	GW		X							

Instructions

Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s
1	3.2	
2	1.9	

SAMPLER

COURIER/AIRBILL FedEx

RELINQUISHED BY	Date	Time	RECEIVED BY
	9/9/24	1153	
	9/10/24	9:20	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

CHAIN OF CUSTODY

2/2

EMAX Laboratories, Inc.	3051 Fujita St, Torrance, CA 90505 Tel # : 310-618-8889 FAX#: 310-618-0818 Email: info@emaxlabs.com	PO NUMBER: SAMPLE STORAGE	EMAX CONTROL NO. 24I027 PROJECT CODE: 275859

CLIENT : CDM SMITH

PROJECT : 700 S 1600 E PCE Plume

COORDINATOR Cherie Zakowski

TEI 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com

SEND REPORT TO

COMPANY CDM Smith

ADDRESS 555 17th St Ste 500

Denver, CO 80201

EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
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SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

TAT
- ☐ Rush __24__hrs.
- ☐ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☒ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	ANALYSIS REQUIRED: VOCs (8260C) PRESERVATIVE CODE HCl	Anions (Cl, SO4) IC	Nitrate/Nitrite (SM4500-NO3E) HS	Alkalinity (SM2320B) IC	TOC (SW9060) HS	TDS (SM 2540C) IC	Dissolved Gases (RSK-175) HCl	COMMENTS
1	MW26A-GW090824 (10)	MW26A	09/08/24	1320	3	40mL	VOA	GW		X							
2	MW26D-GW090824 (11)	MW26D	09/08/24	1530	3	40mL	VOA	GW		X							
3	MW30RA-GW090824 (12)	MW30RA	09/08/24	1215	3	40mL	VOA	GW		X							
4	MW30RB-GW090824 (13)	MW30RB	09/08/24	1201	3	40mL	VOA	GW		X							
5	MW32A-GW090824 (14)	MW32	09/08/24	1416	3	40mL	VOA	GW		X							
6	TB03-GW090924 (15)	—	09/09/24	950	3	40mL	VOA	O		X							
7																	
8																	
9																	

Instructions

Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s

SAMPLER

COURIER/AIRBILL FedEx

RELINQUISHED BY	Date	Time	RECEIVED BY
Jose Bonilla	9/9/24	1153	
	9/10/24	9:20	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

EMAX LABORATORIES, INC.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 24I027
☒ Fedex ☐ UPS ☐ GSO ☐ Others	7784 7117 6340	Recipient Maria Rivera
☐ EMAX Courier ☐ Client Delivery		Date 09/10/24 Time 9:20

COC INSPECTION

☒ Client Name	☒ Client PM/FC	☐ Sampler Name	☒ Sampling Date/Time	☒ Sample ID	☒ Matrix
☒ Address	☒ Tel # / Fax #	☐ Courier Signature	☒ Analysis Required	☒ Preservative (if any)	☒ TAT
Safety Issues (if any)	☐ High concentrations expected	☐ From Superfund Site	☐ Rad screening required		

Note: _____

PACKAGING INSPECTION

Container	☒ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☒ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☒ bag
Temperatures (Cool, ≤6 °C but not frozen)	☒ Cooler 1 3.2 °C	☐ Cooler 2_____ °C	☐ Cooler 3_____ °C	☐ Cooler 4_____ °C	☐ Cooler 5_____ °C
	☐ Cooler 6_____ °C	☐ Cooler 7_____ °C	☐ Cooler 8_____ °C	☐ Cooler 9_____ °C	☐ Cooler 10_____ °C
Thermometer:	*A - S/N* ~~2167662772~~ 240412221 JSR 08/14	*B - S/N* 230044860	*C - S/N* 230044897	*D - S/N* 230044857	

Comments: ☐ **Temperature is out of range. PM was informed IMMEDIATELY.**

Note: _____

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

NOTES/OBSERVATIONS:

SAMPLE MATRIX IS DRINKING WATER? ☐ YES ☒ NO

LEGEND:

Code	Description- Sample Management
D1	Analysis is not indicated in _____
D2	Analysis mismatch COC vs label
D3	Sample ID mismatch COC vs label
D4	Sample ID is not indicated in _____
D5	Container -[improper] [leaking] [broken]
D6	Date/Time is not indicated in _____
D7	Date/Time mismatch COC vs label
D8	Sample listed in COC is not received
D9	Sample received is not listed in COC
D10	No initial/date on corrections in COC/label
D11	Container count mismatch COC vs received
D12	Container size mismatch COC vs received

Code	Description-Sample Management
D13	Out of Holding Time
D14	Bubble is >6mm
D15	No trip blank in cooler
D16	Preservation not indicated in _____
D17	Preservation mismatch COC vs label
D18	Insufficient chemical preservative
D19	Insufficient Sample
D20	No filtration info for dissolved analysis
D21	No sample for moisture determination
D22	_____
D23	_____
D24	_____

☐ **Continue to next page.**

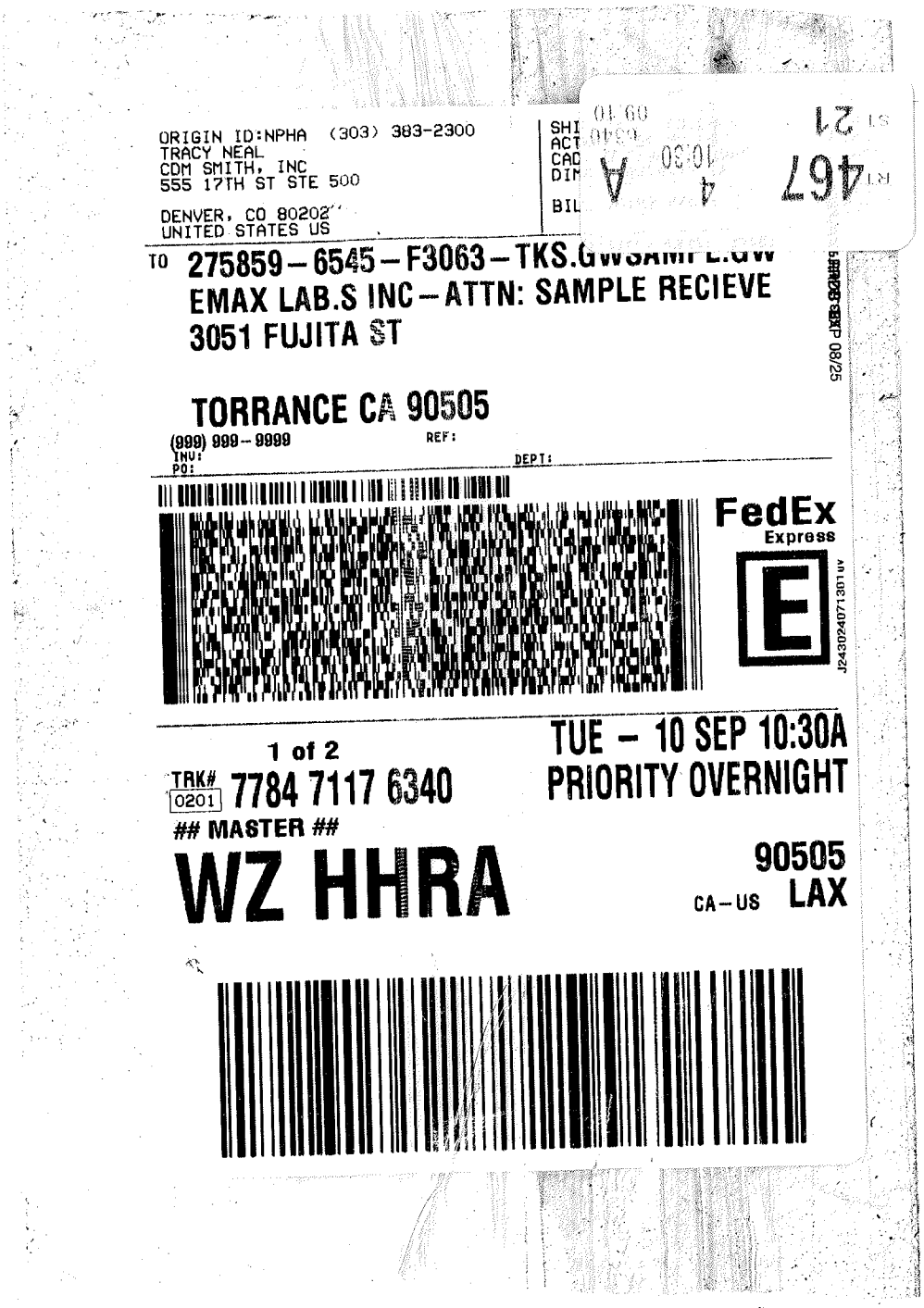
Code	Description-Sample Management
R1	Proceed as indicated in ☐ COC ☐ Label
R2	Refer to attached instruction
R3	Cancel the analysis
R4	Use vial with smallest bubble first
R5	Log-in with latest sampling date and time+1 min
R6	Adjust pH as necessary
R7	Filter and preserved as necessary
R8	_____
R9	_____
R10	_____
R11	_____
R12	_____

REVIEWS:

Sample Labeling Maria Rivera **Date** 09/10/24 9/10/24

SRF _____ **Date** 9/10/24

PM _____ **Date** 9/10/24



ORIGIN ID:NPHA (303) 383-2300
TRACY NEAL
CDM SMITH, INC
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHI
ACT
CAD
DIM
BIL

RT 467 4 A 10:30 6340 09 10 ST 21

TO 275859-6545-F3063-TKS.GWSAMPLE.GW
EMAX LAB.S INC-ATTN: SAMPLE RECIEVE
3051 FUJITA ST

TORRANCE CA 90505
(999) 999-9999 REF:
INV:
PO: DEPT:

FedEx Express

E

J243024071301uv

1 of 2
TRK# 0201 7784 7117 6340
MASTER
WZ HHRA

TUE - 10 SEP 10:30A
PRIORITY OVERNIGHT

90505
CA-US LAX

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range or estimated value.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

SDG#: 24I027

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I027

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of fifteen(15) water samples were received on 09/10/24 to be analyzed for Volatile Organics by GC/MS in accordance with Method SW5030B/8260C and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Instrument Performance and Calibration
Instrument tune check was performed prior to calibration. Result was within acceptance criteria. Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using secondary source (ICV). Continuing calibration (CCV) was carried out at a frequency required by the project. All calibration requirements were satisfied. Note that" Minimum Response Factor" for all analytes were within method recommended response factors with the exception of Acetone and 2-Butanone. However, percent recoveries for all target analytes were within 70-130% on all calibration points. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, two(2) method blanks were analyzed. VO06I06B and VO06I07B were compliant to project requirement. Refer to sample result summary forms for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, two(2) sets of LCS/LCD were analyzed. All analytes were within LCS limits in VO06I06L/VO06I06C and VO06I07L/VO06I07C, except for RPDs for some analytes were greater than RPD QC limit. Refer to LCS summary forms for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met with the exception of those that were discussed within the associated QC parameter.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24I027
Instrument ID : 06

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	VO06I06L	1	NA	09/21/2408:33	09/21/2408:33	RIW127	RIW080	VO06I06	Lab Control Sample (LCS)
LCD1W	VO06I06C	1	NA	09/21/2408:59	09/21/2408:59	RIW128	RIW080	VO06I06	LCS Duplicate
MBLK1W	VO06I06B	1	NA	09/21/2409:51	09/21/2409:51	RIW130	RIW080	VO06I06	Method Blank
TB03-GW090924	24I027-15	1	NA	09/21/2410:44	09/21/2410:44	RIW132	RIW080	VO06I06	Field Sample
MW16D-GW090824	24I027-04	1	NA	09/21/2413:47	09/21/2413:47	RIW139	RIW080	VO06I06	Field Sample
MW16S-GW090824	24I027-05	1	NA	09/21/2414:14	09/21/2414:14	RIW140	RIW080	VO06I06	Field Sample
FD04-GW090824	24I027-06	1	NA	09/21/2414:40	09/21/2414:40	RIW141	RIW080	VO06I06	Field Sample
MW21-GW090824	24I027-07	1	NA	09/21/2415:06	09/21/2415:06	RIW142	RIW080	VO06I06	Field Sample
MW22-GW090824	24I027-08	1	NA	09/21/2415:33	09/21/2415:33	RIW143	RIW080	VO06I06	Field Sample
MW24-GW090824	24I027-09	1	NA	09/21/2415:59	09/21/2415:59	RIW144	RIW080	VO06I06	Field Sample
MW26A-GW090824	24I027-10	1	NA	09/21/2416:25	09/21/2416:25	RIW145	RIW080	VO06I06	Field Sample
MW26D-GW090824	24I027-11	1	NA	09/21/2416:52	09/21/2416:52	RIW146	RIW080	VO06I06	Field Sample
MW30RA-GW090824	24I027-12	1	NA	09/21/2417:18	09/21/2417:18	RIW147	RIW080	VO06I06	Field Sample
MW30RB-GW090824	24I027-13	1	NA	09/21/2417:44	09/21/2417:44	RIW148	RIW080	VO06I06	Field Sample
MW32A-GW090824	24I027-14	1	NA	09/21/2418:11	09/21/2418:11	RIW149	RIW080	VO06I06	Field Sample
MW05R-GW090824	24I027-01	1	NA	09/21/2418:37	09/21/2418:37	RIW150	RIW080	VO06I06	Field Sample
LCS2W	VO06I07L	1	NA	09/22/2413:33	09/22/2413:33	RIW154	RIW080	VO06I07	Lab Control Sample (LCS)
LCD2W	VO06I07C	1	NA	09/22/2413:59	09/22/2413:59	RIW155	RIW080	VO06I07	LCS Duplicate
MBLK2W	VO06I07B	1	NA	09/22/2415:05	09/22/2415:05	RIW157	RIW080	VO06I07	Method Blank
MW15D-GW090824	24I027-02N	1	NA	09/22/2415:31	09/22/2415:31	RIW158	RIW080	VO06I07	Field Sample
MW15S-GW090824	24I027-03	1	NA	09/22/2415:57	09/22/2415:57	RIW159	RIW080	VO06I07	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 16:36
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 18:37
Sample ID	: MW05R-GW090824	Date Analyzed:	09/21/24 18:37
Lab Samp ID:	24I027-01	Dilution Factor:	1
Lab File ID:	RIW150	Matrix:	WATER
Ext Btch ID:	VOO6I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.27J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.9	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.78	10.0	98	70-130
Bromofluorobenzene	9.23	10.0	92	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.79	10.0	98	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW150.D Vial: 26
Acq On : 21 Sep 2024 6:37 pm Operator: DHguye
Sample : 24I027-01 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 16:07 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

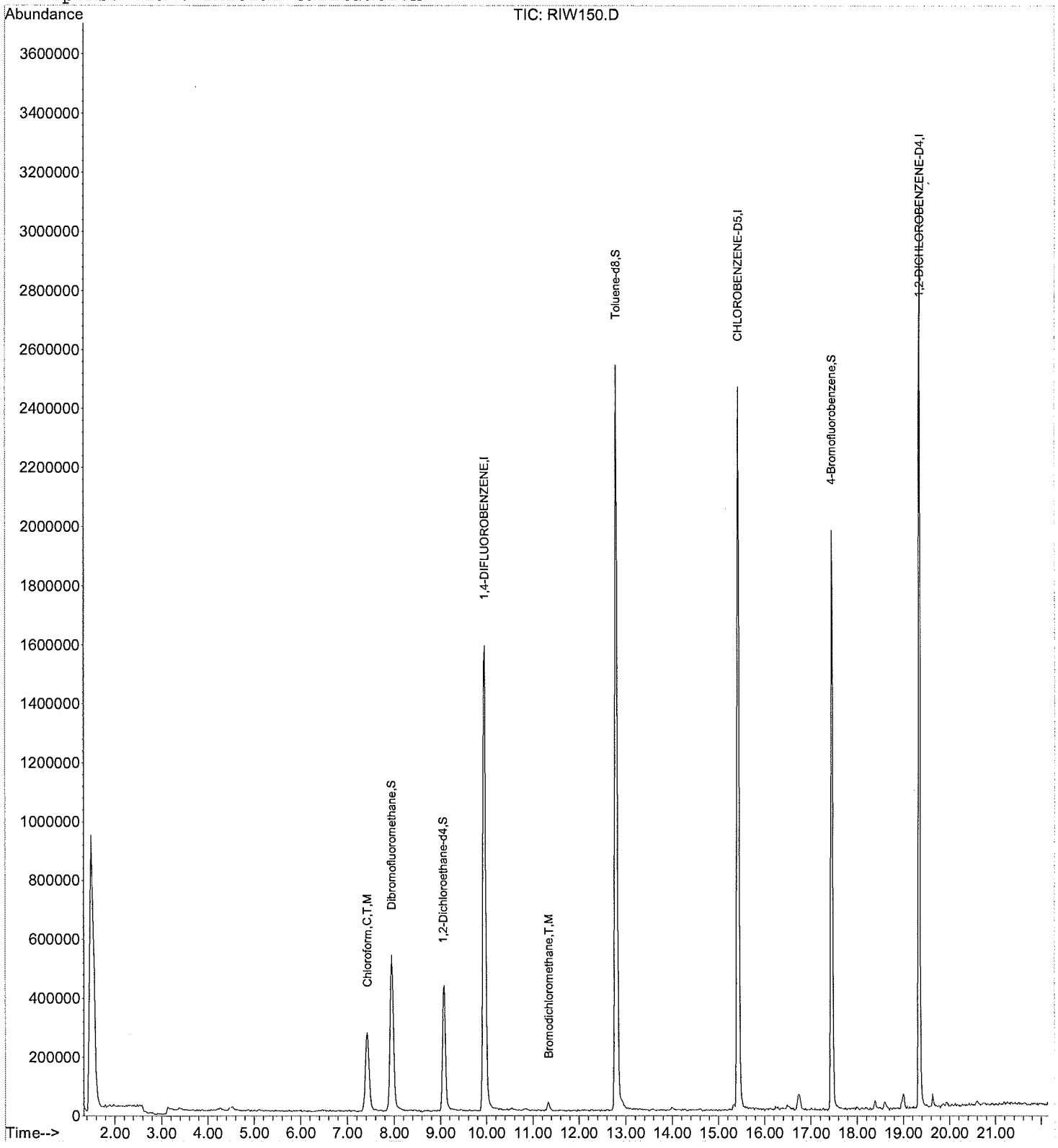
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3149549	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2576465	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1207567	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	872216	9.79	ug/l	-0.02
Spiked Amount 10.000			Recovery =	97.90%		
42) 1,2-Dichloroethane-d4	9.06	65	681205	9.78	ug/l	-0.02
Spiked Amount 10.000			Recovery =	97.80%		
55) Toluene-d8	12.79	98	3424823	10.27	ug/l	-0.02
Spiked Amount 10.000			Recovery =	102.70%		
77) 4-Bromofluorobenzene	17.45	95	1245008	9.23	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.30%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	639648	3.88	ug/l	95
49) Bromodichloromethane	11.35	83	31238	0.27	ug/l	100

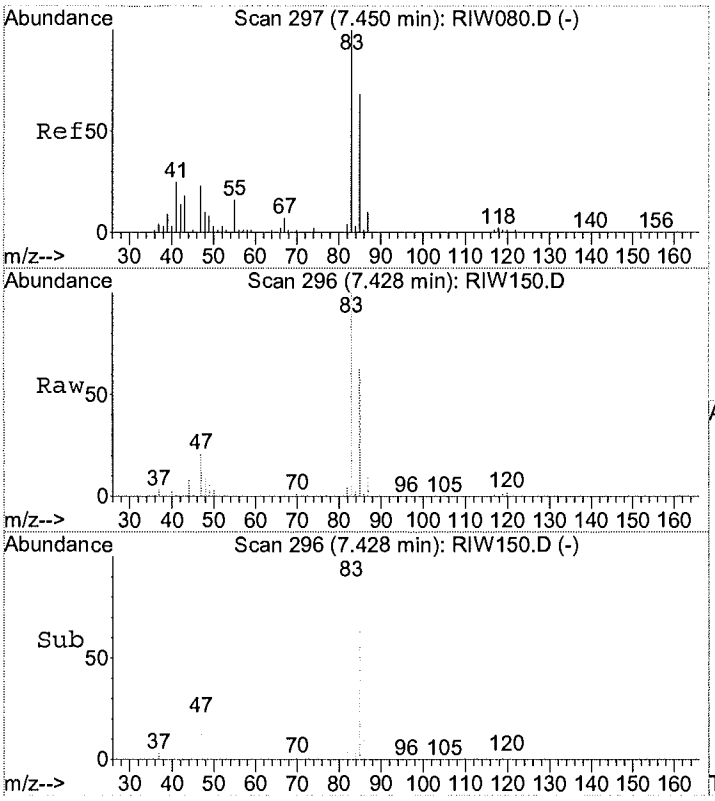
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW150.D Vial: 26
Acq On : 21 Sep 2024 6:37 pm Operator: DHguye
Sample : 24I027-01 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 16:07 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

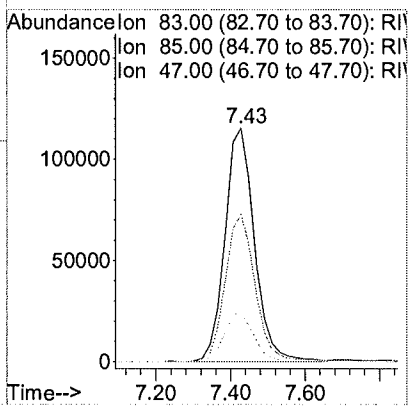


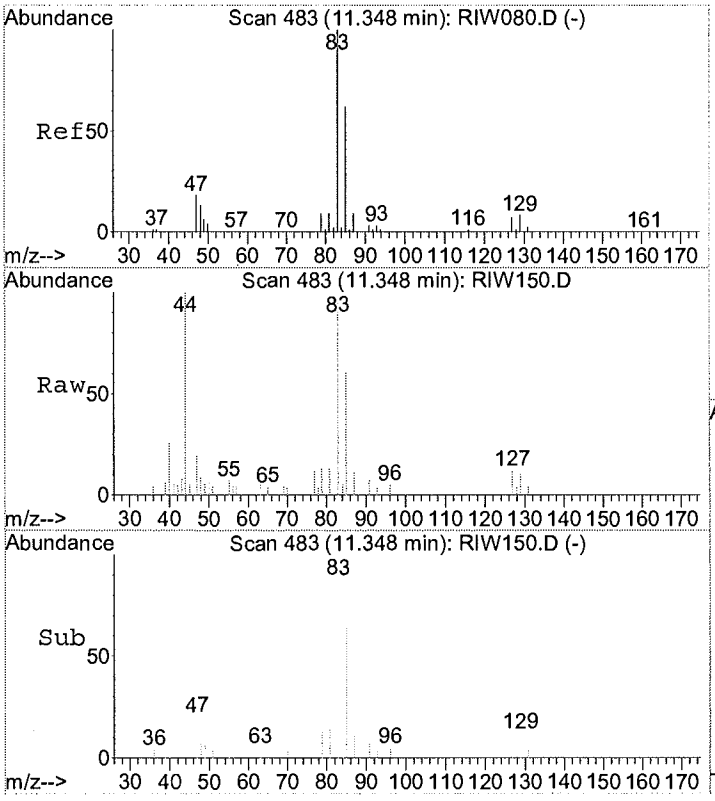


#31
Chloroform
Concen: 3.88 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW150.D
Acq: 21 Sep 2024 6:37 pm

Tgt Ion: 83 Resp: 639648

Ion	Ratio	Lower	Upper
83	100		
85	63.8	38.6	98.6
47	21.5	0.0	53.1

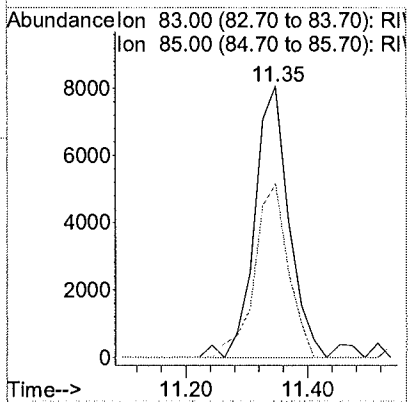




#49
Bromodichloromethane
Concen: 0.27 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW150.D
Acq: 21 Sep 2024 6:37 pm

Tgt Ion: 83 Resp: 31238

Ion	Ratio	Lower	Upper
83	100		
85	63.1	33.1	93.1



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 10:40
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/22/24 15:31
Sample ID	: MW15D-GW090824	Date Analyzed:	09/22/24 15:31
Lab Samp ID:	24I027-02N	Dilution Factor:	1
Lab File ID:	RIW158	Matrix:	WATER
Ext Btch ID:	V006I07	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.15J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.5	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.23J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.66	10.0	97	70-130
Bromofluorobenzene	9.57	10.0	96	70-130
Toluene-d8	10.2	10.0	102	70-130
Dibromofluoromethane	9.69	10.0	97	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I22\RIW158.D Vial: 7
Acq On : 22 Sep 2024 3:31 pm Operator: DHguye
Sample : 24I027-02N Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:44 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

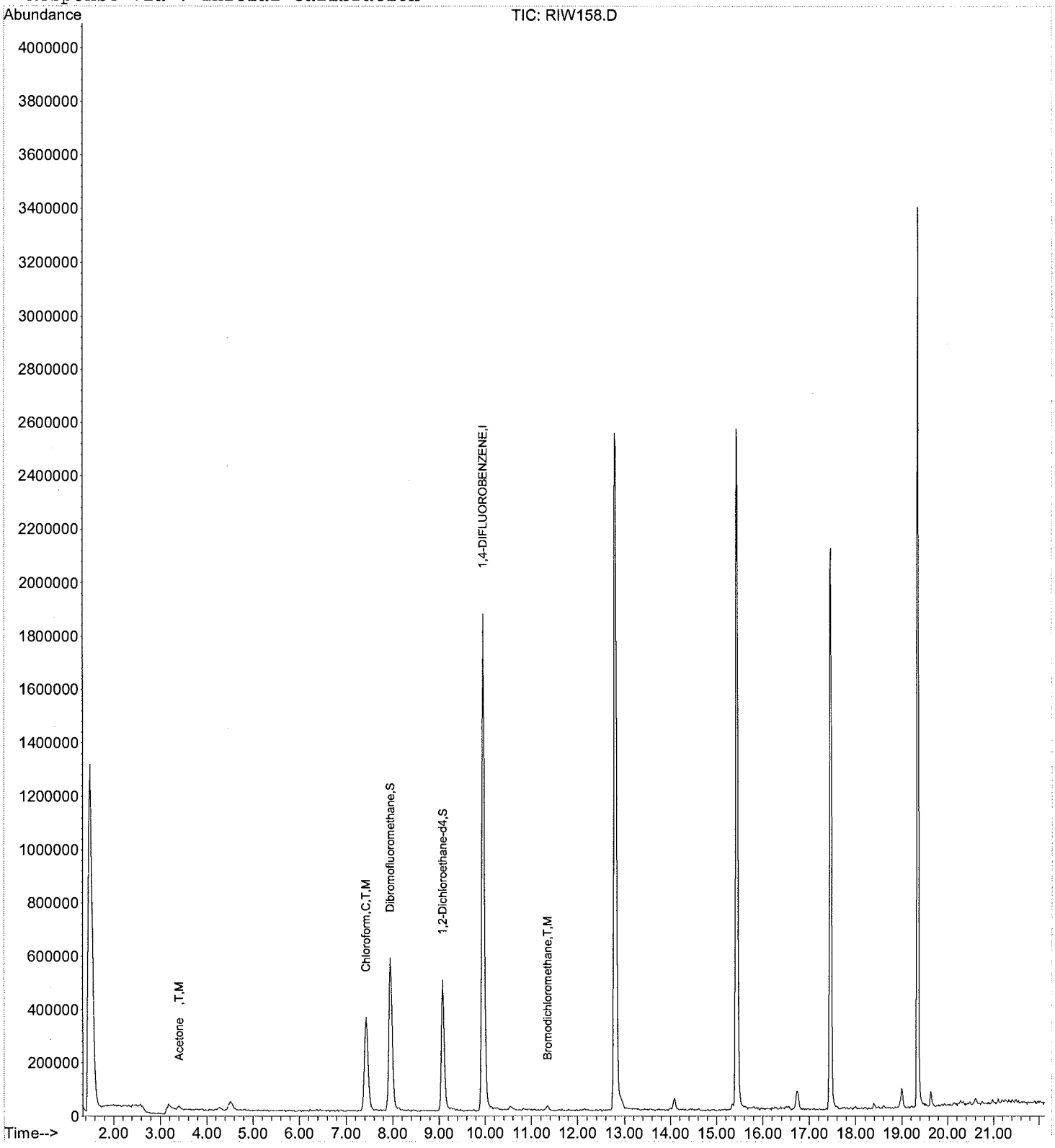
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3464020	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	0.00	117	0m	10.00	ug/l	-15.43
74) 1,2-DICHLOROBENZENE-D4	0.00	152	0m	10.00	ug/l	-19.35
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	948836	9.69	ug/l	-0.02
Spiked Amount 10.000			Recovery =	96.90%		
42) 1,2-Dichloroethane-d4	9.08	65	739860	9.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.60%		
55) Toluene-d8	12.81	98	3643882	0.00	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.00%		
77) 4-Bromofluorobenzene	17.45	95	1395683	0.00	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
11) Acetone	3.40	43	24918	1.78	ug/l	76
31) Chloroform	7.43	83	807714	4.46	ug/l	96
49) Bromodichloromethane	11.35	83	19588	0.15	ug/l	93

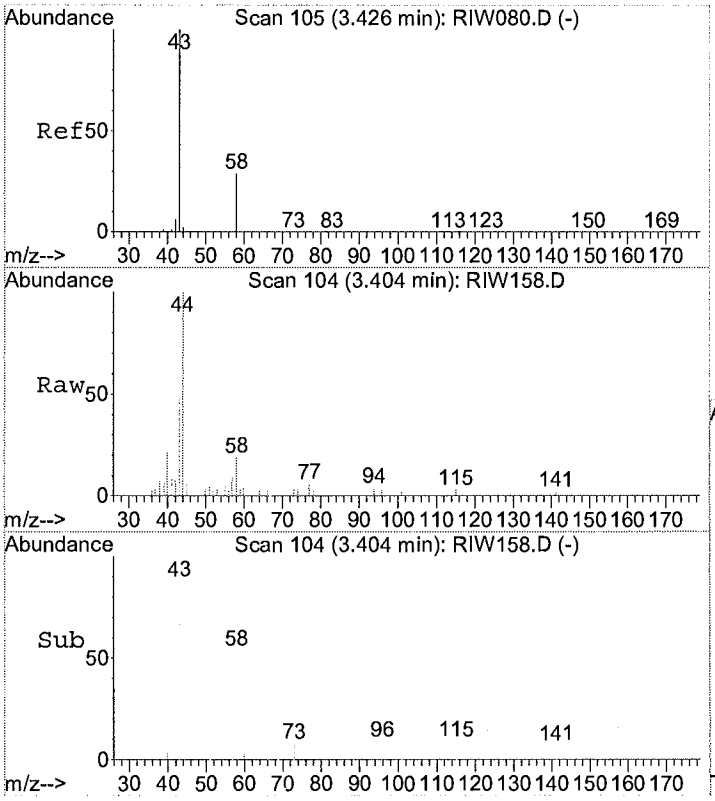
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I22\RIW158.D Vial: 7
Acq On : 22 Sep 2024 3:31 pm Operator: DHguye
Sample : 24I027-02N Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:44 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

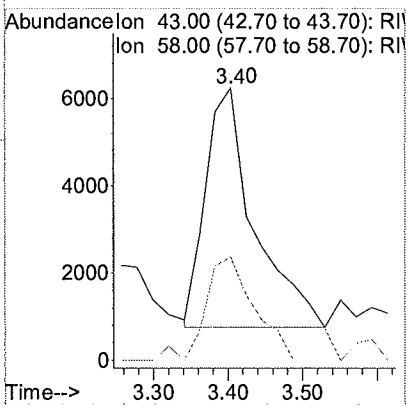


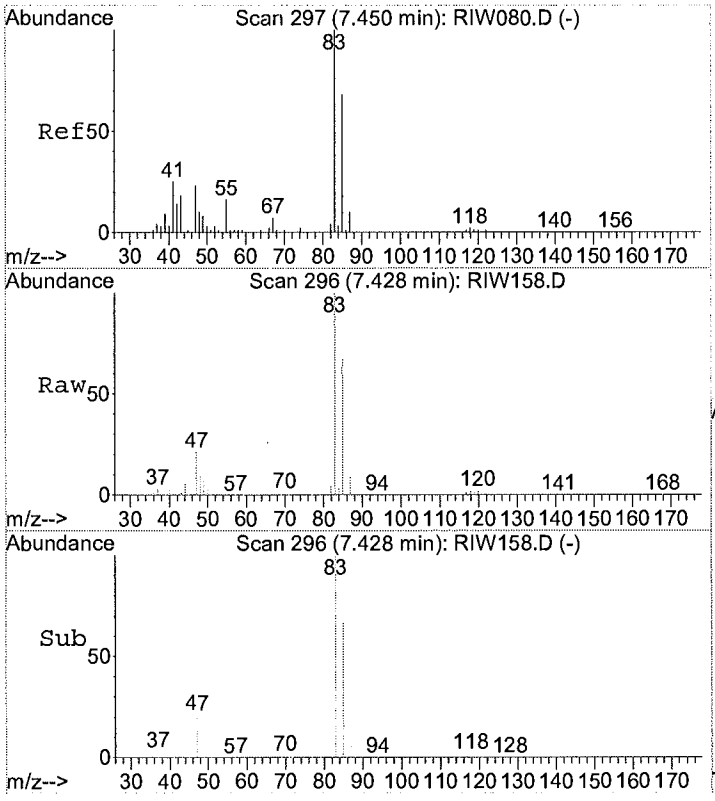


#11
Acetone
Concen: 1.78 ug/l
RT: 3.40 min Scan# 104
Delta R.T. -0.02 min
Lab File: RIW158.D
Acq: 22 Sep 2024 3:31 pm

Tgt Ion: 43 Resp: 24918

Ion	Ratio	Lower	Upper
43	100		
58	43.5	0.4	60.4

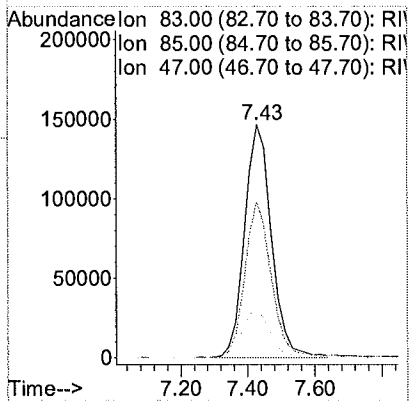


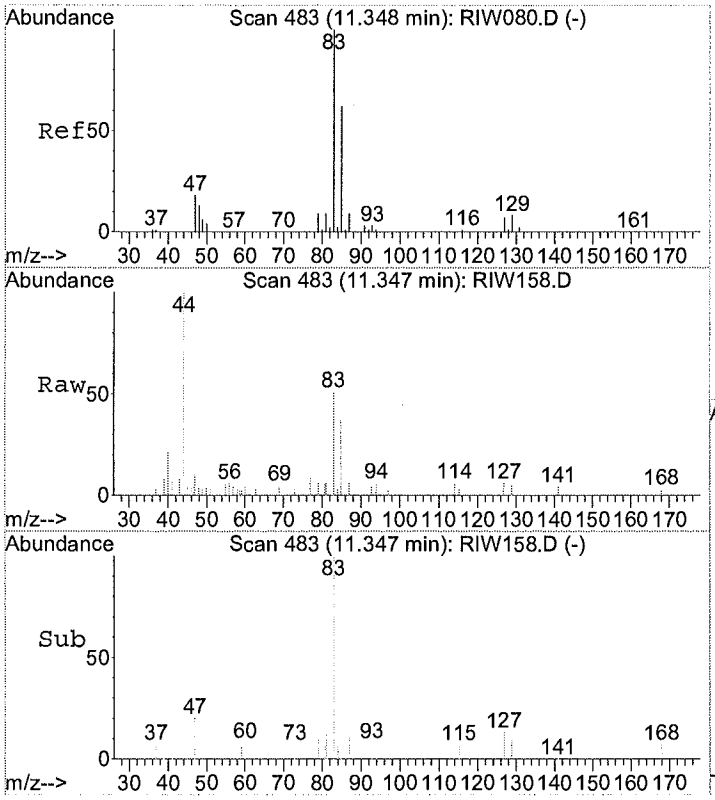


#31
Chloroform
Concen: 4.46 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW158.D
Acq: 22 Sep 2024 3:31 pm

Tgt Ion: 83 Resp: 807714

Ion	Ratio	Lower	Upper
83	100		
85	65.4	38.6	98.6
47	21.5	0.0	53.1

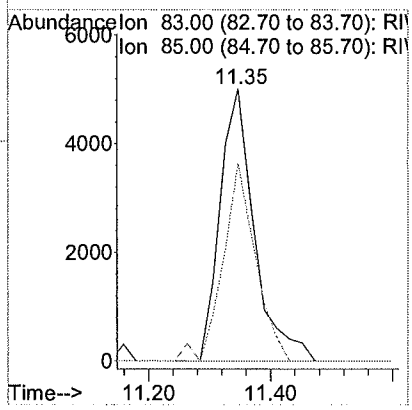




#49
Bromodichloromethane
Concen: 0.15 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW158.D
Acq: 22 Sep 2024 3:31 pm

Tgt Ion: 83 Resp: 19588

Ion	Ratio	Lower	Upper
83	100		
85	68.9	33.1	93.1



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 10:18
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/22/24 15:57
Sample ID	: MW15S-GW090824	Date Analyzed:	09/22/24 15:57
Lab Samp ID:	24I027-03	Dilution Factor:	1
Lab File ID:	RIW159	Matrix:	WATER
Ext Btch ID:	V006I07	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	5.1	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.41J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.3	10.0	103	70-130
Bromofluorobenzene	8.94	10.0	89	70-130
Toluene-dB	10.2	10.0	102	70-130
Dibromofluoromethane	9.97	10.0	100	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DHguye
Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I22\RIW159.D Vial: 8
Acq On : 22 Sep 2024 3:57 pm Operator: DHguye
Sample : 24I027-03 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 11:59 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

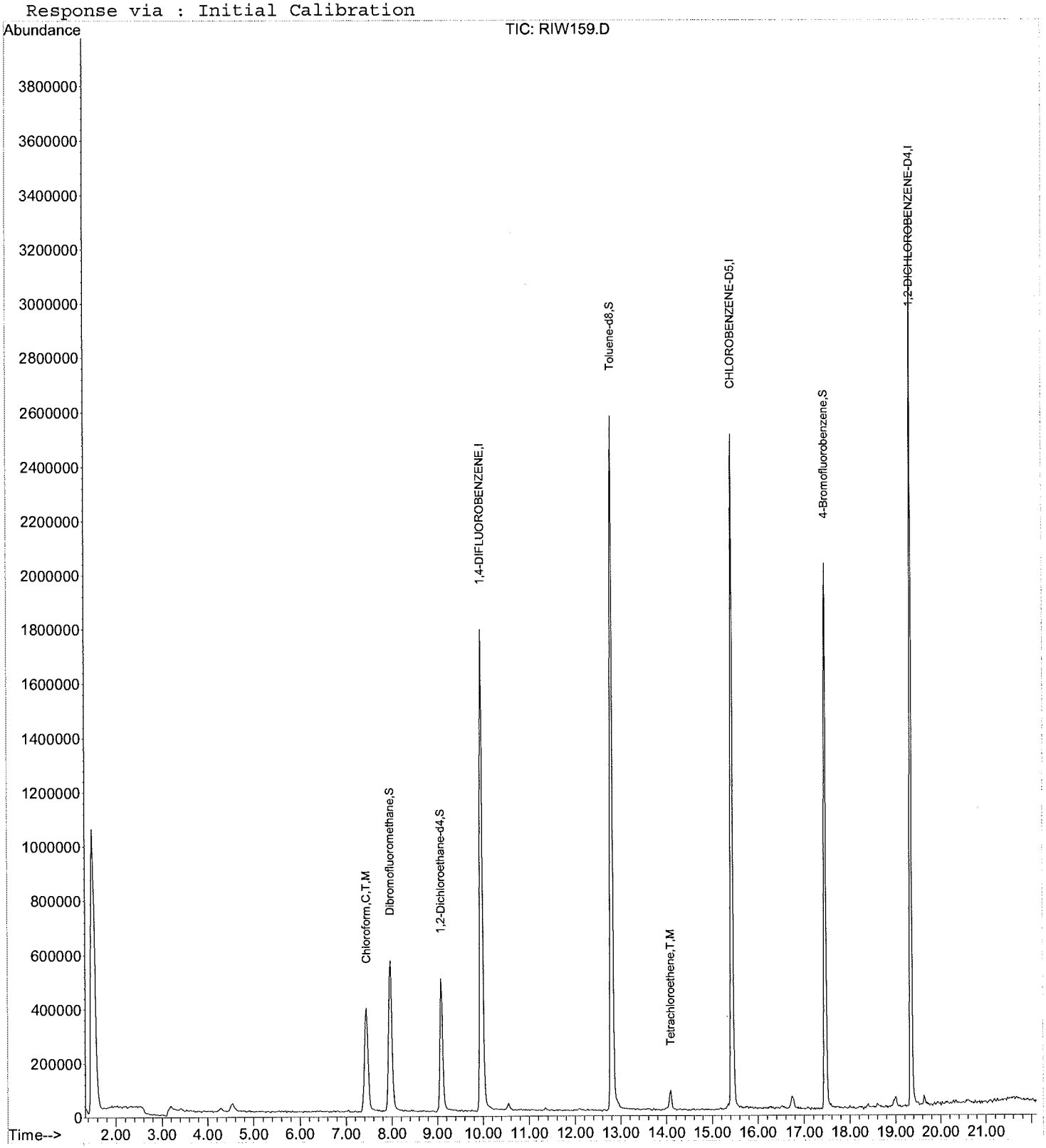
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3308367	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.44	117	2697247	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1296942	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	933008	9.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.70%		
42) 1,2-Dichloroethane-d4	9.08	65	752480	10.29	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.90%		
55) Toluene-d8	12.81	98	3559702	10.20	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.00%		
77) 4-Bromofluorobenzene	17.47	95	1294465	8.94	ug/l	0.01
Spiked Amount 10.000			Recovery =	89.40%		
Target Compounds						Qvalue
31) Chloroform	7.45	83	888196	5.13	ug/l	96
62) Tetrachloroethene	14.09	164	34101	0.41	ug/l	96

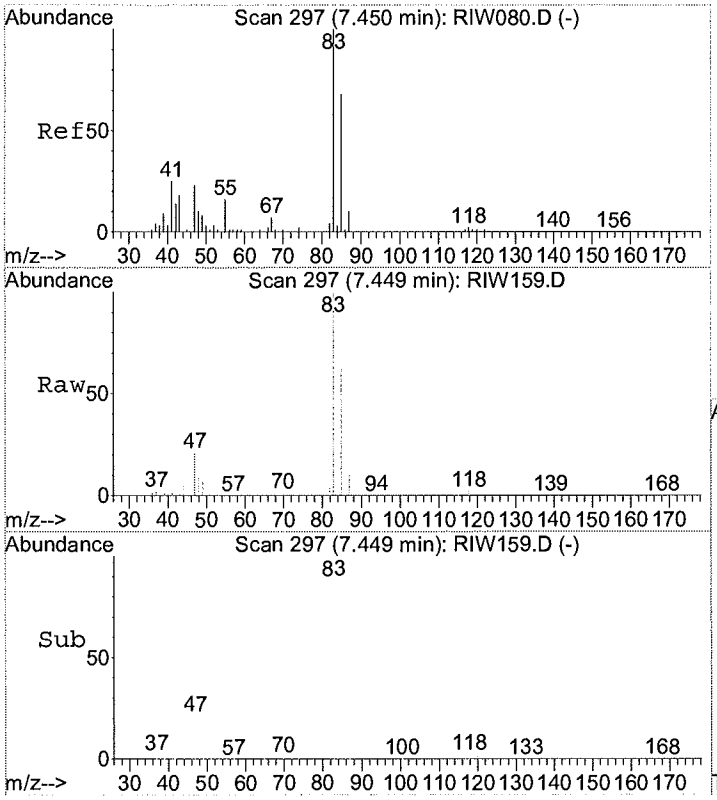
(#) = qualifier out of range (m) = manual integration
RIW159.D VO06I19B.M Tue Oct 15 11:59:36 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I22\RIW159.D Vial: 8
Acq On : 22 Sep 2024 3:57 pm Operator: DHguye
Sample : 24I027-03 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 11:59 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

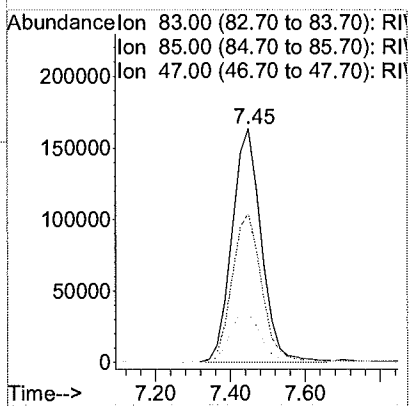


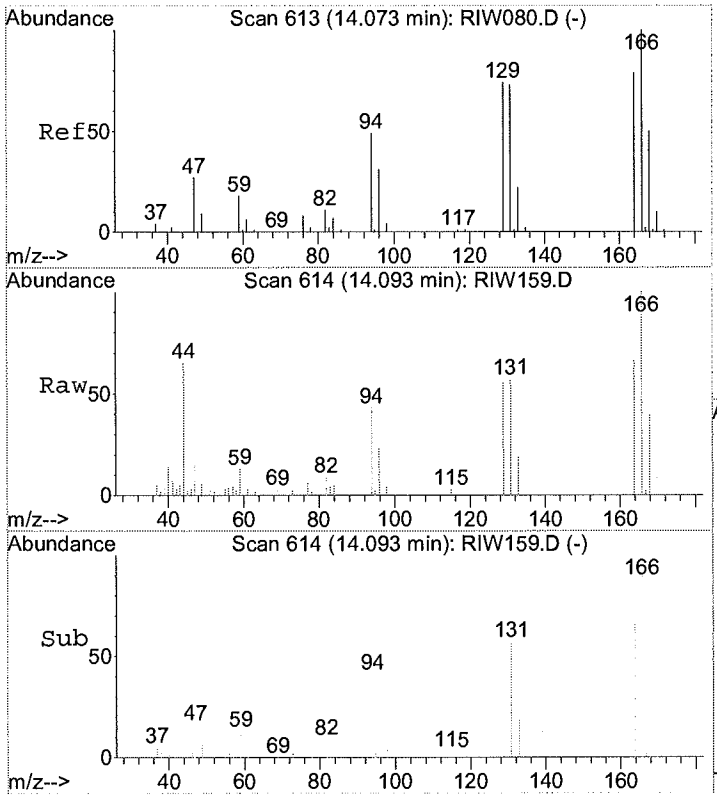


#31
Chloroform
Concen: 5.13 ug/l
RT: 7.45 min Scan# 297
Delta R.T. -0.00 min
Lab File: RIW159.D
Acq: 22 Sep 2024 3:57 pm

Tgt Ion: 83 Resp: 888196

Ion	Ratio	Lower	Upper
83	100		
85	64.4	38.6	98.6
47	22.4	0.0	53.1

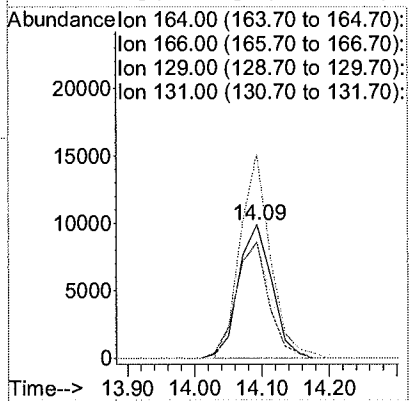




#62
Tetrachloroethene
Concen: 0.41 ug/l
RT: 14.09 min Scan# 614
Delta R.T. 0.02 min
Lab File: RIW159.D
Acq: 22 Sep 2024 3:57 pm

Tgt Ion:164 Resp: 34101

Ion	Ratio	Lower	Upper
164	100		
166	138.6	100.5	160.5
129	89.7	57.4	117.4
131	85.7	54.7	114.7



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 11:45
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 13:47
Sample ID	: MW16D-GW090B24	Date Analyzed:	09/21/24 13:47
Lab Samp ID:	24I027-04	Dilution Factor:	1
Lab File ID:	RIW139	Matrix:	WATER
Ext Btch ID:	V006I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.6	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.74	10.0	97	70-130
Bromofluorobenzene	9.10	10.0	91	70-130
Toluene-dB	10.3	10.0	103	70-130
Dibromofluoromethane	9.56	10.0	96	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DHguye
Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW139.D Vial: 15
Acq On : 21 Sep 2024 1:47 pm Operator: DHguye
Sample : 24I027-04 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:01 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

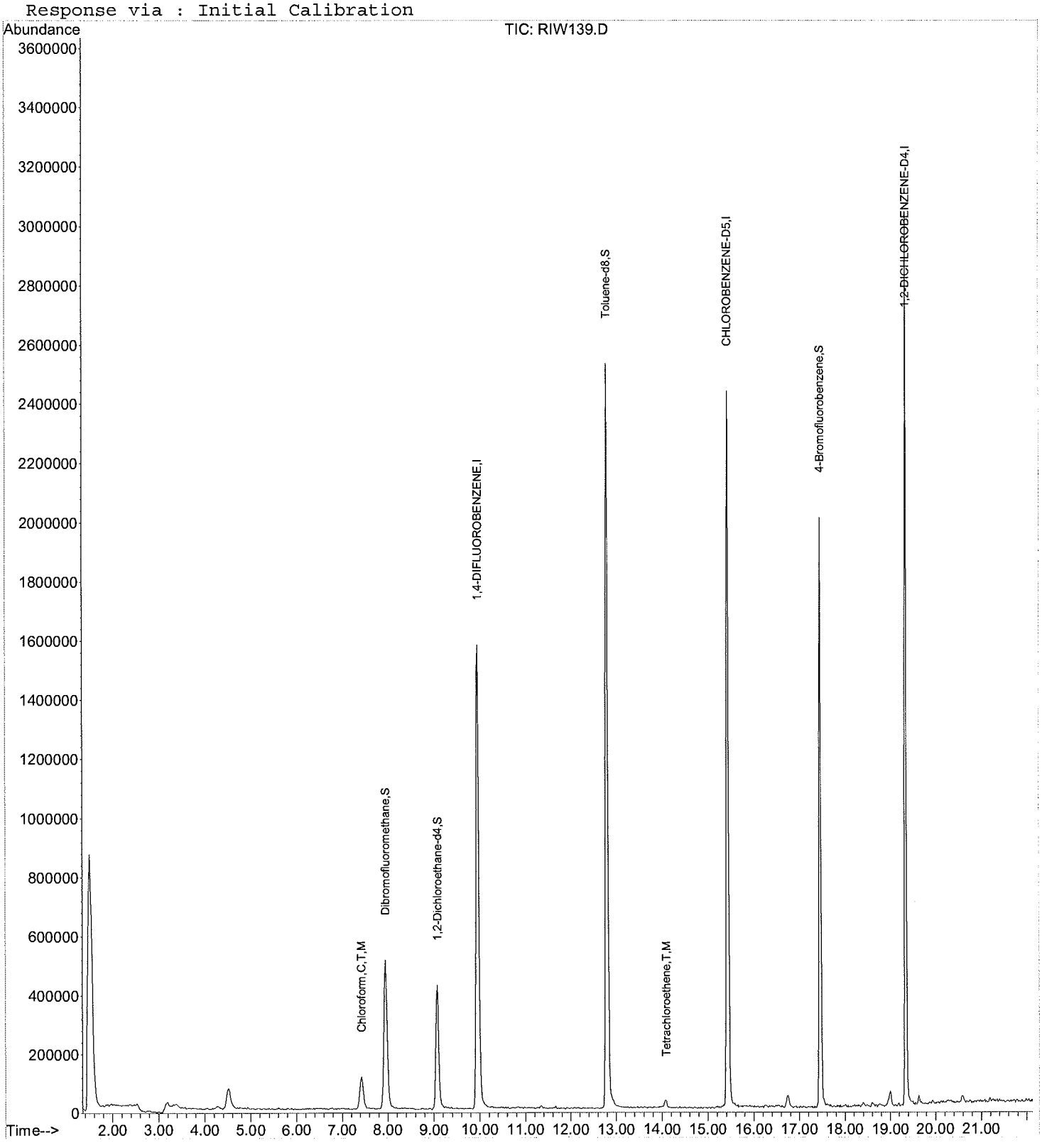
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3099334	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2533596	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1226570	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	837791	9.56	ug/l	-0.02
Spiked Amount 10.000			Recovery =	95.60%		
42) 1,2-Dichloroethane-d4	9.08	65	667489	9.74	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.40%		
55) Toluene-d8	12.79	98	3371502	10.28	ug/l	0.02
Spiked Amount 10.000			Recovery =	102.80%		
77) 4-Bromofluorobenzene	17.45	95	1246135	9.10	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.00%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	256302	1.58	ug/l	93
62) Tetrachloroethene	14.09	164	11359	0.14	ug/l	95

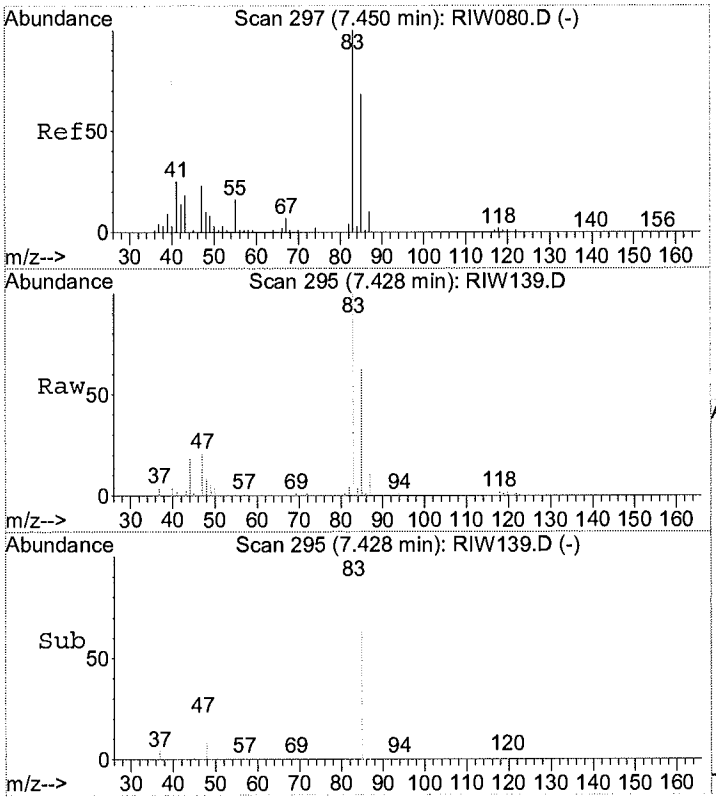
(#) = qualifier out of range (m) = manual integration
RIW139.D VO06I19B.M Tue Oct 15 12:01:24 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW139.D Vial: 15
Acq On : 21 Sep 2024 1:47 pm Operator: DHguye
Sample : 24I027-04 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:01 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

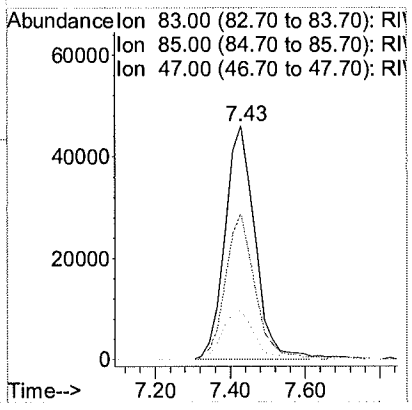


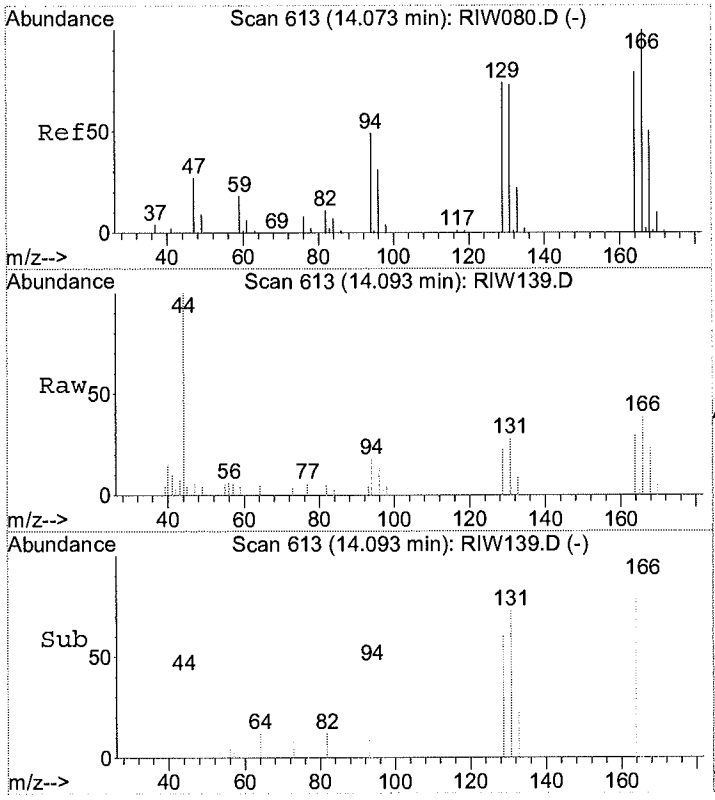


#31
Chloroform
Concen: 1.58 ug/l
RT: 7.43 min Scan# 295
Delta R.T. -0.02 min
Lab File: RIW139.D
Acq: 21 Sep 2024 1:47 pm

Tgt Ion: 83 Resp: 256302

Ion	Ratio	Lower	Upper
83	100		
85	61.4	38.6	98.6
47	22.6	0.0	53.1

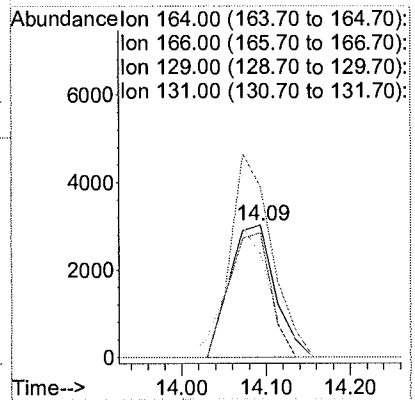




#62
Tetrachloroethene
Concen: 0.14 ug/l
RT: 14.09 min Scan# 613
Delta R.T. 0.02 min
Lab File: RIW139.D
Acq: 21 Sep 2024 1:47 pm

Tgt Ion:164 Resp: 11359

Ion	Ratio	Lower	Upper
164	100		
166	137.0	100.5	160.5
129	95.0	57.4	117.4
131	85.6	54.7	114.7



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/0B/24 12:32
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 14:14
Sample ID	: MW16S-GW090B24	Date Analyzed:	09/21/24 14:14
Lab Samp ID:	24I027-05	Dilution Factor:	1
Lab File ID:	RIW140	Matrix:	WATER
Ext Btch ID:	V006I06	% Moisture:	NA
Calib. Ref.:	RIW0B0	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.16J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.1	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	21	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.1B	10.0	92	70-130
Bromofluorobenzene	9.19	10.0	92	70-130
Toluene-dB	10.4	10.0	104	70-130
Dibromofluoromethane	9.3B	10.0	94	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DHguye
Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW140.D Vial: 16
Acq On : 21 Sep 2024 2:14 pm Operator: DHguye
Sample : 24I027-05 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:16 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

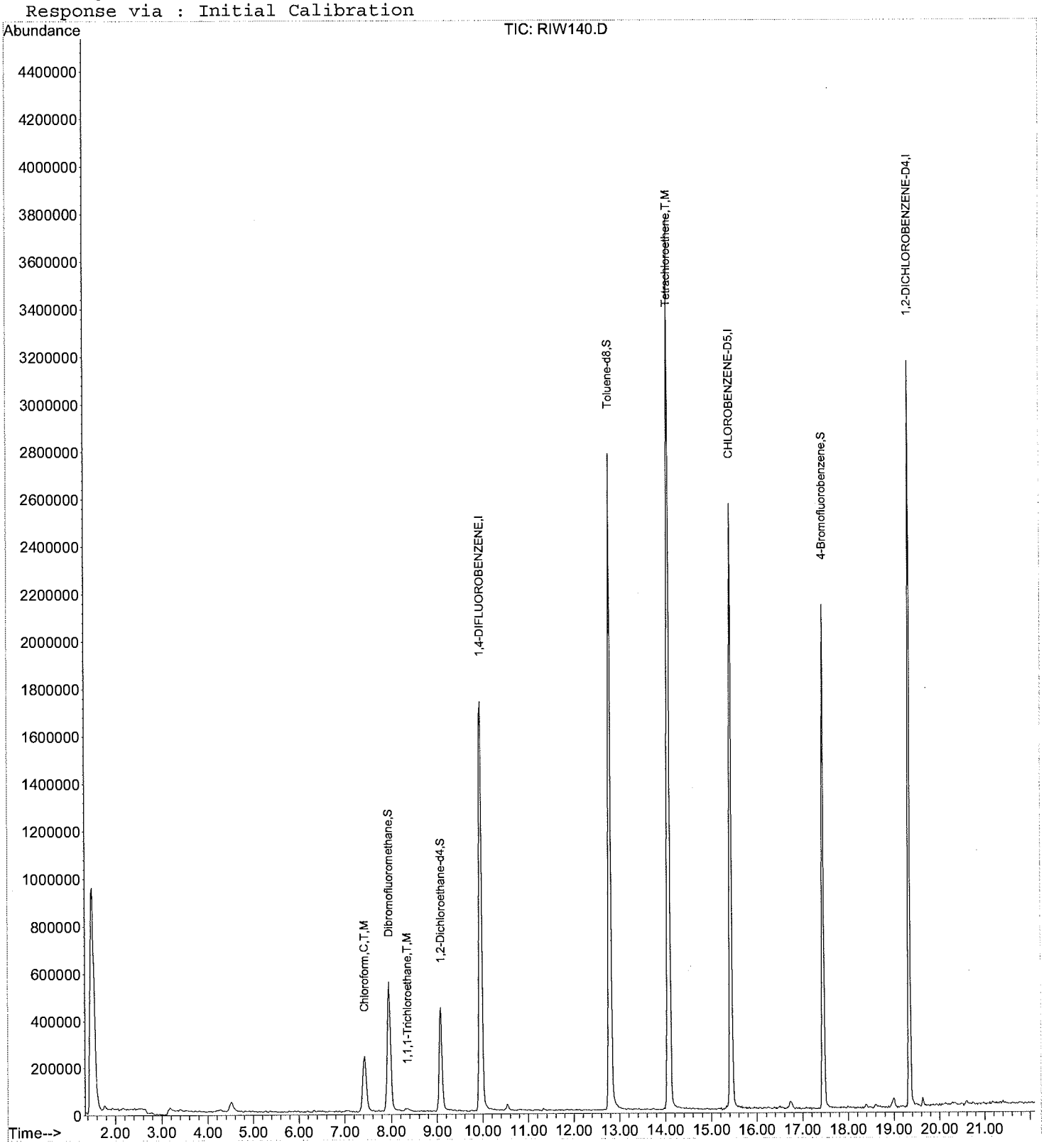
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.97	114	3441245	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2699299	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1281430	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	912499	9.38	ug/l	-0.02
Spiked Amount 10.000			Recovery =	93.80%		
42) 1,2-Dichloroethane-d4	9.09	65	698722	9.18	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.80%		
55) Toluene-d8	12.79	98	3623048	10.37	ug/l	-0.02
Spiked Amount 10.000			Recovery =	103.70%		
77) 4-Bromofluorobenzene	17.45	95	1314632	9.19	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.90%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	563451	3.13	ug/l	94
36) 1,1,1-Trichloroethane	8.35	97	23037	0.16	ug/l	97
62) Tetrachloroethene	14.07	164	1767746	21.10	ug/l	97

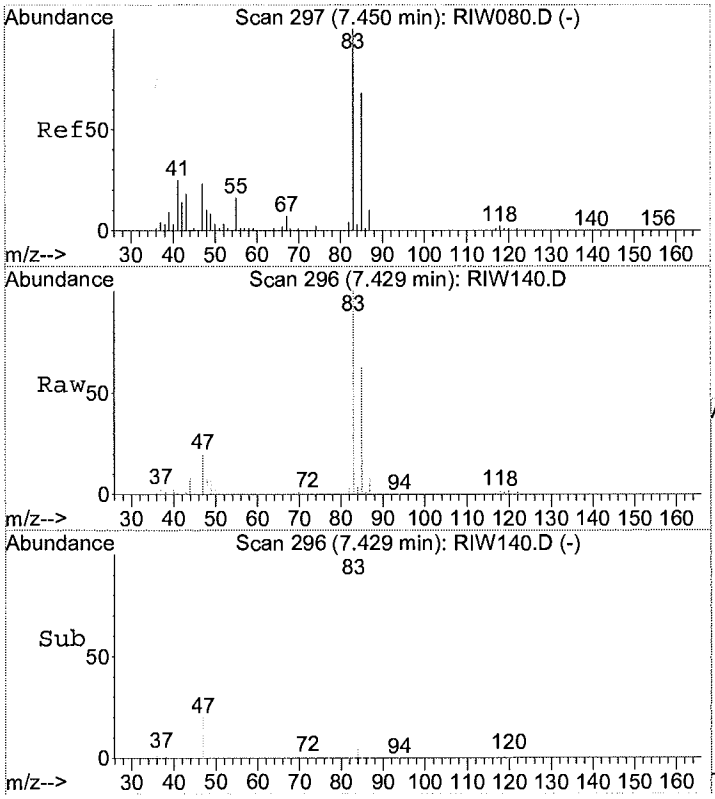
(#) = qualifier out of range (m) = manual integration
RIW140.D VO06I19B.M Tue Oct 15 12:16:28 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW140.D Vial: 16
Acq On : 21 Sep 2024 2:14 pm Operator: DHguye
Sample : 24I027-05 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:16 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

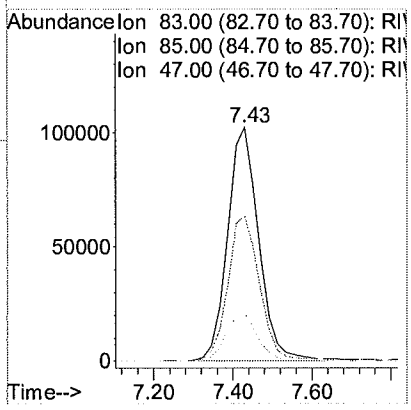


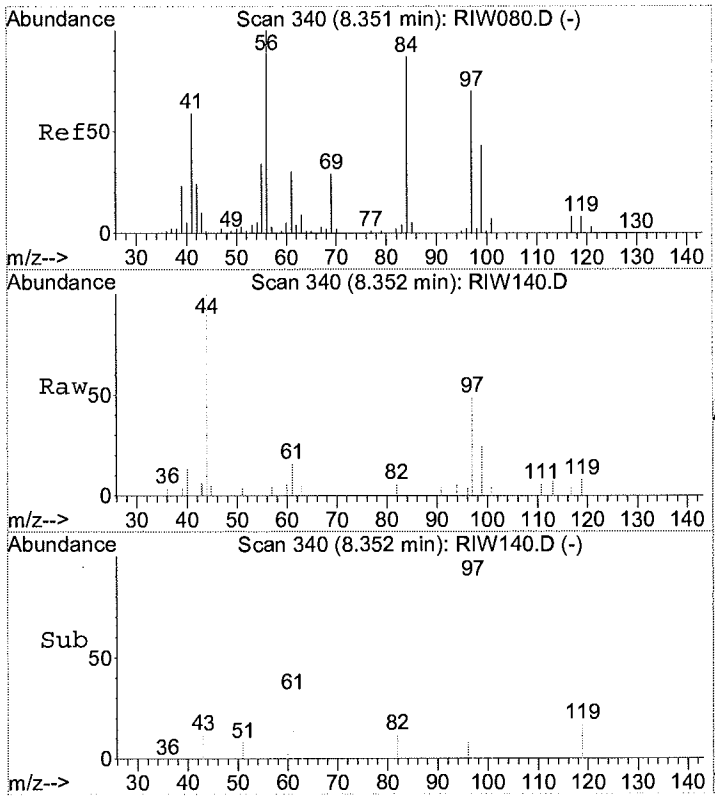


#31
Chloroform
Concen: 3.13 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW140.D
Acq: 21 Sep 2024 2:14 pm

Tgt Ion: 83 Resp: 563451

Ion	Ratio	Lower	Upper
83	100		
85	63.4	38.6	98.6
47	20.9	0.0	53.1

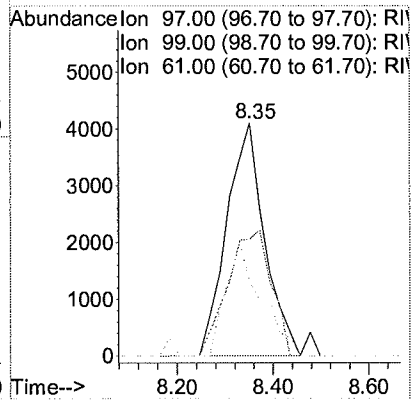


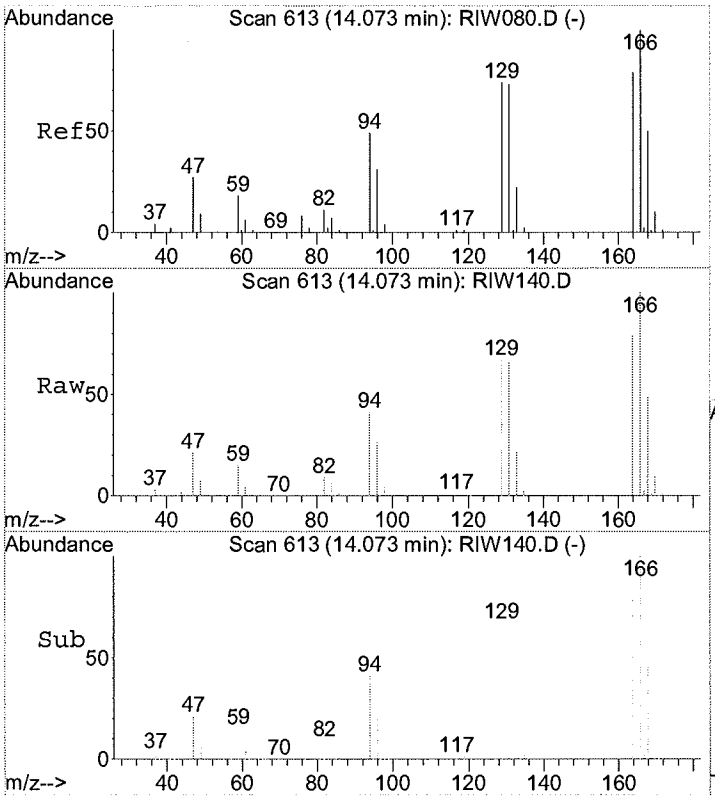


#36
1,1,1-Trichloroethane
Concen: 0.16 ug/l
RT: 8.35 min Scan# 340
Delta R.T. 0.00 min
Lab File: RIW140.D
Acq: 21 Sep 2024 2:14 pm

Tgt Ion: 97 Resp: 23037

Ion	Ratio	Lower	Upper
97	100		
99	60.8	32.6	92.6
61	44.7	12.7	72.7

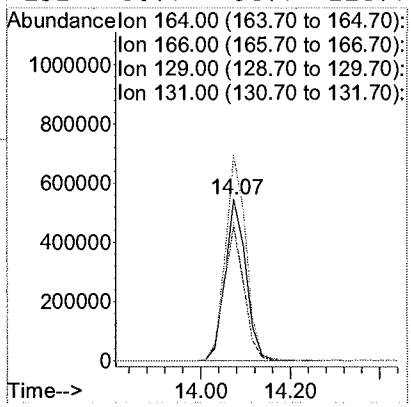




#62
Tetrachloroethene
Concen: 21.10 ug/l
RT: 14.07 min Scan# 613
Delta R.T. 0.00 min
Lab File: RIW140.D
Acq: 21 Sep 2024 2:14 pm

Tgt Ion:164 Resp: 1767746

Ion	Ratio	Lower	Upper
164	100		
166	127.0	100.5	160.5
129	84.6	57.4	117.4
131	80.7	54.7	114.7



METHDD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 12:37
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 14:40
Sample ID	: FD04-GW090824	Date Analyzed:	09/21/24 14:40
Lab Samp ID:	24I027-06	Dilution Factor:	1
Lab File ID:	RIW141	Matrix:	WATER
Ext Btch ID:	VOO6I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.14J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.2	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	21	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.21	10.0	92	70-130
Bromofluorobenzene	9.36	10.0	94	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.64	10.0	96	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW141.D Vial: 17
Acq On : 21 Sep 2024 2:40 pm Operator: DHguye
Sample : 24I027-06 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 11:58 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

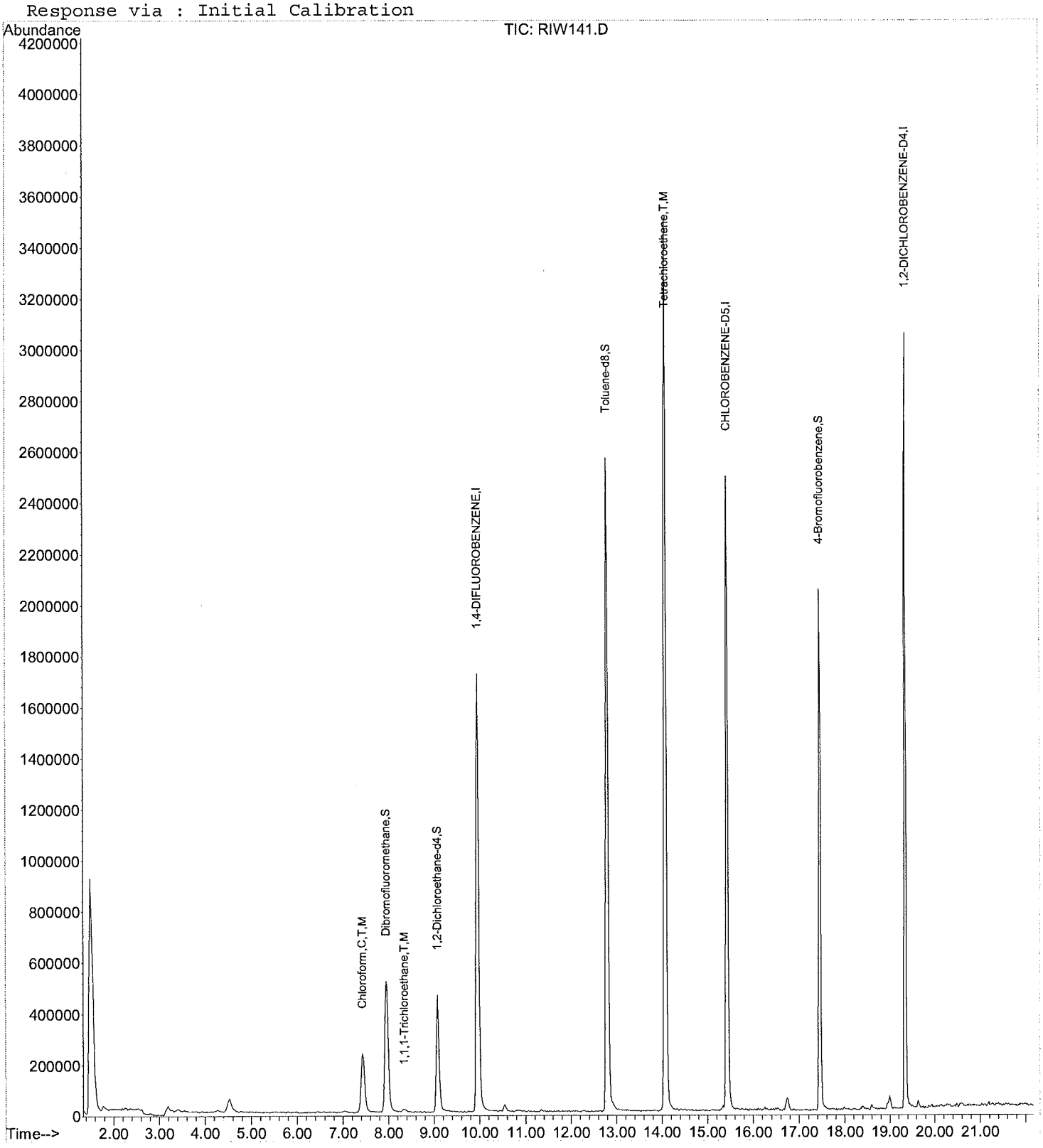
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3258237	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2639265	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1212999	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	888136	9.64	ug/l	-0.02
Spiked Amount 10.000			Recovery =	96.40%		
42) 1,2-Dichloroethane-d4	9.08	65	663623	9.21	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.10%		
55) Toluene-d8	12.79	98	3520662	10.31	ug/l	-0.02
Spiked Amount 10.000			Recovery =	103.10%		
77) 4-Bromofluorobenzene	17.45	95	1267551	9.36	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.60%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	538068	3.16	ug/l	94
36) 1,1,1-Trichloroethane	8.35	97	19838	0.14	ug/l	90
62) Tetrachloroethene	14.07	164	1681281	20.52	ug/l	98

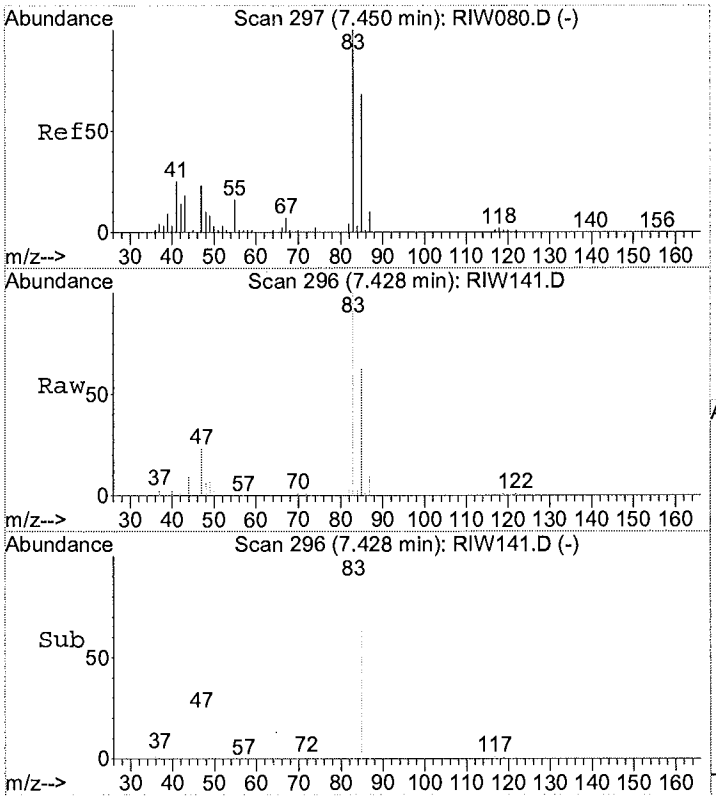
(#) = qualifier out of range (m) = manual integration
RIW141.D VO06I19B.M Wed Oct 23 11:58:25 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW141.D Vial: 17
Acq On : 21 Sep 2024 2:40 pm Operator: DHguye
Sample : 24I027-06 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 11:58 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

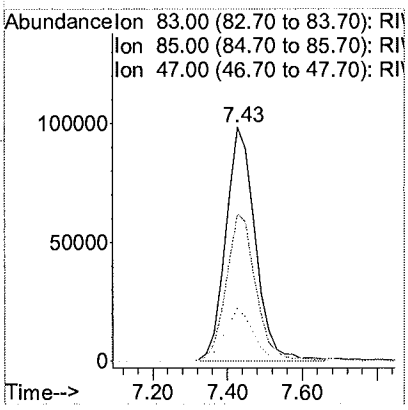


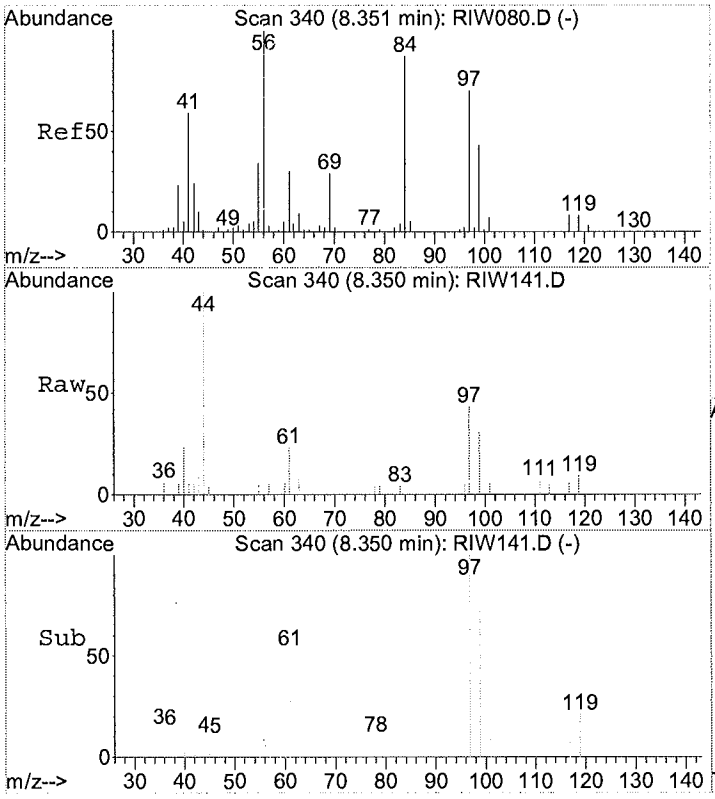


#31
Chloroform
Concen: 3.16 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW141.D
Acq: 21 Sep 2024 2:40 pm

Tgt Ion: 83 Resp: 538068

Ion	Ratio	Lower	Upper
83	100		
85	62.7	38.6	98.6
47	22.3	0.0	53.1

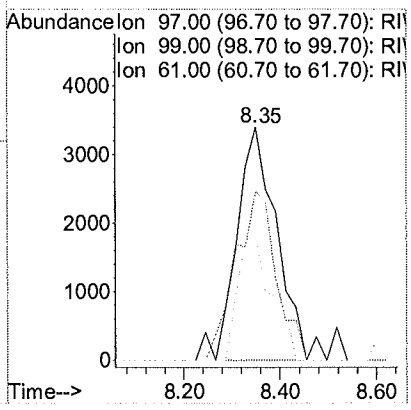


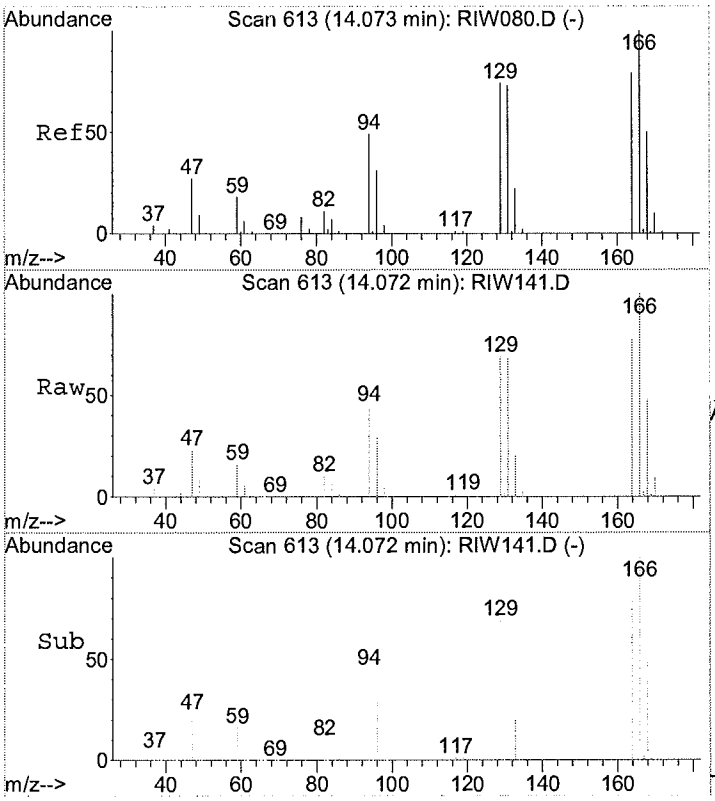


#36
1,1,1-Trichloroethane
Concen: 0.14 ug/l
RT: 8.35 min Scan# 340
Delta R.T. -0.00 min
Lab File: RIW141.D
Acq: 21 Sep 2024 2:40 pm

Tgt Ion: 97 Resp: 19838

Ion	Ratio	Lower	Upper
97	100		
99	73.6	32.6	92.6
61	45.3	12.7	72.7

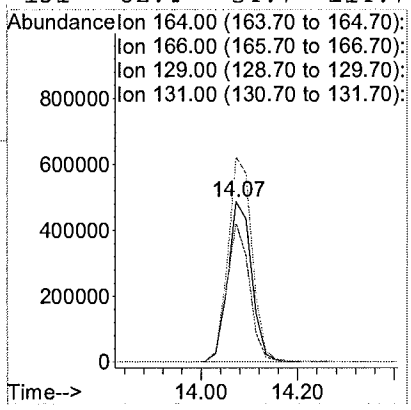




#62
Tetrachloroethene
Concen: 20.52 ug/l
RT: 14.07 min Scan# 613
Delta R.T. -0.00 min
Lab File: RIW141.D
Acq: 21 Sep 2024 2:40 pm

Tgt Ion:164 Resp: 1681281

Ion	Ratio	Lower	Upper
164	100		
166	129.2	100.5	160.5
129	83.8	57.4	117.4
131	82.4	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 14:31
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 15:06
Sample ID	: MW21-GW090824	Date Analyzed:	09/21/24 15:06
Lab Samp ID:	24I027-07	Dilution Factor:	1
Lab File ID:	RIW142	Matrix:	WATER
Ext Btch ID:	VOO6I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.7	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	1.2	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.70	10.0	97	70-130
Bromofluorobenzene	8.86	10.0	89	70-130
Toluene-d8	9.97	10.0	100	70-130
Dibromofluoromethane	9.67	10.0	97	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW142.D Vial: 18
Acq On : 21 Sep 2024 3:06 pm Operator: DHguye
Sample : 24I027-07 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:19 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

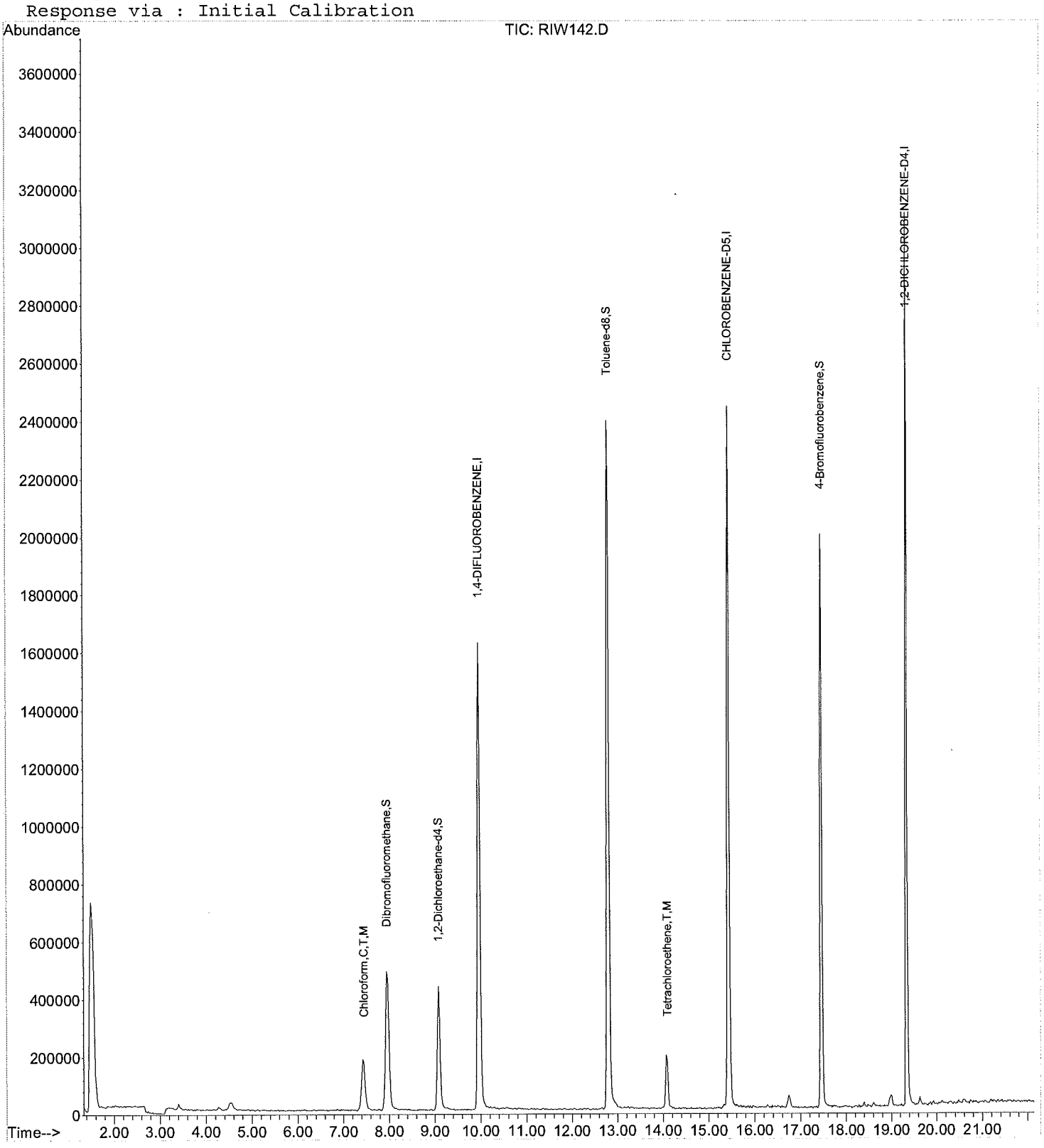
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3016940	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2540582	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1247044	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	824682	9.67	ug/l	-0.02
Spiked Amount 10.000			Recovery =	96.70%		
42) 1,2-Dichloroethane-d4	9.08	65	647147	9.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.00%		
55) Toluene-d8	12.79	98	3277037	9.97	ug/l	-0.02
Spiked Amount 10.000			Recovery =	99.70%		
77) 4-Bromofluorobenzene	17.45	95	1233980	8.86	ug/l	0.00
Spiked Amount 10.000			Recovery =	88.60%		
Target Compounds						Qvalue
31) Chloroform	7.45	83	418937	2.66	ug/l	94
62) Tetrachloroethene	14.09	164	92168	1.17	ug/l	98

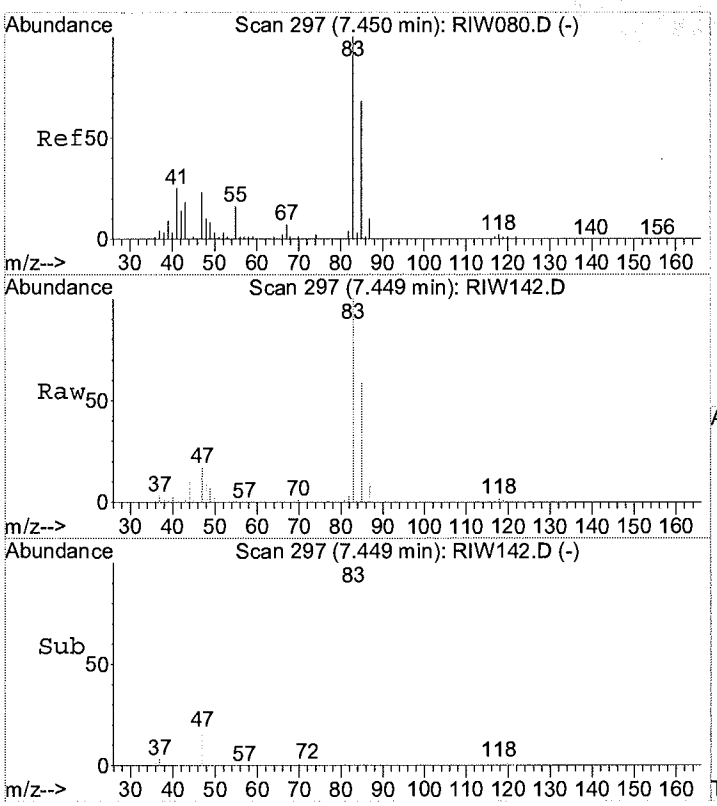
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW142.D Vial: 18
Acq On : 21 Sep 2024 3:06 pm Operator: DHguye
Sample : 24I027-07 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:19 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

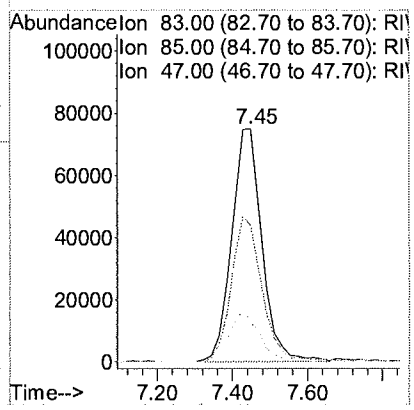


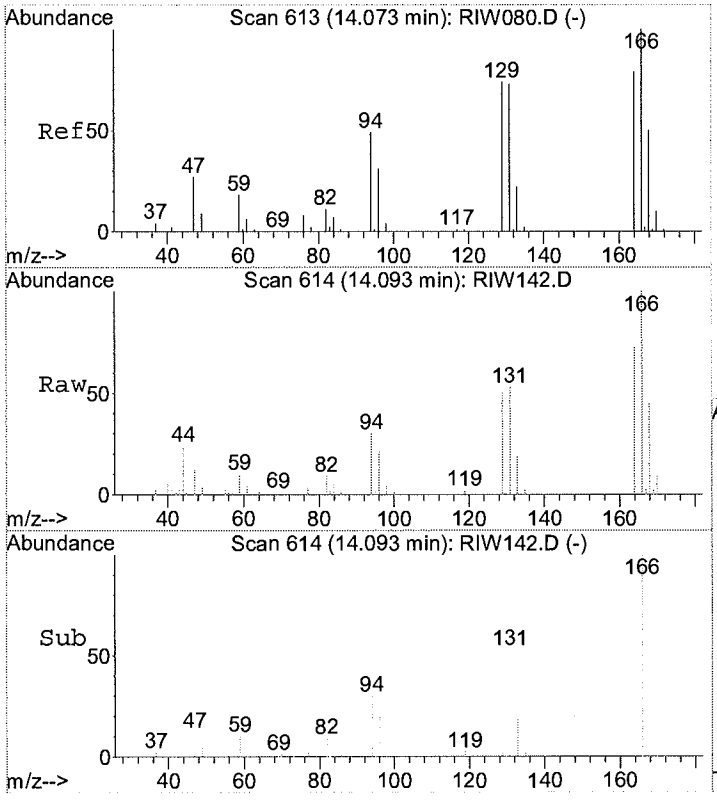


#31
Chloroform
Concen: 2.66 ug/l
RT: 7.45 min Scan# 297
Delta R.T. -0.00 min
Lab File: RIW142.D
Acq: 21 Sep 2024 3:06 pm

Tgt Ion: 83 Resp: 418937

Ion	Ratio	Lower	Upper
83	100		
85	63.2	38.6	98.6
47	21.9	0.0	53.1

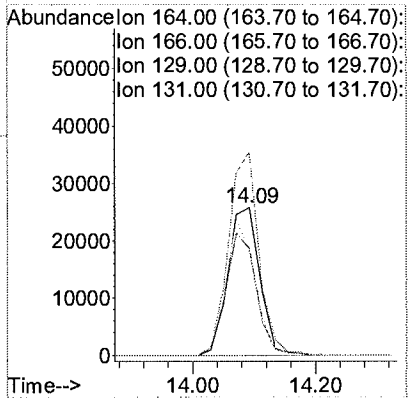




#62
Tetrachloroethene
Concen: 1.17 ug/l
RT: 14.09 min Scan# 614
Delta R.T. 0.02 min
Lab File: RIW142.D
Acq: 21 Sep 2024 3:06 pm

Tgt Ion:164 Resp: 92168

Ion	Ratio	Lower	Upper
164	100		
166	131.3	100.5	160.5
129	86.8	57.4	117.4
131	79.4	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 15:42
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 15:33
Sample ID	: MW22-GW090824	Date Analyzed:	09/21/24 15:33
Lab Samp ID:	24I027-08	Dilution Factor:	1
Lab File ID:	RIW143	Matrix:	WATER
Ext Btch ID:	VOO6I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.28J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.2	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	1.7	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.13	10.0	91	70-130
Bromofluorobenzene	8.93	10.0	89	70-130
Toluene-d8	10.2	10.0	102	70-130
Dibromofluoromethane	9.44	10.0	94	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW143.D Vial: 19
Acq On : 21 Sep 2024 3:33 pm Operator: DHguye
Sample : 24I027-08 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:49 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

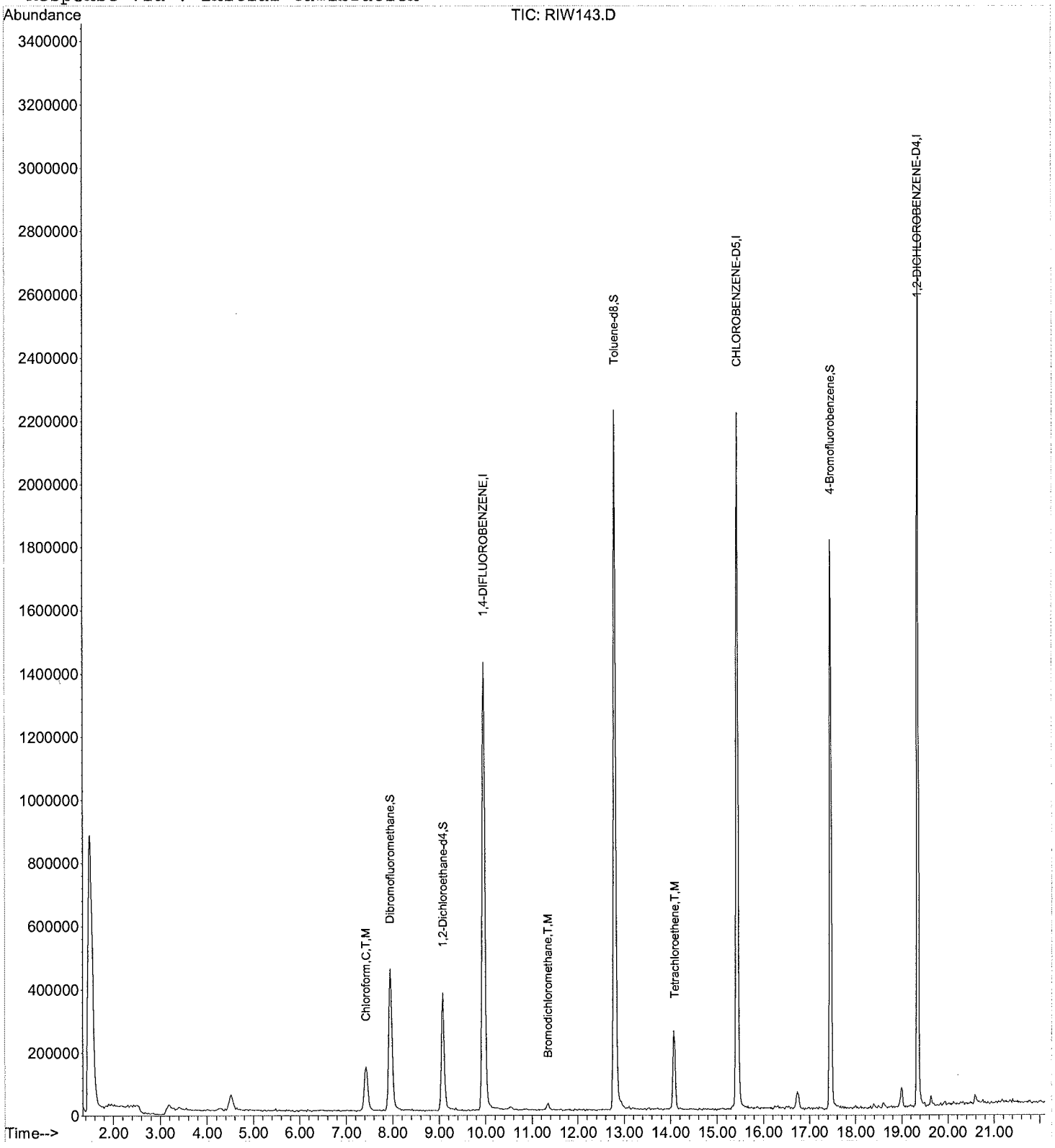
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2787707	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2316435	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1144182	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	743815	9.44	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.40%		
42) 1,2-Dichloroethane-d4	9.08	65	562826	9.13	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.30%		
55) Toluene-d8	12.79	98	3062871	10.22	ug/l	-0.02
Spiked Amount 10.000			Recovery =	102.20%		
77) 4-Bromofluorobenzene	17.45	95	1140220	8.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	89.30%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	327052	2.24	ug/l	95
49) Bromodichloromethane	11.35	83	28473	0.28	ug/l	97
62) Tetrachloroethene	14.09	164	121990	1.70	ug/l	98

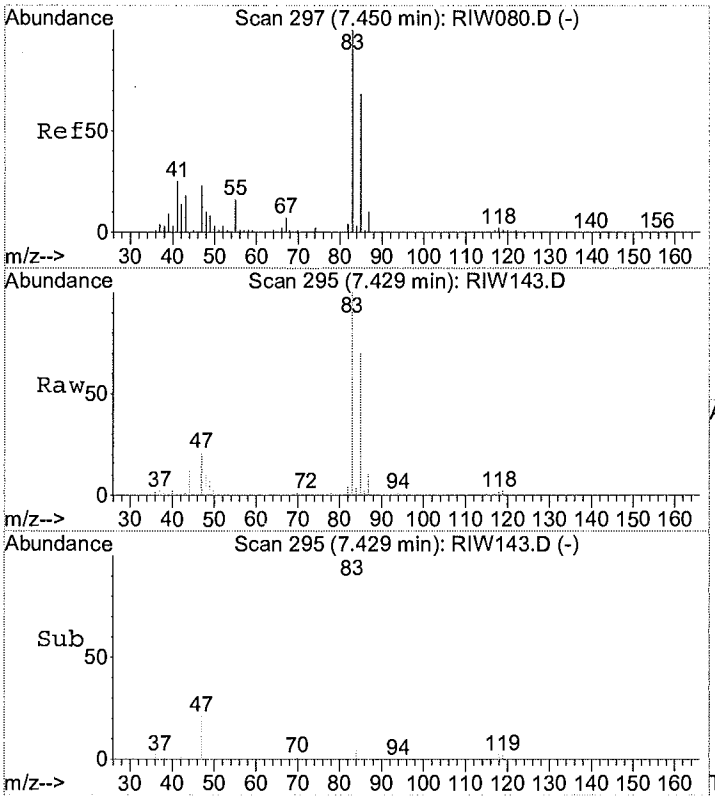
(#) = qualifier out of range (m) = manual integration
RIW143.D VO06I19B.M Tue Oct 22 18:50:14 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW143.D Vial: 19
Acq On : 21 Sep 2024 3:33 pm Operator: DHguye
Sample : 24I027-08 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:49 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

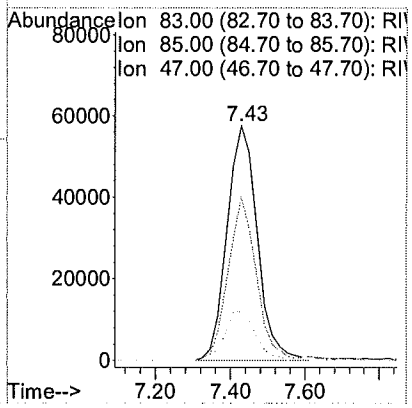


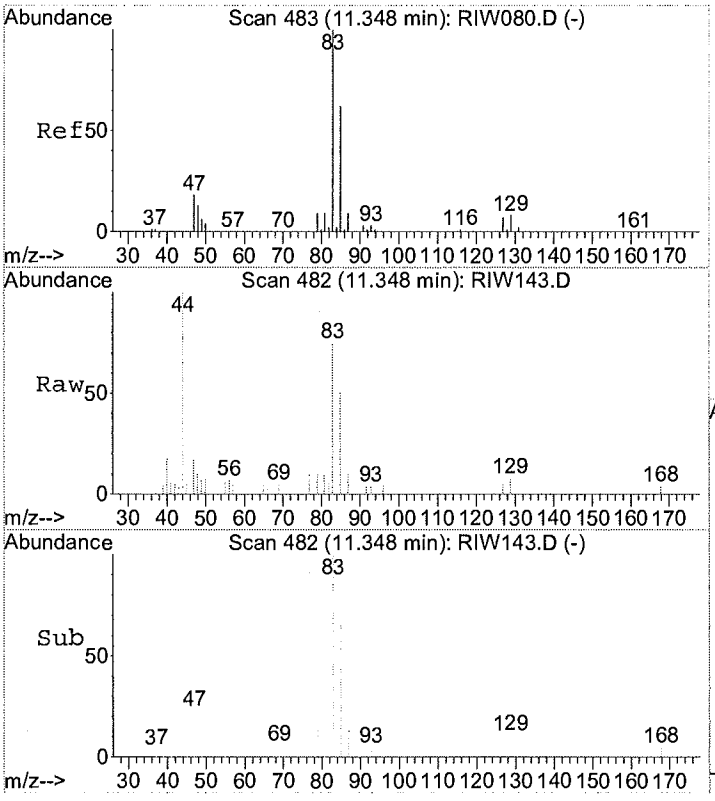


#31
Chloroform
Concen: 2.24 ug/l
RT: 7.43 min Scan# 295
Delta R.T. -0.02 min
Lab File: RIW143.D
Acq: 21 Sep 2024 3:33 pm

Tgt Ion: 83 Resp: 327052

Ion	Ratio	Lower	Upper
83	100		
85	64.1	38.6	98.6
47	21.5	0.0	53.1

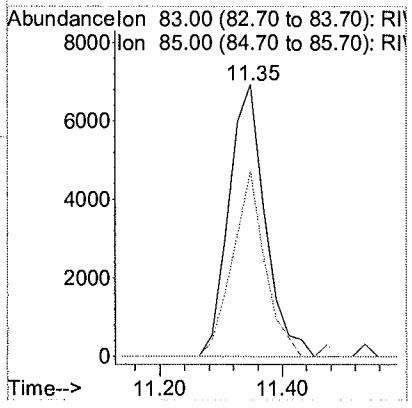


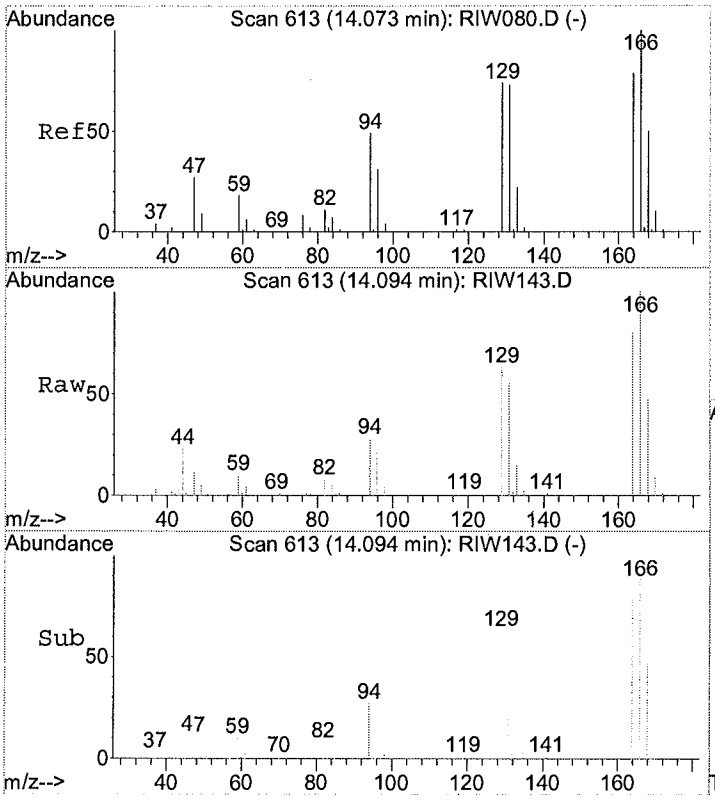


#49
Bromodichloromethane
Concen: 0.28 ug/l
RT: 11.35 min Scan# 482
Delta R.T. -0.00 min
Lab File: RIW143.D
Acq: 21 Sep 2024 3:33 pm

Tgt Ion: 83 Resp: 28473

Ion	Ratio	Lower	Upper
83	100		
85	61.1	33.1	93.1

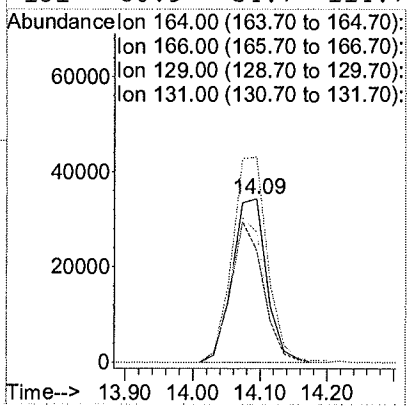




#62
Tetrachloroethene
Concen: 1.70 ug/l
RT: 14.09 min Scan# 613
Delta R.T. 0.02 min
Lab File: RIW143.D
Acq: 21 Sep 2024 3:33 pm

Tgt Ion:164 Resp: 121990

Ion	Ratio	Lower	Upper
164	100		
166	129.3	100.5	160.5
129	88.6	57.4	117.4
131	80.9	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 09:54
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 15:59
Sample ID	: MW24-GW090824	Date Analyzed:	09/21/24 15:59
Lab Samp ID:	24I027-09	Dilution Factor:	1
Lab File ID:	RIW144	Matrix:	WATER
Ext Btch ID:	V006I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.43J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	5.3	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.23J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.31	10.0	93	70-130
Bromofluorobenzene	9.54	10.0	95	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.65	10.0	97	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW144.D Vial: 20
Acq On : 21 Sep 2024 3:59 pm Operator: DHguye
Sample : 24I027-09 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:23 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

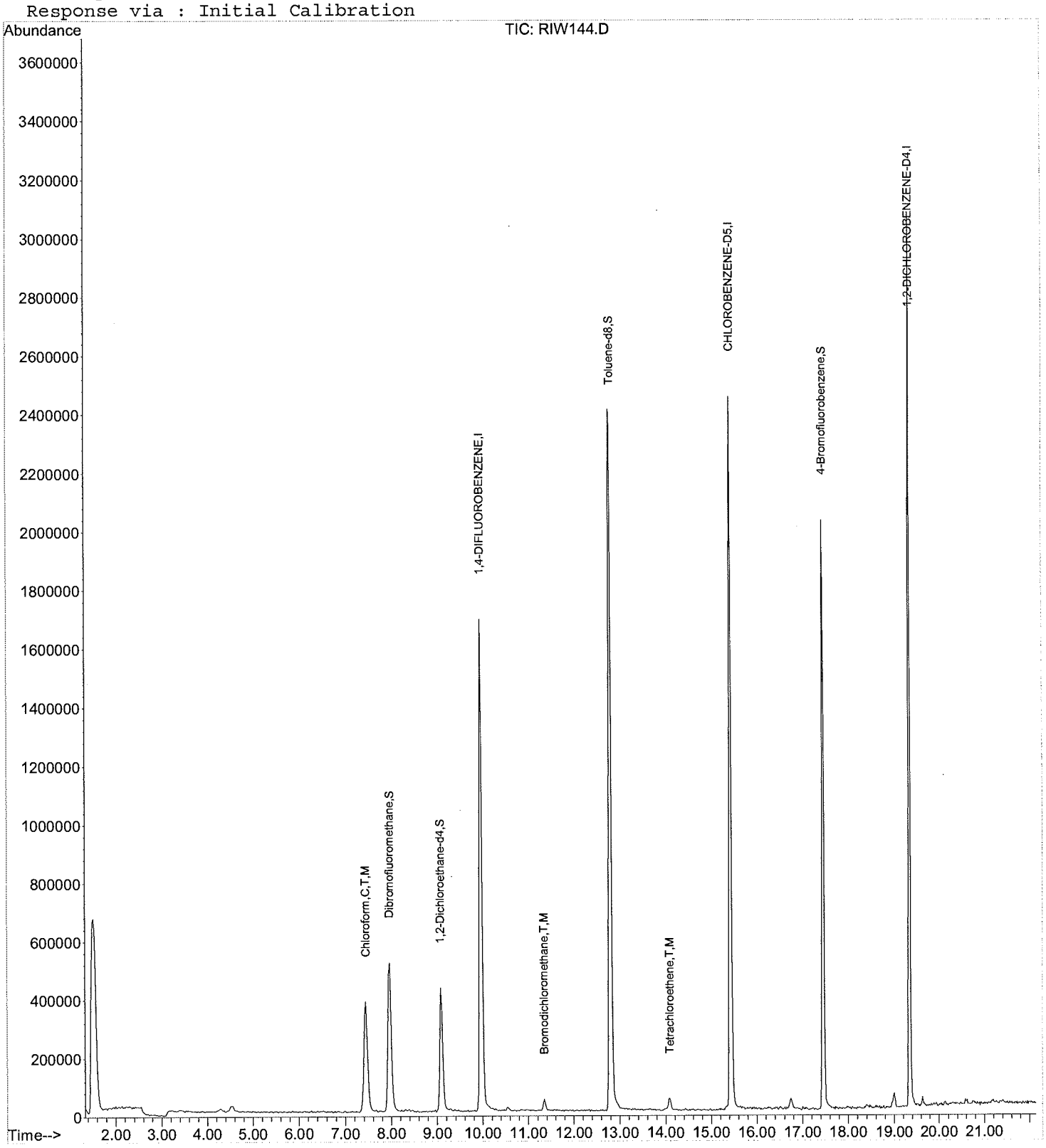
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3185517	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2629254	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1190653	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	869525	9.65	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.50%		
42) 1,2-Dichloroethane-d4	9.08	65	655610	9.31	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.10%		
55) Toluene-d8	12.81	98	3489117	10.25	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.50%		
77) 4-Bromofluorobenzene	17.45	95	1268815	9.54	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.40%		
Target Compounds						Qvalue
31) Chloroform	7.45	83	883058	5.30	ug/l	96
49) Bromodichloromethane	11.35	83	50352	0.43	ug/l	99
62) Tetrachloroethene	14.09	164	18695	0.23	ug/l	99

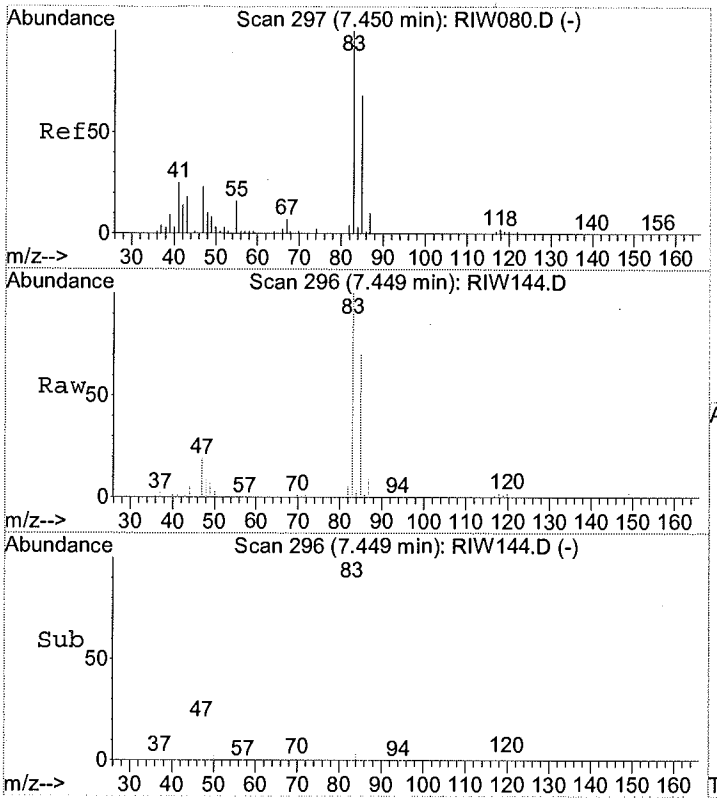
(#) = qualifier out of range (m) = manual integration
RIW144.D VO06I19B.M Tue Oct 15 12:23:22 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW144.D Vial: 20
Acq On : 21 Sep 2024 3:59 pm Operator: DHguye
Sample : 24I027-09 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:23 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

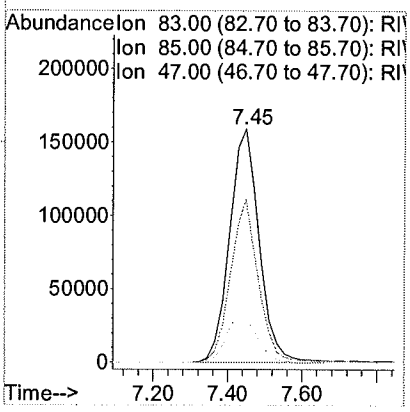


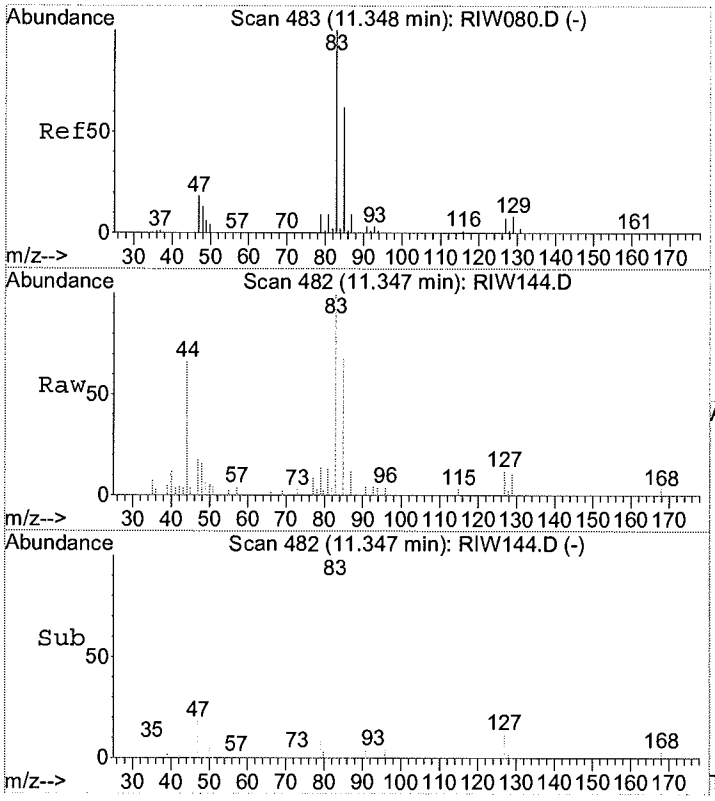


#31
Chloroform
Concen: 5.30 ug/l
RT: 7.45 min Scan# 296
Delta R.T. -0.00 min
Lab File: RIW144.D
Acq: 21 Sep 2024 3:59 pm

Tgt Ion: 83 Resp: 883058

Ion	Ratio	Lower	Upper
83	100		
85	65.2	38.6	98.6
47	20.9	0.0	53.1

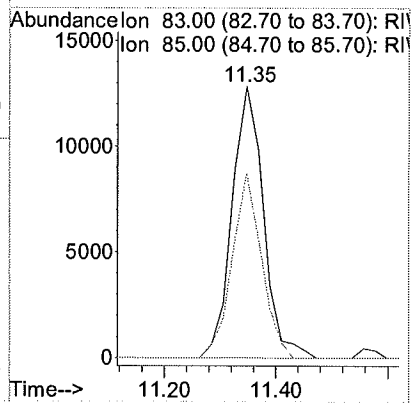


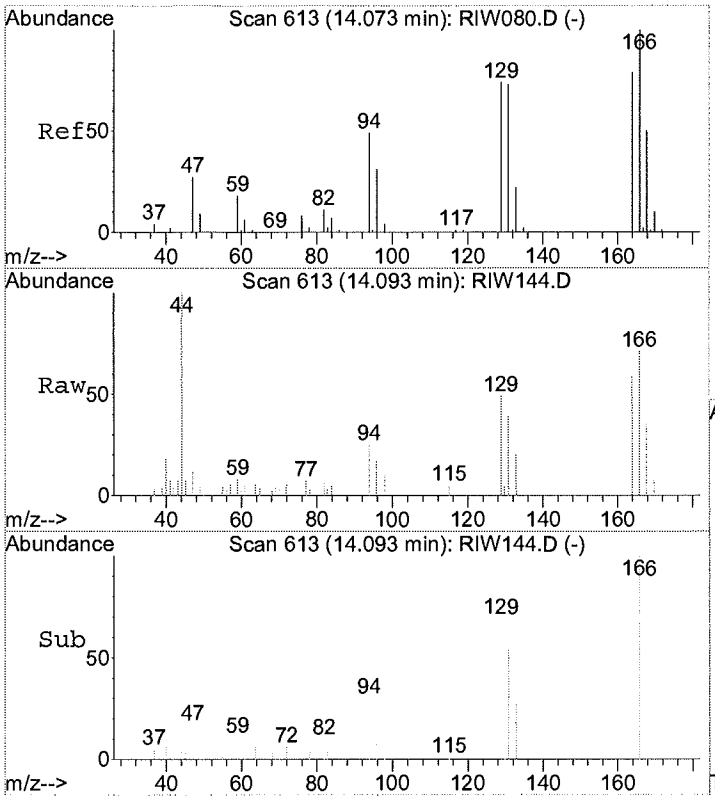


#49
Bromodichloromethane
Concen: 0.43 ug/l
RT: 11.35 min Scan# 482
Delta R.T. -0.00 min
Lab File: RIW144.D
Acq: 21 Sep 2024 3:59 pm

Tgt Ion: 83 Resp: 50352

Ion	Ratio	Lower	Upper
83	100		
85	63.6	33.1	93.1

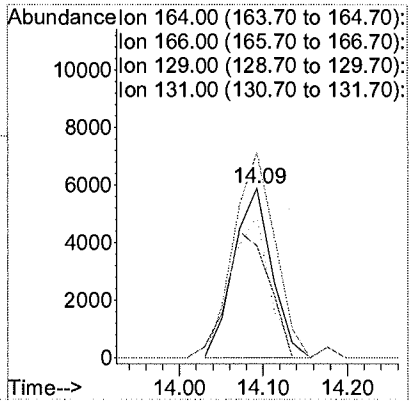




#62
Tetrachloroethene
Concen: 0.23 ug/l
RT: 14.09 min Scan# 613
Delta R.T. 0.02 min
Lab File: RIW144.D
Acq: 21 Sep 2024 3:59 pm

Tgt Ion:164 Resp: 18695

Ion	Ratio	Lower	Upper
164	100		
166	130.7	100.5	160.5
129	86.2	57.4	117.4
131	82.9	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 13:20
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 16:25
Sample ID	: MW26A-GW090824	Date Analyzed:	09/21/24 16:25
Lab Samp ID:	24I027-10	Dilution Factor:	1
Lab File ID:	RIW145	Matrix:	WATER
Ext Btch ID:	V006I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.35J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.3	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.27	10.0	93	70-130
Bromofluorobenzene	8.96	10.0	90	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.53	10.0	95	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW145.D Vial: 21
Acq On : 21 Sep 2024 4:25 pm Operator: DHguye
Sample : 24I027-10 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:24 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

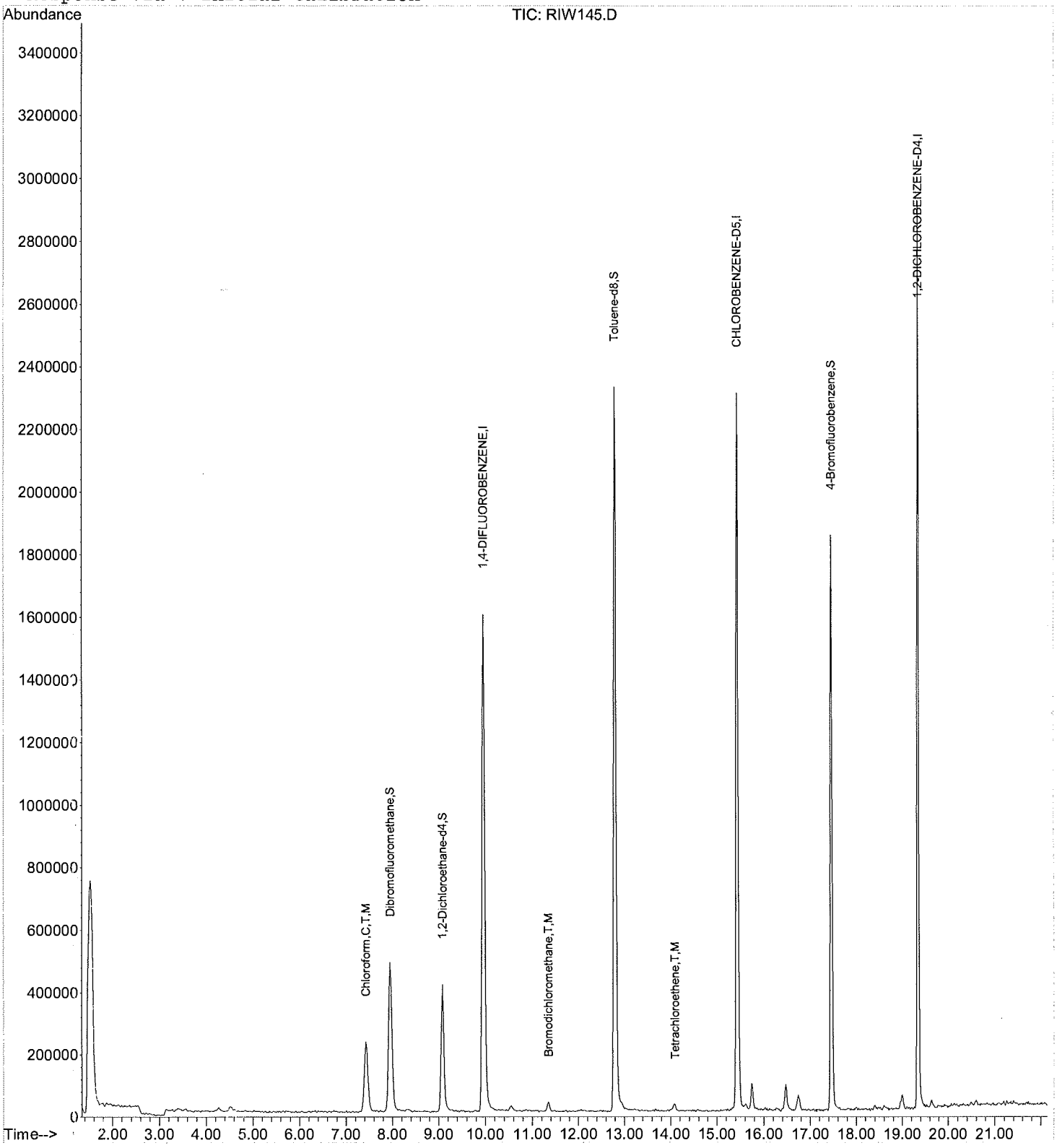
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2991185	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2438645	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1150692	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	806005	9.53	ug/l	-0.02
Spiked Amount 10.000			Recovery =	95.30%		
42) 1,2-Dichloroethane-d4	9.08	65	613175	9.27	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.70%		
55) Toluene-d8	12.79	98	3237790	10.26	ug/l	0.02
Spiked Amount 10.000			Recovery =	102.60%		
77) 4-Bromofluorobenzene	17.45	95	1151003	8.96	ug/l	0.00
Spiked Amount 10.000			Recovery =	89.60%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	523848	3.35	ug/l	95
49) Bromodichloromethane	11.35	83	38156	0.35	ug/l	92
62) Tetrachloroethene	14.09	164	9395	0.12	ug/l	93

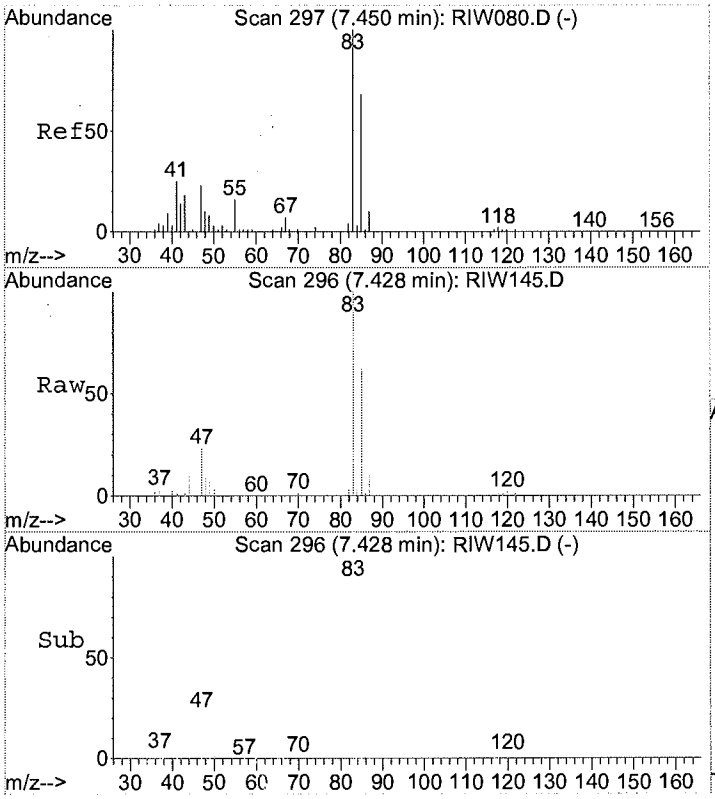
(#) = qualifier out of range (m) = manual integration
RIW145.D VO06I19B.M Tue Oct 15 12:25:05 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW145.D Vial: 21
Acq On : 21 Sep 2024 4:25 pm Operator: DHguye
Sample : 24I027-10 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:24 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

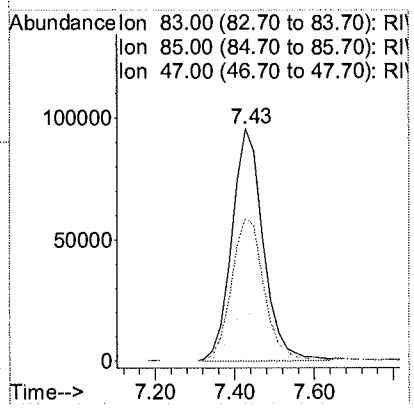


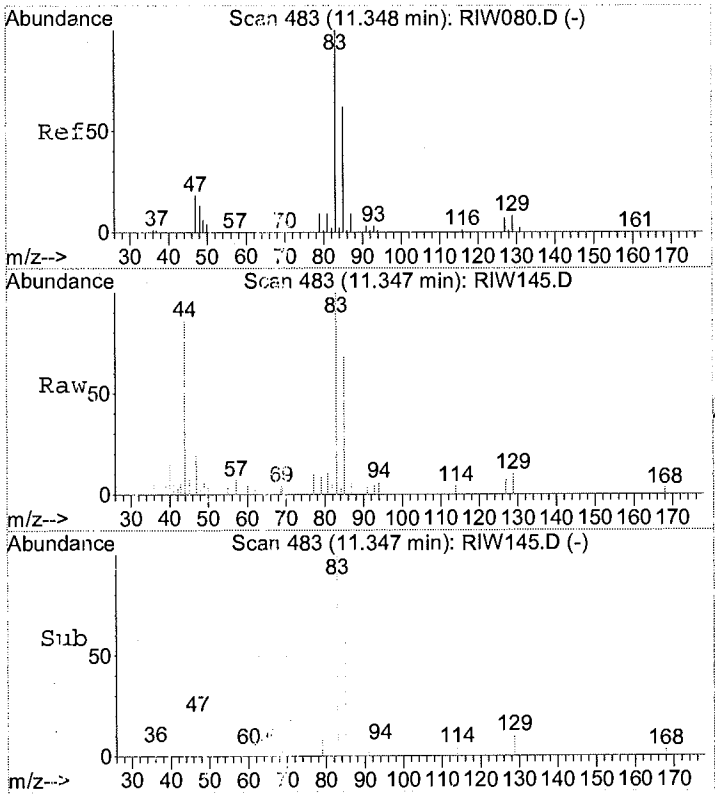


#31
Chloroform
Concen: 3.35 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW145.D
Acq: 21 Sep 2024 4:25 pm

Tgt Ion: 83 Resp: 523848

Ion	Ratio	Lower	Upper
83	100		
85	64.0	38.6	98.6
47	22.3	0.0	53.1

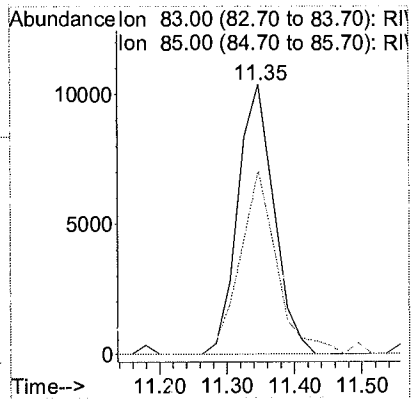


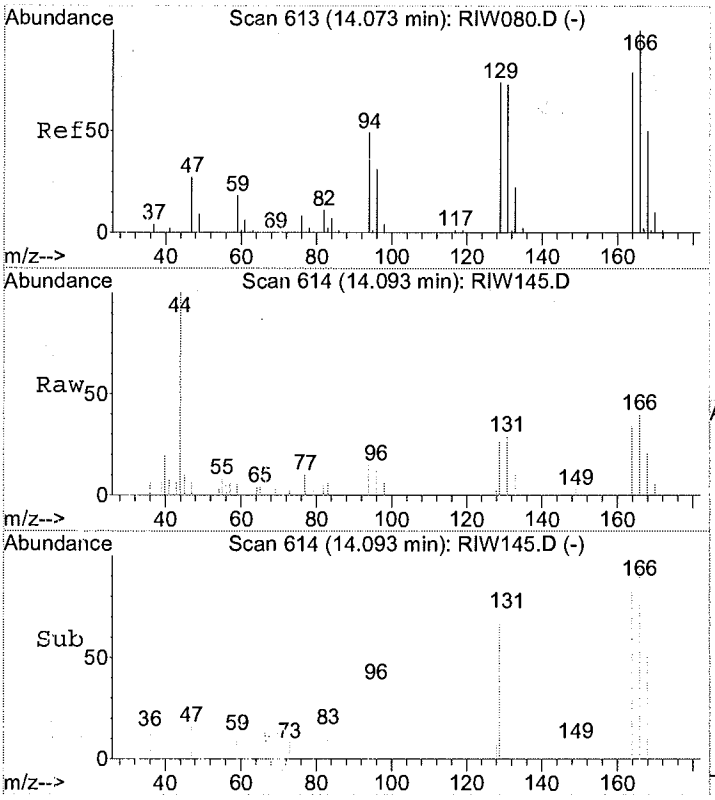


#49
Bromodichloromethane
Concen: 0.35 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW145.D
Acq: 21 Sep 2024 4:25 pm

Tgt Ion: 83 Resp: 38156

Ion	Ratio	Lower	Upper
83	100		
85	69.1	33.1	93.1

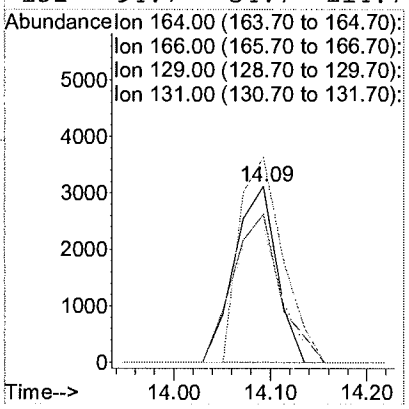




#62
Tetrachloroethene
Concen: 0.12 ug/l
RT: 14.09 min Scan# 614
Delta R.T. 0.02 min
Lab File: RIW145.D
Acq: 21 Sep 2024 4:25 pm

Tgt Ion:164 Resp: 9395

Ion	Ratio	Lower	Upper
164	100		
166	121.0	100.5	160.5
129	87.9	57.4	117.4
131	94.7	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 15:30
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 16:52
Sample ID	: MW26D-GW090824	Date Analyzed:	09/21/24 16:52
Lab Samp ID:	24I027-11	Dilution Factor:	1
Lab File ID:	RIW146	Matrix:	WATER
Ext Btch ID:	VOO6I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.36	10.0	94	70-130
Bromofluorobenzene	9.16	10.0	92	70-130
Toluene-d8	10.2	10.0	102	70-130
Dibromofluoromethane	9.64	10.0	96	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW146.D Vial: 22
Acq On : 21 Sep 2024 4:52 pm Operator: DHguye
Sample : 24I027-11 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:27 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3048408	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2483807	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1211760	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	831089	9.64	ug/l	-0.02
Spiked Amount 10.000			Recovery =	96.40%		
42) 1,2-Dichloroethane-d4	9.08	65	630798	9.36	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.60%		
55) Toluene-d8	12.79	98	3281018	10.21	ug/l	-0.02
Spiked Amount 10.000			Recovery =	102.10%		
77) 4-Bromofluorobenzene	17.45	95	1238673	9.16	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.60%		

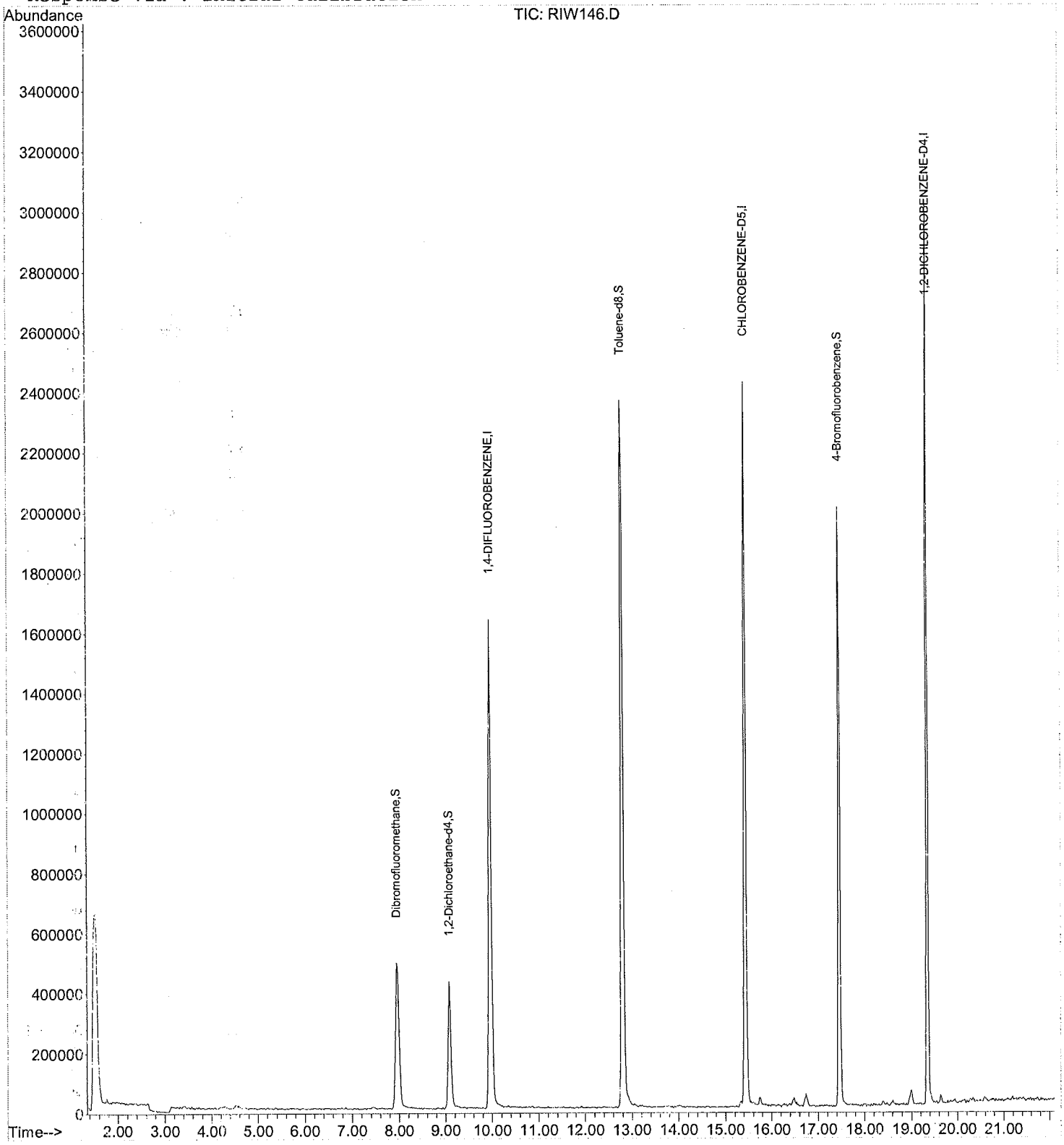
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW146.D Vial: 22
Acq On : 21 Sep 2024 4:52 pm Operator: DHguye
Sample : 24I027-11 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:27 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 12:15
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 17:18
Sample ID	: MW30RA-GW090824	Date Analyzed:	09/21/24 17:18
Lab Samp ID:	24I027-12	Dilution Factor:	1
Lab File ID:	RIW147	Matrix:	WATER
Ext Btch ID:	VOO6I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.47J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	5.7	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.59	10.0	96	70-130
Bromofluorobenzene	8.93	10.0	89	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.59	10.0	96	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW147.D Vial: 23
Acq On : 21 Sep 2024 5:18 pm Operator: DHguye
Sample : 24I027-12 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:30 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

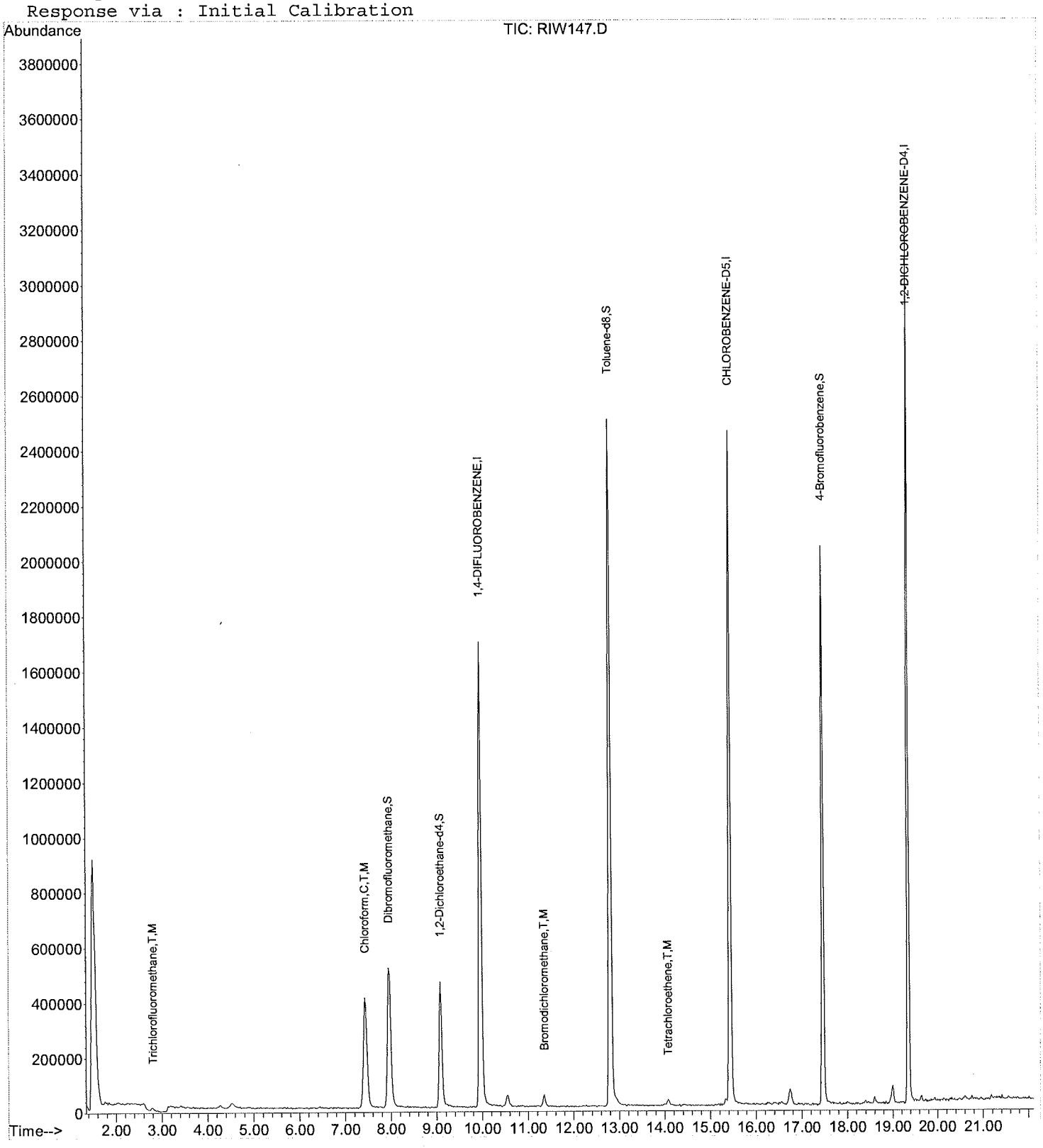
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.97	114	3182159	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2604119	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1274123	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	862627	9.59	ug/l	-0.02
Spiked Amount 10.000			Recovery =	95.90%		
42) 1,2-Dichloroethane-d4	9.08	65	674837	9.59	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.90%		
55) Toluene-d8	12.79	98	3486351	10.34	ug/l	0.02
Spiked Amount 10.000			Recovery =	103.40%		
77) 4-Bromofluorobenzene	17.45	95	1269836	8.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	89.30%		
Target Compounds						Qvalue
8) Trichlorofluoromethane	2.81	101	13593	0.11	ug/l	93
31) Chloroform	7.43	83	945753	5.68	ug/l	95
49) Bromodichloromethane	11.35	83	55395	0.47	ug/l	98
62) Tetrachloroethene	14.07	164	10934	0.14	ug/l	94

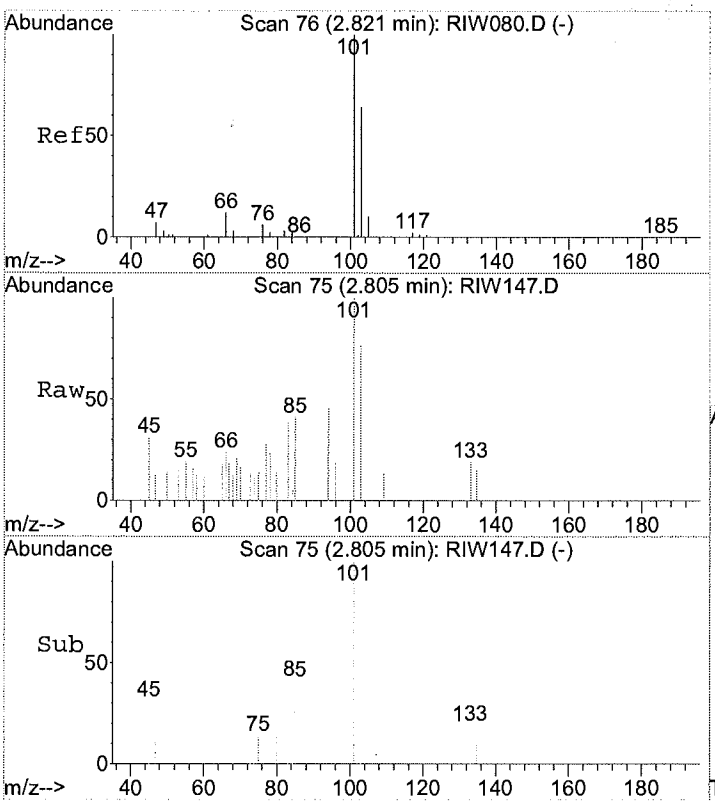
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW147.D Vial: 23
Acq On : 21 Sep 2024 5:18 pm Operator: DHguye
Sample : 24I027-12 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:30 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

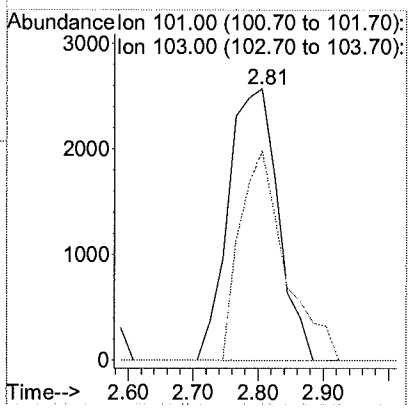


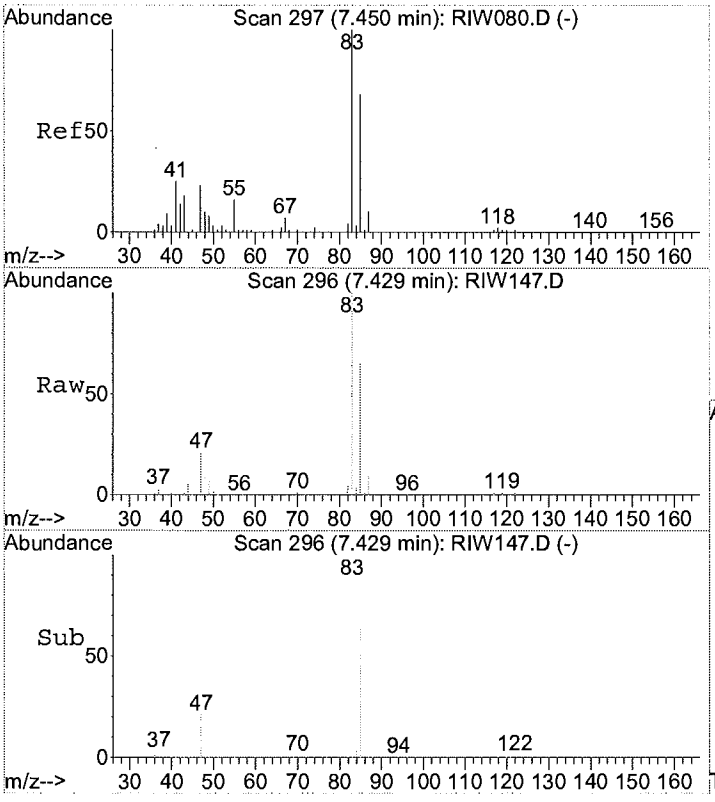


#8
Trichlorofluoromethane
Concen: 0.11 ug/l
RT: 2.81 min Scan# 75
Delta R.T. -0.02 min
Lab File: RIW147.D
Acq: 21 Sep 2024 5:18 pm

Tgt Ion:101 Resp: 13593

Ion	Ratio	Lower	Upper
101	100		
103	70.2	34.5	94.5

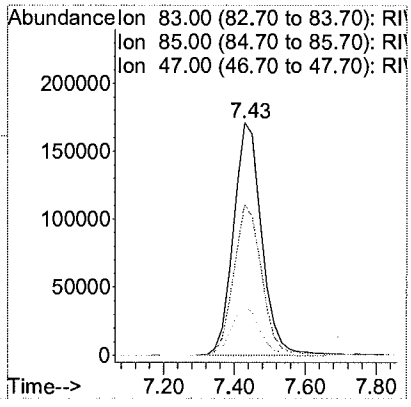


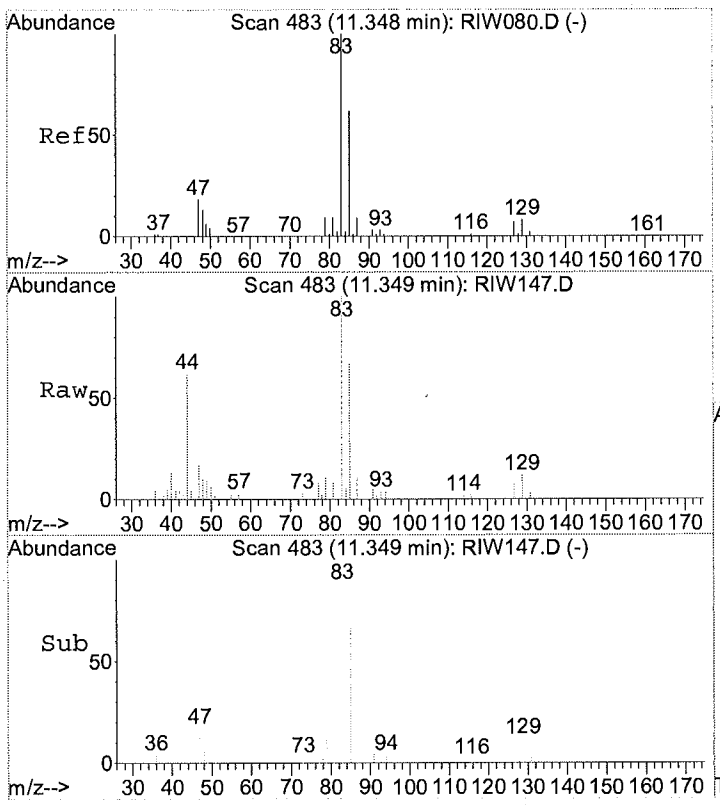


#31
Chloroform
Concen: 5.68 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW147.D
Acq: 21 Sep 2024 5:18 pm

Tgt Ion: 83 Resp: 945753

Ion	Ratio	Lower	Upper
83	100		
85	64.4	38.6	98.6
47	21.3	0.0	53.1

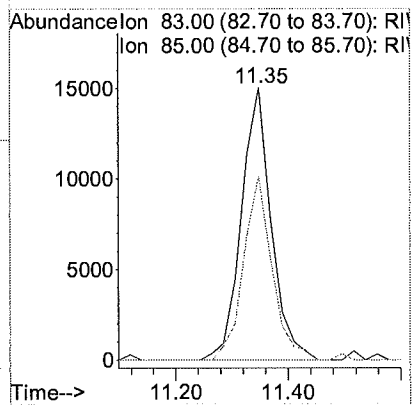


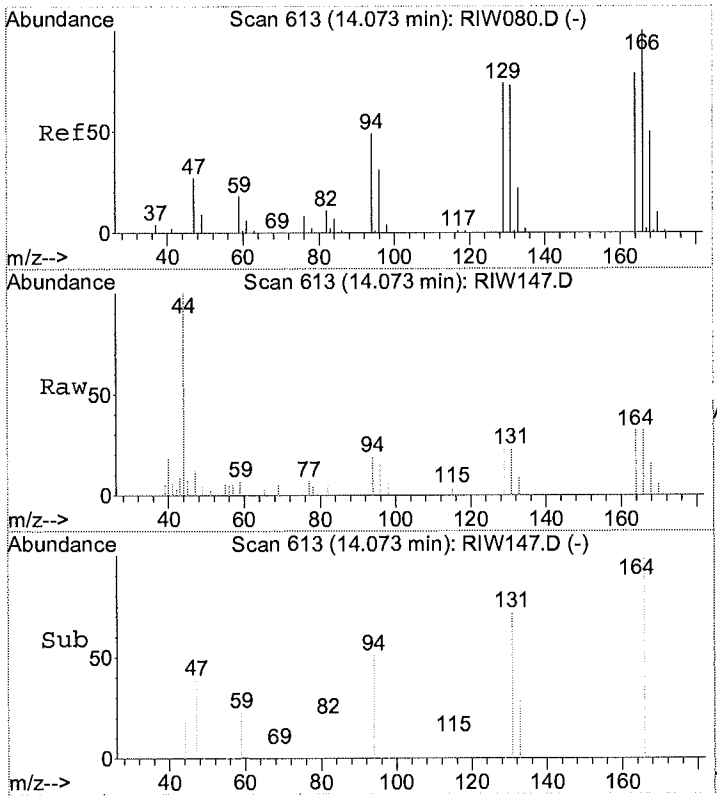


#49
Bromodichloromethane
Concen: 0.47 ug/l
RT: 11.35 min Scan# 483
Delta R.T. 0.00 min
Lab File: RIW147.D
Acq: 21 Sep 2024 5:18 pm

Tgt Ion: 83 Resp: 55395

Ion	Ratio	Lower	Upper
83	100		
85	64.9	33.1	93.1

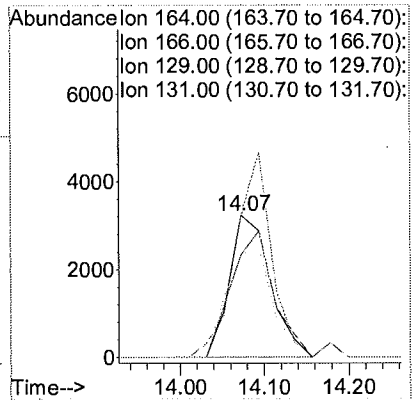




#62
Tetrachloroethene
Concen: 0.14 ug/l
RT: 14.07 min Scan# 613
Delta R.T. 0.00 min
Lab File: RIW147.D
Acq: 21 Sep 2024 5:18 pm

Tgt Ion:164 Resp: 10934

Ion	Ratio	Lower	Upper
164	100		
166	126.1	100.5	160.5
129	84.9	57.4	117.4
131	96.2	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 12:01
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 17:44
Sample ID	: MW30RB-GW090824	Date Analyzed:	09/21/24 17:44
Lab Samp ID:	24I027-13	Dilution Factor:	1
Lab File ID:	RIW148	Matrix:	WATER
Ext Btch ID:	V006I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.60J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	6.3	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.16J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	0.19J	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.59	10.0	96	70-130
Bromofluorobenzene	9.04	10.0	90	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.64	10.0	96	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW148.D Vial: 24
Acq On : 21 Sep 2024 5:44 pm Operator: DHguye
Sample : 24I027-13 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:38 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

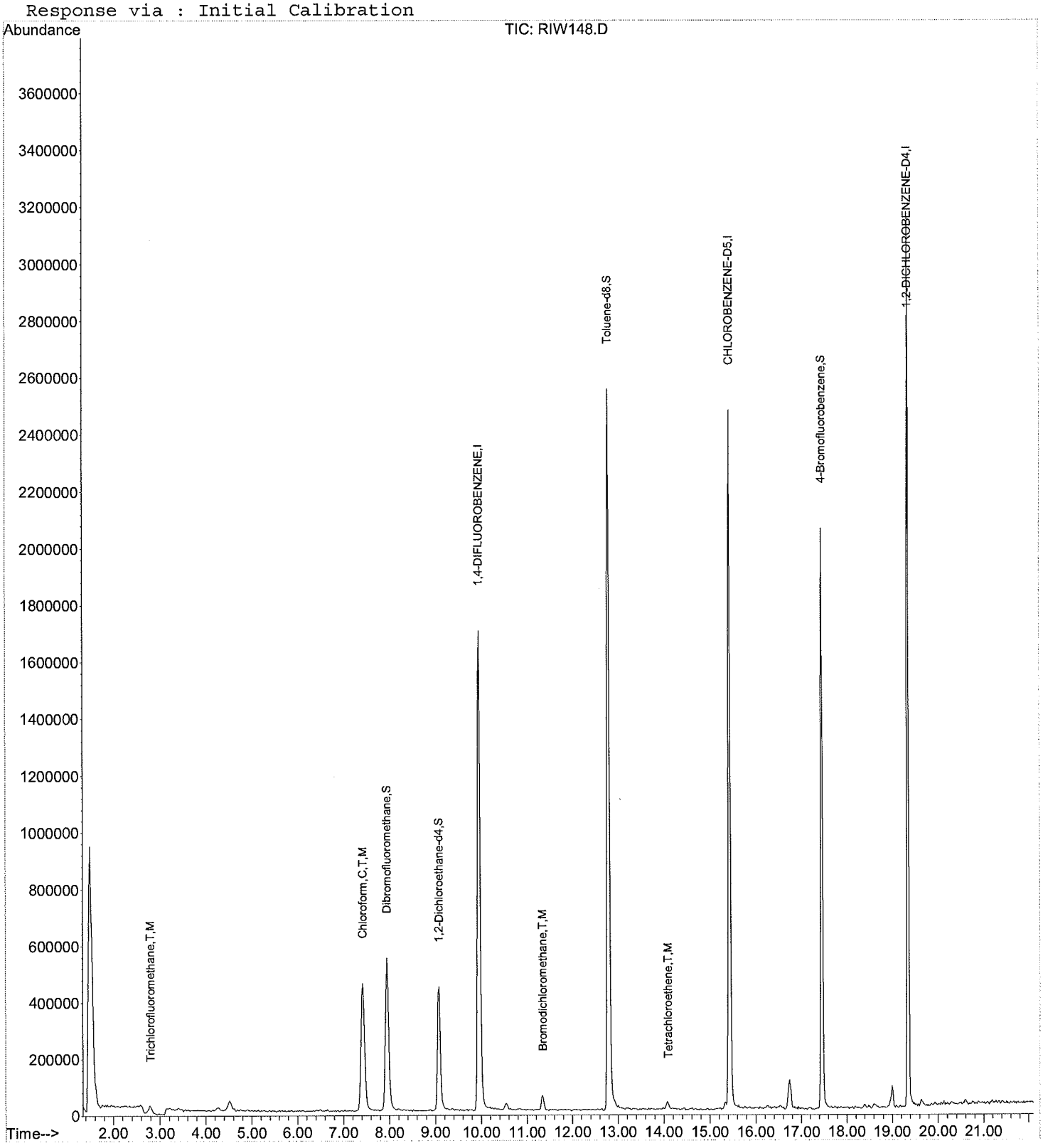
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3251630	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2605680	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1247135	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	886308	9.64	ug/l	-0.02
Spiked Amount 10.000			Recovery =	96.40%		
42) 1,2-Dichloroethane-d4	9.08	65	689111	9.59	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.90%		
55) Toluene-d8	12.79	98	3477015	10.31	ug/l	0.02
Spiked Amount 10.000			Recovery =	103.10%		
77) 4-Bromofluorobenzene	17.45	95	1258195	9.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.40%		
Target Compounds						Qvalue
8) Trichlorofluoromethane	2.80	101	24631	0.19	ug/l	91
31) Chloroform	7.43	83	1075859	6.33	ug/l	95
49) Bromodichloromethane	11.35	83	72186	0.60	ug/l	97
62) Tetrachloroethene	14.09	164	13200	0.16	ug/l	98

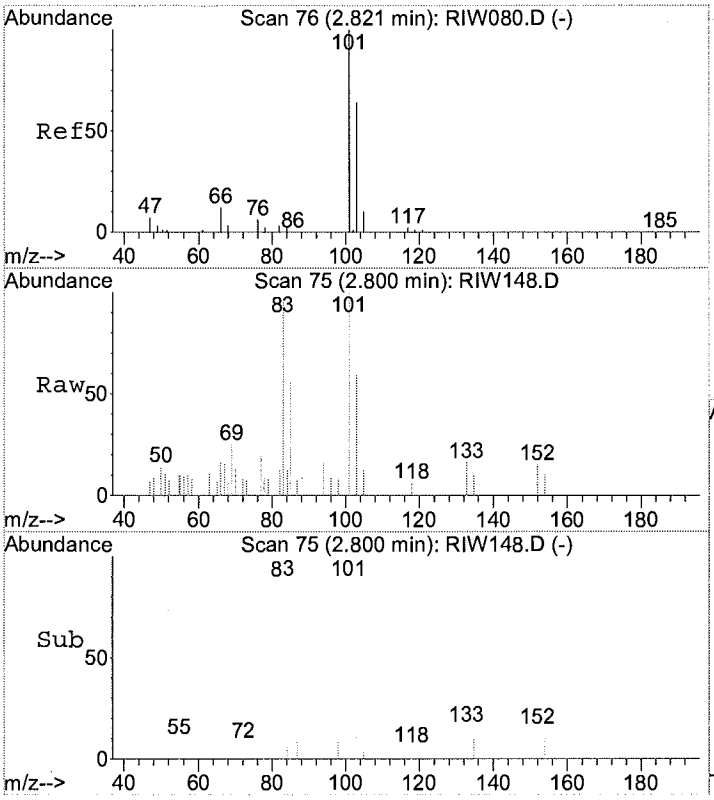
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW148.D Vial: 24
Acq On : 21 Sep 2024 5:44 pm Operator: DHguye
Sample : 24I027-13 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:38 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

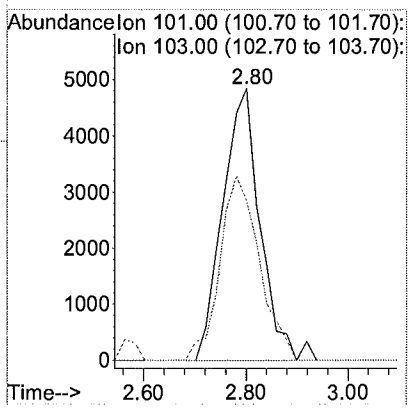


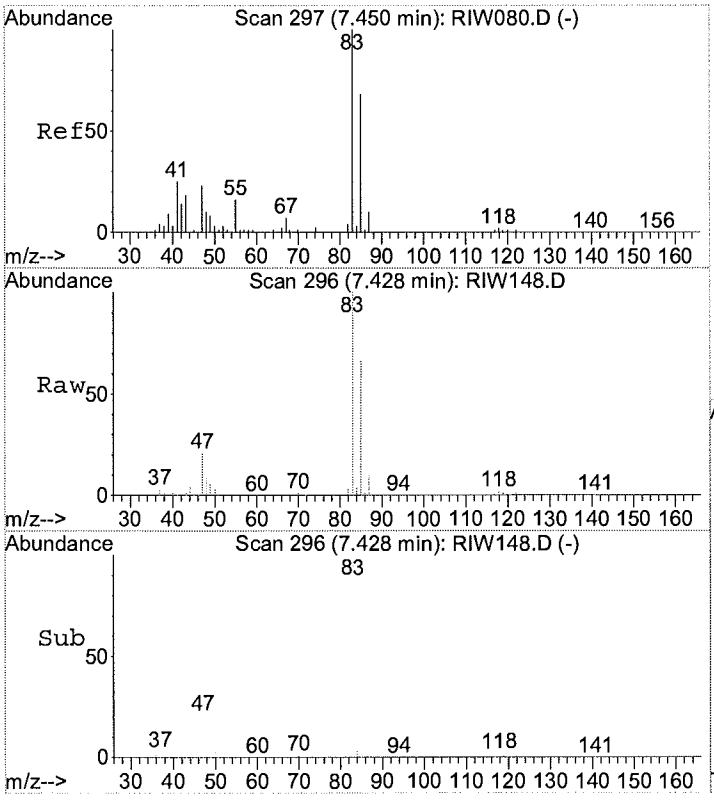


#8
Trichlorofluoromethane
Concen: 0.19 ug/l
RT: 2.80 min Scan# 75
Delta R.T. -0.02 min
Lab File: RIW148.D
Acq: 21 Sep 2024 5:44 pm

Tgt Ion:101 Resp: 24631

Ion	Ratio	Lower	Upper
101	100		
103	71.9	34.5	94.5

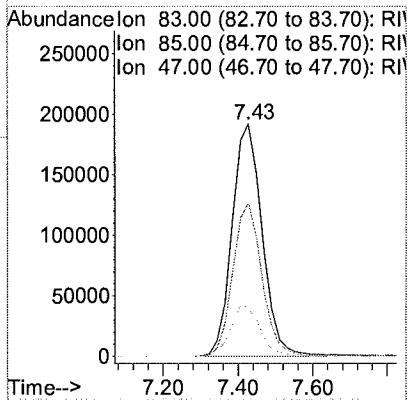


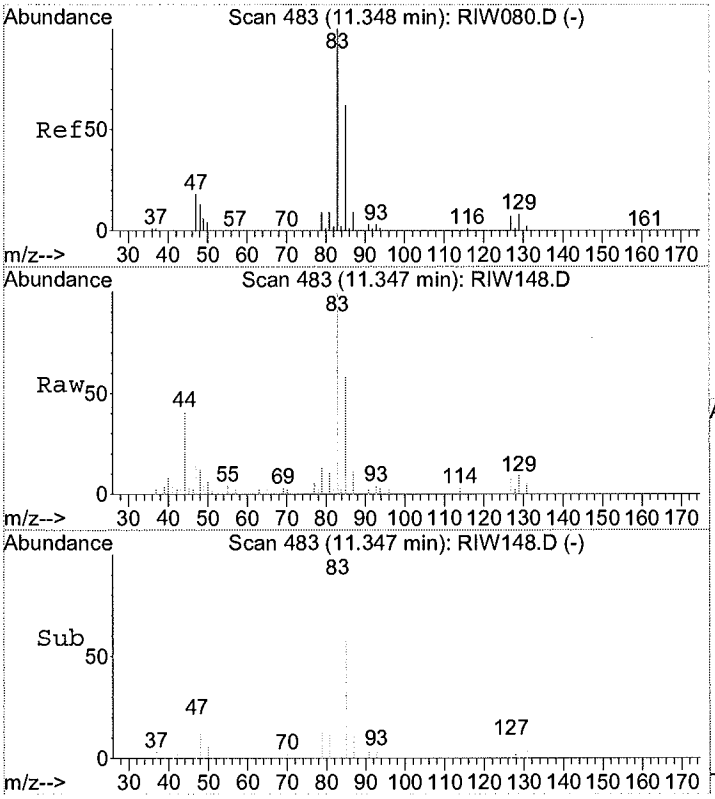


#31
Chloroform
Concen: 6.33 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW148.D
Acq: 21 Sep 2024 5:44 pm

Tgt Ion: 83 Resp: 1075859

Ion	Ratio	Lower	Upper
83	100		
85	64.1	38.6	98.6
47	21.9	0.0	53.1

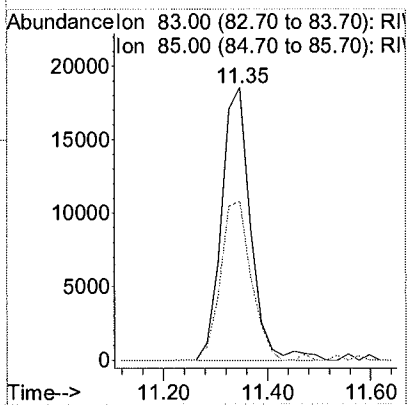


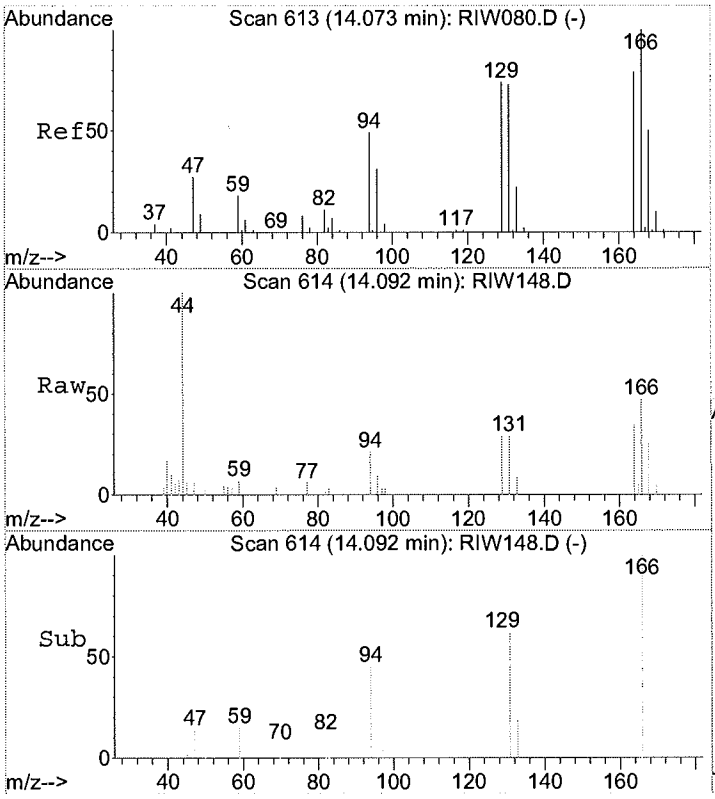


#49
Bromodichloromethane
Concen: 0.60 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW148.D
Acq: 21 Sep 2024 5:44 pm

Tgt Ion: 83 Resp: 72186

Ion	Ratio	Lower	Upper
83	100		
85	60.9	33.1	93.1

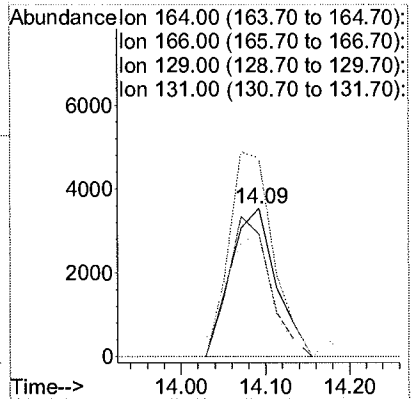




#62
Tetrachloroethene
Concen: 0.16 ug/l
RT: 14.09 min Scan# 614
Delta R.T. 0.02 min
Lab File: RIW148.D
Acq: 21 Sep 2024 5:44 pm

Tgt Ion:164 Resp: 13200

Ion	Ratio	Lower	Upper
164	100		
166	134.5	100.5	160.5
129	86.0	57.4	117.4
131	86.4	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/08/24 14:46
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 18:11
Sample ID	: MW32A-GW090824	Date Analyzed:	09/21/24 18:11
Lab Samp ID:	24I027-14	Dilution Factor:	1
Lab File ID:	RIW149	Matrix:	WATER
Ext Btch ID:	V006I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.3	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.43J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.64	10.0	96	70-130
Bromofluorobenzene	9.27	10.0	93	70-130
Toluene-d8	10.2	10.0	102	70-130
Dibromofluoromethane	9.65	10.0	96	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW149.D Vial: 25
Acq On : 21 Sep 2024 6:11 pm Operator: DHguye
Sample : 24I027-14 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:58 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

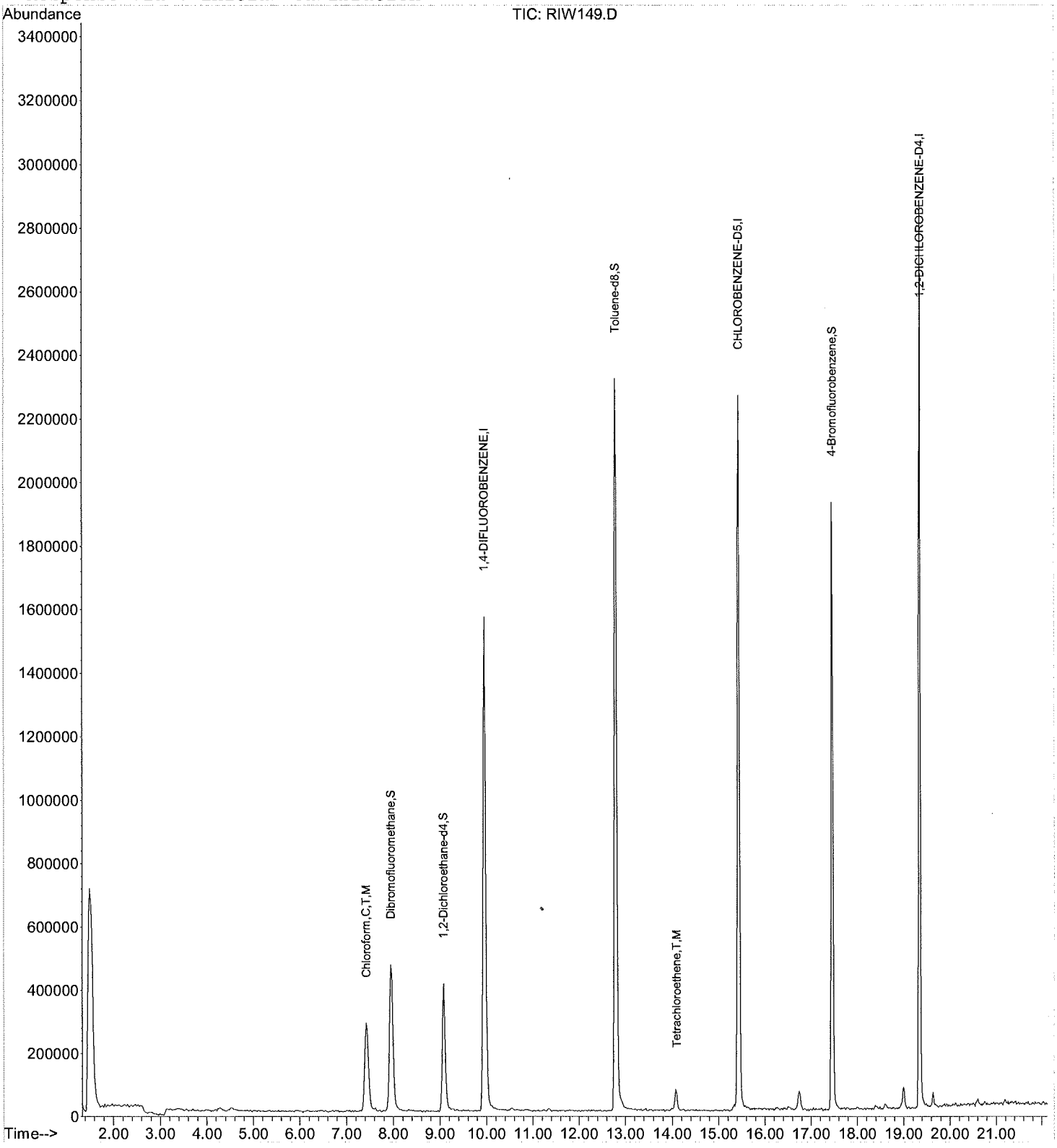
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2922269	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2414939	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1136780	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	797406	9.65	ug/l	-0.02
Spiked Amount 10.000			Recovery =	96.50%		
42) 1,2-Dichloroethane-d4	9.08	65	623172	9.64	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.40%		
55) Toluene-d8	12.79	98	3183093	10.18	ug/l	-0.02
Spiked Amount 10.000			Recovery =	101.80%		
77) 4-Bromofluorobenzene	17.45	95	1177115	9.27	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.70%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	654026	4.28	ug/l	96
62) Tetrachloroethene	14.09	164	32597	0.43	ug/l	93

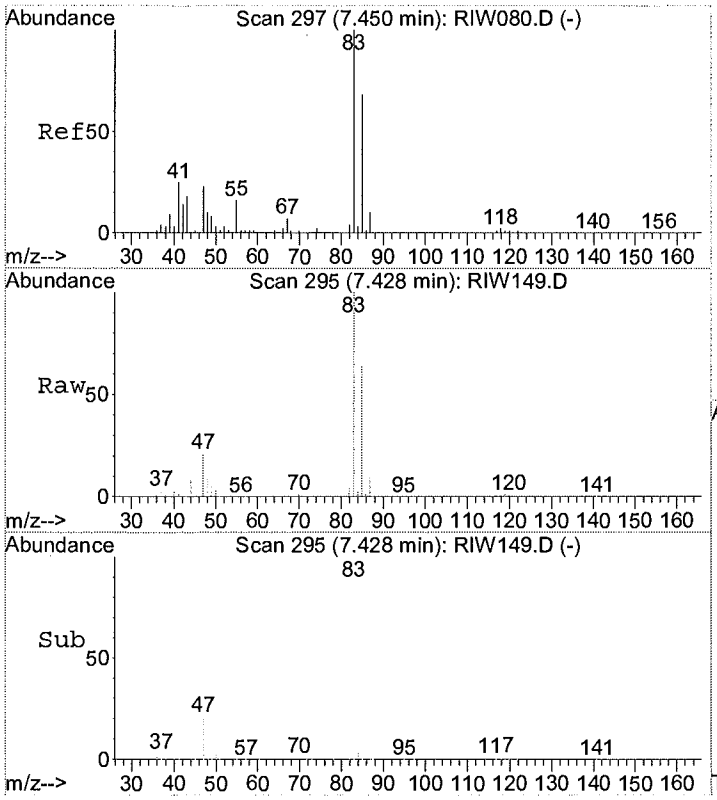
(#) = qualifier out of range (m) = manual integration
RIW149.D VO06I19B.M Tue Oct 15 12:58:32 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW149.D Vial: 25
Acq On : 21 Sep 2024 6:11 pm Operator: DHguye
Sample : 24I027-14 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 12:58 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

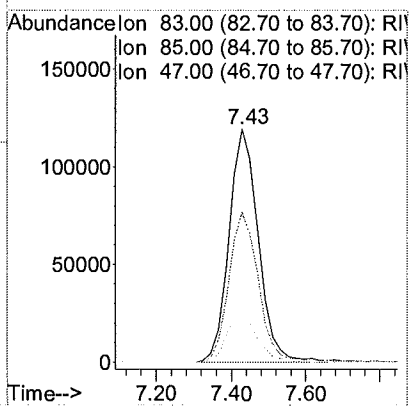


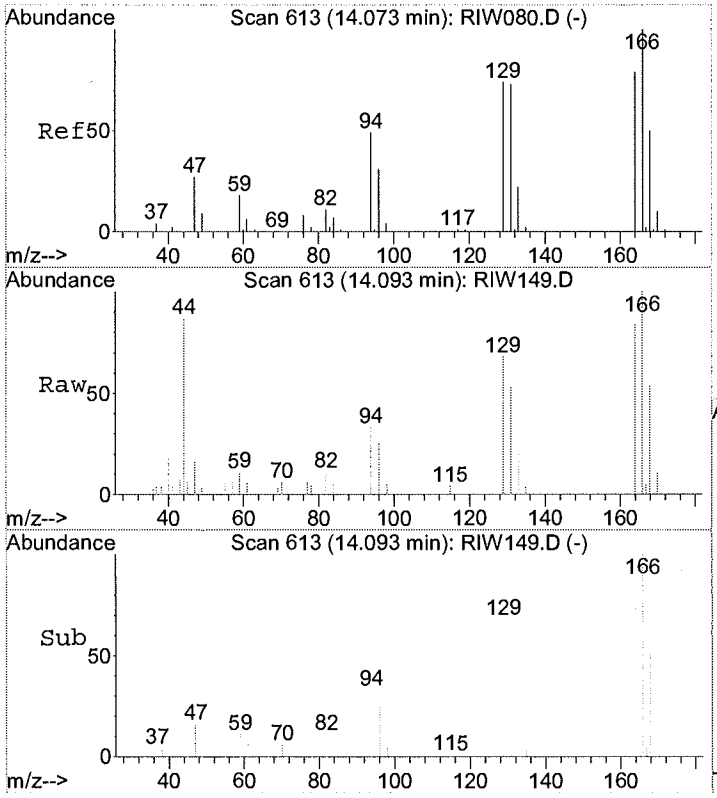


#31
Chloroform
Concen: 4.28 ug/l
RT: 7.43 min Scan# 295
Delta R.T. -0.02 min
Lab File: RIW149.D
Acq: 21 Sep 2024 6:11 pm

Tgt Ion: 83 Resp: 654026

Ion	Ratio	Lower	Upper
83	100		
85	64.7	38.6	98.6
47	22.0	0.0	53.1

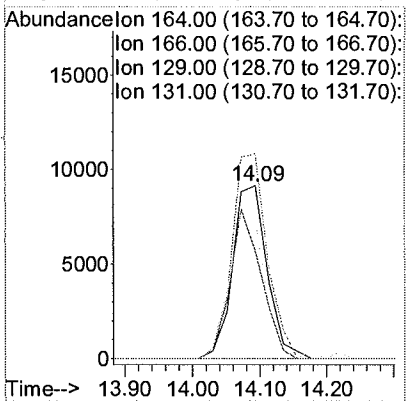




#62
Tetrachloroethene
Concen: 0.43 ug/l
RT: 14.09 min Scan# 613
Delta R.T. 0.02 min
Lab File: RIW149.D
Acq: 21 Sep 2024 6:11 pm

Tgt Ion:164 Resp: 32597

Ion	Ratio	Lower	Upper
164	100		
166	120.9	100.5	160.5
129	85.0	57.4	117.4
131	77.4	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/09/24 09:50
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I027	Date Extracted:	09/21/24 10:44
Sample ID	: TB03-GW090924	Date Analyzed:	09/21/24 10:44
Lab Samp ID:	24I027-15	Dilution Factor:	1
Lab File ID:	RIW132	Matrix:	WATER
Ext Btch ID:	V006I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	3.2J	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.32	10.0	93	70-130
Bromofluorobenzene	9.53	10.0	95	70-130
Toluene-d8	10.4	10.0	104	70-130
Dibromofluoromethane	9.38	10.0	94	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW132.D Vial: 8
Acq On : 21 Sep 2024 10:44 am Operator: DHguye
Sample : 24I027-15 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 13:00 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

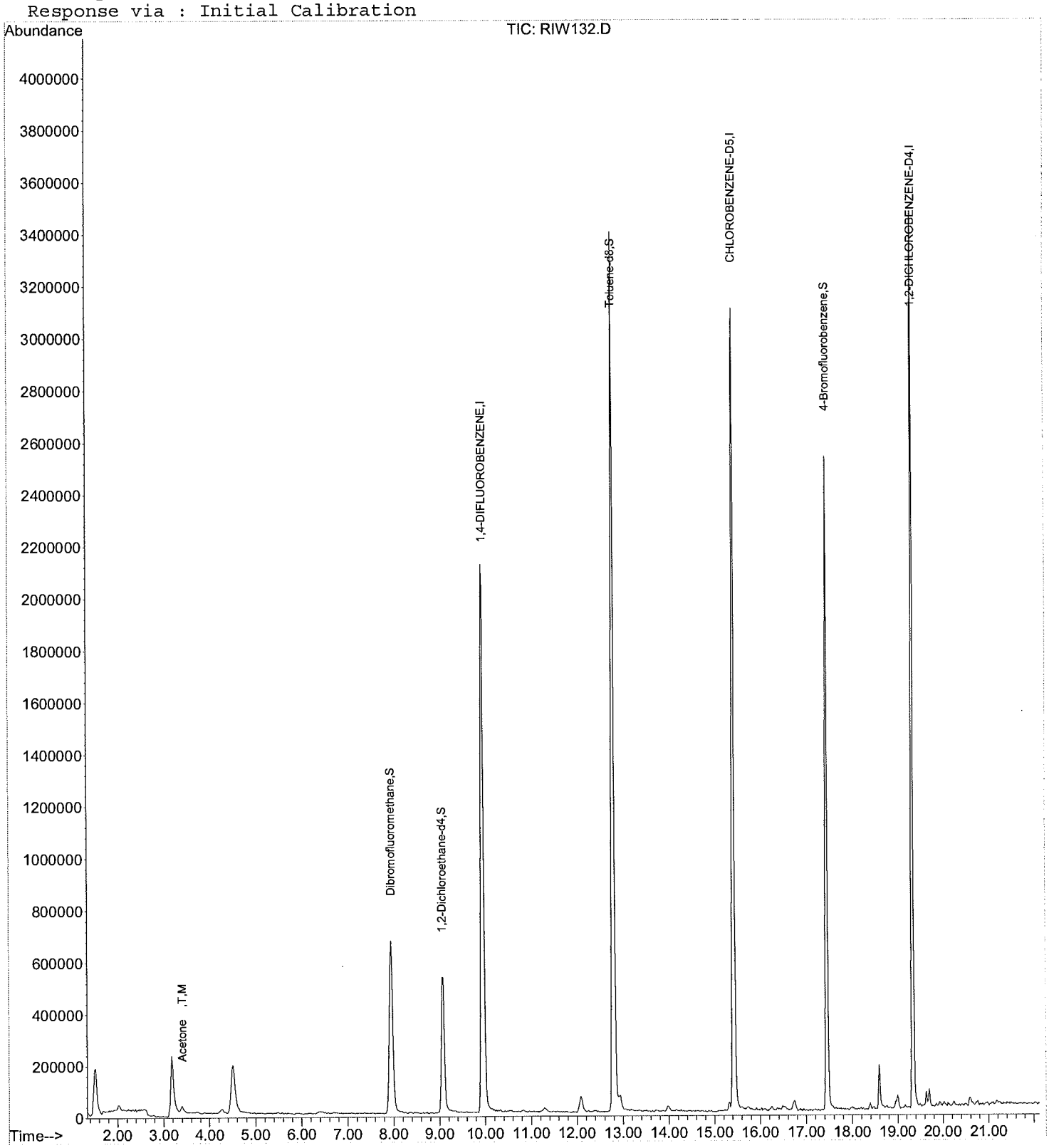
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	4180343	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	3292175	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1476084	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	1107878	9.38	ug/l	-0.02
Spiked Amount 10.000			Recovery =	93.80%		
42) 1,2-Dichloroethane-d4	9.06	65	861053	9.32	ug/l	-0.02
Spiked Amount 10.000			Recovery =	93.20%		
55) Toluene-d8	12.79	98	4437337	10.41	ug/l	0.02
Spiked Amount 10.000			Recovery =	104.10%		
77) 4-Bromofluorobenzene	17.45	95	1571055	9.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.30%		
Target Compounds						Qvalue
11) Acetone	3.40	43	53855	3.19	ug/l	70

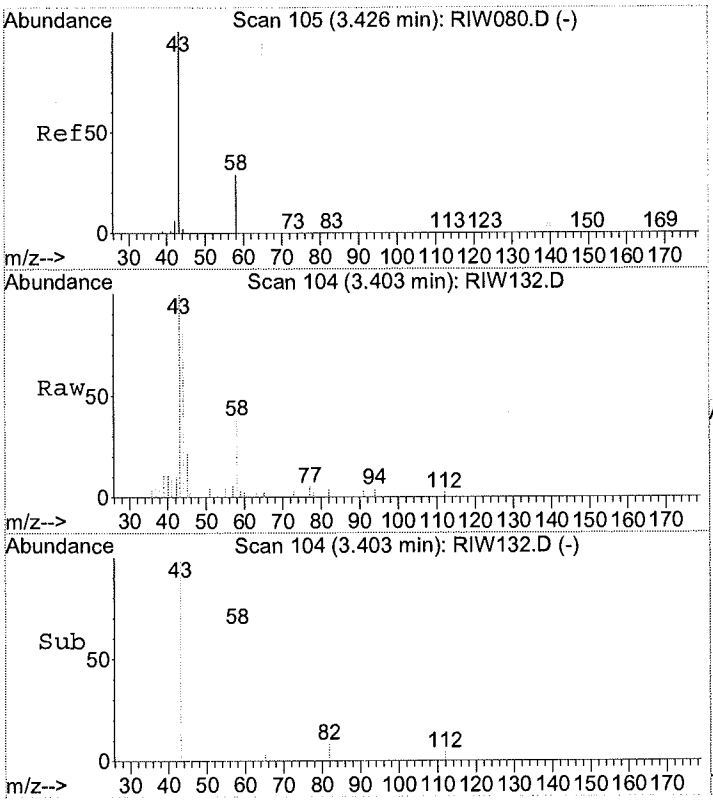
(#) = qualifier out of range (m) = manual integration
RIW132.D VO06I19B.M Tue Oct 15 13:00:42 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW132.D Vial: 8
Acq On : 21 Sep 2024 10:44 am Operator: DHguye
Sample : 24I027-15 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 13:00 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

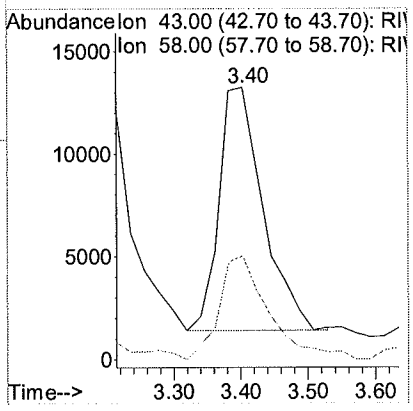




#11
Acetone
Concen: 3.19 ug/l
RT: 3.40 min Scan# 104
Delta R.T. -0.02 min
Lab File: RIW132.D
Acq: 21 Sep 2024 10:44 am

Tgt Ion: 43 Resp: 53855

Ion	Ratio	Lower	Upper
43	100		
58	46.6	0.4	60.4



QC SUMMARIES

METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/21/24 09:51
Project	: VA SALT LAKE CITY	Date Received:	09/21/24
Batch No.	: 24I027	Date Extracted:	09/21/24 09:51
Sample ID	: MBLK1W	Date Analyzed:	09/21/24 09:51
Lab Samp ID:	VO06I06B	Dilution Factor:	1
Lab File ID:	RIW130	Matrix:	WATER
Ext Btch ID:	VO06I06	% Moisture:	NA
Calib. Ref.:	RIW0B0	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.83	10.0	98	70-130
Bromofluorobenzene	9.41	10.0	94	70-130
Toluene-dB	10.0	10.0	100	70-130
Dibromofluoromethane	9.60	10.0	96	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DHguye
Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I027
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VO06I06B	VO06I06L	VO06I06C
LAB FILE ID	: RIW130	RIW127	RIW128
DATE PREPARED	: 09/21/24 09:51	09/21/24 08:33	09/21/24 08:59
DATE ANALYZED	: 09/21/24 09:51	09/21/24 08:33	09/21/24 08:59
PREP BATCH	: VO06I06	VO06I06	VO06I06
CALIBRATION REF	: RIW080	RIW080	RIW080

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	9.38	94	10.0	9.26	93	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	8.54	85	10.0	8.76	88	3	71-121	20
1,1,2-Trichloroethane	ND	10.0	9.58	96	10.0	9.48	95	1	80-119	20
1,1-Dichloroethane	ND	10.0	8.95	90	10.0	8.77	88	2	77-125	20
1,1-Dichloroethene	ND	10.0	7.90	79	10.0	7.98	80	1	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	8.95	90	10.0	8.88	89	1	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.05	91	10.0	9.11	91	1	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.79	88	10.0	8.77	88	0	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	7.88	79	10.0	8.29	83	5	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.39	94	10.0	9.28	93	1	80-119	20
1,2-Dichloroethane	ND	10.0	8.54	85	10.0	8.57	86	0	73-128	20
1,2-Dichloropropane	ND	10.0	8.92	89	10.0	8.81	88	1	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	8.88	89	10.0	9.04	90	2	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.12	91	10.0	9.19	92	1	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.05	91	10.0	8.99	90	1	79-118	20
2-Butanone	ND	50.0	39.7	79	50.0	38.5	77	3	56-143	20
2-Hexanone	ND	50.0	43.3	87	50.0	43.0	86	1	57-139	20
Acetone	ND	50.0	37.7	75	50.0	37.3	75	1	39-160	20
Benzene	ND	10.0	9.41	94	10.0	9.21	92	2	79-120	20
Bromochloromethane	ND	10.0	9.30	93	10.0	9.03	90	3	78-120	20
Bromodichloromethane	ND	10.0	8.82	88	10.0	8.79	88	0	79-125	20
Bromoform	ND	10.0	8.12	81	10.0	8.26	83	2	66-130	20
Bromomethane	ND	10.0	7.62	76	10.0	8.78	88	14	53-141	20
Carbon Disulfide	ND	10.0	7.96	80	10.0	7.75	78	3	64-133	20
Carbon Tetrachloride	ND	10.0	9.47	95	10.0	9.44	94	0	72-136	20
Chlorobenzene	ND	10.0	10.1	101	10.0	9.94	99	2	82-118	20
Chloroethane	ND	10.0	6.56	66	10.0	8.26	83	23*	60-138	20
Chloroform	ND	10.0	8.88	89	10.0	8.61	86	3	79-124	20
Chloromethane	ND	10.0	8.44	84	10.0	8.86	89	5	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.04	90	10.0	8.78	88	3	78-123	20
Dibromochloromethane	ND	10.0	9.38	94	10.0	9.29	93	1	74-126	20
Dichlorodifluoromethane	ND	10.0	7.95	80	10.0	9.41	94	17	32-152	20
Ethylbenzene	ND	10.0	9.58	96	10.0	9.54	95	0	79-121	20
Isopropylbenzene	ND	10.0	9.61	96	10.0	9.64	96	0	72-131	20
m,p-Xylene	ND	20.0	18.9	95	20.0	19.0	95	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	41.8	84	50.0	42.7	85	2	67-130	20
Methylene Chloride	ND	10.0	7.60	76	10.0	7.56	76	1	74-124	20
tert-Butyl Methyl Ether	ND	10.0	8.99	90	10.0	9.07	91	1	71-124	20
o-Xylene	ND	10.0	9.64	96	10.0	9.80	98	2	78-122	20
Styrene	ND	10.0	9.93	99	10.0	9.85	99	1	78-123	20
Tetrachloroethene	ND	10.0	10.1	101	10.0	10.1	101	0	74-129	20
Toluene	ND	10.0	9.98	100	10.0	9.92	99	1	80-121	20
Trans-1,2-DCE	ND	10.0	9.01	90	10.0	8.74	87	3	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.04	90	10.0	8.84	88	2	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	9.22	92	10.0	9.22	92	0	73-127	20
TCE	ND	10.0	9.61	96	10.0	9.28	93	3	79-123	20
Trichlorofluoromethane	ND	10.0	8.14	81	10.0	9.35	94	14	65-141	20
Vinyl Chloride	ND	10.0	8.20	82	10.0	9.25	93	12	58-137	20
1,2-Dibromoethane	ND	10.0	9.34	93	10.0	9.14	91	2	77-121	20
Vinyl Acetate	ND	10.0	7.87	79	10.0	8.45	85	7	54-146	20
Trichlorotrifluoroethane	ND	10.0	7.25	73	10.0	8.18	82	12	70-136	20
Methyl Acetate	ND	10.0	8.63	86	10.0	8.76	88	1	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	9.28	93	10.0	9.17	92	70-130
Bromofluorobenzene	10.0	9.24	92	10.0	9.31	93	70-130
Toluene-d8	10.0	10.4	104	10.0	10.3	103	70-130
Dibromofluoromethane	10.0	9.43	94	10.0	9.48	95	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate
* Out of QC Limit

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/22/24 15:05
Project	: VA SALT LAKE CITY	Date Received:	09/22/24
Batch No.	: 24I027	Date Extracted:	09/22/24 15:05
Sample ID	: MBLK2W	Date Analyzed:	09/22/24 15:05
Lab Samp ID:	V006I07B	Dilution Factor:	1
Lab File ID:	RIW157	Matrix:	WATER
Ext Btch ID:	V006I07	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.3	10.0	103	70-130
Bromofluorobenzene	9.23	10.0	92	70-130
Toluene-d8	10.1	10.0	101	70-130
Dibromofluoromethane	9.91	10.0	99	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DHguye
Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I027
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK2W	LCS2W	LCD2W
LAB SAMPLE ID	: VO06I07B	VO06I07L	VO06I07C
LAB FILE ID	: RIW157	RIW154	RIW155
DATE PREPARED	: 09/22/24 15:05	09/22/24 13:33	09/22/24 13:59
DATE ANALYZED	: 09/22/24 15:05	09/22/24 13:33	09/22/24 13:59
PREP BATCH	: VO06I07	VO06I07	VO06I07
CALIBRATION REF	: RIW080	RIW080	RIW080

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	11.2	112	10.0	10.5	105	6	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	10.5	105	10.0	10.6	106	1	71-121	20
1,1,2-Trichloroethane	ND	10.0	11.1	111	10.0	10.7	107	4	80-119	20
1,1-Dichloroethane	ND	10.0	10.6	106	10.0	10.1	101	5	77-125	20
1,1-Dichloroethene	ND	10.0	9.18	92	10.0	8.62	86	6	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	10.3	103	10.0	9.36	94	10	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	10.2	102	10.0	9.25	93	10	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	9.81	98	10.0	9.92	99	1	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	9.69	97	10.0	9.03	90	7	62-138	20
1,2-Dichlorobenzene	ND	10.0	10.4	104	10.0	10.5	105	1	80-119	20
1,2-Dichloroethane	ND	10.0	10.2	102	10.0	10.1	101	1	73-128	20
1,2-Dichloropropane	ND	10.0	10.1	101	10.0	10.1	101	0	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	10.1	101	10.0	10.3	103	2	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.97	100	10.0	10.3	103	3	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.92	99	10.0	10.2	102	3	79-118	20
2-Butanone	ND	50.0	52.6	105	50.0	49.7	99	6	56-143	20
2-Hexanone	ND	50.0	54.0	108	50.0	53.0	106	2	57-139	20
Acetone	ND	50.0	49.5	99	50.0	47.0	94	5	39-160	20
Benzene	ND	10.0	10.7	107	10.0	10.3	103	4	79-120	20
Bromochloromethane	ND	10.0	11.1	111	10.0	10.4	104	7	78-120	20
Bromodichloromethane	ND	10.0	10.3	103	10.0	10.0	100	3	79-125	20
Bromoform	ND	10.0	9.44	94	10.0	10.1	101	7	66-130	20
Bromomethane	ND	10.0	10.3	103	10.0	8.00	80	25*	53-141	20
Carbon Disulfide	ND	10.0	10.4	104	10.0	9.62	96	8	64-133	20
Carbon Tetrachloride	ND	10.0	11.0	110	10.0	10.4	104	6	72-136	20
Chlorobenzene	ND	10.0	11.2	112	10.0	10.8	108	4	82-118	20
Chloroethane	ND	10.0	8.62	86	10.0	7.72	77	11	60-138	20
Chloroform	ND	10.0	10.2	102	10.0	9.86	99	3	79-124	20
Chloromethane	ND	10.0	11.3	113	10.0	8.21	82	32*	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	10.7	107	10.0	10.2	102	5	78-123	20
Dibromochloromethane	ND	10.0	10.6	106	10.0	10.6	106	0	74-126	20
Dichlorodifluoromethane	ND	10.0	9.97	100	10.0	7.95	80	23*	32-152	20
Ethylbenzene	ND	10.0	10.5	105	10.0	10.3	103	2	79-121	20
Isopropylbenzene	ND	10.0	10.7	107	10.0	10.1	101	6	72-131	20
m,p-Xylene	ND	20.0	20.5	103	20.0	20.2	101	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	54.8	110	50.0	52.5	105	4	67-130	20
Methylene Chloride	ND	10.0	9.34	93	10.0	8.77	88	6	74-124	20
tert-Butyl Methyl Ether	ND	10.0	11.4	114	10.0	10.4	104	9	71-124	20
o-Xylene	ND	10.0	10.7	107	10.0	10.5	105	2	78-122	20
Styrene	ND	10.0	11.0	110	10.0	10.8	108	2	78-123	20
Tetrachloroethene	ND	10.0	10.9	109	10.0	10.7	107	2	74-129	20
Toluene	ND	10.0	11.1	111	10.0	11.0	110	1	80-121	20
Trans-1,2-DCE	ND	10.0	10.7	107	10.0	9.97	100	7	75-124	20
cis-1,3-Dichloropropene	ND	10.0	10.5	105	10.0	10.3	103	2	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	10.7	107	10.0	10.8	108	1	73-127	20
TCE	ND	10.0	10.7	107	10.0	10.5	105	2	79-123	20
Trichlorofluoromethane	ND	10.0	11.5	115	10.0	9.02	90	24*	65-141	20
Vinyl Chloride	ND	10.0	11.3	113	10.0	8.01	80	34*	58-137	20
1,2-Dibromoethane	ND	10.0	11.1	111	10.0	10.8	108	3	77-121	20
Vinyl Acetate	ND	10.0	11.5	115	10.0	10.4	104	10	54-146	20
Trichlorotrifluoroethane	ND	10.0	7.92	79	10.0	7.40	74	7	70-136	20
Methyl Acetate	ND	10.0	10.8	108	10.0	10.7	107	1	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	9.78	98	10.0	9.58	96	70-130
Bromofluorobenzene	10.0	9.12	91	10.0	10.2	102	70-130
Toluene-d8	10.0	10.4	104	10.0	10.4	104	70-130
Dibromofluoromethane	10.0	9.81	98	10.0	9.77	98	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate
* Out of QC Limit

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW130.D Vial: 6
Acq On : 21 Sep 2024 9:51 am Operator: DHguye
Sample : VO06I06B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:38 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3585929	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2935993	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1386567	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	973245	9.60	ug/l	-0.02
Spiked Amount 10.000			Recovery = 96.00%			
42) 1,2-Dichloroethane-d4	9.08	65	779348	9.83	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.30%			
55) Toluene-d8	12.79	98	3810050	10.03	ug/l	-0.02
Spiked Amount 10.000			Recovery = 100.30%			
77) 4-Bromofluorobenzene	17.45	95	1456104	9.41	ug/l	0.00
Spiked Amount 10.000			Recovery = 94.10%			

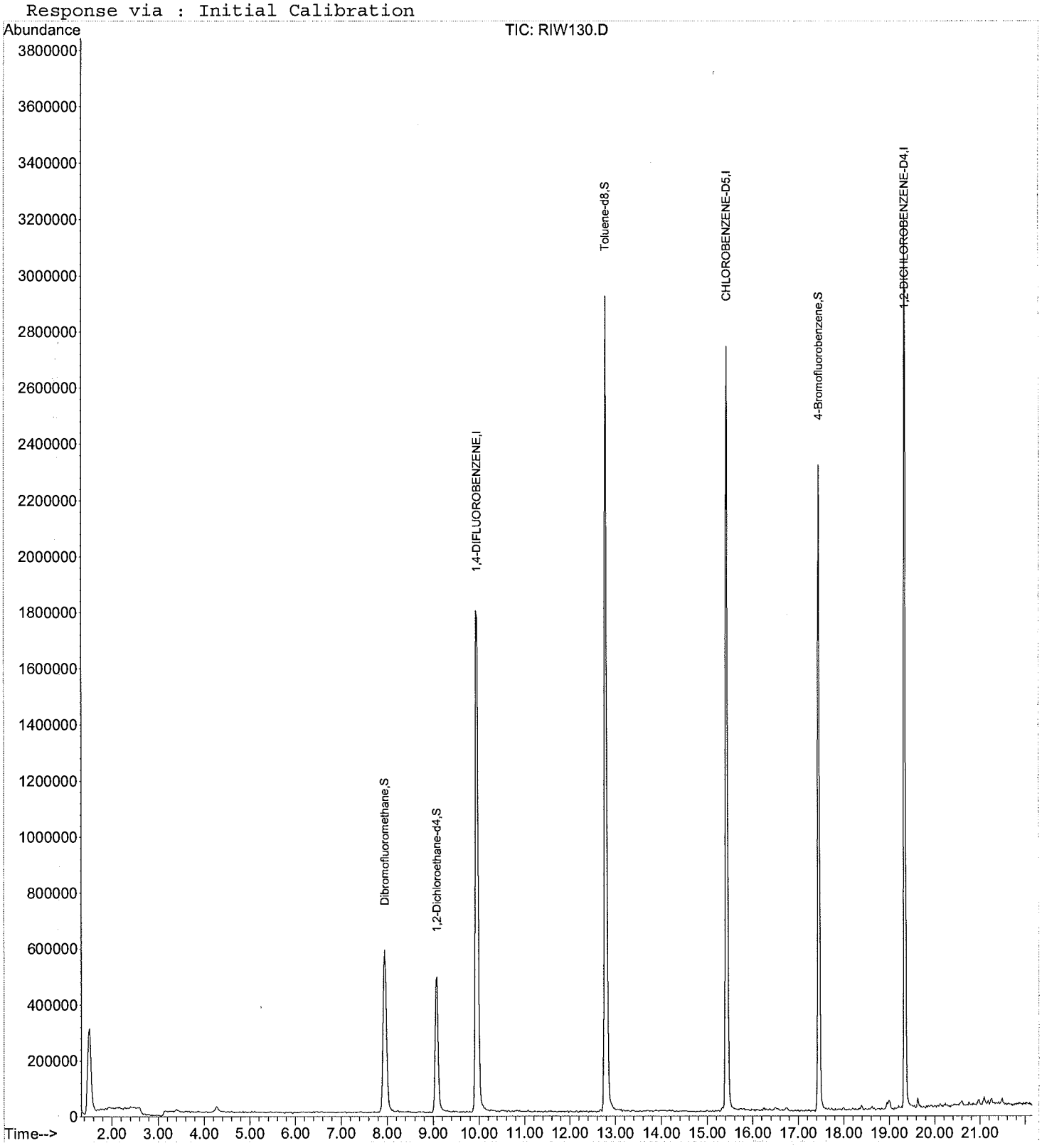
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW130.D Vial: 6
Acq On : 21 Sep 2024 9:51 am Operator: DHguye
Sample : VO06I06B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:38 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW127.D Vial: 3
Acq On : 21 Sep 2024 8:33 am Operator: DHguye
Sample : VO06I06L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:39 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3599838	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2851913	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1372629	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	959400	9.43	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.30%		
42) 1,2-Dichloroethane-d4	9.08	65	738594	9.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.80%		
55) Toluene-d8	12.79	98	3837487	10.40	ug/l	-0.02
Spiked Amount 10.000			Recovery =	104.00%		
77) 4-Bromofluorobenzene	17.45	95	1415443	9.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.40%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1209507	7.95	ug/l	99
3) Chloromethane	1.87	50	1175780	8.44	ug/l	98
4) Vinyl chloride	1.99	62	895161	8.20	ug/l	100
5) Bromomethane	2.43	94	683095	7.62	ug/l	99
6) Chloroethane	2.51	64	464328	6.56	ug/l	97
7) Dichlorofluoromethane	2.55	67	1911356	7.46	ug/l	100
8) Trichlorofluoromethane	2.80	101	1169522	8.14	ug/l	99
9) Acrolein	3.32	56	186655	36.91	ug/l	98
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	864837	7.25	ug/l	100
11) Acetone	3.40	43	548076	37.70	ug/l	100
12) 1,1-Dichloroethene	3.55	61	1505249	7.90	ug/l	96
13) tert-Butyl alcohol	3.70	59	889873	197.85	ug/l	100
15) Methyl acetate	4.10	74	67057	8.63	ug/l	73
16) Iodomethane	3.99	142	1589148	8.91	ug/l	97
17) Allyl chloride	4.12	76	542269	8.90	ug/l	98
18) Methylene chloride	4.28	49	1144596	7.60	ug/l	91
19) Carbon disulfide	4.26	76	1784453	7.96	ug/l	100
20) Acrylonitrile	4.54	53	776704	43.00	ug/l	98
21) tert-Butyl methyl ether (M	4.58	73	1640370	8.99	ug/l	99
22) trans-1,2-Dichloroethene	4.79	96	1024590	9.01	ug/l	96
23) Isopropyl ether (DIPE)	5.46	45	3321321	8.83	ug/l	97
24) Vinyl acetate	5.71	43	1068824	7.87	ug/l	99
25) 1,1-Dichloroethane	5.63	63	1702415	8.95	ug/l	99
26) 2-Butanol	6.19	45	866628	171.96	ug/l	95
27) tert-Butyl ethyl ether (ET	6.38	59	2420667	8.87	ug/l	97
28) 2-Butanone	6.67	43	980823	39.70	ug/l	98
29) 2,2-Dichloropropane	6.93	77	1164918	9.81	ug/l	99
30) cis-1,2-Dichloroethene	7.05	96	1062497	9.04	ug/l	98
31) Chloroform	7.45	83	1671867	8.88	ug/l	99
32) Bromochloromethane	7.81	130	473558	9.30	ug/l	98
33) Tetrahydrofuran	7.93	42	90338	6.83	ug/l	89
36) 1,1,1-Trichloroethane	8.35	97	1419490	9.38	ug/l	98
37) Cyclohexane	8.33	84	1715802	8.84	ug/l	99
39) 1,1-Dichloropropene	8.71	110	467924	9.15	ug/l	98
40) Carbon tetrachloride	8.90	119	1188648	9.47	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	2022666	9.07	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW127.D Vial: 3
Acq On : 21 Sep 2024 8:33 am Operator: DHguye
Sample : VO06I06L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:39 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 1,2-Dichloroethane	9.27	62	809176	8.54	ug/l	99
44) Benzene	9.27	78	3884085	9.41	ug/l	98
45) Trichloroethene	10.55	130	1032297	9.61	ug/l	100
46) Methylcyclohexane	10.61	83	1786023	8.74	ug/l	95
47) 1,2-Dichloropropane	10.91	63	910776	8.92	ug/l	99
48) 1,4-Dioxane	11.45	88	74421	155.76	ug/l	95
49) Bromodichloromethane	11.35	83	1168013	8.82	ug/l	99
50) Dibromomethane	11.41	93	443061	9.17	ug/l	97
51) 2-Chloroethyl vinyl ether	12.04	63	265261	8.26	ug/l	98
52) 4-Methyl-2-pentanone	12.08	43	2843079	41.75	ug/l	96
53) cis-1,3-Dichloropropene	12.40	75	1465614	9.04	ug/l	98
56) Toluene	12.94	91	4291551	9.98	ug/l	100
57) Ethyl methacrylate	13.38	69	828782	8.76	ug/l	93
58) trans-1,3-Dichloropropene	13.32	75	1115213	9.22	ug/l	93
59) 1,1,2-Trichloroethane	13.57	97	592009	9.58	ug/l	97
60) 2-Hexanone	13.65	43	1951521	43.26	ug/l	98
61) 1,3-Dichloropropane	14.03	76	1065858	9.34	ug/l	99
62) Tetrachloroethene	14.07	164	895013	10.11	ug/l	96
63) Dibromochloromethane	14.43	129	713936	9.38	ug/l	98
65) 1,2-Dibromoethane	14.76	107	548571	9.34	ug/l	99
66) 1-Chlorohexane	15.12	91	1574332	8.59	ug/l	99
67) Chlorobenzene	15.49	112	2655081	10.08	ug/l	100
68) 1,1,1,2-Tetrachloroethane	15.59	131	864482	10.38	ug/l	98
69) Ethylbenzene	15.60	91	5080404	9.58	ug/l	100
70) m-Xylene & p-Xylene	15.73	91	7674841	18.94	ug/l	100
71) o-Xylene	16.45	91	3847901	9.64	ug/l	100
72) Styrene	16.52	104	2959462	9.93	ug/l	99
73) Isopropylbenzene	17.06	105	4974866	9.61	ug/l	99
75) Bromoform	17.06	173	343284	8.12	ug/l	100
76) 1,1,2,2-Tetrachloroethane	17.35	83	678059	8.54	ug/l	99
78) 1,2,3-Trichloropropane	17.57	110	175668	8.03	ug/l	100
79) trans-1,4-Dichloro-2-buten	17.67	53	179166	7.42	ug/l	100
80) n-Propylbenzene	17.67	91	6559836	8.66	ug/l	99
81) Bromobenzene	17.71	156	1025393	9.45	ug/l	97
82) 1,3,5-Trimethylbenzene	17.89	105	4102113	8.88	ug/l	98
83) 2-Chlorotoluene	17.91	91	3949496	8.90	ug/l	94
84) 4-Chlorotoluene	17.97	91	3738032	9.19	ug/l	95
85) tert-Butylbenzene	18.35	134	929147	9.51	ug/l	99
86) 1,2,4-Trimethylbenzene	18.39	105	4209271	8.79	ug/l	98
87) sec-Butylbenzene	18.60	105	5733910	8.79	ug/l	99
88) p-Isopropyltoluene	18.76	119	4690115	8.46	ug/l	98
89) 1,3-Dichlorobenzene	18.86	146	2212486	9.12	ug/l	97
90) 1,2,3-Trimethylbenzene	18.93	105	3824599	8.82	ug/l	99
91) 1,4-Dichlorobenzene	18.98	146	2173391	9.05	ug/l	98
92) n-Butylbenzene	19.21	91	5158336	8.64	ug/l	100
93) 1,2-Dichlorobenzene	19.37	146	1884008	9.39	ug/l	100
94) 1,2-Dibromo-3-chloropropan	20.14	157	110621	7.88	ug/l	88
95) 1,2,4-Trichlorobenzene	20.97	180	1427845	9.05	ug/l	100
96) Hexachlorobutadiene	21.10	225	766051	8.99	ug/l	99
97) Naphthalene	21.24	128	1951419	9.19	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW127.D Vial: 3
Acq On : 21 Sep 2024 8:33 am Operator: DHguye
Sample : VO06I06L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:39 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

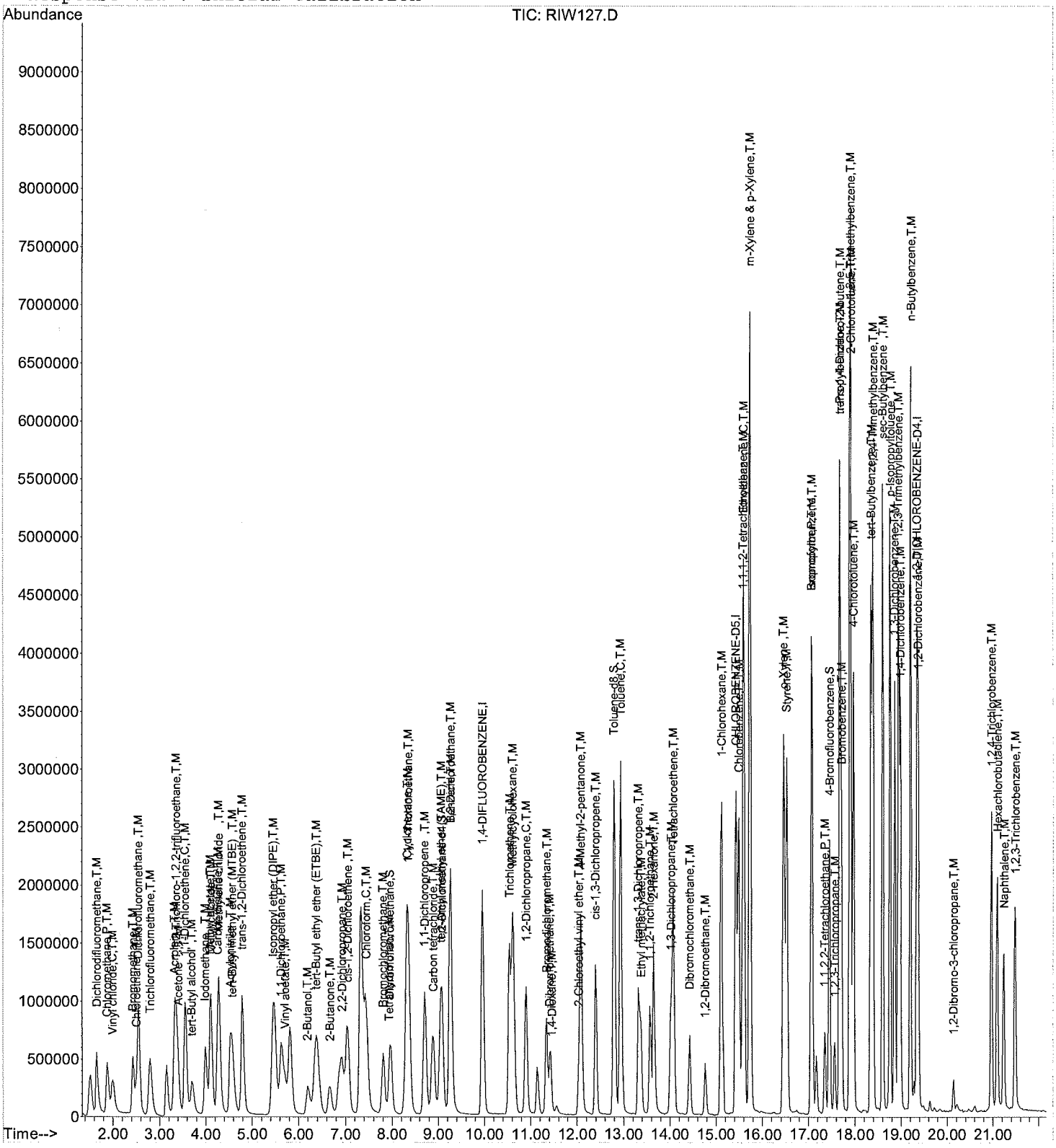
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1064897	8.95	ug/l	99

(#) = qualifier out of range (m) = manual integration
RIW127.D VO06I19B.M Tue Oct 15 15:39:27 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW127.D Vial: 3
Acq On : 21 Sep 2024 8:33 am Operator: DHguye
Sample : VO06I06L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:39 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW128.D Vial: 4
Acq On : 21 Sep 2024 8:59 am Operator: DHguye
Sample : VO06I06C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:39 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3758345	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2942290	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1398011	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	1007359	9.48	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.80%		
42) 1,2-Dichloroethane-d4	9.08	65	762294	9.17	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.70%		
55) Toluene-d8	12.79	98	3938488	10.34	ug/l	0.02
Spiked Amount 10.000			Recovery =	103.40%		
77) 4-Bromofluorobenzene	17.45	95	1452509	9.31	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.10%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1493733	9.41	ug/l	97
3) Chloromethane	1.87	50	1288974	8.86	ug/l	98
4) Vinyl chloride	1.99	62	1054123	9.25	ug/l	97
5) Bromomethane	2.43	94	823443	8.78	ug/l	99
6) Chloroethane	2.50	64	609763	8.26	ug/l	95
7) Dichlorofluoromethane	2.54	67	2215353	8.32	ug/l	100
8) Trichlorofluoromethane	2.80	101	1401996	9.35	ug/l	99
9) Acrolein	3.32	56	203815	38.61	ug/l	94
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	1012861	8.18	ug/l	100
11) Acetone	3.40	43	566447	37.32	ug/l	99
12) 1,1-Dichloroethene	3.55	61	1585933	7.98	ug/l	96
13) tert-Butyl alcohol	3.70	59	894721	190.54	ug/l	97
15) Methyl acetate	4.07	74	71077	8.76	ug/l	86
16) Iodomethane	3.99	142	1659442	8.91	ug/l	98
17) Allyl chloride	4.10	76	561531	8.82	ug/l	99
18) Methylene chloride	4.28	49	1188380	7.56	ug/l	93
19) Carbon disulfide	4.24	76	1812613	7.75	ug/l	100
20) Acrylonitrile	4.51	53	776254	41.16	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	1728187	9.07	ug/l	98
22) trans-1,2-Dichloroethene	4.79	96	1037681	8.74	ug/l	98
23) Isopropyl ether (DIPE)	5.46	45	3381780	8.61	ug/l	96
24) Vinyl acetate	5.71	43	1199308	8.45	ug/l	99
25) 1,1-Dichloroethane	5.63	63	1742289	8.77	ug/l	98
26) 2-Butanol	6.19	45	856529	163.18	ug/l	99
27) tert-Butyl ethyl ether (ET	6.38	59	2484534	8.72	ug/l	96
28) 2-Butanone	6.65	43	992902	38.50	ug/l	96
29) 2,2-Dichloropropane	6.90	77	1215432	9.81	ug/l	98
30) cis-1,2-Dichloroethene	7.03	96	1076551	8.78	ug/l	99
31) Chloroform	7.43	83	1692441	8.61	ug/l	99
32) Bromochloromethane	7.81	130	479765	9.03	ug/l	99
33) Tetrahydrofuran	7.93	42	102831	7.45	ug/l	97
36) 1,1,1-Trichloroethane	8.35	97	1463468	9.26	ug/l	99
37) Cyclohexane	8.33	84	1859236	9.17	ug/l	98
39) 1,1-Dichloropropene	8.71	110	480708	9.00	ug/l	99
40) Carbon tetrachloride	8.87	119	1236376	9.44	ug/l	98
41) tert-Amyl methyl ether (TA	9.06	73	2141137	9.19	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW128.D Vial: 4
Acq On : 21 Sep 2024 8:59 am Operator: DHguye
Sample : VO06I06C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:39 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 1,2-Dichloroethane	9.27	62	847171	8.57	ug/l	97
44) Benzene	9.25	78	3966967	9.21	ug/l	99
45) Trichloroethene	10.53	130	1041211	9.28	ug/l	99
46) Methylcyclohexane	10.61	83	1868957	8.76	ug/l	96
47) 1,2-Dichloropropane	10.91	63	938377	8.81	ug/l	100
48) 1,4-Dioxane	11.45	88	70676	141.68	ug/l	94
49) Bromodichloromethane	11.33	83	1215122	8.79	ug/l	98
50) Dibromomethane	11.41	93	459396	9.10	ug/l	98
51) 2-Chloroethyl vinyl ether	12.04	63	268926	8.02	ug/l	100
52) 4-Methyl-2-pentanone	12.08	43	3038480	42.74	ug/l	96
53) cis-1,3-Dichloropropene	12.40	75	1496281	8.84	ug/l	97
56) Toluene	12.94	91	4404704	9.92	ug/l	100
57) Ethyl methacrylate	13.38	69	840771	8.62	ug/l	94
58) trans-1,3-Dichloropropene	13.32	75	1150589	9.22	ug/l	95
59) 1,1,2-Trichloroethane	13.57	97	604553	9.48	ug/l	98
60) 2-Hexanone	13.65	43	2001176	43.00	ug/l	96
61) 1,3-Dichloropropane	14.03	76	1105186	9.38	ug/l	99
62) Tetrachloroethene	14.07	164	919892	10.07	ug/l	98
63) Dibromochloromethane	14.43	129	729408	9.29	ug/l	97
65) 1,2-Dibromoethane	14.76	107	553902	9.14	ug/l	96
66) 1-Chlorohexane	15.12	91	1617521	8.56	ug/l	97
67) Chlorobenzene	15.49	112	2700985	9.94	ug/l	100
68) 1,1,1,2-Tetrachloroethane	15.59	131	881580	10.26	ug/l	97
69) Ethylbenzene	15.60	91	5217108	9.54	ug/l	99
70) m-Xylene & p-Xylene	15.73	91	7961142	19.05	ug/l	100
71) o-Xylene	16.45	91	4034277	9.80	ug/l	99
72) Styrene	16.52	104	3030150	9.85	ug/l	99
73) Isopropylbenzene	17.06	105	5145833	9.64	ug/l	99
75) Bromoform	17.06	173	355506	8.26	ug/l	97
76) 1,1,2,2-Tetrachloroethane	17.35	83	708284	8.76	ug/l	99
78) 1,2,3-Trichloropropane	17.57	110	177316	7.96	ug/l	97
79) trans-1,4-Dichloro-2-buten	17.67	53	182642	7.43	ug/l	100
80) n-Propylbenzene	17.67	91	6685963	8.67	ug/l	99
81) Bromobenzene	17.71	156	1047345	9.48	ug/l	96
82) 1,3,5-Trimethylbenzene	17.89	105	4251010	9.04	ug/l	99
83) 2-Chlorotoluene	17.89	91	4114420	9.10	ug/l	94
84) 4-Chlorotoluene	17.97	91	3813166	9.21	ug/l	95
85) tert-Butylbenzene	18.35	134	961591	9.67	ug/l	98
86) 1,2,4-Trimethylbenzene	18.39	105	4276820	8.77	ug/l	99
87) sec-Butylbenzene	18.60	105	5929721	8.93	ug/l	99
88) p-Isopropyltoluene	18.76	119	4879114	8.64	ug/l	98
89) 1,3-Dichlorobenzene	18.86	146	2270676	9.19	ug/l	96
90) 1,2,3-Trimethylbenzene	18.93	105	3957589	8.97	ug/l	100
91) 1,4-Dichlorobenzene	18.98	146	2199892	8.99	ug/l	98
92) n-Butylbenzene	19.21	91	5188859	8.53	ug/l	99
93) 1,2-Dichlorobenzene	19.37	146	1897029	9.28	ug/l	99
94) 1,2-Dibromo-3-chloropropan	20.14	157	118540	8.29	ug/l	96
95) 1,2,4-Trichlorobenzene	20.97	180	1462862	9.11	ug/l	99
96) Hexachlorobutadiene	21.10	225	767849	8.85	ug/l	96
97) Naphthalene	21.24	128	2046427	9.46	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW128.D Vial: 4
Acq On : 21 Sep 2024 8:59 am Operator: DHguye
Sample : VO06I06C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:39 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

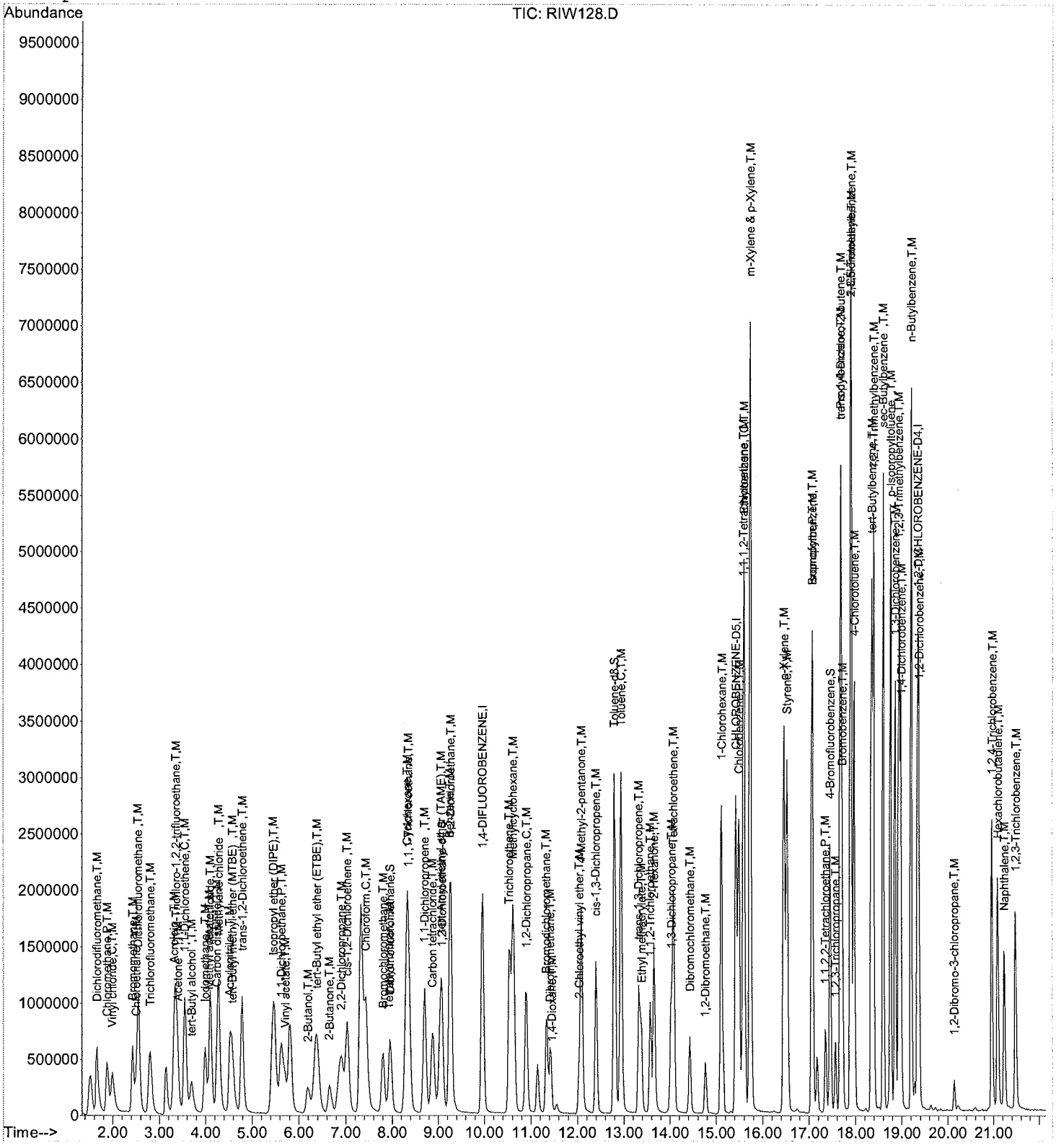
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1076026	8.88	ug/l	97

(#) = qualifier out of range (m) = manual integration
RIW128.D VO06I19B.M Tue Oct 15 15:40:01 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW128.D Vial: 4
Acq On : 21 Sep 2024 8:59 am Operator: DHguye
Sample : VO06I06C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:39 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I22\RIW157.D Vial: 6
Acq On : 22 Sep 2024 3:05 pm Operator: DHguye
Sample : VO06I07B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:41 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

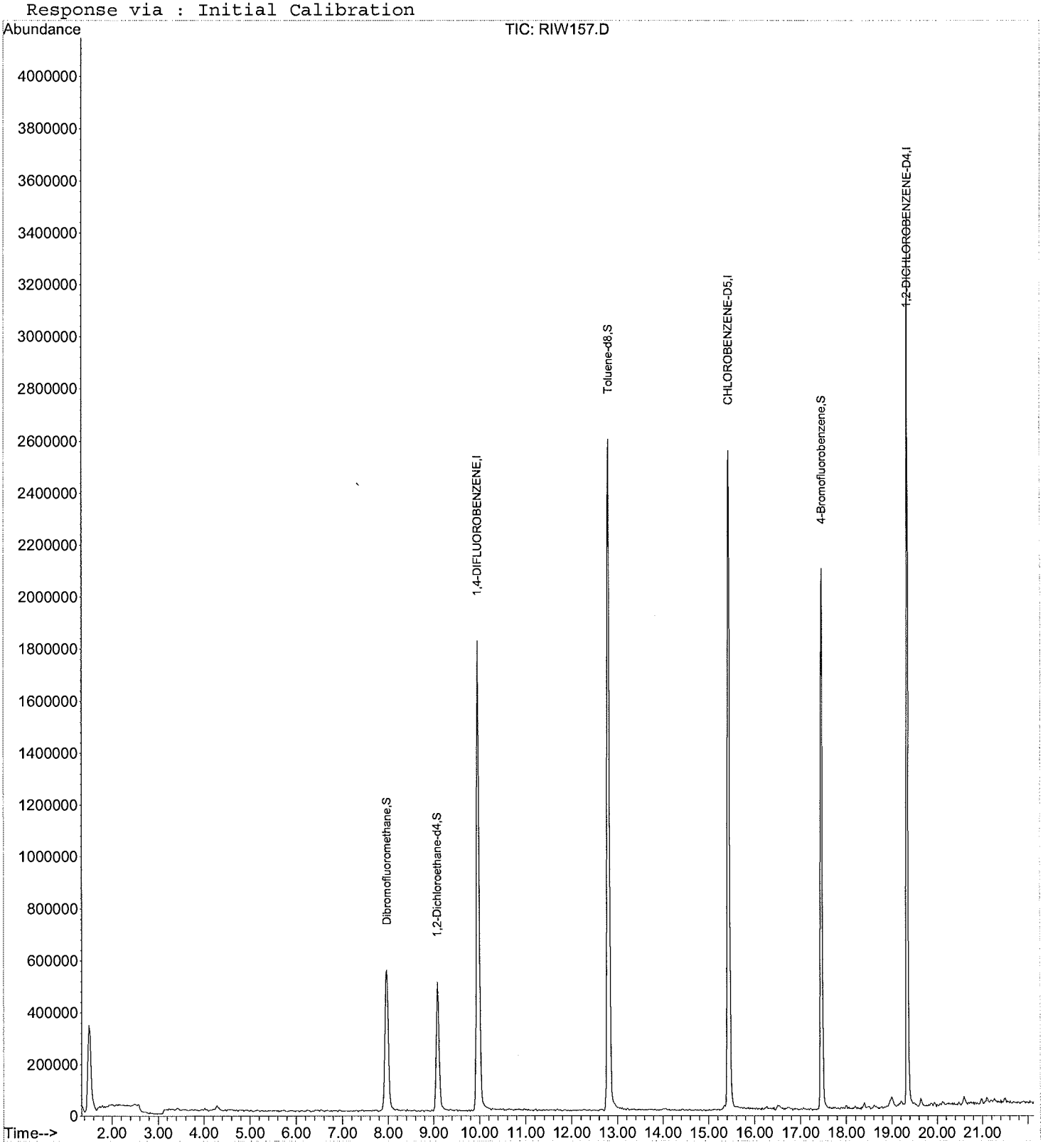
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3325575	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.44	117	2769816	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1330626	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	932682	9.91	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.10%			
42) 1,2-Dichloroethane-d4	9.08	65	756008	10.28	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.80%			
55) Toluene-d8	12.81	98	3620397	10.10	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.00%			
77) 4-Bromofluorobenzene	17.47	95	1371861	9.23	ug/l	0.01
Spiked Amount 10.000			Recovery = 92.30%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I22\RIW157.D Vial: 6
Acq On : 22 Sep 2024 3:05 pm Operator: DHguye
Sample : VO06I07B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:41 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I22\RIW154.D Vial: 3
Acq On : 22 Sep 2024 1:33 pm Operator: DHguye
Sample : VO06I07L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:41 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3511581	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2802334	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1335200	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	974695	9.81	ug/l	-0.02
Spiked Amount 10.000			Recovery = 98.10%			
42) 1,2-Dichloroethane-d4	9.08	65	759578	9.78	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.80%			
55) Toluene-d8	12.81	98	3760962	10.37	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.70%			
77) 4-Bromofluorobenzene	17.45	95	1358968	9.12	ug/l	0.00
Spiked Amount 10.000			Recovery = 91.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.64	85	1478834	9.97	ug/l	99
3) Chloromethane	1.88	50	1531623	11.26	ug/l	100
4) Vinyl chloride	1.99	62	1208614	11.35	ug/l	99
5) Bromomethane	2.43	94	904375	10.30	ug/l	99
6) Chloroethane	2.49	64	594153	8.62	ug/l	98
7) Dichlorofluoromethane	2.55	67	2195189	8.84	ug/l	100
8) Trichlorofluoromethane	2.78	101	1604165	11.45	ug/l	98
9) Acrolein	3.30	56	244106	49.49	ug/l	96
10) 1,1,2-Trichloro-1,2,2-trif	3.34	151	917661	7.92	ug/l	99
11) Acetone	3.40	43	701981	49.49	ug/l	95
12) 1,1-Dichloroethene	3.55	61	1705621	9.18	ug/l	98
13) tert-Butyl alcohol	3.70	59	1142163	260.33	ug/l	99
15) Methyl acetate	4.07	74	82151	10.84	ug/l	83
16) Iodomethane	3.99	142	1741843	10.01	ug/l	99
17) Allyl chloride	4.12	76	624422	10.50	ug/l	98
18) Methylene chloride	4.28	49	1354552	9.34	ug/l	95
19) Carbon disulfide	4.24	76	2286928	10.41	ug/l	100
20) Acrylonitrile	4.51	53	1014198	57.56	ug/l	99
21) tert-Butyl methyl ether (M	4.58	73	2035780	11.43	ug/l	99
22) trans-1,2-Dichloroethene	4.79	96	1185517	10.68	ug/l	99
23) Isopropyl ether (DIPE)	5.46	45	3899914	10.63	ug/l	98
24) Vinyl acetate	5.71	43	1529148	11.54	ug/l	99
25) 1,1-Dichloroethane	5.63	63	1962050	10.57	ug/l	98
26) 2-Butanol	6.19	45	1053368	212.45	ug/l	99
27) tert-Butyl ethyl ether (ET	6.38	59	2899914	10.90	ug/l	98
28) 2-Butanone	6.65	43	1267213	52.58	ug/l	97
29) 2,2-Dichloropropane	6.92	77	1445235	12.48	ug/l	98
30) cis-1,2-Dichloroethene	7.05	96	1224127	10.68	ug/l	99
31) Chloroform	7.43	83	1874950	10.21	ug/l	99
32) Bromochloromethane	7.80	130	548763	11.05	ug/l	99
33) Tetrahydrofuran	7.93	42	127658	9.89	ug/l	98
36) 1,1,1-Trichloroethane	8.35	97	1651746	11.18	ug/l	98
37) Cyclohexane	8.33	84	1858466	9.81	ug/l	97
39) 1,1-Dichloropropene	8.71	110	515052	10.33	ug/l	99
40) Carbon tetrachloride	8.89	119	1347150	11.01	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	2435222	11.19	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I22\RIW154.D Vial: 3
Acq On : 22 Sep 2024 1:33 pm Operator: DHguye
Sample : VO06I07L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:41 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	940903	10.18	ug/l	97
44)	Benzene	9.27	78	4326123	10.75	ug/l	99
45)	Trichloroethene	10.55	130	1118153	10.67	ug/l	99
46)	Methylcyclohexane	10.63	83	2089731	10.48	ug/l	96
47)	1,2-Dichloropropane	10.91	63	1003714	10.08	ug/l	99
48)	1,4-Dioxane	11.45	88	81997	175.93	ug/l	98
49)	Bromodichloromethane	11.35	83	1323984	10.25	ug/l	99
50)	Dibromomethane	11.41	93	489976	10.39	ug/l	97
51)	2-Chloroethyl vinyl ether	12.04	63	309008	9.86	ug/l	99
52)	4-Methyl-2-pentanone	12.08	43	3637809	54.77	ug/l	97
53)	cis-1,3-Dichloropropene	12.39	75	1664572	10.53	ug/l	98
56)	Toluene	12.94	91	4697808	11.11	ug/l	98
57)	Ethyl methacrylate	13.38	69	953592	10.26	ug/l	97
58)	trans-1,3-Dichloropropene	13.34	75	1267799	10.67	ug/l	95
59)	1,1,2-Trichloroethane	13.59	97	676041	11.13	ug/l	98
60)	2-Hexanone	13.65	43	2393106	53.99	ug/l	97
61)	1,3-Dichloropropane	14.03	76	1216520	10.85	ug/l	98
62)	Tetrachloroethene	14.09	164	948144	10.90	ug/l	98
63)	Dibromochloromethane	14.43	129	790989	10.58	ug/l	99
65)	1,2-Dibromoethane	14.76	107	637750	11.05	ug/l	99
66)	1-Chlorohexane	15.12	91	1661346	9.23	ug/l	96
67)	Chlorobenzene	15.49	112	2891783	11.17	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.59	131	976209	11.93	ug/l	97
69)	Ethylbenzene	15.61	91	5475185	10.51	ug/l	100
70)	m-Xylene & p-Xylene	15.74	91	8173347	20.53	ug/l	100
71)	o-Xylene	16.47	91	4188001	10.68	ug/l	100
72)	Styrene	16.53	104	3228666	11.02	ug/l	99
73)	Isopropylbenzene	17.08	105	5429142	10.67	ug/l	99
75)	Bromoform	17.06	173	388897	9.44	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.36	83	809111	10.48	ug/l	99
78)	1,2,3-Trichloropropane	17.57	110	208451	9.79	ug/l	97
79)	trans-1,4-Dichloro-2-buten	17.69	53	207805	8.85	ug/l	99
80)	n-Propylbenzene	17.67	91	7013484	9.52	ug/l	99
81)	Bromobenzene	17.73	156	1094028	10.37	ug/l	97
82)	1,3,5-Trimethylbenzene	17.89	105	4522333	10.06	ug/l	100
83)	2-Chlorotoluene	17.91	91	4213918	9.76	ug/l	98
84)	4-Chlorotoluene	17.97	91	3996463	10.10	ug/l	99
85)	tert-Butylbenzene	18.35	134	988385	10.41	ug/l	100
86)	1,2,4-Trimethylbenzene	18.39	105	4570123	9.81	ug/l	99
87)	sec-Butylbenzene	18.60	105	6309349	9.95	ug/l	98
88)	p-Isopropyltoluene	18.76	119	5209175	9.66	ug/l	99
89)	1,3-Dichlorobenzene	18.87	146	2350875	9.97	ug/l	96
90)	1,2,3-Trimethylbenzene	18.95	105	4283347	10.16	ug/l	100
91)	1,4-Dichlorobenzene	18.98	146	2318174	9.92	ug/l	99
92)	n-Butylbenzene	19.21	91	5557901	9.57	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	2036030	10.43	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.14	157	132299	9.69	ug/l	95
95)	1,2,4-Trichlorobenzene	20.97	180	1571063	10.24	ug/l	100
96)	Hexachlorobutadiene	21.10	225	851000	10.27	ug/l	99
97)	Naphthalene	21.24	128	2303882	11.15	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I22\RIW154.D Vial: 3
Acq On : 22 Sep 2024 1:33 pm Operator: DHguye
Sample : VO06I07L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:41 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

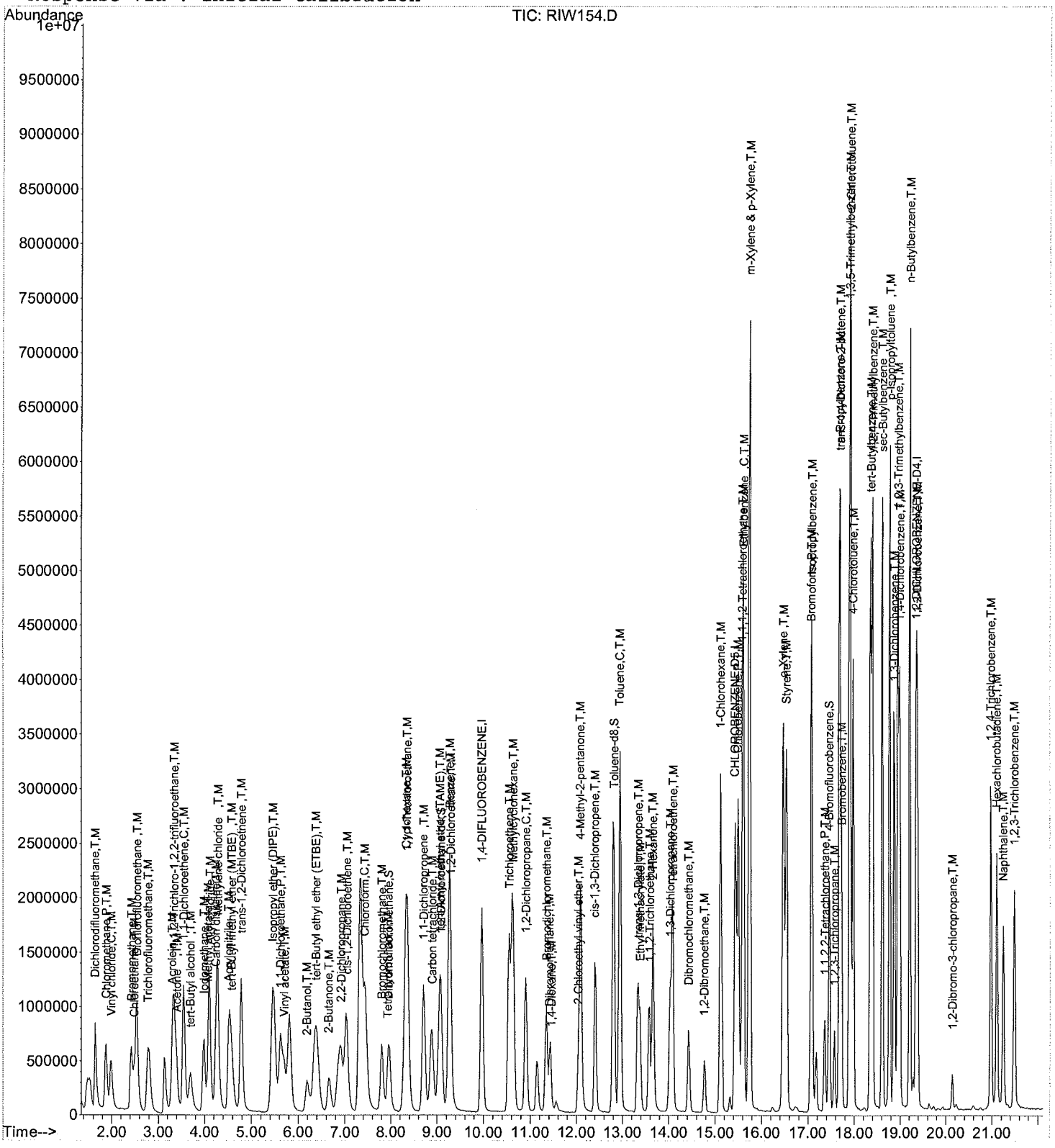
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1198010	10.35	ug/l	99

(#) = qualifier out of range (m) = manual integration
RIW154.D VO06I19B.M Tue Oct 15 15:42:04 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I22\RIW154.D Vial: 3
Acq On : 22 Sep 2024 1:33 pm Operator: DHguye
Sample : VO06I07L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:41 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I22\RIW155.D Vial: 4
Acq On : 22 Sep 2024 1:59 pm Operator: DHguye
Sample : VO06I07C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	4201223	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	3307964	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1430277	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	1161494	9.77	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.70%			
42) 1,2-Dichloroethane-d4	9.08	65	890231	9.58	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.80%			
55) Toluene-d8	12.81	98	4449218	10.39	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.90%			
77) 4-Bromofluorobenzene	17.45	95	1622074	10.16	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1411274	7.95	ug/l	100
3) Chloromethane	1.88	50	1335396	8.21	ug/l	100
4) Vinyl chloride	1.99	62	1020164	8.01	ug/l	99
5) Bromomethane	2.43	94	837752	8.00	ug/l	99
6) Chloroethane	2.51	64	637663	7.72	ug/l	96
7) Dichlorofluoromethane	2.55	67	2299870	7.70	ug/l	99
8) Trichlorofluoromethane	2.80	101	1511495	9.02	ug/l	100
9) Acrolein	3.32	56	263444	44.64	ug/l	94
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	1028500	7.40	ug/l	98
11) Acetone	3.40	43	798022	47.03	ug/l	97
12) 1,1-Dichloroethene	3.55	61	1915366	8.62	ug/l	97
13) tert-Butyl alcohol	3.70	59	1274408	242.79	ug/l	99
15) Methyl acetate	4.10	74	96662	10.66	ug/l	84
16) Iodomethane	3.99	142	1958250	9.40	ug/l	99
17) Allyl chloride	4.12	76	698350	9.82	ug/l	95
18) Methylene chloride	4.28	49	1527387	8.77	ug/l	96
19) Carbon disulfide	4.26	76	2526729	9.62	ug/l	99
20) Acrylonitrile	4.54	53	1088329	51.63	ug/l	98
21) tert-Butyl methyl ether (M	4.58	73	2218976	10.42	ug/l	100
22) trans-1,2-Dichloroethene	4.79	96	1324141	9.97	ug/l	100
23) Isopropyl ether (DIPE)	5.48	45	4450528	10.14	ug/l	97
24) Vinyl acetate	5.71	43	1644329	10.37	ug/l	100
25) 1,1-Dichloroethane	5.63	63	2245318	10.11	ug/l	98
26) 2-Butanol	6.19	45	1264058	213.07	ug/l	96
27) tert-Butyl ethyl ether (ET	6.38	59	3283882	10.31	ug/l	98
28) 2-Butanone	6.67	43	1432560	49.69	ug/l	99
29) 2,2-Dichloropropane	6.92	77	1509222	10.89	ug/l	98
30) cis-1,2-Dichloroethene	7.05	96	1402505	10.23	ug/l	99
31) Chloroform	7.45	83	2165268	9.86	ug/l	99
32) Bromochloromethane	7.80	130	617764	10.40	ug/l	100
33) Tetrahydrofuran	7.93	42	131783	8.54	ug/l	95
36) 1,1,1-Trichloroethane	8.35	97	1855364	10.50	ug/l	98
37) Cyclohexane	8.33	84	2205269	9.73	ug/l	98
39) 1,1-Dichloropropene	8.71	110	595350	9.98	ug/l	99
40) Carbon tetrachloride	8.89	119	1516884	10.36	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	2741693	10.53	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I22\RIW155.D Vial: 4
Acq On : 22 Sep 2024 1:59 pm Operator: DHguye
Sample : VO06I07C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	1113821	10.07	ug/l	100
44)	Benzene	9.27	78	4953822	10.29	ug/l	99
45)	Trichloroethene	10.55	130	1312224	10.47	ug/l	99
46)	Methylcyclohexane	10.63	83	2480068	10.40	ug/l	96
47)	1,2-Dichloropropane	10.91	63	1201185	10.08	ug/l	99
48)	1,4-Dioxane	11.45	88	93091	166.94	ug/l	96
49)	Bromodichloromethane	11.35	83	1545020	10.00	ug/l	100
50)	Dibromomethane	11.43	93	578987	10.26	ug/l	99
51)	2-Chloroethyl vinyl ether	12.04	63	361917	9.66	ug/l	96
52)	4-Methyl-2-pentanone	12.08	43	4173051	52.51	ug/l	97
53)	cis-1,3-Dichloropropene	12.42	75	1942977	10.27	ug/l	98
56)	Toluene	12.94	91	5475786	10.97	ug/l	99
57)	Ethyl methacrylate	13.38	69	1115242	10.17	ug/l	96
58)	trans-1,3-Dichloropropene	13.34	75	1516668	10.81	ug/l	95
59)	1,1,2-Trichloroethane	13.59	97	769202	10.73	ug/l	99
60)	2-Hexanone	13.65	43	2770732	52.96	ug/l	98
61)	1,3-Dichloropropane	14.03	76	1416995	10.70	ug/l	99
62)	Tetrachloroethene	14.09	164	1097462	10.69	ug/l	98
63)	Dibromochloromethane	14.43	129	939204	10.64	ug/l	99
65)	1,2-Dibromoethane	14.76	107	735613	10.80	ug/l	99
66)	1-Chlorohexane	15.12	91	1940993	9.13	ug/l	99
67)	Chlorobenzene	15.49	112	3285798	10.75	ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.59	131	1105636	11.44	ug/l	99
69)	Ethylbenzene	15.61	91	6315779	10.27	ug/l	99
70)	m-Xylene & p-Xylene	15.74	91	9483754	20.18	ug/l	99
71)	o-Xylene	16.47	91	4841630	10.46	ug/l	100
72)	Styrene	16.53	104	3733708	10.80	ug/l	98
73)	Isopropylbenzene	17.08	105	6090943	10.15	ug/l	99
75)	Bromoform	17.06	173	444177	10.06	ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.36	83	877152	10.60	ug/l	99
78)	1,2,3-Trichloropropane	17.57	110	229596	10.07	ug/l	98
79)	trans-1,4-Dichloro-2-buten	17.69	53	231403	9.20	ug/l	99
80)	n-Propylbenzene	17.67	91	7971649	10.10	ug/l	100
81)	Bromobenzene	17.73	156	1228850	10.87	ug/l	98
82)	1,3,5-Trimethylbenzene	17.89	105	4942197	10.27	ug/l	99
83)	2-Chlorotoluene	17.91	91	5097562	11.02	ug/l	94
84)	4-Chlorotoluene	17.97	91	4317665	10.19	ug/l	95
85)	tert-Butylbenzene	18.35	134	1109312	10.90	ug/l	96
86)	1,2,4-Trimethylbenzene	18.39	105	4951115	9.92	ug/l	100
87)	sec-Butylbenzene	18.61	105	6732798	9.91	ug/l	99
88)	p-Isopropyltoluene	18.76	119	5614918	9.72	ug/l	99
89)	1,3-Dichlorobenzene	18.87	146	2596600	10.28	ug/l	96
90)	1,2,3-Trimethylbenzene	18.95	105	4487102	9.94	ug/l	99
91)	1,4-Dichlorobenzene	18.98	146	2564999	10.25	ug/l	98
92)	n-Butylbenzene	19.20	91	5925841	9.52	ug/l	99
93)	1,2-Dichlorobenzene	19.37	146	2189702	10.47	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.14	157	132023	9.03	ug/l	90
95)	1,2,4-Trichlorobenzene	20.97	180	1519346	9.25	ug/l	99
96)	Hexachlorobutadiene	21.10	225	827136	9.31	ug/l	98
97)	Naphthalene	21.24	128	2157290	9.75	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I22\RIW155.D Vial: 4
Acq On : 22 Sep 2024 1:59 pm Operator: DHguye
Sample : VO06I07C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:42 2024 Quant Results File: VO06I19B.RES

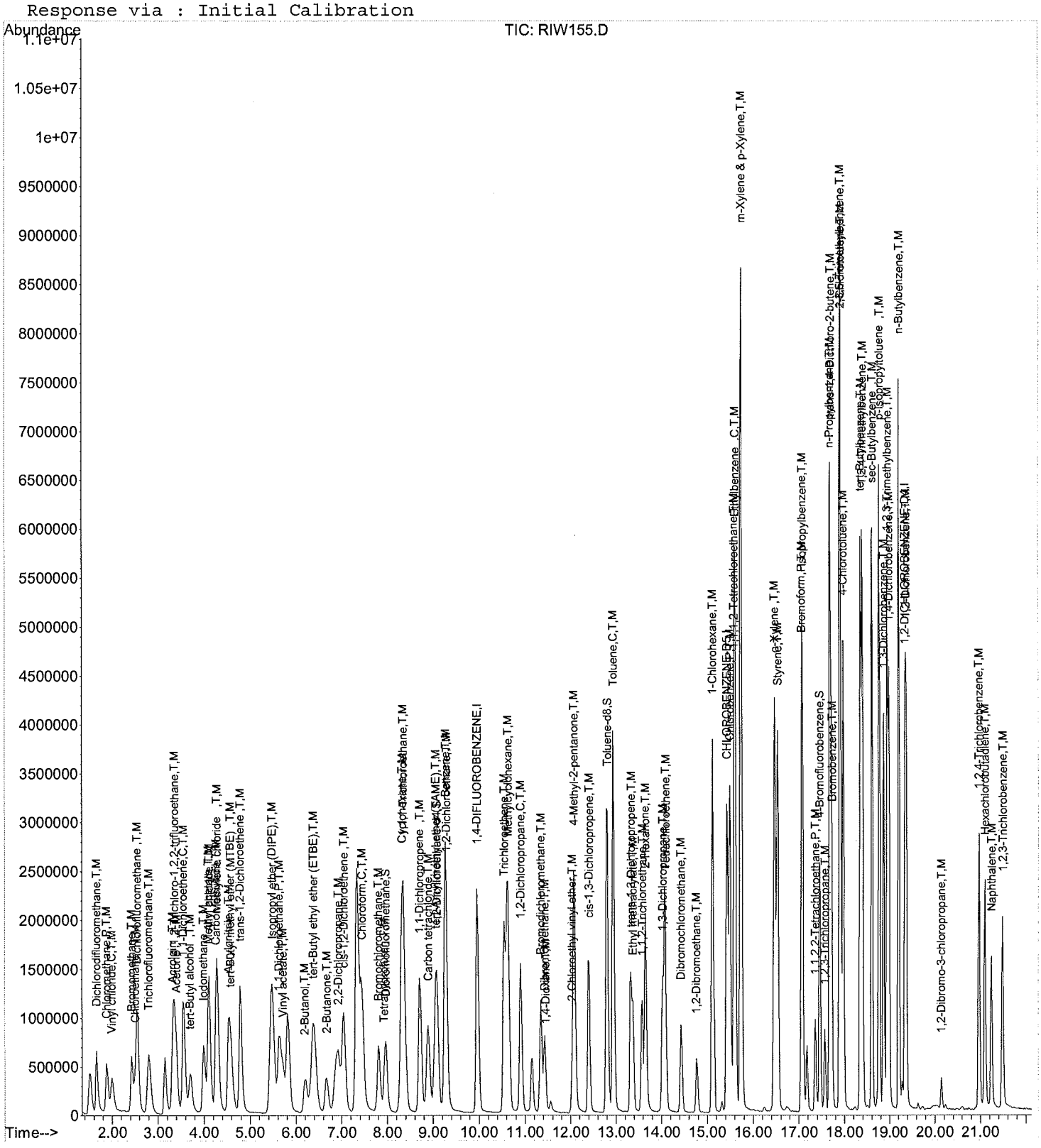
Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	1160661	9.36	ug/l	99

(#) = qualifier out of range (m) = manual integration
RIW155.D VO06I19B.M Tue Oct 15 15:42:51 2024 Page 3

Data File : D:\HPCHEM\1\DATA\24I22\RIW155.D Vial: 4
Acq On : 22 Sep 2024 1:59 pm Operator: DHguye
Sample : VO06I07C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 15 15:42 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



INITIAL CALIBRATION(S)

FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RIW074 BFB Injection Date: 09/19/24

Instrument ID: 06 BFB Injection Time: 09:28

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	16.136
75	30 - 60% of mass 95	44.663
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.924
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	71.255
175	5 - 9% of mass 174	4.438(6.23)1
176	95 - 101% % of mass 174	71.759(100.71)1
177	5 - 9% % of mass 176	3.986(5.55)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	VO06I191	RIW075	09/19/24	11:07
2	VSTD0.5	VO06I192	RIW076	09/19/24	11:33
3	VSTD1	VO06I193	RIW077	09/19/24	11:59
4	VSTD2	VO06I194	RIW078	09/19/24	12:25
5	VSTD5	VO06I195	RIW079	09/19/24	12:51
6	VSTD10	VO06I196	RIW080	09/19/24	13:18
7	VSTD20	VO06I197	RIW081	09/19/24	13:44
8	VSTD30	VO06I198	RIW082	09/19/24	14:10
9	VSTD50	VO06I199	RIW083	09/19/24	14:36
10	VSTD100	VO06I1910	RIW084	09/19/24	15:02
11	VSTD10	IVO06I1901	RIW087	09/19/24	16:20
12	VSTD10	IVO06I1902	RIW093	09/19/24	19:59

SC 10/14/24

Instrument ID :06
Beginning DateTime :09/19/24 11:07
Spike Units :PPB
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B

M	IDX	Parameters	.3 11:07 RIW075	.5 11:33 RIW076	1 11:59 RIW077	2 12:25 RIW078	5 12:51 RIW079	10 13:18 RIW080	20 13:44 RIW081	30 14:10 RIW082	50 14:36 RIW083	100 15:02 RIW084	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	9.9664
	2	Dichlorodifluoromethane	------	0.407	0.465	0.489	0.405	0.358	0.432	0.483	0.321	0.444	0.422	13.33	1.6611
	3	Chloromethane	------	0.343	0.422	0.430	0.370	0.346	0.397	0.469	0.306	0.402	0.387	13.07	1.8826
	4	Vinyl chloride	------	0.297	0.362	0.351	0.308	0.242	0.266	0.297	------	------	0.303	14.03	1.9928
	5	Bromomethane	------	0.174	0.263	0.284	0.225	0.212	0.251	0.264	------	------	0.239	15.81	2.4327
	6	Chloroethane	0.285	0.157	0.180	0.258	0.171	0.173	0.198	0.204	------	------	0.203	22.40	2.5109
	7	Dichlorofluoromethane	------	0.646	0.696	1.049	0.692	0.664	0.672	0.660	------	------	0.725	19.79	2.5568
	8	Trichlorofluoromethane	0.421	0.306	0.381	0.455	0.387	0.355	0.442	0.452	0.339	0.450	0.399	13.35	2.8035
5	9	Acrolein	------	------	0.017	0.016	0.012	0.012	0.015	0.014	0.013	0.013	0.014	13.03	3.3178
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.303	0.273	0.288	0.469	0.299	0.289	0.304	0.296	0.222	------	0.305	21.85	3.3599
5	11	Acetone	------	------	0.044	0.040	0.040	0.039	0.043	0.041	0.040	0.036	0.040	5.70	3.4121
	12	1,1-Dichloroethene	0.504	0.424	0.481	0.681	0.548	0.535	0.569	0.529	0.463	0.555	0.529	13.18	3.5593
25	13	tert-Butyl alcohol	0.013	0.010	0.011	0.012	0.012	0.014	0.015	0.014	0.013	0.011	0.012	12.15	3.7081
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	------	0.018	0.022	0.021	0.024	0.023	0.022	------	------	0.022	9.28	4.0924
	16	Iodomethane	0.485	0.408	0.483	0.580	0.513	0.494	0.529	0.503	0.443	0.518	0.496	9.49	3.9973
	17	Allyl chloride	0.189	0.146	0.149	0.171	0.167	0.175	0.188	0.167	0.170	0.170	0.169	8.27	4.1126
	18	Methylene chloride	------	------	0.569	0.524	0.433	0.403	0.420	0.387	------	------	0.456	16.08	4.2915
	19	Carbon disulfide	0.434	0.392	0.401	0.685	0.578	0.637	0.672	0.604	------	------	0.550	22.27	4.2609
5	20	Acrylonitrile	0.052	0.037	0.044	0.050	0.051	0.051	0.057	0.055	0.054	0.051	0.050	11.25	4.5318
	21	tert-Butyl methyl ether (MTBE)	0.526	0.412	0.470	0.523	0.526	0.550	0.576	0.529	0.500	0.458	0.507	9.55	4.5779
	22	trans-1,2-Dichloroethene	0.366	0.263	0.304	0.333	0.327	0.320	0.343	0.308	0.297	0.300	0.316	9.01	4.7958
	23	Isopropyl ether (DIPE)	1.045	0.834	0.958	1.105	1.135	1.115	1.181	1.072	1.029	0.976	1.045	9.74	5.4728
	24	Vinyl acetate	------	------	0.301	0.335	0.373	0.361	0.438	0.414	0.407	0.392	0.377	11.84	5.7071
	25	1,1-Dichloroethane	0.535	0.417	0.512	0.568	0.565	0.544	0.587	0.524	0.518	0.514	0.528	8.85	5.6321
25	26	2-Butanol	0.009	0.006	0.007	0.009	0.011	0.015	0.015	0.015	------	------	0.011	34.89	6.2179
	27	tert-Butyl ethyl ether (ETBE)	0.724	0.599	0.744	0.803	0.839	0.814	0.856	0.764	0.751	0.683	0.758	10.20	6.3866
5	28	2-Butanone	------	------	0.059	0.063	0.067	0.069	0.077	0.074	0.073	0.067	0.069	8.30	6.6712
	29	2,2-Dichloropropane	0.362	0.290	0.318	0.363	0.343	0.346	0.381	0.321	0.302	0.271	0.330	10.70	6.9211
	30	cis-1,2-Dichloroethene	0.344	0.297	0.313	0.342	0.339	0.329	0.352	0.317	0.317	0.314	0.326	5.38	7.0405
	31	Chloroform	0.591	0.445	0.529	0.550	0.547	0.525	0.561	0.498	0.498	0.485	0.523	8.09	7.4387
	32	Bromochloromethane	0.136	0.114	0.129	0.137	0.149	0.149	0.157	0.148	0.150	0.147	0.141	8.96	7.8160
	33	Tetrahydrofuran	------	------	0.032	0.041	0.037	0.035	0.038	0.035	0.039	0.037	0.037	7.29	7.9287
5	34	tert-Amyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	35	Dibromofluoromethane	0.143	0.182	0.161	0.232	0.259	0.287	0.311	0.275	------	------	0.231	27.01	7.9680
	36	1,1,1-Trichloroethane	0.436	0.364	0.395	0.442	0.446	0.437	0.469	0.426	0.400	0.391	0.421	7.56	8.3546
	37	Cyclohexane	------	------	0.435	0.556	0.517	0.572	0.602	0.552	------	------	0.539	10.75	8.3366
	38	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	39	1,1-Dichloropropene	0.137	0.128	0.136	0.153	0.147	0.144	0.155	0.141	0.140	0.140	0.142	5.75	8.7130
	40	Carbon tetrachloride	0.321	0.289	0.315	0.368	0.370	0.367	0.395	0.366	0.338	0.357	0.349	9.23	8.8912
	41	tert-Amyl methyl ether (TAME)	0.601	0.532	0.602	0.647	0.659	0.669	0.704	0.638	0.603	0.544	0.620	8.76	9.0672
	42	1,2-Dichloroethane-d4	------	------	------	0.183	0.214	0.236	0.247	0.226	------	------	0.221	11.06	9.0842
	43	1,2-Dichloroethane	0.221	0.205	0.259	0.277	0.287	0.281	0.300	0.272	0.269	0.262	0.263	11.07	9.2873
	44	Benzene	1.107	0.949	1.163	1.265	1.275	1.220	1.273	1.150	1.095	0.965	1.146	10.43	9.2705
	45	Trichloroethene	0.267	0.254	0.286	0.304	0.324	0.318	0.340	0.304	0.296	0.291	0.298	8.68	10.5511
	46	Methylcyclohexane	------	------	0.438	0.550	0.549	0.629	0.656	0.585	------	------	0.568	13.50	10.6211
	47	1,2-Dichloropropane	0.292	0.229	0.270	0.294	0.302	0.292	0.320	0.287	0.277	0.272	0.284	8.52	10.9074
20	48	1,4-Dioxane	------	------	0.001	0.001	0.001	0.002	0.002	0.001	0.001	------	0.001	11.21	11.4583
	49	Bromodichloromethane	0.407	0.320	0.333	0.378	0.386	0.375	0.401	0.370	0.358	0.349	0.368	7.61	11.3476
	50	Dibromomethane	0.126	0.106	0.128	0.135	0.143	0.139	0.152	0.143	0.138	0.134	0.134	9.25	11.4167
	51	2-Chloroethyl vinyl ether	------	0.078	0.082	0.077	0.087	0.090	0.100	0.096	0.098	0.095	0.089	9.82	12.0415
5	52	4-Methyl-2-pentanone	0.177	0.149	0.184	0.208	0.202	0.205	0.215	0.203	0.193	0.157	0.189	11.78	12.0874
	53	cis-1,3-Dichloropropene	0.457	0.352	0.435	0.471	0.484	0.475	0.499	0.462	0.445	0.421	0.450	9.21	12.3976
	54	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.4323
	55	Toluene-d8	------	------	------	1.190	1.327	1.342	1.395	1.218	------	------	1.294	6.71	12.8023
	56	Toluene	1.381	1.344	1.595	1.769	1.757	1.605	1.671	1.462	1.381	1.119	1.509	13.73	12.9404
	57	Ethyl methacrylate	0.361	0.297	0.317	0.338	0.345	0.334	0.355	0.318	0.334	0.317	0.332	5.91	13.3805
	58	trans-1,3-Dichloropropene	0.391	0.346	0.378	0.440	0.469	0.435	0.477	0.427	0.434	0.440	0.424	9.58	13.3261
	59	1,1,2-Trichloroethane	0.213	0.164	0.197	0.229	0.238	0.224	0.240	0.215	0.224	0.222	0.217	10.21	13.5797
5	60	2-Hexanone	------	0.136	0.147	0.173	0.169	0.163	0.169	0.160	0.163	0.144	0.158	8.03	13.6576
	61	1,3-Dichloropropane	0.346	0.350	0.383	0.421	0.459	0.413	0.443	0.392	0.402	0.394	0.400	9.06	14 0303
	62	Tetrachloroethene	0.276	0.281	0.308	0.347	0.340	0.320	0.342	0.300	0.296	0.293	0.310	8.33	14.0827
	63	Dibromochloromethane	0.268	0.234	0.234	0.269	0.280	0.271	0.292	0.268	0.278	0.275	0.267	7.03	14.4285
	64	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	65	1,2-Dibromoethane	0.176	0.170	0.186	0.219	0.222	0.214	0.229	0.212	0.218	0.213	0.206	10.05	14.7659
	66	1-Chlorohexane	------	0.641	0.620	0.760	0.633	0.592	0.610	------	------	------	0.643	9.33	15.1201
	67	Chlorobenzene	0.849	0.820	0.923	1.040	1.038	0.964	1.006	0.922	0.874	0.801	0.924	9.47	15.4972
	68	1,1,1,2-Tetrachloroethane	0.257	0.241	0.271	0.321	0.327	0.322	0.334	0.301	0.281	0.266	0.292	11.30	15.5893
	69	Ethylbenzene	1.650	1.724	1.902	2.066	2.033	1.874	1.925	1.699	------	------	1.859	8.30	15.6082
2	70	m-Xylene & p-Xylene	1.341	1.292	1.463	1.590	1.567	1.409	1.452	1.251	------	------	1.421	8.61	15.7412
	71	o-Xylene	1.413	1.286	1.373	1.581	1.515	1.453	1.500	1.315	1.154	------	1.399	9.46	16.4663
	72	Styrene	0.984	1.005	1.075	1.175	1.158	1.095	1.136	1.026	0.952	0.847	1.045	9.82	16.5326
	73	Isopropylbenzene	1.881	1.582	1.794	2.049	1.926	1.838	1.865	1.584	------	------	1.815	8.91	17.0776
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.3480
	75	Bromoform	0.254	0.192	0.263	0.307	0.299	0.297	0.339	0.316	0.353	0.285	0.290	15.86	17.0684
	76	1,1,2,2-Tetrachloroethane	------	0.441	0.544	0.582	0.643	0.604	0.643	0.598	0.624	0.527	0.578	11.29	17.3601
	77	4-Bromofluorobenzene	------	------	------	1.005	1.120	1.130	1.233	1.094	------	------	1.116	7.32	17.4541
	78	1,2,3-Trichloropropane	0.157	0.132	0.144	0.156	0.164	0.160	0.185	0.160	0.183	0.154	0.159	9.99	17.5731
	79	trans-1,4-Dichloro-2-butene	------	0.163	0.191	0.180	0.175	0.167	0.178	0.176	0.193	0.160	0.176	6.51	17.6830
	80	n-Propylbenzene	4.844	5.107	5.823	6.285	6.097	5.416	5.776	4.788	------	------	5.517	10.27	17.6761
	81	Bromobenzene	0.689	0.605	0.743	0.887	0.902	0.827	0.915	0.816	0.838	0.681	0.790	13.37	17.7223
	82	1,3,5-Trimethylbenzene	3.012	2.925	3.549	3.847	3.670	3.417	3.559	2.944	------	------	3.365	10.62	17.8950
	83	2-Chlorotoluene	2.806	2.762	3.264	3.620	3.604	3.215	3.719	3.205	2.902	------	3.233	11.15	17.9080
	84	4-Chlorotoluene	2.324	2.689	3.095	3.530	3.458	3.137	3.139	2.711	2.582	------	2.963	13.81	17.9728
	85	tert-Butylbenzene	0.651	0.708	0.718	0.824	0.798	0.753	0.810	0.650	0.620	0.584	0.711	11.84	18.3503
	86	1,2,4-Trimethylbenzene	3.338	3.123	3.575	3.960	3.789	3.472	3.637	3.019	------	------	3.489	9.18	18.3880
	87	sec-Butylbenzene	4.627	4.566	4.864	5.399	5.107	4.702	4.857	3.885	------	------	4.751	9.32	18.6005
	88	p-Isopropyltoluene	4.040	3.859	4.153	4.530	4.264	4.045	4.116	3.293	------	------	4.038	8.88	18.7643
	89	1,3-Dichlorobenzene	1.448	1.517	1.841	1.997	1.962	1.838	1.943	1.696	1.656	------	1.767	11.22	18.8666
	90	1,2,3-Trimethylbenzene	3.034	2.834	3.239	3.600	3.383	3.200	3.276	2.696	------	------	3.158	9.29	18.9459
	91	1,4-Dichlorobenzene	1.550	1.444	1.777	2.069	1.922	1.793	1.888	1.670	1.636	------	1.750	11.18	18.9848
	92	n-Butylbenzene	4.540	4.326	4.418	4.956	4.527	4.231	4.271	3.536	------	------	4.351	9.21	19.2054
	93	1,2-Dichlorobenzene	1.364	1.245	1.472	1.700	1.615	1.551	1.619	1.440	1.365	1.252	1.462	10.78	19.3740
	94	1,2-Dibromo-3-chloropropane	------	------	0.096	0.102	0.098	0.102	0.107	0.101	0.105	0.107	0.102	3.78	20.1412
	95	1,2,4-Trichlorobenzene	1.423	1.073	1.099	1.268	1.198	1.192	1.165	1.062	0.998	1.013	1.149	11.27	20.9699
	96	Hexachlorobutadiene	0.721	0.589	0.605	0.710	0.621	0.677	0.652	0.566	0.513	0.554	0.621	11.09	21.0996
	97	Naphthalene	------	1.343	1.452	1.731	1.639	1.649	1.625	1.502	1.464	1.523	1.548	7.87	21.2424
	98	1,2,3-Trichlorobenzene	1.147	0.750	0.832	0.983	0.876	0.901	0.855	0.785	0.743	0.799	0.867	14.10	21.4888

Spike Amount = Nominal Amount * M
Ave_%RSD : 11 Max_%RSD : 34.9

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
5	Bromomethane	-0.00236	0.25228	0.9963
6	Chloroethane	0.00085	0.19539	0.9954

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7	Dichlorofluoromethane	0.01051	0.66716	0.9949*
10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00499	0.26465	0.9850*
18	Methylene chloride	0.02079	0.39077	0.9991
19	Carbon disulfide	-0.00935	0.63461	0.9977
26	2-Butanol	-0.01079	0.01463	0.9959
35	Dibromofluoromethane	-0.00646	0.28948	0.9975
75	Bromoform	-0.00294	0.31161	0.9955

Use Quadratic Regression of inv conc w.f. for comps of linear reg of inv conc w.f. with CCF < .995
Resp_Ratio = xo + x1 * Amt_Ratio + x2 * Amt_Ratio * Amt_Ratio

IDX	Parameter	x0	x1	x2	CCF2
7	Dichlorofluoromethane	0.00466	0.72295	-0.02386	0.9954
10	1,1,2-Trichloro-1,2,2-trifluoroethane	-0.00177	0.35171	-0.02477	0.9955

SM
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PROGRAM: ICALMAX

Input: R:\cal\8260\2024\vo06i19b\riw080.ICL Output: R:\cal\8260\2024\vo06i19b\riw080.MAX

IDX	Parameter	x0	x1	x2	CCF2	MaxMinAmtRatio	MaxMinRespRatio	MaxMinRRF	MaxMinConc
7	Dichlorofluoromethane	0.00466	0.72295	-0.02386	0.9954	15.14983	5.48095	0.36178	151.5
10	1,1,2-Trichloro-1,2,2-trifluoroethane	-0.00177	0.35171	-0.02477	0.9955	7.09952	1.24672	0.17561	71.0

SG
10/14/24

Instrument ID :06
Beginning DateTime :09/19/24 11:07
Spike Units :PPB
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B

M	IDX	Parameters	.3 11:07 RIW075	.5 11:33 RIW076	1 11:59 RIW077	2 12:25 RIW078	5 12:51 RIW079	10 13:18 RIW080	20 13:44 RIW081	30 14:10 RIW082	50 14:36 RIW083	100 15:02 RIW084	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	9.9664
	2	Dichlorodifluoromethane	------	96	110	116	96	85	102	114	76	105	10.5	13.33	1.6611
	3	Chloromethane	------	89	109	111	96	89	103	121	79	104	10.6	13.07	1.8826
	4	Vinyl chloride	------	98	119	116	102	80	88	98	------	------	10.5	14.03	1.9928
	5	Bromomethane	------	88	114	118	91	85	100	105	------	------	12.7	15.81	2.4327
	6	Chloroethane	130	72	88	130	86	88	101	104	------	------	16.9	22.40	2.5109
	7	Dichlorofluoromethane	------	76	90	143	96	94	99	101	------	------	12.7	19.79	2.5568
	8	Trichlorofluoromethane	106	77	95	114	97	89	111	113	85	113	11.3	13.35	2.8035
5	9	Acrolein	------	------	121	114	86	86	107	100	93	93	10.7	13.03	3.3178
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	99	90	94	154	98	95	100	97	73	------	12	21.85	3.3599
5	11	Acetone	------	------	110	100	100	98	108	102	100	90	4.1	5.70	3.4121
	12	1,1-Dichloroethene	95	80	91	129	104	101	108	100	88	105	9.2	13.18	3.5593
25	13	tert-Butyl alcohol	108	83	92	100	100	117	125	117	108	92	10.8	12.15	3.7081
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	------	82	100	95	109	105	100	------	------	6.1	9.28	4.0924
	16	Iodomethane	98	82	97	117	103	100	107	101	89	104	6.7	9.49	3.9973
	17	Allyl chloride	112	86	88	101	99	104	111	99	101	101	5.7	8.27	4.1126
	18	Methylene chloride	------	------	93	108	100	98	105	97	------	------	13.2	16.08	4.2915
	19	Carbon disulfide	117	92	76	116	94	102	107	96	------	------	19.3	22.27	4.2609
5	20	Acrylonitrile	104	74	88	100	102	102	114	110	108	102	8	11.25	4.5318
	21	tert-Butyl methyl ether (MTBE)	104	81	93	103	104	108	114	104	99	90	7.4	9.55	4.5779
	22	trans-1,2-Dichloroethene	116	83	96	105	103	101	109	97	94	95	6.9	9.01	4.7958
	23	Isopropyl ether (DIPE)	100	80	92	106	109	107	113	103	98	93	7.3	9.74	5.4728
	24	Vinyl acetate	------	------	80	89	99	96	116	110	108	104	9.3	11.84	5.7071
	25	1,1-Dichloroethane	101	79	97	108	107	103	111	99	98	97	5.9	8.85	5.6321
25	26	2-Butanol	158	97	76	79	81	104	105	100	------	------	28.4	34.89	6.2179
	27	tert-Butyl ethyl ether (ETBE)	96	79	98	106	111	107	113	101	99	90	7.6	10.20	6.3866
5	28	2-Butanone	------	------	86	91	97	100	112	107	106	97	6.7	8.30	6.6712
	29	2,2-Dichloropropane	110	88	96	110	104	105	115	97	92	82	8.9	10.70	6.9211
	30	cis-1,2-Dichloroethene	106	91	96	105	104	101	108	97	97	96	4.5	5.38	7.0405
	31	Chloroform	113	85	101	105	105	100	107	95	95	93	6.3	8.09	7.4387
	32	Bromochloromethane	96	81	91	97	106	106	111	105	106	104	7.2	8.96	7.8160
	33	Tetrahydrofuran	------	------	86	111	100	95	103	95	105	100	5.4	7.29	7.9287
5	34	tert-Amyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	35	Dibromofluoromethane	123	108	78	92	94	101	109	96	------	------	22.5	27.01	7.9680
	36	1,1,1-Trichloroethane	104	86	94	105	106	104	111	101	95	93	6.3	7.56	8.3546
	37	Cyclohexane	------	------	81	103	96	106	112	102	------	------	7.8	10.75	8.3366
	38	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	39	1,1-Dichloropropene	96	90	96	108	104	101	109	99	99	99	4.3	5.75	8.7130
	40	Carbon tetrachloride	92	83	90	105	106	105	113	105	97	102	7.5	9.23	8.8912
	41	tert-Amyl methyl ether (TAME)	97	86	97	104	106	108	114	103	97	88	7	8.76	9.0672
	42	1,2-Dichloroethane-d4	------	------	------	83	97	107	112	102	------	------	8.2	11.06	9.0842
	43	1,2-Dichloroethane	84	78	98	105	109	107	114	103	102	100	8.1	11.07	9.2873
	44	Benzene	97	83	101	110	111	106	111	100	96	84	8.2	10.43	9.2705
	45	Trichloroethene	90	85	96	102	109	107	114	102	99	98	6.6	8.68	10.5511
	46	Methylcyclohexane	------	------	77	97	97	111	115	103	------	------	9.8	13.50	10.6211
	47	1,2-Dichloropropane	103	81	95	104	106	103	113	101	98	96	6	8.52	10.9074
20	48	1,4-Dioxane	------	------	83	92	101	114	113	95	101	------	28.6	11.21	11.4583
	49	Bromodichloromethane	111	87	90	103	105	102	109	101	97	95	6	7.61	11.3476
	50	Dibromomethane	94	79	96	101	107	104	113	107	103	100	6.6	9.25	11.4167
	51	2-Chloroethyl vinyl ether	------	88	92	87	98	101	112	108	110	107	8.2	9.82	12.0415
5	52	4-Methyl-2-pentanone	94	79	97	110	107	108	114	107	102	83	9.6	11.78	12.0874
	53	cis-1,3-Dichloropropene	102	78	97	105	108	106	111	103	99	94	6.6	9.21	12.3976
	54	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.4323
	55	Toluene-d8	------	------	------	92	103	104	108	94	------	------	5.6	6.71	12.8023
	56	Toluene	92	89	106	117	116	106	111	97	92	74	11.3	13.73	12.9404
	57	Ethyl methacrylate	109	89	95	102	104	101	107	96	101	95	4.6	5.91	13.3805
	58	trans-1,3-Dichloropropene	92	82	89	104	111	103	112	101	102	104	7.3	9.58	13.3261
	59	1,1,2-Trichloroethane	98	76	91	106	110	103	111	99	103	102	7.1	10.21	13.5797
5	60	2-Hexanone	------	86	93	109	107	103	107	101	103	91	6.8	8.03	13.6576
	61	1,3-Dichloropropane	86	88	96	105	115	103	111	98	100	98	6.8	9.06	14.0303
	62	Tetrachloroethene	89	91	99	112	110	103	110	97	95	95	6.9	8.33	14.0827
	63	Dibromochloromethane	100	88	88	101	105	101	109	100	104	103	4.9	7.03	14.4285
	64	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	65	1,2-Dibromoethane	85	83	90	106	108	104	111	103	106	103	8.3	10.05	14.7659
	66	1-Chlorohexane	------	100	96	118	98	92	95	------	------	------	6.1	9.33	15.1201
	67	Chlorobenzene	92	89	100	113	112	104	109	100	95	87	7.7	9.47	15.4972
	68	1,1,1,2-Tetrachloroethane	88	83	93	110	112	110	114	103	96	91	9.9	11.30	15.5893
	69	Ethylbenzene	89	93	102	111	109	101	104	91	------	------	6.8	8.30	15.6082
2	70	m-Xylene & p-Xylene	94	91	103	112	110	99	102	88	------	------	6.9	8.61	15.7412
	71	o-Xylene	101	92	98	113	108	104	107	94	82	------	7.4	9.46	16.4663
	72	Styrene	94	96	103	112	111	105	109	98	91	81	7.9	9.82	16.5326
	73	Isopropylbenzene	104	87	99	113	106	101	103	87	------	------	6.7	8.91	17.0776
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.3480
	75	Bromoform	113	80	94	103	98	96	109	102	113	92	11.6	15.86	17.0684
	76	1,1,2,2-Tetrachloroethane	------	76	94	101	111	104	111	103	108	91	8.6	11.29	17.3601
	77	4-Bromofluorobenzene	------	------	------	90	100	101	110	98	------	------	4.8	7.32	17.4541
	78	1,2,3-Trichloropropane	99	83	91	98	103	101	116	101	115	97	6.9	9.99	17.5731
	79	trans-1,4-Dichloro-2-butene	------	93	109	102	99	95	101	100	110	91	4.9	6.51	17.6830
	80	n-Propylbenzene	88	93	106	114	111	98	105	87	------	------	8.7	10.27	17.6761
	81	Bromobenzene	87	77	94	112	114	105	116	103	106	86	11.2	13.37	17.7223
	82	1,3,5-Trimethylbenzene	90	87	105	114	109	102	106	87	------	------	9	10.62	17.8950
	83	2-Chlorotoluene	87	85	101	112	111	99	115	99	90	------	8.8	11.15	17.9080
	84	4-Chlorotoluene	78	91	104	119	117	106	106	91	87	------	11.6	13.81	17.9728
	85	tert-Butylbenzene	92	100	101	116	112	106	114	91	87	82	9.7	11.84	18.3503
	86	1,2,4-Trimethylbenzene	96	90	102	113	109	100	104	87	------	------	7.2	9.18	18.3880
	87	sec-Butylbenzene	97	96	102	114	107	99	102	82	------	------	6.4	9.32	18.6005
	88	p-Isopropyltoluene	100	96	103	112	106	100	102	82	------	------	5.7	8.88	18.7643
	89	1,3-Dichlorobenzene	82	86	104	113	111	104	110	96	94	------	9.4	11.22	18.8666
	90	1,2,3-Trimethylbenzene	96	90	103	114	107	101	104	85	------	------	7.2	9.29	18.9459
	91	1,4-Dichlorobenzene	89	83	102	118	110	102	108	95	93	------	8.9	11.18	18.9848
	92	n-Butylbenzene	104	99	102	114	104	97	98	81	------	------	6	9.21	19.2054
	93	1,2-Dichlorobenzene	93	85	101	116	110	106	111	98	93	86	8.8	10.78	19.3740
	94	1,2-Dibromo-3-chloropropane	------	------	94	100	96	100	105	99	103	105	2.9	3.78	20.1412
	95	1,2,4-Trichlorobenzene	124	93	96	110	104	104	101	92	87	88	8.7	11.27	20.9699
	96	Hexachlorobutadiene	116	95	97	114	100	109	105	91	83	89	8.9	11.09	21.0996
	97	Naphthalene	------	87	94	112	106	107	105	97	95	98	6.5	7.87	21.2424
	98	1,2,3-Trichlorobenzene	132	87	96	113	101	104	99	91	86	92	10.1	14.10	21.4888

For 8260 C
SW 10/14/24

Compound List Report 06

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
Total Cpnds : 98

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-DIFLUOROBENZENE	114	9.96	1.000	A	1	A	B
2	T	Dichlorodifluoromethane	85	1.68	0.168	A	1	A	B
3	T	Chloromethane	50	1.89	0.190	A	1	A	B
4	T	Vinyl chloride	62	2.01	0.202	A	1	A	B
5	T	Bromomethane	94	2.45	0.245	L	1	A	B
6	T	Chloroethane	64	2.52	0.253	L	1	A	B
7	T	Dichlorofluoromethane	67	2.56	0.257	Q	1	A	B
8	T	Trichlorofluoromethane	101	2.82	0.283	A	1	A	B
9	T	Acrolein	56	3.32	0.333	A	1	A	B
10	T	1,1,2-Trichloro-1,2,2-trifluor	151	3.36	0.337	Q	1	A	B
11	T	Acetone	43	3.43	0.344	A	1	A	B
12	T	1,1-Dichloroethene	61	3.57	0.358	A	2	A	B
13	T	tert-Butyl alcohol	59	3.72	0.373	A	1	A	B
14	T	Acetonitrile	41	0.00	0.000	A	2	A	B
15	T	Methyl acetate	74	4.10	0.411	A	1	A	B
16	T	Iodomethane	142	4.01	0.403	A	1	A	B
17	T	Allyl chloride	76	4.12	0.413	A	1	A	B
18	T	Methylene chloride	49	4.31	0.432	L	2	A	B
19	T	Carbon disulfide	76	4.26	0.428	L	1	A	B
20	T	Acrylonitrile	53	4.54	0.455	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	4.58	0.459	A	1	A	B
22	T	trans-1,2-Dichloroethene	96	4.81	0.483	A	1	A	B
23	T	Isopropyl ether (DIPE)	45	5.48	0.550	A	1	A	B
24	T	Vinyl acetate	43	5.71	0.573	A	1	A	B
25	T	1,1-Dichloroethane	63	5.65	0.567	A	2	A	B
26	T	2-Butanol	45	6.21	0.624	L	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.38	0.640	A	1	A	B
28	T	2-Butanone	43	6.67	0.670	A	1	A	B
29	T	2,2-Dichloropropane	77	6.93	0.695	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	7.05	0.708	A	1	A	B
31	T	Chloroform	83	7.45	0.748	A	2	A	B
32	T	Bromochloromethane	130	7.83	0.785	A	1	A	B
33	T	Tetrahydrofuran	42	7.93	0.796	A	2	A	B
34	T	tert-Amyl alcohol	59	8.12	0.815	A	1	A	B
35	S	Dibromofluoromethane	111	7.97	0.800	L	1	A	B
36	T	1,1,1-Trichloroethane	97	8.35	0.838	A	2	A	B
37	T	Cyclohexane	84	8.35	0.838	A	1	A	B
38	T	2,2,4-Trimethylpentane	57	8.69	0.872	A	1	A	B
39	T	1,1-Dichloropropene	110	8.73	0.876	A	1	A	B
40	T	Carbon tetrachloride	119	8.90	0.893	A	1	A	B
41	T	tert-Amyl methyl ether (TAME)	73	9.06	0.910	A	2	A	B
42	S	1,2-Dichloroethane-d4	65	9.08	0.912	A	1	A	B
43	T	1,2-Dichloroethane	62	9.29	0.933	A	1	A	B
44	T	Benzene	78	9.27	0.931	A	2	A	B
45	T	Trichloroethene	130	10.55	1.059	A	3	A	B
46	T	Methylcyclohexane	83	10.64	1.067	A	2	A	B
47	T	1,2-Dichloropropane	63	10.91	1.095	A	1	A	B
48	T	1,4-Dioxane	88	11.45	1.149	A	1	A	B
49	T	Bromodichloromethane	83	11.35	1.139	A	1	A	B
50	T	Dibromomethane	93	11.41	1.145	A	2	A	B
51	T	2-Chloroethyl vinyl ether	63	12.04	1.208	A	1	A	B
52	T	4-Methyl-2-pentanone	43	12.08	1.212	A	3	A	B
53	T	cis-1,3-Dichloropropene	75	12.40	1.244	A	3	A	B
54	I	CHLOROBENZENE-D5	117	15.43	1.000	A	2	A	B
55	S	Toluene-d8	98	12.82	0.831	A	1	A	B
56	T	Toluene	91	12.94	0.839	A	1	A	B
57	T	Ethyl methacrylate	69	13.38	0.867	A	1	A	B
58	T	trans-1,3-Dichloropropene	75	13.32	0.863	A	1	A	B
59	T	1,1,2-Trichloroethane	97	13.57	0.879	A	2	A	B
60	T	2-Hexanone	43	13.65	0.885	A	1	A	B
61	T	1,3-Dichloropropane	76	14.03	0.909	A	1	A	B

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62	T	Tetrachloroethene	164	14.07	0.912	A	3	A	B
63	T	Dibromochloromethane	129	14.43	0.935	A	1	A	B
64	T	2-Ethyl-1-butanol	43	0.00	0.000	A	3	A	B
65	T	1,2-Dibromoethane	107	14.76	0.957	A	1	A	B
66	T	1-Chlorohexane	91	15.12	0.980	A	1	A	B
67	T	Chlorobenzene	112	15.50	1.004	A	1	A	B
68	T	1,1,1,2-Tetrachloroethane	131	15.59	1.010	A	1	A	B
69	T	Ethylbenzene	91	15.60	1.011	A	1	A	B
70	T	m-Xylene & p-Xylene	91	15.74	1.020	A	1	A	B
71	T	o-Xylene	91	16.47	1.067	A	1	A	B
72	T	Styrene	104	16.53	1.071	A	2	A	B
73	T	Isopropylbenzene	105	17.08	1.107	A	3	A	B
74	I	1,2-DICHLOROBENZENE-D4	152	19.35	1.000	A	1	A	B
75	T	Bromoform	173	17.07	0.882	L	2	A	B
76	T	1,1,2,2-Tetrachloroethane	83	17.36	0.897	A	1	A	B
77	S	4-Bromofluorobenzene	95	17.45	0.902	A	2	A	B
78	T	1,2,3-Trichloropropane	110	17.57	0.908	A	1	A	B
79	T	trans-1,4-Dichloro-2-butene	53	17.68	0.913	A	1	A	B
80	T	n-Propylbenzene	91	17.68	0.913	A	2	A	B
81	T	Bromobenzene	156	17.71	0.916	A	1	A	B
82	T	1,3,5-Trimethylbenzene	105	17.90	0.925	A	2	A	B
83	T	2-Chlorotoluene	91	17.91	0.926	A	1	A	B
84	T	4-Chlorotoluene	91	17.97	0.929	A	1	A	B
85	T	tert-Butylbenzene	134	18.35	0.948	A	1	A	B
86	T	1,2,4-Trimethylbenzene	105	18.39	0.950	A	1	A	B
87	T	sec-Butylbenzene	105	18.60	0.961	A	1	A	B
88	T	p-Isopropyltoluene	119	18.76	0.970	A	2	A	B
89	T	1,3-Dichlorobenzene	146	18.87	0.975	A	2	A	B
90	T	1,2,3-Trimethylbenzene	105	18.95	0.979	A	2	A	B
91	T	1,4-Dichlorobenzene	146	18.99	0.981	A	2	A	B
92	T	n-Butylbenzene	91	19.21	0.993	A	2	A	B
93	T	1,2-Dichlorobenzene	146	19.37	1.001	A	1	A	B
94	T	1,2-Dibromo-3-chloropropane	157	20.14	1.041	A	1	A	B
95	T	1,2,4-Trichlorobenzene	180	20.97	1.084	A	2	A	B
96	T	Hexachlorobutadiene	225	21.10	1.091	A	2	A	B
97	T	Naphthalene	128	21.24	1.098	A	1	A	B
98	T	1,2,3-Trichlorobenzene	180	21.49	1.111	A	2	A	B

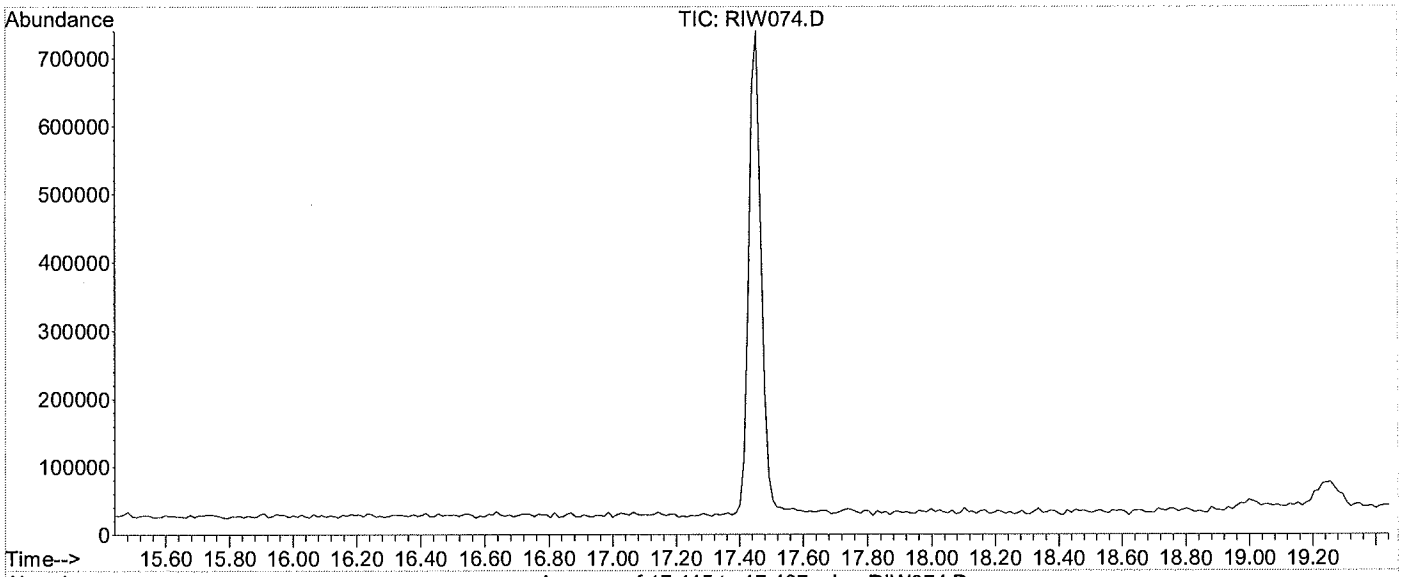
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

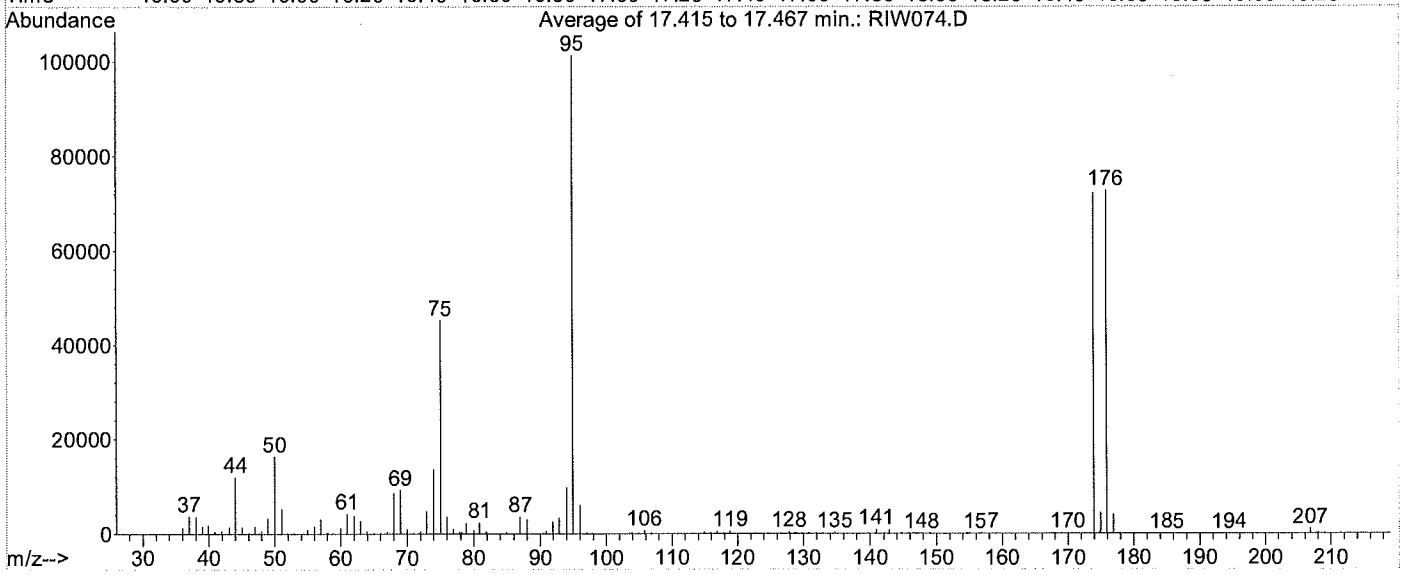
VO06I19B.M Fri Oct 11 17:22:24 2024

SC 10/19/24

BFB

Data File : D:\HPCHEM\1\DATA\24I19\RIW074.D Vial: 1
Acq On : 19 Sep 2024 9:28 am Operator: PMai
Sample : BFB06I04 Inst : 06
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260





Spectrum Information: Average of 17.415 to 17.467 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.1	16345	PASS
75	95	30	60	44.7	45243	PASS
95	95	100	100	100.0	101298	PASS
96	95	5	9	5.9	6001	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	71.3	72180	PASS
175	174	5	9	6.2	4496	PASS
176	174	95	101	100.7	72690	PASS
177	176	5	9	5.6	4038	PASS

SV 10/14/24

RIW074.D VO06I19B.M Mon Oct 14 12:30:43 2024

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW075.D Vial: 2
Acq On : 19 Sep 2024 11:07 am Operator: PMai
Sample : VO06I191 0.03/0.15uL Inst : 06
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:38 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2702801	10.00	ug/l		0.00
54) CHLOROBENZENE-D5	15.43	117	2093254	10.00	ug/l		0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1084478	10.00	ug/l		0.00
System Monitoring Compounds							
35) Dibromofluoromethane	7.97	111	11581	0.37	ug/l		0.00
Spiked Amount 10.000			Recovery = 3.70%				
42) 1,2-Dichloroethane-d4	9.08	65	10878	0.18	ug/l		0.00
Spiked Amount 10.000			Recovery = 1.80%				
55) Toluene-d8	12.82	98	43813	0.16	ug/l		0.00
Spiked Amount 10.000			Recovery = 1.60%				
77) 4-Bromofluorobenzene	17.47	95	18275	0.15	ug/l		0.01
Spiked Amount 10.000			Recovery = 1.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.66	85	47039	0.41	ug/l		88
3) Chloromethane	1.89	50	43921	0.42	ug/l		97
4) Vinyl chloride	1.99	62	34689	0.42	ug/l		99
5) Bromomethane	2.45	94	42067	0.71	ug/l	#	49
6) Chloroethane	2.51	64	23145	0.39	ug/l		94
7) Dichlorofluoromethane	2.56	67	55363	0.22	ug/l		64
8) Trichlorofluoromethane	2.80	101	34141	0.32	ug/l		97
9) Acrolein	3.32	56	10132	2.67	ug/l		87
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	24584	0.31	ug/l		97
11) Acetone	3.43	43	72895	6.68	ug/l	#	1
12) 1,1-Dichloroethene	3.57	61	40889	0.29	ug/l		88
13) tert-Butyl alcohol	3.72	59	27238	8.07	ug/l		83
15) Methyl acetate	4.12	74	1643	0.28	ug/l	#	41
16) Iodomethane	3.99	142	39307	0.29	ug/l		98
17) Allyl chloride	4.12	76	15359	0.34	ug/l		74
19) Carbon disulfide	4.26	76	35181	0.35	ug/l		82
20) Acrylonitrile	4.56	53	20968	1.55	ug/l		95
21) tert-Butyl methyl ether (M	4.60	73	42665	0.31	ug/l		90
22) trans-1,2-Dichloroethene	4.81	96	29653	0.35	ug/l		86
23) Isopropyl ether (DIPE)	5.48	45	84725	0.30	ug/l		97
24) Vinyl acetate	5.75	43	18073	0.18	ug/l		88
25) 1,1-Dichloroethane	5.65	63	43369	0.30	ug/l		87
26) 2-Butanol	6.26	45	17738	11.86	ug/l	#	62
27) tert-Butyl ethyl ether (ET	6.40	59	58690	0.29	ug/l		86
28) 2-Butanone	6.70	43	47417	2.56	ug/l		100
29) 2,2-Dichloropropane	6.93	77	29376	0.33	ug/l		74
30) cis-1,2-Dichloroethene	7.07	96	27910	0.32	ug/l		90
31) Chloroform	7.45	83	47910	0.34	ug/l		99
32) Bromochloromethane	7.83	130	10992	0.29	ug/l		78
33) Tetrahydrofuran	7.97	42	8124	0.82	ug/l		63
36) 1,1,1-Trichloroethane	8.37	97	35378	0.31	ug/l		97
37) Cyclohexane	8.35	84	32156	0.22	ug/l		68
39) 1,1-Dichloropropene	8.71	110	11101	0.29	ug/l		100
40) Carbon tetrachloride	8.90	119	25992	0.28	ug/l		96
41) tert-Amyl methyl ether (TA	9.08	73	48708	0.29	ug/l		92
43) 1,2-Dichloroethane	9.29	62	17895	0.25	ug/l		72

(#) = qualifier out of range (m) = manual integration

SV 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW075.D Vial: 2
Acq On : 19 Sep 2024 11:07 am Operator: PMai
Sample : VO06I191 0.03/0.15uL Inst : 06
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:38 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44)	Benzene	9.27	78	89786	0.29	ug/l	98
45)	Trichloroethene	10.55	130	21639	0.27	ug/l	86
46)	Methylcyclohexane	10.64	83	35601	0.23	ug/l	94
47)	1,2-Dichloropropane	10.91	63	23664	0.31	ug/l	90
48)	1,4-Dioxane	11.47	88	3700	10.31	ug/l	93
49)	Bromodichloromethane	11.35	83	33039	0.33	ug/l	91
50)	Dibromomethane	11.41	93	10206	0.28	ug/l	91
52)	4-Methyl-2-pentanone	12.10	43	71762	1.40	ug/l	94
53)	cis-1,3-Dichloropropene	12.40	75	37064	0.30	ug/l	89
56)	Toluene	12.94	91	86740	0.27	ug/l	98
57)	Ethyl methacrylate	13.38	69	22660	0.33	ug/l	87
58)	trans-1,3-Dichloropropene	13.34	75	24584	0.28	ug/l	83
59)	1,1,2-Trichloroethane	13.57	97	13356	0.29	ug/l	97
60)	2-Hexanone	13.67	43	72192	2.18	ug/l	99
61)	1,3-Dichloropropane	14.03	76	21698	0.26	ug/l	71
62)	Tetrachloroethene	14.07	164	17314	0.27	ug/l	94
63)	Dibromochloromethane	14.43	129	16812	0.30	ug/l	96
65)	1,2-Dibromoethane	14.76	107	11034	0.26	ug/l	95
66)	1-Chlorohexane	15.12	91	58798	0.44	ug/l	92
67)	Chlorobenzene	15.49	112	53305	0.28	ug/l	98
68)	1,1,1,2-Tetrachloroethane	15.60	131	16152	0.26	ug/l	74
69)	Ethylbenzene	15.61	91	103629	0.27	ug/l	99
70)	m-Xylene & p-Xylene	15.74	91	168443	0.57	ug/l	94
71)	o-Xylene	16.47	91	88715	0.30	ug/l	98
72)	Styrene	16.53	104	61796	0.28	ug/l	88
73)	Isopropylbenzene	17.08	105	118148	0.31	ug/l	97
75)	Bromoform	17.06	173	8255	0.34	ug/l	79
76)	1,1,2,2-Tetrachloroethane	17.36	83	16690	0.27	ug/l	91
78)	1,2,3-Trichloropropane	17.58	110	5121	0.30	ug/l	81
79)	trans-1,4-Dichloro-2-buten	17.67	53	8361	0.44	ug/l	70
80)	n-Propylbenzene	17.69	91	157605	0.26	ug/l	96
81)	Bromobenzene	17.73	156	22415	0.26	ug/l	86
82)	1,3,5-Trimethylbenzene	17.89	105	98000	0.27	ug/l	99
83)	2-Chlorotoluene	17.91	91	91285	0.26	ug/l	92
84)	4-Chlorotoluene	17.97	91	75596	0.24	ug/l	96
85)	tert-Butylbenzene	18.35	134	21167	0.27	ug/l	76
86)	1,2,4-Trimethylbenzene	18.39	105	108593	0.29	ug/l	96
87)	sec-Butylbenzene	18.61	105	150523	0.29	ug/l	94
88)	p-Isopropyltoluene	18.76	119	131428	0.30	ug/l	97
89)	1,3-Dichlorobenzene	18.87	146	47096	0.25	ug/l	90
90)	1,2,3-Trimethylbenzene	18.95	105	98697	0.29	ug/l	95
91)	1,4-Dichlorobenzene	18.98	146	50419	0.27	ug/l	90
92)	n-Butylbenzene	19.20	91	147712	0.31	ug/l	98
93)	1,2-Dichlorobenzene	19.37	146	44367	0.28	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	4806	0.43	ug/l	74
95)	1,2,4-Trichlorobenzene	20.97	180	46289	0.37	ug/l	98
96)	Hexachlorobutadiene	21.10	225	23464	0.35	ug/l	87
97)	Naphthalene	21.24	128	70434	0.42	ug/l	96
98)	1,2,3-Trichlorobenzene	21.49	180	37303	0.40	ug/l	97

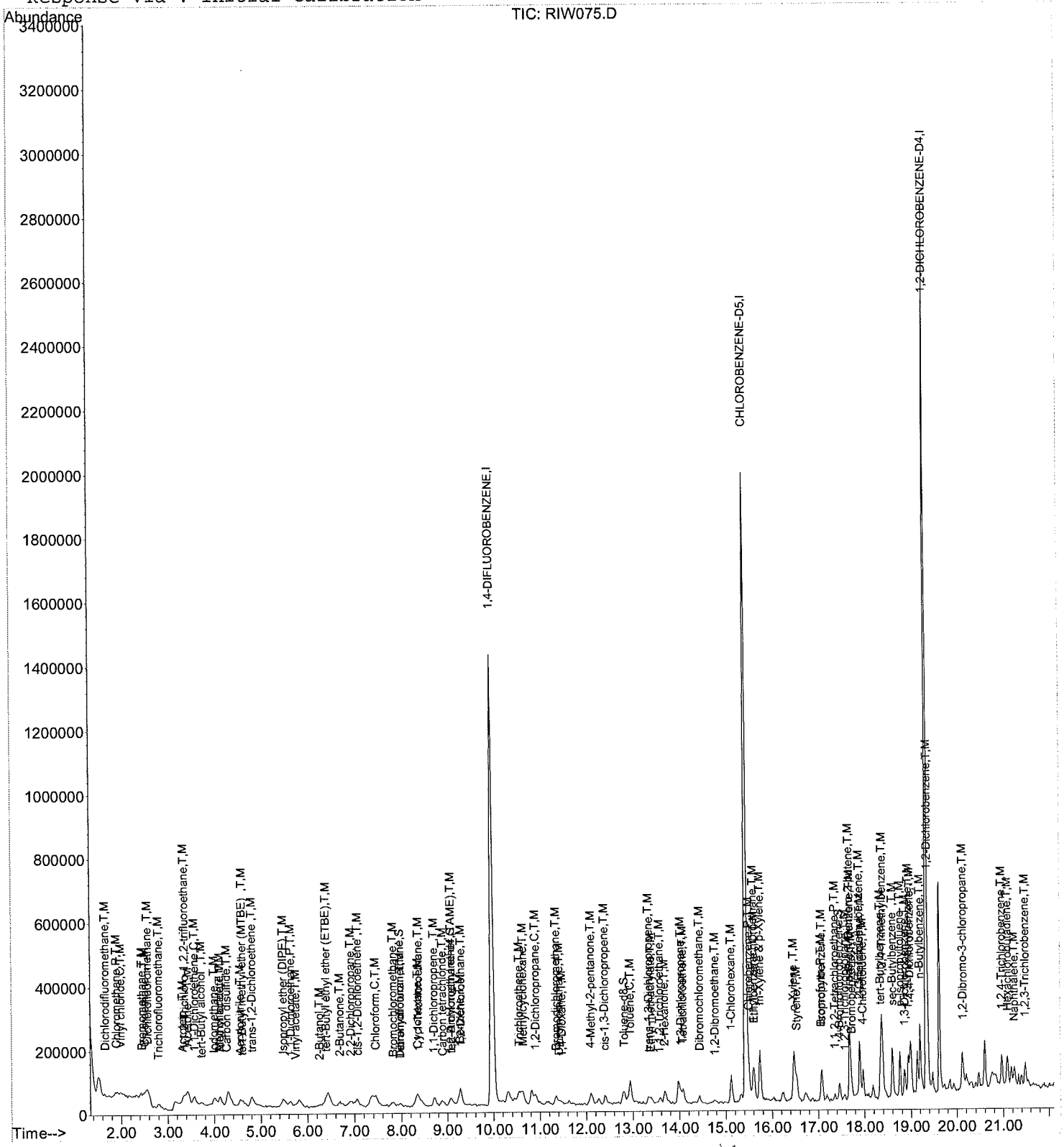
SC 10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW075.D Vial: 2
Acq On : 19 Sep 2024 11:07 am Operator: PMai
Sample : VO06I191 0.03/0.15uL Inst : 06
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:38 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SM 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3602052	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2932021	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1368492	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	32709	0.54	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.40%		
42) 1,2-Dichloroethane-d4	9.08	65	27417	0.34	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.40%		
55) Toluene-d8	12.81	98	130588	0.34	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.40%		
77) 4-Bromofluorobenzene	17.45	95	52440	0.34	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.40%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	73258	0.48	ug/l	96
3) Chloromethane	1.87	50	61771	0.44	ug/l	80
4) Vinyl chloride	1.99	62	53540	0.49	ug/l	89
5) Bromomethane	2.43	94	31280	0.44	ug/l	100
6) Chloroethane	2.50	64	28196	0.36	ug/l	95
7) Dichlorofluoromethane	2.56	67	116363	0.38	ug/l	93
8) Trichlorofluoromethane	2.80	101	55054	0.38	ug/l	99
9) Acrolein	3.32	56	12175	2.41	ug/l	70
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	49153	0.44	ug/l	98
11) Acetone	3.40	43	52946	3.64	ug/l	75
12) 1,1-Dichloroethene	3.55	61	76442	0.40	ug/l	90
13) tert-Butyl alcohol	3.72	59	45320	10.07	ug/l	84
15) Methyl acetate	4.09	74	1425	0.18	ug/l #	1
16) Iodomethane	3.99	142	73427	0.41	ug/l	94
17) Allyl chloride	4.09	76	26224	0.43	ug/l	92
18) Methylene chloride	4.28	49	104262	0.21	ug/l	99
19) Carbon disulfide	4.26	76	70559	0.46	ug/l	95
20) Acrylonitrile	4.54	53	33642	1.86	ug/l	96
21) tert-Butyl methyl ether (M	4.58	73	74136	0.41	ug/l	99
22) trans-1,2-Dichloroethene	4.79	96	47316	0.42	ug/l	97
23) Isopropyl ether (DIPE)	5.48	45	150121	0.40	ug/l	95
24) Vinyl acetate	5.73	43	35113	0.26	ug/l	92
25) 1,1-Dichloroethane	5.62	63	75099	0.39	ug/l	87
26) 2-Butanol	6.23	45	25013	12.12	ug/l #	62
27) tert-Butyl ethyl ether (ET	6.40	59	107914	0.40	ug/l	94
28) 2-Butanone	6.69	43	52378	2.12	ug/l	94
29) 2,2-Dichloropropane	6.92	77	52180	0.44	ug/l	94
30) cis-1,2-Dichloroethene	7.03	96	53525	0.46	ug/l	92
31) Chloroform	7.43	83	80220	0.43	ug/l	97
32) Bromochloromethane	7.80	130	20585	0.40	ug/l	89
33) Tetrahydrofuran	7.95	42	6668	0.50	ug/l	79
36) 1,1,1-Trichloroethane	8.35	97	65591	0.43	ug/l	96
37) Cyclohexane	8.33	84	53943	0.28	ug/l	85
39) 1,1-Dichloropropene	8.71	110	22965	0.45	ug/l	95
40) Carbon tetrachloride	8.87	119	52082	0.41	ug/l	99
41) tert-Amyl methyl ether (TA	9.08	73	95840	0.43	ug/l	92

(#) = qualifier out of range (m) = manual integration
RIW076.D VO06I19B.M Fri Oct 11 17:36:14 2024

10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	1,2-Dichloroethane	9.27	62	36987	0.39 ug/l	77
44)	Benzene	9.27	78	170834	0.41 ug/l	95
45)	Trichloroethene	10.55	130	45725	0.43 ug/l	97
46)	Methylcyclohexane	10.61	83	51792	0.25 ug/l	97
47)	1,2-Dichloropropane	10.91	63	41267	0.40 ug/l	91
48)	1,4-Dioxane	11.45	88	5989	12.53 ug/l	99
49)	Bromodichloromethane	11.35	83	57691	0.44 ug/l	93
50)	Dibromomethane	11.41	93	19132	0.40 ug/l	97
51)	2-Chloroethyl vinyl ether	12.06	63	13987	0.44 ug/l	96
52)	4-Methyl-2-pentanone	12.10	43	133804	1.96 ug/l	97
53)	cis-1,3-Dichloropropene	12.39	75	63396	0.39 ug/l	93
56)	Toluene	12.94	91	197036	0.45 ug/l	98
57)	Ethyl methacrylate	13.38	69	43487	0.45 ug/l	98
58)	trans-1,3-Dichloropropene	13.34	75	50744	0.41 ug/l	100
59)	1,1,2-Trichloroethane	13.57	97	24112	0.38 ug/l	94
60)	2-Hexanone	13.67	43	99771	2.15 ug/l	97
61)	1,3-Dichloropropane	14.03	76	51286	0.44 ug/l	85
62)	Tetrachloroethene	14.09	164	41220	0.45 ug/l	93
63)	Dibromochloromethane	14.43	129	34335	0.44 ug/l	94
65)	1,2-Dibromoethane	14.76	107	24902	0.41 ug/l	94
66)	1-Chlorohexane	15.12	91	93959	0.50 ug/l	100
67)	Chlorobenzene	15.49	112	120143	0.44 ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.59	131	35392	0.41 ug/l	98
69)	Ethylbenzene	15.61	91	252802	0.46 ug/l	94
70)	m-Xylene & p-Xylene	15.74	91	378852	0.91 ug/l	96
71)	o-Xylene	16.47	91	188549	0.46 ug/l	99
72)	Styrene	16.53	104	147292	0.48 ug/l	92
73)	Isopropylbenzene	17.08	105	231853	0.44 ug/l	97
75)	Bromoform	17.08	173	13128	0.40 ug/l	97
76)	1,1,2,2-Tetrachloroethane	17.36	83	30166	0.38 ug/l	98
78)	1,2,3-Trichloropropane	17.57	110	9018	0.41 ug/l	91
79)	trans-1,4-Dichloro-2-buten	17.69	53	11147	0.46 ug/l	91
80)	n-Propylbenzene	17.67	91	349467	0.46 ug/l	95
81)	Bromobenzene	17.73	156	41407	0.38 ug/l	96
82)	1,3,5-Trimethylbenzene	17.89	105	200111	0.43 ug/l	99
83)	2-Chlorotoluene	17.91	91	188970	0.43 ug/l	91
84)	4-Chlorotoluene	17.97	91	184018	0.45 ug/l	97
85)	tert-Butylbenzene	18.35	134	48411	0.50 ug/l	96
86)	1,2,4-Trimethylbenzene	18.39	105	213722	0.45 ug/l	98
87)	sec-Butylbenzene	18.60	105	312446	0.48 ug/l	93
88)	p-Isopropyltoluene	18.76	119	264036	0.48 ug/l	95
89)	1,3-Dichlorobenzene	18.87	146	103794	0.43 ug/l	93
90)	1,2,3-Trimethylbenzene	18.95	105	193889	0.45 ug/l	97
91)	1,4-Dichlorobenzene	18.98	146	98791	0.41 ug/l	94
92)	n-Butylbenzene	19.21	91	296003	0.50 ug/l	93
93)	1,2-Dichlorobenzene	19.37	146	85207	0.43 ug/l	94
94)	1,2-Dibromo-3-chloropropan	20.14	157	7430	0.53 ug/l	96
95)	1,2,4-Trichlorobenzene	20.97	180	73400	0.47 ug/l	93
96)	Hexachlorobutadiene	21.10	225	40297	0.47 ug/l	99
97)	Naphthalene	21.24	128	91896	0.43 ug/l	82

(#) = qualifier out of range (m) = manual integration SA 10/14/24
RIW076.D VO06I19B.M Fri Oct 11 17:36:14 2024

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	51351	0.43	ug/l	89

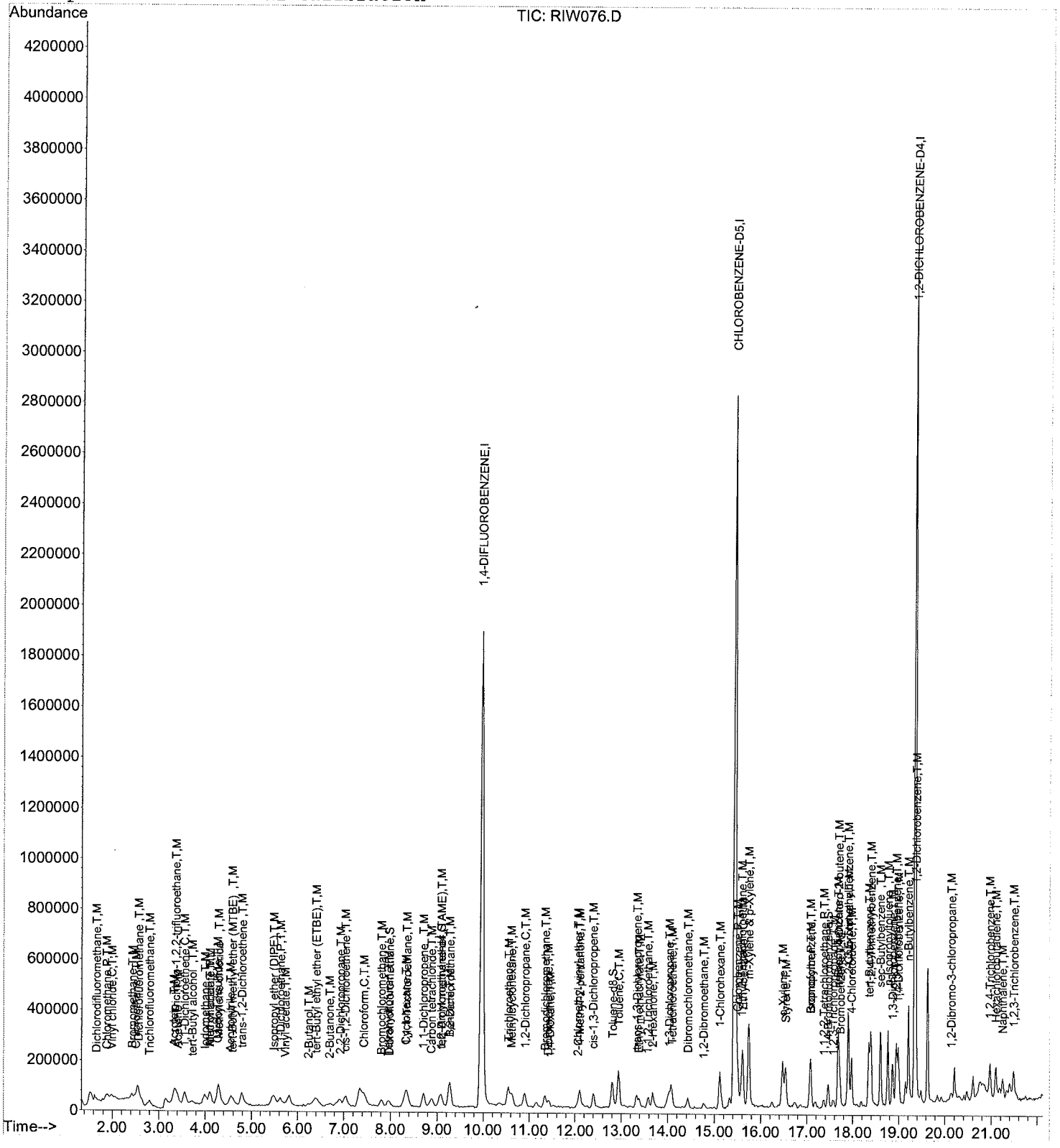
SA 10/14/24

(#) = qualifier out of range (m) = manual integration
RIW076.D VO06I19B.M Fri Oct 11 17:36:15 2024

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3122913	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2588859	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1139628	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	50378	0.78	ug/l	0.00
Spiked Amount 10.000			Recovery =	7.80%		
42) 1,2-Dichloroethane-d4	9.08	65	45903	0.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	6.60%		
55) Toluene-d8	12.79	98	213396	0.64	ug/l	-0.02
Spiked Amount 10.000			Recovery =	6.40%		
77) 4-Bromofluorobenzene	17.45	95	83199	0.65	ug/l	0.00
Spiked Amount 10.000			Recovery =	6.50%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	145071	1.10	ug/l	99
3) Chloromethane	1.87	50	131927	1.09	ug/l	84
4) Vinyl chloride	1.99	62	113028	1.19	ug/l	96
5) Bromomethane	2.43	94	82236	1.14	ug/l	76
6) Chloroethane	2.50	64	56065	0.88	ug/l	98
7) Dichlorofluoromethane	2.54	67	217462	0.90	ug/l	99
8) Trichlorofluoromethane	2.80	101	119139	0.96	ug/l	98
9) Acrolein	3.32	56	26374	6.01	ug/l	84
10) 1,1,2-Trichloro-1,2,2-trif	3.34	151	90044	0.88	ug/l	94
11) Acetone	3.40	43	68261	5.41	ug/l	71
12) 1,1-Dichloroethene	3.55	61	150316	0.91	ug/l	93
13) tert-Butyl alcohol	3.70	59	87780	22.50	ug/l	89
15) Methyl acetate	4.12	74	5582	0.83	ug/l	73
16) Iodomethane	3.99	142	150918	0.97	ug/l	96
17) Allyl chloride	4.12	76	46620	0.88	ug/l	79
18) Methylene chloride	4.28	49	177833	0.93	ug/l	97
19) Carbon disulfide	4.24	76	125207	0.78	ug/l	98
20) Acrylonitrile	4.54	53	68440	4.37	ug/l	93
21) tert-Butyl methyl ether (M	4.58	73	146668	0.93	ug/l	97
22) trans-1,2-Dichloroethene	4.79	96	95056	0.96	ug/l	97
23) Isopropyl ether (DIPE)	5.46	45	299087	0.92	ug/l	97
24) Vinyl acetate	5.71	43	93894	0.80	ug/l	99
25) 1,1-Dichloroethane	5.63	63	159907	0.97	ug/l	92
26) 2-Butanol	6.21	45	52791	18.93	ug/l	99
27) tert-Butyl ethyl ether (ET	6.38	59	232212	0.98	ug/l	99
28) 2-Butanone	6.69	43	92234	4.30	ug/l	98
29) 2,2-Dichloropropane	6.90	77	99220	0.96	ug/l	89
30) cis-1,2-Dichloroethene	7.03	96	97646	0.96	ug/l	92
31) Chloroform	7.43	83	165058	1.01	ug/l	95
32) Bromochloromethane	7.80	130	40199	0.91	ug/l	97
33) Tetrahydrofuran	7.93	42	10008	0.87	ug/l	79
36) 1,1,1-Trichloroethane	8.35	97	123421	0.94	ug/l	98
37) Cyclohexane	8.33	84	135999	0.81	ug/l	91
39) 1,1-Dichloropropene	8.71	110	42529	0.96	ug/l	94
40) Carbon tetrachloride	8.89	119	98289	0.90	ug/l	96
41) tert-Amyl methyl ether (TA	9.06	73	188039	0.97	ug/l	94

(#) = qualifier out of range (m) = manual integration
RIW077.D VO06I19B.M Fri Oct 11 17:40:16 2024 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	1,2-Dichloroethane	9.27	62	80979	0.99 ug/l	93
44)	Benzene	9.27	78	363157	1.01 ug/l	98
45)	Trichloroethene	10.55	130	89264	0.96 ug/l	98
46)	Methylcyclohexane	10.61	83	136668	0.77 ug/l	96
47)	1,2-Dichloropropane	10.91	63	84382	0.95 ug/l	99
48)	1,4-Dioxane	11.47	88	6883	16.61 ug/l	80
49)	Bromodichloromethane	11.35	83	104110	0.91 ug/l	90
50)	Dibromomethane	11.43	93	39826	0.95 ug/l	99
51)	2-Chloroethyl vinyl ether	12.04	63	25675	0.92 ug/l	90
52)	4-Methyl-2-pentanone	12.10	43	287486	4.87 ug/l	98
53)	cis-1,3-Dichloropropene	12.39	75	135990	0.97 ug/l	98
56)	Toluene	12.94	91	412836	1.06 ug/l	98
57)	Ethyl methacrylate	13.38	69	82013	0.96 ug/l	99
58)	trans-1,3-Dichloropropene	13.34	75	97979	0.89 ug/l	97
59)	1,1,2-Trichloroethane	13.59	97	51122	0.91 ug/l	97
60)	2-Hexanone	13.67	43	190175	4.64 ug/l	97
61)	1,3-Dichloropropane	14.03	76	99252	0.96 ug/l	96
62)	Tetrachloroethene	14.07	164	79681	0.99 ug/l	98
63)	Dibromochloromethane	14.43	129	60557	0.88 ug/l	99
65)	1,2-Dibromoethane	14.76	107	48235	0.90 ug/l	98
66)	1-Chlorohexane	15.12	91	160457	0.96 ug/l	96
67)	Chlorobenzene	15.49	112	239026	1.00 ug/l	98
68)	1,1,1,2-Tetrachloroethane	15.59	131	70104	0.93 ug/l	94
69)	Ethylbenzene	15.61	91	492334	1.02 ug/l	97
70)	m-Xylene & p-Xylene	15.74	91	757677	2.06 ug/l	97
71)	o-Xylene	16.45	91	355552	0.98 ug/l	99
72)	Styrene	16.53	104	278207	1.03 ug/l	98
73)	Isopropylbenzene	17.08	105	464469	0.99 ug/l	97
75)	Bromoform	17.06	173	29978	0.94 ug/l	96
76)	1,1,2,2-Tetrachloroethane	17.35	83	61947	0.94 ug/l	98
78)	1,2,3-Trichloropropane	17.57	110	16378	0.90 ug/l	75
79)	trans-1,4-Dichloro-2-buten	17.69	53	21718	1.08 ug/l	94
80)	n-Propylbenzene	17.67	91	663586	1.06 ug/l	98
81)	Bromobenzene	17.73	156	84669	0.94 ug/l	95
82)	1,3,5-Trimethylbenzene	17.89	105	404481	1.05 ug/l	96
83)	2-Chlorotoluene	17.91	91	371994	1.01 ug/l	94
84)	4-Chlorotoluene	17.97	91	352700	1.04 ug/l	100
85)	tert-Butylbenzene	18.35	134	81866	1.01 ug/l	99
86)	1,2,4-Trimethylbenzene	18.39	105	407450	1.02 ug/l	94
87)	sec-Butylbenzene	18.60	105	554309	1.02 ug/l	96
88)	p-Isopropyltoluene	18.76	119	473312	1.03 ug/l	99
89)	1,3-Dichlorobenzene	18.87	146	209858	1.04 ug/l	99
90)	1,2,3-Trimethylbenzene	18.95	105	369080	1.03 ug/l	98
91)	1,4-Dichlorobenzene	18.98	146	202545	1.02 ug/l	100
92)	n-Butylbenzene	19.21	91	503441	1.02 ug/l	99
93)	1,2-Dichlorobenzene	19.37	146	167764	1.01 ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	10992	0.94 ug/l	100
95)	1,2,4-Trichlorobenzene	20.97	180	125247	0.96 ug/l	98
96)	Hexachlorobutadiene	21.10	225	68906	0.97 ug/l	96
97)	Naphthalene	21.24	128	165484	0.94 ug/l	93

(#) = qualifier out of range (m) = manual integration
RIW077.D VO06I19B.M Fri Oct 11 17:40:17 2024 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	94769	0.96	ug/l	99

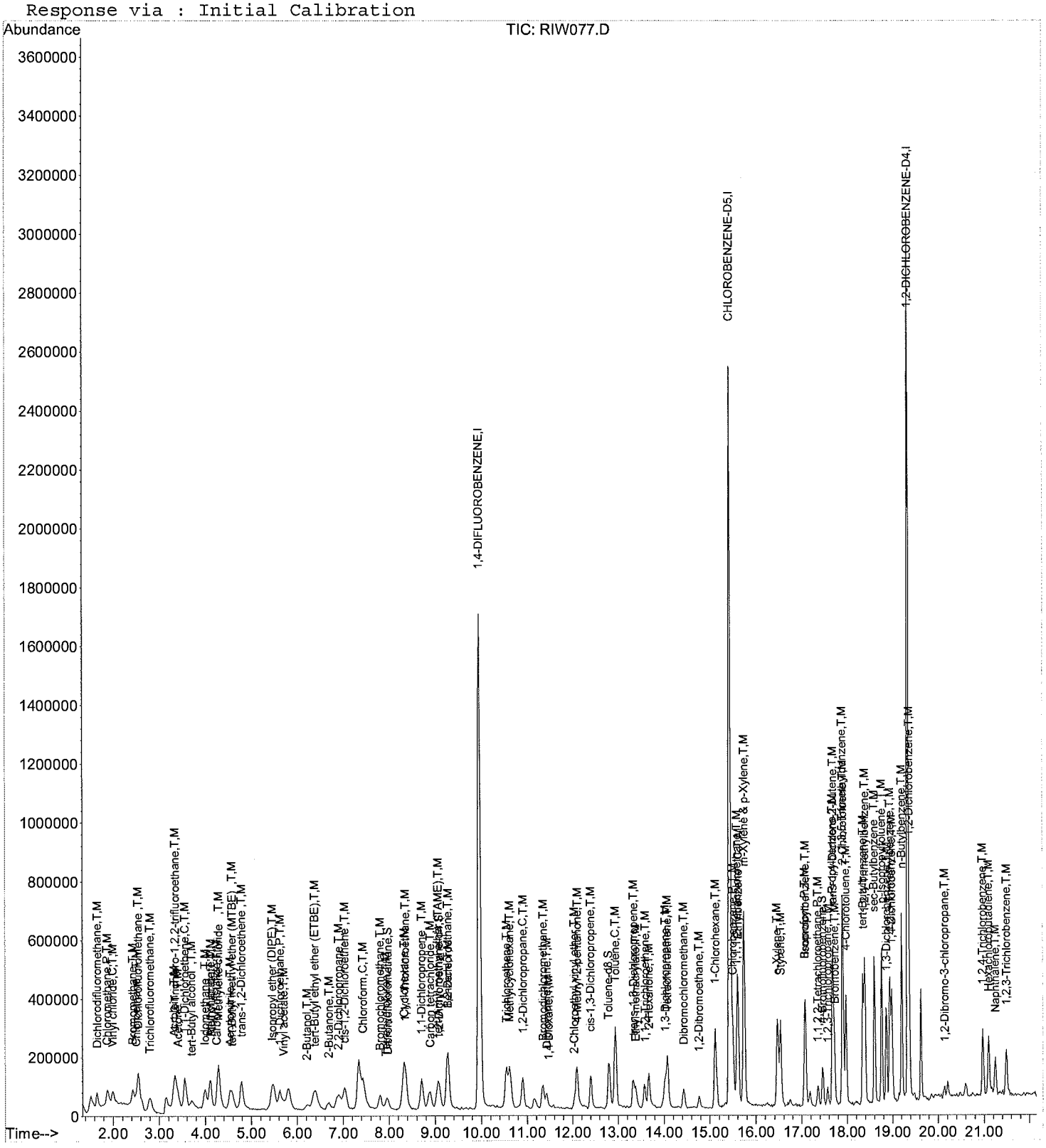
SG 10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D Vial: 5
Acq On : 19 Sep 2024 12:25 pm Operator: PMai
Sample : VO06I194 0.20/1.00uL Inst : 06
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2977226	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2452751	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1072692	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	138141	1.83	ug/l	-0.02
Spiked Amount 10.000			Recovery =	18.30%		
42) 1,2-Dichloroethane-d4	9.08	65	109084	1.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	16.60%		
55) Toluene-d8	12.79	98	583826	1.84	ug/l	-0.02
Spiked Amount 10.000			Recovery =	18.40%		
77) 4-Bromofluorobenzene	17.45	95	215651	1.80	ug/l	0.00
Spiked Amount 10.000			Recovery =	18.00%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	290951	2.31	ug/l	97
3) Chloromethane	1.89	50	255930	2.22	ug/l	91
4) Vinyl chloride	1.99	62	208812	2.31	ug/l	94
5) Bromomethane	2.43	94	169214	2.35	ug/l	93
6) Chloroethane	2.50	64	153383	2.59	ug/l	97
7) Dichlorofluoromethane	2.56	67	624367	2.86	ug/l	97
8) Trichlorofluoromethane	2.80	101	270779	2.28	ug/l	98
9) Acrolein	3.32	56	48203	11.53	ug/l	73
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	279180	2.77	ug/l	94
11) Acetone	3.40	43	119311	9.92	ug/l	85
12) 1,1-Dichloroethene	3.55	61	405243	2.57	ug/l	99
13) tert-Butyl alcohol	3.70	59	176997	47.58	ug/l	86
15) Methyl acetate	4.07	74	12895	2.01	ug/l	87
16) Iodomethane	3.99	142	345559	2.34	ug/l	99
17) Allyl chloride	4.12	76	102068	2.02	ug/l	94
18) Methylene chloride	4.28	49	311940	2.15	ug/l	98
19) Carbon disulfide	4.26	76	407778	2.31	ug/l	99
20) Acrylonitrile	4.51	53	149523	10.01	ug/l	98
21) tert-Butyl methyl ether (M	4.56	73	311390	2.06	ug/l	99
22) trans-1,2-Dichloroethene	4.79	96	198170	2.11	ug/l	99
23) Isopropyl ether (DIPE)	5.48	45	658163	2.12	ug/l	100
24) Vinyl acetate	5.71	43	199658	1.78	ug/l	99
25) 1,1-Dichloroethane	5.63	63	338005	2.15	ug/l	98
26) 2-Butanol	6.21	45	140481	39.63	ug/l #	62
27) tert-Butyl ethyl ether (ET	6.38	59	478439	2.12	ug/l	98
28) 2-Butanone	6.67	43	188844	9.24	ug/l	91
29) 2,2-Dichloropropane	6.90	77	216431	2.20	ug/l	98
30) cis-1,2-Dichloroethene	7.03	96	203848	2.10	ug/l	95
31) Chloroform	7.43	83	327346	2.10	ug/l	99
32) Bromochloromethane	7.80	130	81369	1.93	ug/l	93
33) Tetrahydrofuran	7.93	42	24208	2.21	ug/l	91
36) 1,1,1-Trichloroethane	8.35	97	263274	2.10	ug/l	99
37) Cyclohexane	8.33	84	331183	2.06	ug/l	99
39) 1,1-Dichloropropene	8.71	110	91016	2.15	ug/l	93
40) Carbon tetrachloride	8.87	119	219297	2.11	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	385225	2.09	ug/l	98

(#) = qualifier out of range (m) = manual integration

Sa 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D
Acq On : 19 Sep 2024 12:25 pm
Sample : VO06I194 0.20/1.00uL
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024

Vial: 5
Operator: PMai
Inst : 06
Multiplr: 1.00

Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloroethane	9.27	62	164764	2.10 ug/l	92
44) Benzene	9.25	78	753488	2.21 ug/l	100
45) Trichloroethene	10.55	130	181232	2.04 ug/l	92
46) Methylcyclohexane	10.61	83	327215	1.94 ug/l	98
47) 1,2-Dichloropropane	10.91	63	174985	2.07 ug/l	99
48) 1,4-Dioxane	11.47	88	14536	36.79 ug/l	84
49) Bromodichloromethane	11.35	83	224915	2.05 ug/l	98
50) Dibromomethane	11.41	93	80523	2.01 ug/l	96
51) 2-Chloroethyl vinyl ether	12.04	63	45681	1.72 ug/l	78
52) 4-Methyl-2-pentanone	12.08	43	618458	10.98 ug/l	99
53) cis-1,3-Dichloropropene	12.39	75	280174	2.09 ug/l	98
56) Toluene	12.94	91	867931	2.35 ug/l	98
57) Ethyl methacrylate	13.38	69	165988	2.04 ug/l	93
58) trans-1,3-Dichloropropene	13.32	75	215945	2.08 ug/l	98
59) 1,1,2-Trichloroethane	13.57	97	112160	2.11 ug/l	97
60) 2-Hexanone	13.65	43	423881	10.93 ug/l	96
61) 1,3-Dichloropropane	14.03	76	206334	2.10 ug/l	98
62) Tetrachloroethene	14.07	164	170395	2.24 ug/l	98
63) Dibromochloromethane	14.43	129	132138	2.02 ug/l	96
65) 1,2-Dibromoethane	14.76	107	107636	2.13 ug/l	96
66) 1-Chlorohexane	15.12	91	372758	2.37 ug/l	95
67) Chlorobenzene	15.50	112	510278	2.25 ug/l	100
68) 1,1,1,2-Tetrachloroethane	15.59	131	157371	2.20 ug/l	97
69) Ethylbenzene	15.60	91	1013329	2.22 ug/l	96
70) m-Xylene & p-Xylene	15.74	91	1559495	4.48 ug/l	98
71) o-Xylene	16.47	91	775527	2.26 ug/l	96
72) Styrene	16.53	104	576362	2.25 ug/l	90
73) Isopropylbenzene	17.08	105	1005342	2.26 ug/l	96
75) Bromoform	17.06	173	65813	2.06 ug/l	91
76) 1,1,2,2-Tetrachloroethane	17.35	83	124870	2.01 ug/l	93
78) 1,2,3-Trichloropropane	17.57	110	33433	1.96 ug/l	87
79) trans-1,4-Dichloro-2-buten	17.67	53	38690	2.05 ug/l	95
80) n-Propylbenzene	17.67	91	1348423	2.28 ug/l	98
81) Bromobenzene	17.71	156	190356	2.25 ug/l	97
82) 1,3,5-Trimethylbenzene	17.90	105	825276	2.29 ug/l	98
83) 2-Chlorotoluene	17.91	91	776573	2.24 ug/l	97
84) 4-Chlorotoluene	17.97	91	757409	2.38 ug/l	99
85) tert-Butylbenzene	18.35	134	176756	2.32 ug/l	97
86) 1,2,4-Trimethylbenzene	18.39	105	849501	2.27 ug/l	96
87) sec-Butylbenzene	18.60	105	1158259	2.27 ug/l	95
88) p-Isopropyltoluene	18.76	119	971849	2.24 ug/l	99
89) 1,3-Dichlorobenzene	18.86	146	428370	2.26 ug/l	97
90) 1,2,3-Trimethylbenzene	18.95	105	772297	2.28 ug/l	99
91) 1,4-Dichlorobenzene	18.99	146	443854	2.36 ug/l	97
92) n-Butylbenzene	19.21	91	1063245	2.28 ug/l	98
93) 1,2-Dichlorobenzene	19.37	146	364780	2.33 ug/l	96
94) 1,2-Dibromo-3-chloropropan	20.14	157	21865	1.99 ug/l	89
95) 1,2,4-Trichlorobenzene	20.97	180	271937	2.21 ug/l	99
96) Hexachlorobutadiene	21.10	225	152423	2.29 ug/l	96
97) Naphthalene	21.24	128	371339	2.24 ug/l	100

(#) = qualifier out of range (m) = manual integration
RIW078.D VO06I19B.M Fri Oct 11 17:41:17 2024

SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D Vial: 5
Acq On : 19 Sep 2024 12:25 pm Operator: PMai
Sample : VO06I194 0.20/1.00uL Inst : 06
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	210803	2.27	ug/l	99

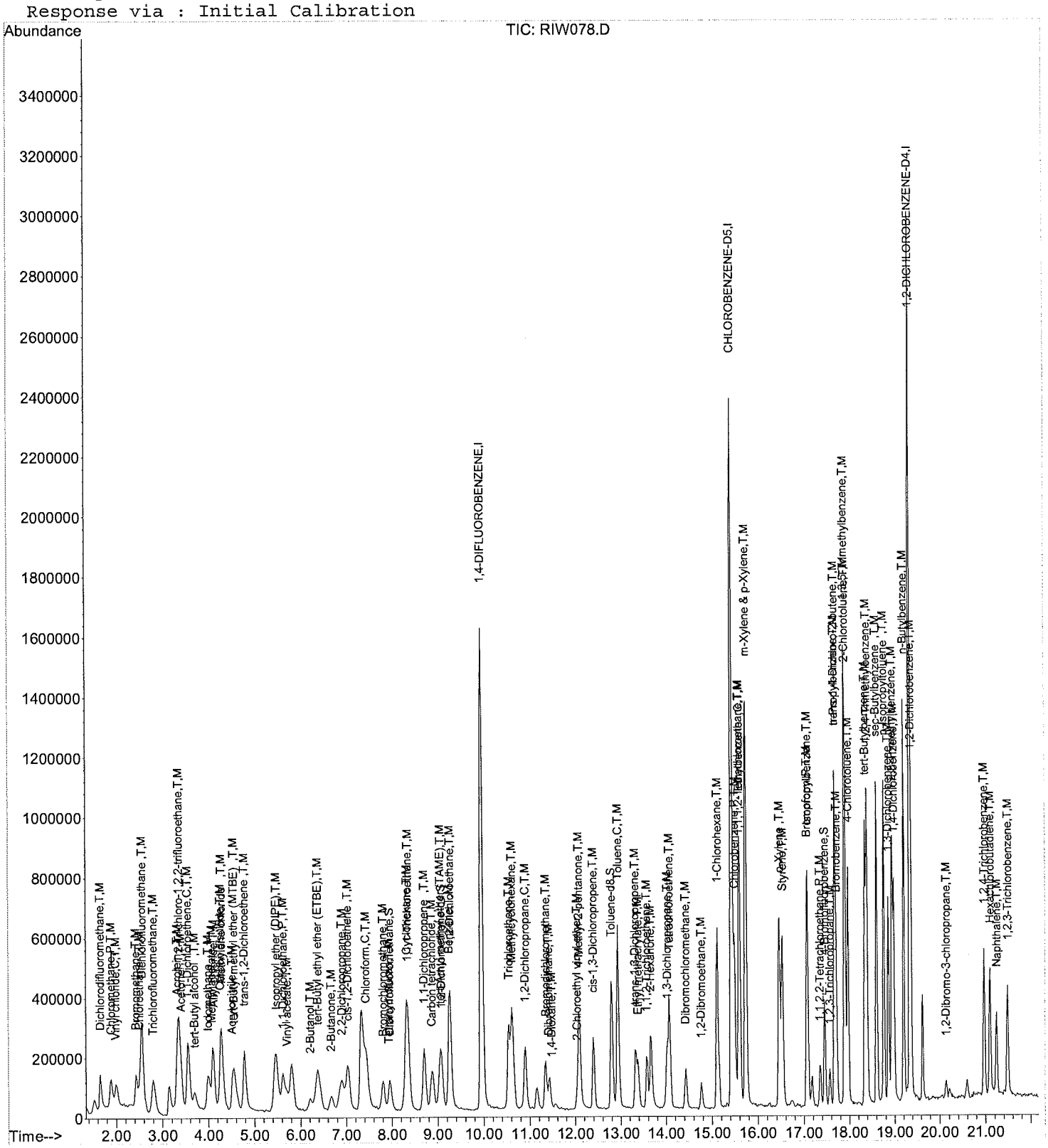
SL
10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D Vial: 5
Acq On : 19 Sep 2024 12:25 pm Operator: PMai
Sample : VO06I194 0.20/1.00uL Inst : 06
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.97	114	3487068	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2802782	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1201206	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	452215	4.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	47.00%		
42) 1,2-Dichloroethane-d4	9.08	65	372812	4.84	ug/l	0.00
Spiked Amount 10.000			Recovery =	48.40%		
55) Toluene-d8	12.79	98	1860263	5.13	ug/l	-0.02
Spiked Amount 10.000			Recovery =	51.30%		
77) 4-Bromofluorobenzene	17.45	95	672635	5.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	50.20%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	705323	4.79	ug/l	98
3) Chloromethane	1.88	50	645720	4.78	ug/l	99
4) Vinyl chloride	2.00	62	536336	5.07	ug/l	96
5) Bromomethane	2.43	94	392664	4.56	ug/l	99
6) Chloroethane	2.51	64	297391	4.32	ug/l	98
7) Dichlorofluoromethane	2.55	67	1206364	4.80	ug/l	100
8) Trichlorofluoromethane	2.81	101	674943	4.85	ug/l	98
9) Acrolein	3.32	56	105766	21.59	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	520488	4.43	ug/l	97
11) Acetone	3.41	43	344671	24.47	ug/l	97
12) 1,1-Dichloroethene	3.55	61	955223	5.18	ug/l	99
13) tert-Butyl alcohol	3.70	59	527311	121.03	ug/l	92
15) Methyl acetate	4.10	74	37300	4.96	ug/l	90
16) Iodomethane	3.99	142	893864	5.17	ug/l	100
17) Allyl chloride	4.12	76	291842	4.94	ug/l	94
18) Methylene chloride	4.29	49	754258	5.00	ug/l	99
19) Carbon disulfide	4.26	76	1006892	4.70	ug/l	98
20) Acrylonitrile	4.54	53	447157	25.56	ug/l	98
21) tert-Butyl methyl ether (M	4.58	73	917670	5.19	ug/l	100
22) trans-1,2-Dichloroethene	4.79	96	569783	5.17	ug/l	99
23) Isopropyl ether (DIPE)	5.48	45	1978503	5.43	ug/l	99
24) Vinyl acetate	5.71	43	650720	4.94	ug/l	99
25) 1,1-Dichloroethane	5.63	63	985792	5.35	ug/l	99
26) 2-Butanol	6.21	45	477745	101.04	ug/l	93
27) tert-Butyl ethyl ether (ET	6.38	59	1463594	5.54	ug/l	98
28) 2-Butanone	6.67	43	586459	24.51	ug/l	99
29) 2,2-Dichloropropane	6.93	77	597793	5.20	ug/l	98
30) cis-1,2-Dichloroethene	7.03	96	590518	5.19	ug/l	99
31) Chloroform	7.43	83	954073	5.23	ug/l	100
32) Bromochloromethane	7.83	130	259616	5.27	ug/l	98
33) Tetrahydrofuran	7.93	42	63795	4.98	ug/l	97
36) 1,1,1-Trichloroethane	8.35	97	777033	5.30	ug/l	99
37) Cyclohexane	8.33	84	900707	4.79	ug/l	99
39) 1,1-Dichloropropene	8.71	110	255523	5.16	ug/l	99
40) Carbon tetrachloride	8.90	119	645340	5.31	ug/l	98
41) tert-Amyl methyl ether (TA	9.06	73	1149031	5.32	ug/l	99

(#) = qualifier out of range (m) = manual integration

RIW079.D VO06I19B.M Fri Oct 11 17:42:10 2024

SR 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	499694	5.45 ug/l	98
44)	Benzene	9.27	78	2222758	5.56 ug/l	99
45)	Trichloroethene	10.55	130	565474	5.43 ug/l	97
46)	Methylcyclohexane	10.61	83	957335	4.84 ug/l	98
47)	1,2-Dichloropropane	10.91	63	526844	5.33 ug/l	96
48)	1,4-Dioxane	11.45	88	46867	101.26 ug/l	97
49)	Bromodichloromethane	11.35	83	672807	5.25 ug/l	100
50)	Dibromomethane	11.41	93	248905	5.32 ug/l	97
51)	2-Chloroethyl vinyl ether	12.04	63	152451	4.90 ug/l	97
52)	4-Methyl-2-pentanone	12.08	43	1759557	26.68 ug/l	99
53)	cis-1,3-Dichloropropene	12.40	75	844563	5.38 ug/l	99
56)	Toluene	12.94	91	2462675	5.82 ug/l	99
57)	Ethyl methacrylate	13.38	69	482886	5.20 ug/l	99
58)	trans-1,3-Dichloropropene	13.32	75	657703	5.53 ug/l	99
59)	1,1,2-Trichloroethane	13.57	97	333735	5.50 ug/l	99
60)	2-Hexanone	13.65	43	1182712	26.68 ug/l	100
61)	1,3-Dichloropropane	14.03	76	643788	5.74 ug/l	98
62)	Tetrachloroethene	14.07	164	476520	5.48 ug/l	99
63)	Dibromochloromethane	14.43	129	392171	5.24 ug/l	99
65)	1,2-Dibromoethane	14.76	107	311792	5.40 ug/l	98
66)	1-Chlorohexane	15.12	91	886729	4.92 ug/l	100
67)	Chlorobenzene	15.50	112	1454079	5.62 ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.59	131	457578	5.59 ug/l	96
69)	Ethylbenzene	15.61	91	2848987	5.47 ug/l	100
70)	m-Xylene & p-Xylene	15.74	91	4392415	11.03 ug/l	99
71)	o-Xylene	16.47	91	2123490	5.42 ug/l	99
72)	Styrene	16.53	104	1623289	5.54 ug/l	98
73)	Isopropylbenzene	17.08	105	2699729	5.31 ug/l	98
75)	Bromoform	17.07	173	179345	4.89 ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.36	83	385919	5.56 ug/l	100
78)	1,2,3-Trichloropropane	17.57	110	98375	5.14 ug/l	94
79)	trans-1,4-Dichloro-2-buten	17.68	53	105050	4.97 ug/l	96
80)	n-Propylbenzene	17.68	91	3661988	5.53 ug/l	99
81)	Bromobenzene	17.71	156	541620	5.71 ug/l	97
82)	1,3,5-Trimethylbenzene	17.90	105	2204256	5.45 ug/l	99
83)	2-Chlorotoluene	17.91	91	2164604	5.57 ug/l	97
84)	4-Chlorotoluene	17.97	91	2077155	5.84 ug/l	99
85)	tert-Butylbenzene	18.35	134	479046	5.61 ug/l	98
86)	1,2,4-Trimethylbenzene	18.39	105	2275431	5.43 ug/l	98
87)	sec-Butylbenzene	18.60	105	3067129	5.37 ug/l	96
88)	p-Isopropyltoluene	18.77	119	2561125	5.28 ug/l	98
89)	1,3-Dichlorobenzene	18.87	146	1178641	5.55 ug/l	96
90)	1,2,3-Trimethylbenzene	18.95	105	2031695	5.36 ug/l	99
91)	1,4-Dichlorobenzene	18.99	146	1154468	5.49 ug/l	99
92)	n-Butylbenzene	19.21	91	2719202	5.20 ug/l	98
93)	1,2-Dichlorobenzene	19.37	146	970120	5.52 ug/l	97
94)	1,2-Dibromo-3-chloropropan	20.14	157	58638	4.78 ug/l	89
95)	1,2,4-Trichlorobenzene	20.97	180	719485	5.21 ug/l	98
96)	Hexachlorobutadiene	21.10	225	373228	5.00 ug/l	98
97)	Naphthalene	21.24	128	984317	5.29 ug/l	99

(#) = qualifier out of range (m) = manual integration SA 10/14/24
RIW079.D VO06I19B.M Fri Oct 11 17:42:11 2024 Page 2

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	526222	5.05	ug/l	98

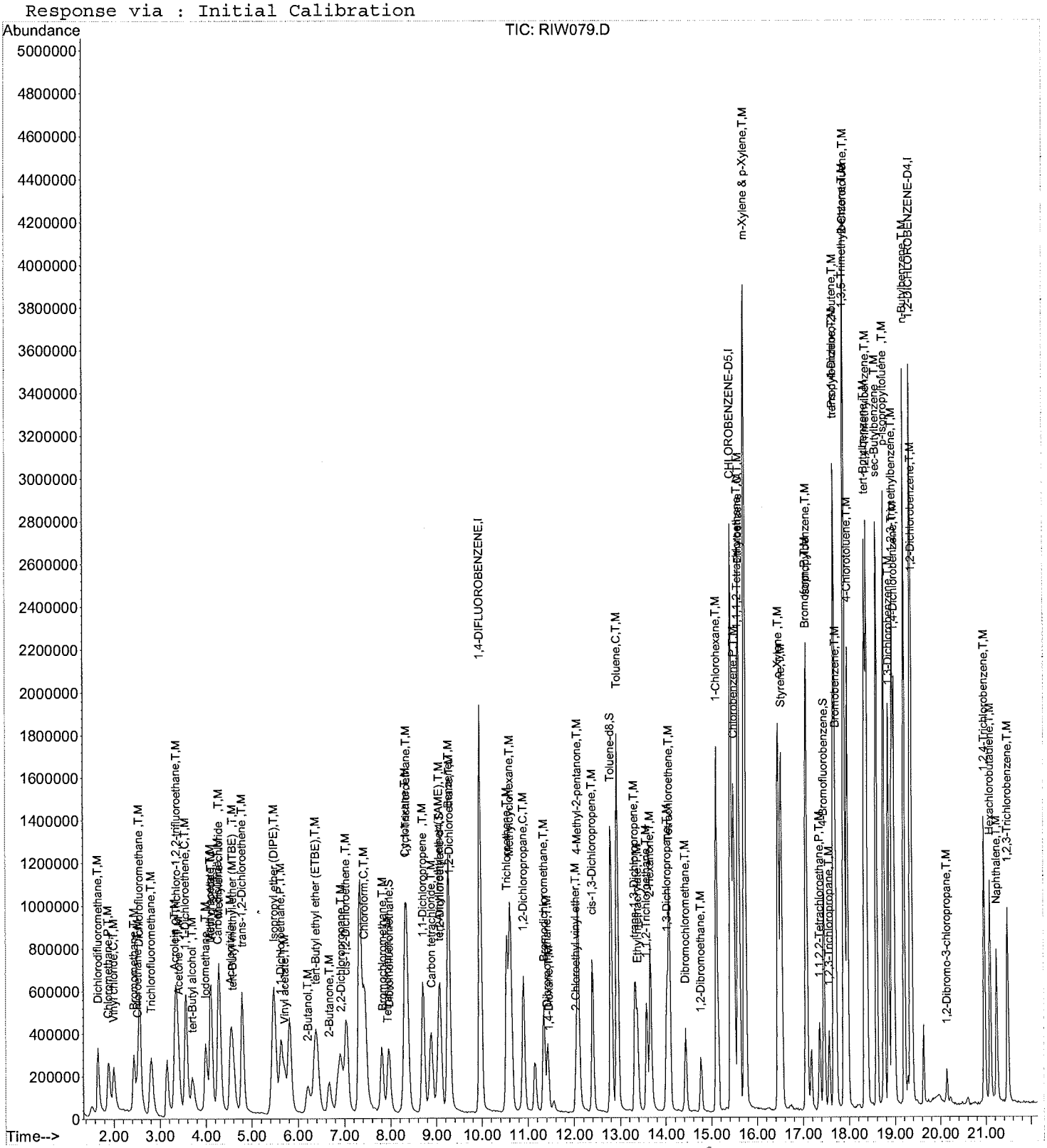
(#) = qualifier out of range (m) = manual integration
RIW079.D VO06I19B.M Fri Oct 11 17:42:11 2024 Page 3

SM 10/14/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3477436	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2910329	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1285376	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	996942	10.13	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.30%			
42) 1,2-Dichloroethane-d4	9.08	65	820553	10.67	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.70%			
55) Toluene-d8	12.82	98	3904240	10.37	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.70%			
77) 4-Bromofluorobenzene	17.45	95	1452227	10.12	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.68	85	1244191	8.47	ug/l	100
3) Chloromethane	1.89	50	1201881	8.93	ug/l	100
4) Vinyl chloride	2.01	62	842844	7.99	ug/l	100
5) Bromomethane	2.45	94	738453	8.51	ug/l	100
6) Chloroethane	2.52	64	600895	8.80	ug/l	100
7) Dichlorofluoromethane	2.56	67	2309931	9.42	ug/l	100
8) Trichlorofluoromethane	2.82	101	1234378	8.90	ug/l	100
9) Acrolein	3.32	56	208289	42.64	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	1005367	8.82	ug/l	100
11) Acetone	3.43	43	685177	48.78	ug/l	100
12) 1,1-Dichloroethene	3.57	61	1860392	10.11	ug/l	100
13) tert-Butyl alcohol	3.72	59	1210429	278.60	ug/l	100
15) Methyl acetate	4.10	74	81794	10.90	ug/l	100
16) Iodomethane	4.01	142	1717915	9.97	ug/l	100
17) Allyl chloride	4.12	76	609108	10.34	ug/l	100
18) Methylene chloride	4.31	49	1402141	9.79	ug/l	100
19) Carbon disulfide	4.26	76	2215273	10.19	ug/l	100
20) Acrylonitrile	4.54	53	894199	51.25	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	1914184	10.86	ug/l	100
22) trans-1,2-Dichloroethene	4.81	96	1113536	10.13	ug/l	100
23) Isopropyl ether (DIPE)	5.48	45	3878239	10.67	ug/l	100
24) Vinyl acetate	5.71	43	1253638	9.55	ug/l	100
25) 1,1-Dichloroethane	5.65	63	1890375	10.29	ug/l	100
26) 2-Butanol	6.21	45	1282863	259.58	ug/l	100
27) tert-Butyl ethyl ether (ET	6.38	59	2830606	10.74	ug/l	100
28) 2-Butanone	6.67	43	1196383	50.13	ug/l	100
29) 2,2-Dichloropropane	6.93	77	1204191	10.50	ug/l	100
30) cis-1,2-Dichloroethene	7.05	96	1144335	10.08	ug/l	100
31) Chloroform	7.45	83	1825674	10.04	ug/l	100
32) Bromochloromethane	7.83	130	516536	10.51	ug/l	100
33) Tetrahydrofuran	7.93	42	121438	9.50	ug/l	100
36) 1,1,1-Trichloroethane	8.35	97	1518593	10.38	ug/l	100
37) Cyclohexane	8.35	84	1990061	10.61	ug/l	100
39) 1,1-Dichloropropene	8.73	110	500876	10.14	ug/l	100
40) Carbon tetrachloride	8.90	119	1275832	10.52	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	2324869	10.79	ug/l	100

(#) = qualifier out of range (m) = manual integration
RIW080.D VO06I19B.M Fri Oct 11 17:42:29 2024 SU 10/14/24 Page 1

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	975945	10.66	ug/l	100
44)	Benzene	9.27	78	4242252	10.64	ug/l	100
45)	Trichloroethene	10.55	130	1107094	10.67	ug/l	100
46)	Methylcyclohexane	10.64	83	2187565	11.08	ug/l	100
47)	1,2-Dichloropropane	10.91	63	1016617	10.31	ug/l	100
48)	1,4-Dioxane	11.45	88	105136	227.79	ug/l	100
49)	Bromodichloromethane	11.35	83	1304302	10.20	ug/l	100
50)	Dibromomethane	11.41	93	483310	10.35	ug/l	100
51)	2-Chloroethyl vinyl ether	12.04	63	312874	10.09	ug/l	100
52)	4-Methyl-2-pentanone	12.08	43	3562279	54.16	ug/l	100
53)	cis-1,3-Dichloropropene	12.40	75	1651593	10.55	ug/l	100
56)	Toluene	12.94	91	4671479	10.64	ug/l	100
57)	Ethyl methacrylate	13.38	69	971870	10.07	ug/l	100
58)	trans-1,3-Dichloropropene	13.32	75	1266634	10.27	ug/l	100
59)	1,1,2-Trichloroethane	13.57	97	650537	10.32	ug/l	100
60)	2-Hexanone	13.65	43	2373340	51.56	ug/l	100
61)	1,3-Dichloropropane	14.03	76	1202925	10.33	ug/l	100
62)	Tetrachloroethene	14.07	164	932030	10.32	ug/l	100
63)	Dibromochloromethane	14.43	129	787869	10.14	ug/l	100
65)	1,2-Dibromoethane	14.76	107	621498	10.37	ug/l	100
66)	1-Chlorohexane	15.12	91	1723656	9.22	ug/l	100
67)	Chlorobenzene	15.50	112	2806780	10.44	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.59	131	938184	11.04	ug/l	100
69)	Ethylbenzene	15.60	91	5454069	10.08	ug/l	100
70)	m-Xylene & p-Xylene	15.74	91	8198654	19.83	ug/l	100
71)	o-Xylene	16.47	91	4227945	10.38	ug/l	100
72)	Styrene	16.53	104	3186076	10.47	ug/l	100
73)	Isopropylbenzene	17.08	105	5348931	10.13	ug/l	100
75)	Bromoform	17.07	173	381371	9.62	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.36	83	775935	10.44	ug/l	100
78)	1,2,3-Trichloropropane	17.57	110	205069	10.01	ug/l	100
79)	trans-1,4-Dichloro-2-buten	17.68	53	214711	9.50	ug/l	100
80)	n-Propylbenzene	17.68	91	6962101	9.82	ug/l	100
81)	Bromobenzene	17.71	156	1062944	10.46	ug/l	100
82)	1,3,5-Trimethylbenzene	17.90	105	4392289	10.15	ug/l	100
83)	2-Chlorotoluene	17.91	91	4132029	9.94	ug/l	100
84)	4-Chlorotoluene	17.97	91	4032123	10.59	ug/l	100
85)	tert-Butylbenzene	18.35	134	967924	10.58	ug/l	100
86)	1,2,4-Trimethylbenzene	18.39	105	4463438	9.95	ug/l	100
87)	sec-Butylbenzene	18.60	105	6044348	9.90	ug/l	100
88)	p-Isopropyltoluene	18.76	119	5199036	10.02	ug/l	100
89)	1,3-Dichlorobenzene	18.87	146	2363059	10.41	ug/l	97
90)	1,2,3-Trimethylbenzene	18.95	105	4113818	10.14	ug/l	100
91)	1,4-Dichlorobenzene	18.99	146	2305203	10.25	ug/l	100
92)	n-Butylbenzene	19.21	91	5438391	9.72	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	1993209	10.61	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	130796	9.95	ug/l	100
95)	1,2,4-Trichlorobenzene	20.97	180	1532298	10.38	ug/l	100
96)	Hexachlorobutadiene	21.10	225	869897	10.90	ug/l	100
97)	Naphthalene	21.24	128	2119779	10.66	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1157581	10.39	ug/l	100

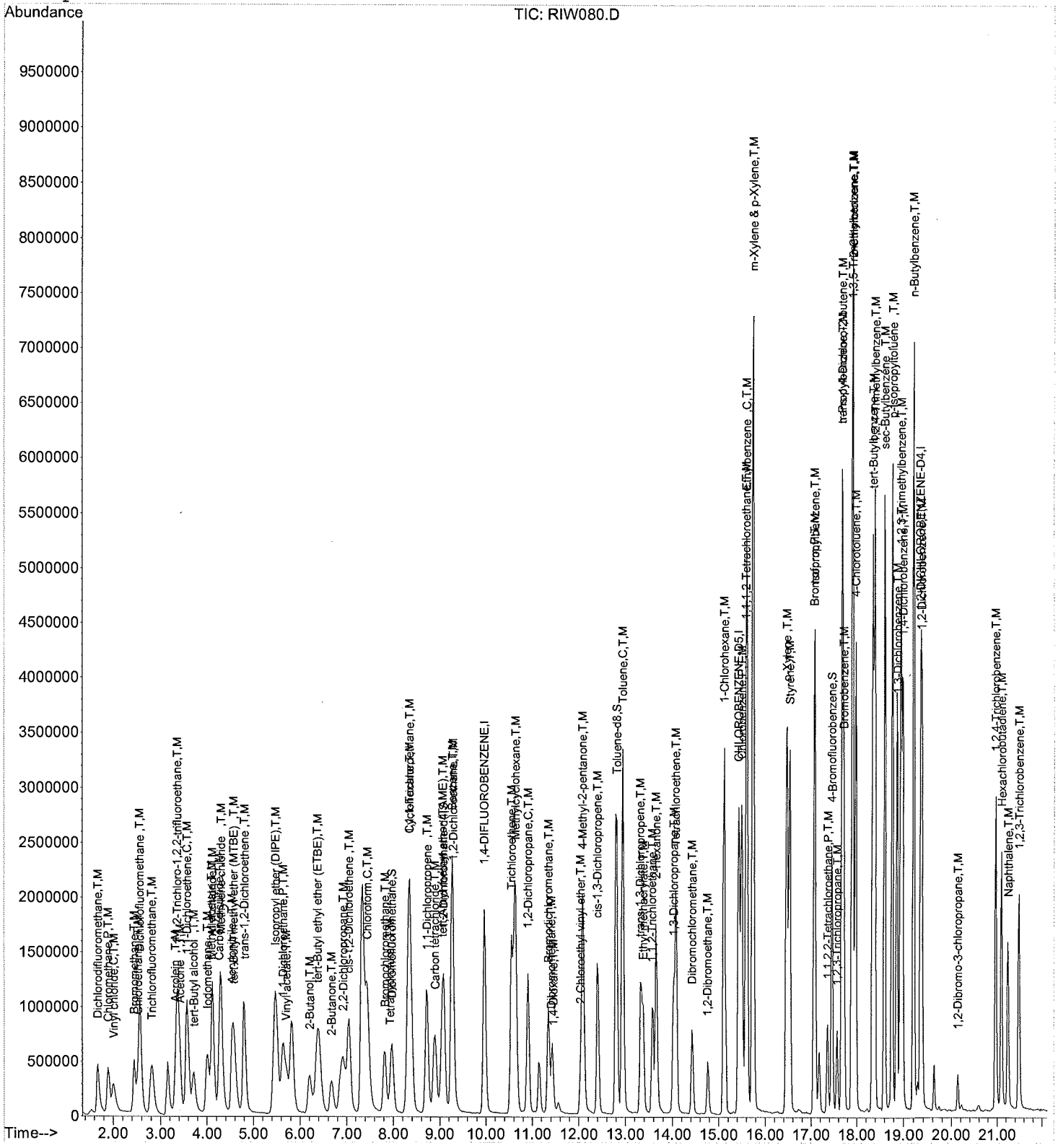
SA 10/14/24

(#) = qualifier out of range (m) = manual integration
RIW080.D VO06I19B.M Fri Oct 11 17:42:30 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3259946	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2727598	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1145684	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	2026440	21.70	ug/l	0.00
Spiked Amount 10.000			Recovery = 217.00%			
42) 1,2-Dichloroethane-d4	9.08	65	1608726	22.32	ug/l	0.00
Spiked Amount 10.000			Recovery = 223.20%			
55) Toluene-d8	12.82	98	7608294	21.55	ug/l	0.00
Spiked Amount 10.000			Recovery = 215.50%			
77) 4-Bromofluorobenzene	17.45	95	2825717	22.09	ug/l	0.00
Spiked Amount 10.000			Recovery = 220.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.68	85	2814273	20.43	ug/l	100
3) Chloromethane	1.89	50	2586862	20.49	ug/l	100
4) Vinyl chloride	1.99	62	1735839	17.55	ug/l	98
5) Bromomethane	2.45	94	1639634	20.03	ug/l	99
6) Chloroethane	2.52	64	1291787	20.24	ug/l	95
7) Dichlorofluoromethane	2.56	67	4378680	19.81	ug/l	100
8) Trichlorofluoromethane	2.80	101	2882610	22.17	ug/l	97
9) Acrolein	3.32	56	481504	105.15	ug/l	89
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	1980661	20.20	ug/l	100
11) Acetone	3.43	43	1410991	107.16	ug/l	94
12) 1,1-Dichloroethene	3.57	61	3710554	21.52	ug/l	100
13) tert-Butyl alcohol	3.72	59	2397266	588.57	ug/l	99
15) Methyl acetate	4.10	74	150749	21.43	ug/l	87
16) Iodomethane	4.01	142	3450750	21.36	ug/l	98
17) Allyl chloride	4.12	76	1225111	22.19	ug/l	98
18) Methylene chloride	4.31	49	2740308	20.98	ug/l	99
19) Carbon disulfide	4.26	76	4382421	21.33	ug/l	99
20) Acrylonitrile	4.54	53	1852792	113.27	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	3757839	22.73	ug/l	99
22) trans-1,2-Dichloroethene	4.81	96	2236452	21.71	ug/l	97
23) Isopropyl ether (DIPE)	5.48	45	7699041	22.60	ug/l	99
24) Vinyl acetate	5.71	43	2853220	23.19	ug/l	97
25) 1,1-Dichloroethane	5.63	63	3829282	22.23	ug/l	98
26) 2-Butanol	6.21	45	2467800	524.91	ug/l	98
27) tert-Butyl ethyl ether (ET	6.38	59	5583711	22.60	ug/l	99
28) 2-Butanone	6.67	43	2494992	111.52	ug/l	99
29) 2,2-Dichloropropane	6.93	77	2480859	23.08	ug/l	98
30) cis-1,2-Dichloroethene	7.05	96	2296690	21.58	ug/l	99
31) Chloroform	7.45	83	3655957	21.45	ug/l	99
32) Bromochloromethane	7.83	130	1025107	22.24	ug/l	99
33) Tetrahydrofuran	7.93	42	247680	20.68	ug/l	95
36) 1,1,1-Trichloroethane	8.35	97	3057587	22.30	ug/l	99
37) Cyclohexane	8.35	84	3927189	22.34	ug/l	100
39) 1,1-Dichloropropene	8.73	110	1012955	21.87	ug/l	100
40) Carbon tetrachloride	8.90	119	2576962	22.68	ug/l	98
41) tert-Amyl methyl ether (TA	9.06	73	4590846	22.72	ug/l	98

(#) = qualifier out of range (m) = manual integration
RIW081.D VO06I19B.M Fri Oct 11 17:43:41 2024 Su 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	1953475	22.77	ug/l	98
44)	Benzene	9.27	78	8297255	22.21	ug/l	99
45)	Trichloroethene	10.55	130	2214903	22.77	ug/l	98
46)	Methylcyclohexane	10.64	83	4274185	23.10	ug/l	99
47)	1,2-Dichloropropane	10.91	63	2085605	22.57	ug/l	100
48)	1,4-Dioxane	11.45	88	196251	453.57	ug/l	100
49)	Bromodichloromethane	11.35	83	2616755	21.82	ug/l	99
50)	Dibromomethane	11.43	93	989518	22.60	ug/l	99
51)	2-Chloroethyl vinyl ether	12.04	63	653430	22.47	ug/l	100
52)	4-Methyl-2-pentanone	12.08	43	6996398	113.46	ug/l	99
53)	cis-1,3-Dichloropropene	12.40	75	3252609	22.16	ug/l	98
56)	Toluene	12.94	91	9114710	22.15	ug/l	98
57)	Ethyl methacrylate	13.38	69	1936324	21.41	ug/l	99
58)	trans-1,3-Dichloropropene	13.32	75	2603367	22.51	ug/l	98
59)	1,1,2-Trichloroethane	13.59	97	1309355	22.16	ug/l	98
60)	2-Hexanone	13.65	43	4598630	106.59	ug/l	99
61)	1,3-Dichloropropane	14.03	76	2415904	22.13	ug/l	98
62)	Tetrachloroethene	14.09	164	1867253	22.05	ug/l	99
63)	Dibromochloromethane	14.43	129	1594038	21.90	ug/l	98
65)	1,2-Dibromoethane	14.76	107	1246516	22.19	ug/l	98
66)	1-Chlorohexane	15.12	91	3327490	18.98	ug/l	98
67)	Chlorobenzene	15.49	112	5487858	21.78	ug/l	98
68)	1,1,1,2-Tetrachloroethane	15.58	131	1819533	22.84	ug/l	97
69)	Ethylbenzene	15.61	91	10498672	20.70	ug/l	99
70)	m-Xylene & p-Xylene	15.74	91	15843624	40.89	ug/l	99
71)	o-Xylene	16.47	91	8180389	21.44	ug/l	100
72)	Styrene	16.53	104	6197208	21.74	ug/l	98
73)	Isopropylbenzene	17.08	105	10172431	20.55	ug/l	99
75)	Bromoform	17.06	173	775699	21.82	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.36	83	1472547	22.22	ug/l	97
78)	1,2,3-Trichloropropane	17.57	110	423916	23.21	ug/l	95
79)	trans-1,4-Dichloro-2-buten	17.69	53	408435	20.27	ug/l	96
80)	n-Propylbenzene	17.67	91	13234493	20.94	ug/l	99
81)	Bromobenzene	17.73	156	2096833	23.16	ug/l	99
82)	1,3,5-Trimethylbenzene	17.89	105	8155548	21.15	ug/l	99
83)	2-Chlorotoluene	17.91	91	8521424	23.01	ug/l	95
84)	4-Chlorotoluene	17.97	91	7193174	21.19	ug/l	94
85)	tert-Butylbenzene	18.35	134	1856605	22.78	ug/l	98
86)	1,2,4-Trimethylbenzene	18.39	105	8332998	20.85	ug/l	100
87)	sec-Butylbenzene	18.61	105	11128130	20.45	ug/l	99
88)	p-Isopropyltoluene	18.76	119	9432368	20.39	ug/l	99
89)	1,3-Dichlorobenzene	18.87	146	4452930	22.00	ug/l	95
90)	1,2,3-Trimethylbenzene	18.94	105	7506191	20.75	ug/l	99
91)	1,4-Dichlorobenzene	18.98	146	4325382	21.57	ug/l	98
92)	n-Butylbenzene	19.20	91	9786813	19.63	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	3708693	22.14	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.14	157	244382	20.87	ug/l	94
95)	1,2,4-Trichlorobenzene	20.97	180	2669858	20.28	ug/l	99
96)	Hexachlorobutadiene	21.10	225	1494990	21.02	ug/l	99
97)	Naphthalene	21.24	128	3722562	20.99	ug/l	100

(#) = qualifier out of range (m) = manual integration

SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1960125	19.73	ug/l	100

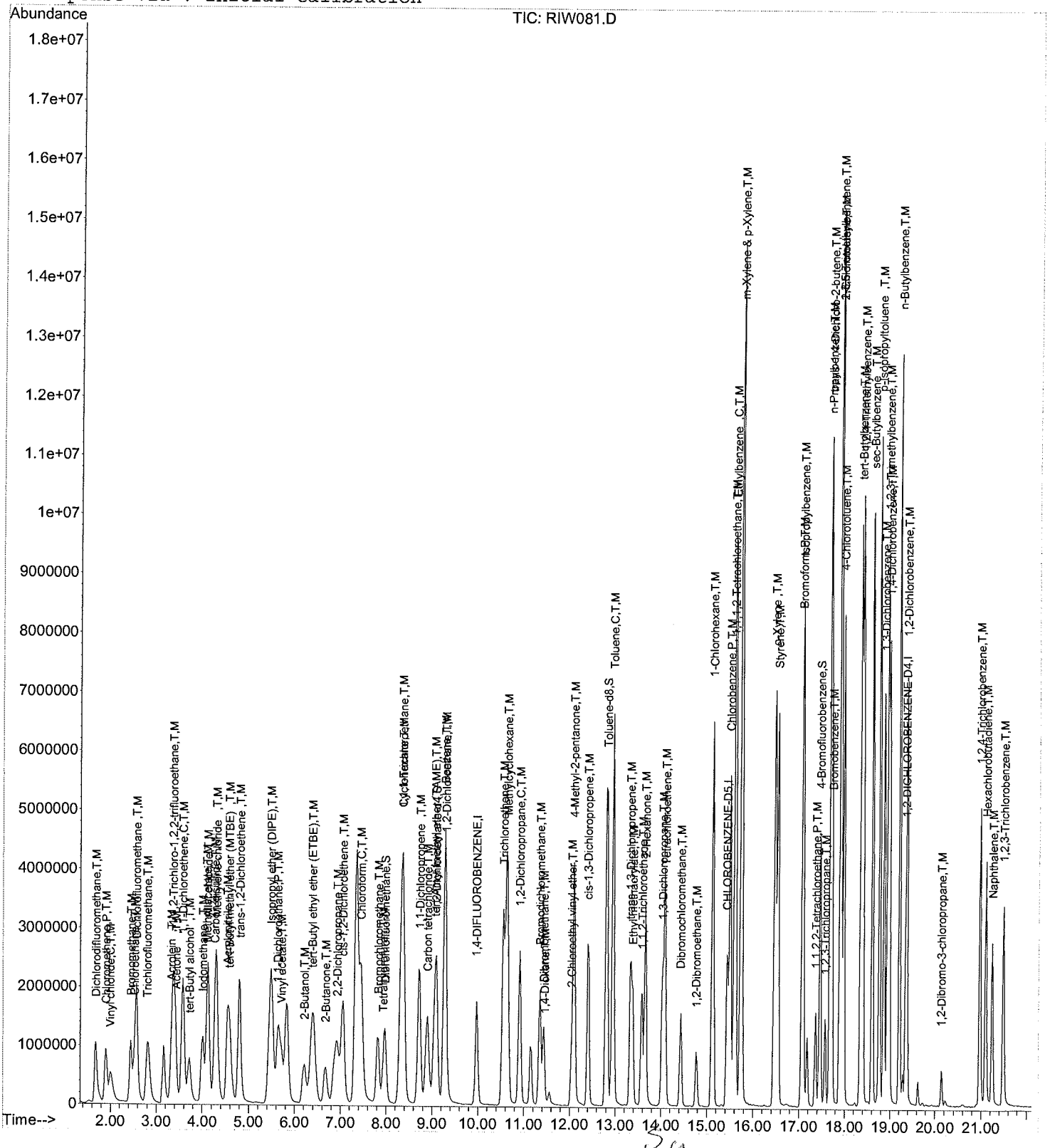
(#) = qualifier out of range (m) = manual integration

SL 10/14/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2996590	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2593955	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1106357	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	2475444	28.76	ug/l	-0.02
Spiked Amount 10.000			Recovery = 287.60%			
42) 1,2-Dichloroethane-d4	9.08	65	2029791	30.64	ug/l	0.00
Spiked Amount 10.000			Recovery = 306.40%			
55) Toluene-d8	12.79	98	9474484	28.22	ug/l	-0.02
Spiked Amount 10.000			Recovery = 282.20%			
77) 4-Bromofluorobenzene	17.45	95	3632219	29.40	ug/l	0.00
Spiked Amount 10.000			Recovery = 294.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.64	85	4343299	34.31	ug/l	100
3) Chloromethane	1.88	50	4213115	36.31	ug/l	99
4) Vinyl chloride	1.98	62	2671691	29.39	ug/l	98
5) Bromomethane	2.43	94	2372767	31.48	ug/l	100
6) Chloroethane	2.51	64	1830393	31.22	ug/l	95
7) Dichlorofluoromethane	2.55	67	5929070	30.34	ug/l	98
8) Trichlorofluoromethane	2.79	101	4066672	34.02	ug/l	99
9) Acrolein	3.32	56	643849	152.96	ug/l	90
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	2664263	33.00	ug/l	100
11) Acetone	3.40	43	1823308	150.65	ug/l	97
12) 1,1-Dichloroethene	3.55	61	4759473	30.03	ug/l	99
13) tert-Butyl alcohol	3.70	59	3102130	828.57	ug/l	99
15) Methyl acetate	4.07	74	197181	30.49	ug/l	82
16) Iodomethane	3.99	142	4526140	30.47	ug/l	100
17) Allyl chloride	4.12	76	1499684	29.55	ug/l	96
18) Methylene chloride	4.28	49	3476444	29.16	ug/l	98
19) Carbon disulfide	4.26	76	5428429	28.69	ug/l	99
20) Acrylonitrile	4.51	53	2455163	163.29	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	4757117	31.31	ug/l	97
22) trans-1,2-Dichloroethene	4.79	96	2764398	29.20	ug/l	98
23) Isopropyl ether (DIPE)	5.46	45	9637058	30.78	ug/l	98
24) Vinyl acetate	5.71	43	3718693	32.88	ug/l	98
25) 1,1-Dichloroethane	5.63	63	4709963	29.75	ug/l	97
26) 2-Butanol	6.19	45	3263498	751.93	ug/l	92
27) tert-Butyl ethyl ether (ET	6.38	59	6868003	30.24	ug/l	98
28) 2-Butanone	6.65	43	3307044	160.81	ug/l	99
29) 2,2-Dichloropropane	6.93	77	2888967	29.24	ug/l	99
30) cis-1,2-Dichloroethene	7.03	96	2847278	29.11	ug/l	98
31) Chloroform	7.43	83	4474111	28.56	ug/l	98
32) Bromochloromethane	7.81	130	1328838	31.36	ug/l	100
33) Tetrahydrofuran	7.93	42	317590	28.85	ug/l	97
36) 1,1,1-Trichloroethane	8.35	97	3828686	30.38	ug/l	99
37) Cyclohexane	8.33	84	4965871	30.73	ug/l	98
39) 1,1-Dichloropropene	8.71	110	1267382	29.77	ug/l	99
40) Carbon tetrachloride	8.90	119	3286825	31.47	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	5733032	30.87	ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	2447233	31.03	ug/l	97
44)	Benzene	9.27	78	10336717	30.10	ug/l	99
45)	Trichloroethene	10.55	130	2733613	30.57	ug/l	98
46)	Methylcyclohexane	10.61	83	5256309	30.90	ug/l	99
47)	1,2-Dichloropropane	10.91	63	2579347	30.36	ug/l	100
48)	1,4-Dioxane	11.45	88	226753	570.12	ug/l	100
49)	Bromodichloromethane	11.35	83	3321819	30.14	ug/l	99
50)	Dibromomethane	11.41	93	1282993	31.88	ug/l	97
51)	2-Chloroethyl vinyl ether	12.04	63	864724	32.35	ug/l	98
52)	4-Methyl-2-pentanone	12.08	43	9111280	160.75	ug/l	98
53)	cis-1,3-Dichloropropene	12.40	75	4151190	30.77	ug/l	98
56)	Toluene	12.94	91	11380108	29.08	ug/l	99
57)	Ethyl methacrylate	13.38	69	2477183	28.80	ug/l	100
58)	trans-1,3-Dichloropropene	13.32	75	3326453	30.25	ug/l	100
59)	1,1,2-Trichloroethane	13.59	97	1672406	29.76	ug/l	98
60)	2-Hexanone	13.65	43	6207786	151.31	ug/l	99
61)	1,3-Dichloropropane	14.03	76	3050247	29.38	ug/l	97
62)	Tetrachloroethene	14.09	164	2337859	29.03	ug/l	100
63)	Dibromochloromethane	14.43	129	2088544	30.17	ug/l	100
65)	1,2-Dibromoethane	14.76	107	1650966	30.91	ug/l	99
66)	1-Chlorohexane	15.12	91	4031468	24.19	ug/l	100
67)	Chlorobenzene	15.50	112	7171112	29.93	ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.59	131	2345975	30.97	ug/l	98
69)	Ethylbenzene	15.61	91	13217589	27.41	ug/l	99
70)	m-Xylene & p-Xylene	15.74	91	19467041	52.83	ug/l	98
71)	o-Xylene	16.47	91	10236315	28.21	ug/l	99
72)	Styrene	16.53	104	7984911	29.45	ug/l	98
73)	Isopropylbenzene	17.08	105	12324935	26.18	ug/l	99
75)	Bromoform	17.07	173	1048187	30.50	ug/l	98
76)	1,1,2,2-Tetrachloroethane	17.36	83	1984883	31.02	ug/l	97
78)	1,2,3-Trichloropropane	17.57	110	531594	30.15	ug/l	98
79)	trans-1,4-Dichloro-2-buten	17.69	53	582680	29.94	ug/l	99
80)	n-Propylbenzene	17.67	91	15892073	26.04	ug/l	98
81)	Bromobenzene	17.73	156	2706883	30.96	ug/l	98
82)	1,3,5-Trimethylbenzene	17.90	105	9772572	26.25	ug/l	100
83)	2-Chlorotoluene	17.91	91	10639210	29.75	ug/l	95
84)	4-Chlorotoluene	17.97	91	8998085	27.45	ug/l	92
85)	tert-Butylbenzene	18.35	134	2156275	27.40	ug/l	96
86)	1,2,4-Trimethylbenzene	18.39	105	10021249	25.96	ug/l	100
87)	sec-Butylbenzene	18.61	105	12894661	24.53	ug/l	100
88)	p-Isopropyltoluene	18.76	119	10930698	24.47	ug/l	99
89)	1,3-Dichlorobenzene	18.87	146	5629520	28.80	ug/l	95
90)	1,2,3-Trimethylbenzene	18.95	105	8947950	25.61	ug/l	99
91)	1,4-Dichlorobenzene	18.99	146	5542485	28.63	ug/l	99
92)	n-Butylbenzene	19.21	91	11735065	24.38	ug/l	99
93)	1,2-Dichlorobenzene	19.37	146	4777836	29.53	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	336882	29.79	ug/l	96
95)	1,2,4-Trichlorobenzene	20.97	180	3523968	27.72	ug/l	100
96)	Hexachlorobutadiene	21.10	225	1877895	27.34	ug/l	96
97)	Naphthalene	21.24	128	4985329	29.12	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

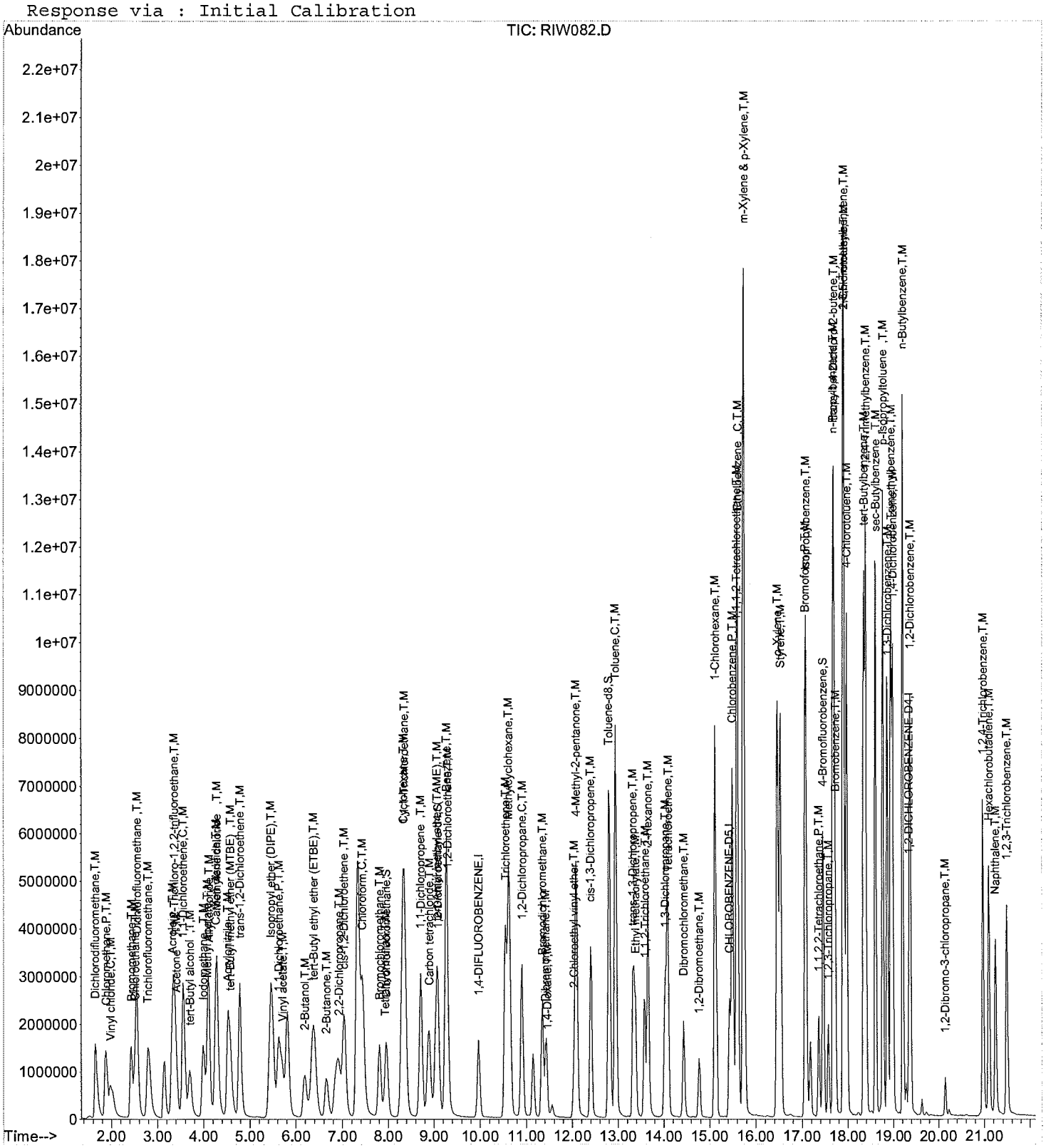
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	2604808	27.15	ug/l	99

(#) = qualifier out of range (m) = manual integration
RIW082.D VO06I19B.M Fri Oct 11 17:43:58 2024 SU 10/14/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SG 10/14/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW083.D Vial: 10
Acq On : 19 Sep 2024 2:36 pm Operator: PMai
Sample : VO06I199 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:19 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.98	114	4206183	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.44	117	3395951	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1267473	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	2150	0.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.40%		
42) 1,2-Dichloroethane-d4	9.08	65	13988	0.15	ug/l	0.00
Spiked Amount 10.000			Recovery =	1.50%		
55) Toluene-d8	12.81	98	16417	0.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.40%		
77) 4-Bromofluorobenzene	17.47	95	23003	0.16	ug/l	0.01
Spiked Amount 10.000			Recovery =	1.60%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.67	85	6754956	38.01	ug/l	99
3) Chloromethane	1.89	50	6445667	39.58	ug/l	98
4) Vinyl chloride	1.99	62	3515513	27.55	ug/l	97
5) Bromomethane	2.44	94	3970742	37.51	ug/l	100
6) Chloroethane	2.52	64	2965042	36.04	ug/l	98
7) Dichlorofluoromethane	2.56	67	10112600	37.94	ug/l	97
8) Trichlorofluoromethane	2.82	101	7139355	42.55	ug/l	100
9) Acrolein	3.32	56	1406709	238.09	ug/l	98
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	4662942	47.37	ug/l	98
11) Acetone	3.42	43	4217841	248.27	ug/l	97
12) 1,1-Dichloroethene	3.57	61	9740642	43.78	ug/l	98
13) tert-Butyl alcohol	3.72	59	6835306	1300.66	ug/l	99
16) Iodomethane	4.01	142	9321990	44.71	ug/l	99
17) Allyl chloride	4.12	76	3578200	50.23	ug/l	97
18) Methylene chloride	4.30	49	7567524	45.51	ug/l	98
20) Acrylonitrile	4.54	53	5653483	267.88	ug/l	99
21) tert-Butyl methyl ether (M	4.60	73	10516211	49.30	ug/l	97
22) trans-1,2-Dichloroethene	4.81	96	6242469	46.97	ug/l	95
23) Isopropyl ether (DIPE)	5.48	45	21645712	49.25	ug/l	98
24) Vinyl acetate	5.71	43	8556935	53.90	ug/l	99
25) 1,1-Dichloroethane	5.65	63	10895440	49.02	ug/l	96
27) tert-Butyl ethyl ether (ET	6.40	59	15789414	49.54	ug/l	98
28) 2-Butanone	6.67	43	7666590	265.60	ug/l	98
29) 2,2-Dichloropropane	6.92	77	6348535	45.77	ug/l	98
30) cis-1,2-Dichloroethene	7.05	96	6666481	48.56	ug/l	99
31) Chloroform	7.45	83	10469209	47.61	ug/l	98
32) Bromochloromethane	7.83	130	3145842	52.90	ug/l	97
33) Tetrahydrofuran	7.93	42	823075	53.26	ug/l	92
36) 1,1,1-Trichloroethane	8.37	97	8404301	47.51	ug/l	98
39) 1,1-Dichloropropene	8.73	110	2938897	49.19	ug/l	100
40) Carbon tetrachloride	8.89	119	7104046	48.45	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	12687032	48.66	ug/l	97
43) 1,2-Dichloroethane	9.29	62	5648982	51.03	ug/l	95
44) Benzene	9.27	78	23027133	47.77	ug/l	97
45) Trichloroethene	10.55	130	6227092	49.61	ug/l	99
47) 1,2-Dichloropropane	10.91	63	5818578	48.79	ug/l	98

(#) = qualifier out of range (m) = manual integration

10/14/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW083.D Vial: 10
Acq On : 19 Sep 2024 2:36 pm Operator: PMai
Sample : VO06I199 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:19 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
48) 1,4-Dioxane	11.45	88	566310	1014.39 ug/l	98
49) Bromodichloromethane	11.35	83	7539332	48.73 ug/l	97
50) Dibromomethane	11.43	93	2901431	51.37 ug/l	98
51) 2-Chloroethyl vinyl ether	12.04	63	2051335	54.67 ug/l	99
52) 4-Methyl-2-pentanone	12.08	43	20321326	255.42 ug/l	97
53) cis-1,3-Dichloropropene	12.42	75	9368979	49.48 ug/l	96
56) Toluene	12.94	91	23446877	45.77 ug/l	94
57) Ethyl methacrylate	13.38	69	5674935	50.40 ug/l	99
58) trans-1,3-Dichloropropene	13.34	75	7374646	51.22 ug/l	97
59) 1,1,2-Trichloroethane	13.59	97	3809137	51.77 ug/l	98
60) 2-Hexanone	13.65	43	13855803	257.96 ug/l	98
61) 1,3-Dichloropropane	14.03	76	6819196	50.17 ug/l	97
62) Tetrachloroethene	14.09	164	5033292	47.74 ug/l	99
63) Dibromochloromethane	14.43	129	4717008	52.04 ug/l	99
65) 1,2-Dibromoethane	14.78	107	3694760	52.84 ug/l	100
66) 1-Chlorohexane	15.12	91	8067645	36.97 ug/l	99
67) Chlorobenzene	15.51	112	14846965	47.33 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.60	131	4766403	48.06 ug/l	97
69) Ethylbenzene	15.61	91	23453413	37.15 ug/l	91
70) m-Xylene & p-Xylene	15.74	91	28404866	58.88 ug/l	72
71) o-Xylene	16.47	91	19600374	41.26 ug/l	97
72) Styrene	16.53	104	16164162	45.54 ug/l	98
73) Isopropylbenzene	17.08	105	21351804	34.64 ug/l	96
75) Bromoform	17.08	173	2236173	56.71 ug/l	98
76) 1,1,2,2-Tetrachloroethane	17.36	83	3954685	53.95 ug/l	96
78) 1,2,3-Trichloropropane	17.57	110	1158755	57.36 ug/l	100
79) trans-1,4-Dichloro-2-buten	17.69	53	1225932	54.99 ug/l	98
80) n-Propylbenzene	17.69	91	22799005	32.60 ug/l	86
81) Bromobenzene	17.73	156	5310135	53.01 ug/l	99
82) 1,3,5-Trimethylbenzene	17.89	105	16646536	39.02 ug/l	97
83) 2-Chlorotoluene	17.91	91	18389880	44.88 ug/l	97
84) 4-Chlorotoluene	17.97	91	16360928	43.57 ug/l	88
85) tert-Butylbenzene	18.35	134	3928334	43.56 ug/l	94
86) 1,2,4-Trimethylbenzene	18.40	105	16666415	37.69 ug/l	92
87) sec-Butylbenzene	18.61	105	18886826	31.37 ug/l	91
88) p-Isopropyltoluene	18.76	119	17527627	34.25 ug/l	91
89) 1,3-Dichlorobenzene	18.87	146	10495959	46.88 ug/l	93
90) 1,2,3-Trimethylbenzene	18.95	105	15252661	38.11 ug/l	94
91) 1,4-Dichlorobenzene	18.98	146	10370135	46.76 ug/l	97
92) n-Butylbenzene	19.21	91	17919160	32.50 ug/l	85
93) 1,2-Dichlorobenzene	19.37	146	8649707	46.67 ug/l	98
94) 1,2-Dibromo-3-chloropropan	20.14	157	665681	51.37 ug/l	96
95) 1,2,4-Trichlorobenzene	20.97	180	6323418	43.42 ug/l	100
96) Hexachlorobutadiene	21.10	225	3248765	41.28 ug/l	96
97) Naphthalene	21.24	128	9280937	47.31 ug/l	98
98) 1,2,3-Trichlorobenzene	21.49	180	4707593	42.84 ug/l	98

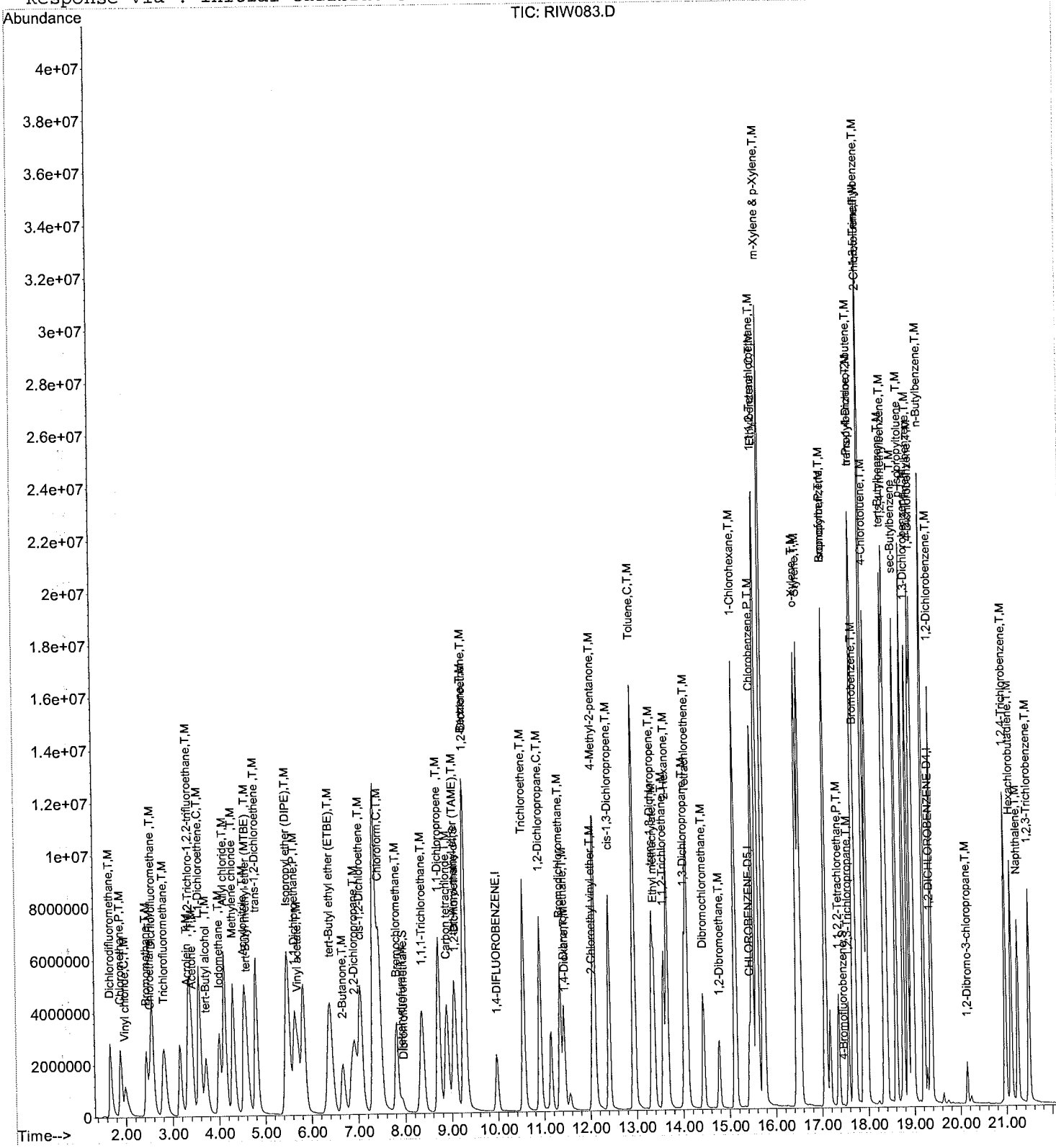
SC 10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW083.D Vial: 10
Acq On : 19 Sep 2024 2:36 pm Operator: PMai
Sample : VO06I199 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:19 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW084.D Vial: 11
Acq On : 19 Sep 2024 3:02 pm Operator: PMai
Sample : VO06I1910 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:22 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3637958	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.44	117	2768644	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1265533	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	1625	0.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.40%		
42) 1,2-Dichloroethane-d4	9.06	65	22232	0.28	ug/l	-0.02
Spiked Amount 10.000			Recovery =	2.80%		
55) Toluene-d8	12.82	98	10286	0.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.30%		
77) 4-Bromofluorobenzene	17.36	95	985993	6.98	ug/l	-0.09
Spiked Amount 10.000			Recovery =	69.80%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.65	85	16148328	105.07	ug/l	97
3) Chloromethane	1.87	50	14612117	103.73	ug/l	96
4) Vinyl chloride	1.99	62	8824260	79.97	ug/l	95
5) Bromomethane	2.42	94	9945559	108.46	ug/l	99
6) Chloroethane	2.50	64	7683261	108.05	ug/l	100
8) Trichlorofluoromethane	2.80	101	16365848	112.78	ug/l	99
9) Acrolein	3.30	56	2311513	452.34	ug/l	99
11) Acetone	3.40	43	6625917	450.94	ug/l	98
12) 1,1-Dichloroethene	3.55	61	20172568	104.83	ug/l	97
13) tert-Butyl alcohol	3.70	59	9798742	2155.79	ug/l	100
16) Iodomethane	3.99	142	18843913	104.50	ug/l	98
17) Allyl chloride	4.10	76	6196143	100.58	ug/l	96
18) Methylene chloride	4.29	49	14002938	97.97	ug/l	97
20) Acrylonitrile	4.52	53	9218905	505.05	ug/l	99
21) tert-Butyl methyl ether (M	4.56	73	16666283	90.34	ug/l	96
22) trans-1,2-Dichloroethene	4.79	96	10906587	94.88	ug/l	95
23) Isopropyl ether (DIPE)	5.46	45	35507486	93.40	ug/l	96
24) Vinyl acetate	5.69	43	14250810	103.78	ug/l	100
25) 1,1-Dichloroethane	5.63	63	18709340	97.33	ug/l	95
27) tert-Butyl ethyl ether (ET	6.38	59	24858794	90.17	ug/l	98
28) 2-Butanone	6.65	43	12262250	491.16	ug/l	97
29) 2,2-Dichloropropane	6.93	77	9875821	82.32	ug/l	97
30) cis-1,2-Dichloroethene	7.03	96	11419506	96.17	ug/l	98
31) Chloroform	7.45	83	17652598	92.81	ug/l	97
32) Bromochloromethane	7.81	130	5332114	103.66	ug/l	99
33) Tetrahydrofuran	7.91	42	1355631	101.42	ug/l	94
36) 1,1,1-Trichloroethane	8.35	97	14233825	93.02	ug/l	97
39) 1,1-Dichloropropene	8.71	110	5105574	98.80	ug/l	99
40) Carbon tetrachloride	8.90	119	13004055	102.54	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	19774924	87.70	ug/l	96
43) 1,2-Dichloroethane	9.29	62	9529457	99.53	ug/l	95
44) Benzene	9.27	78	35095883	84.17	ug/l	92
45) Trichloroethene	10.55	130	10584429	97.49	ug/l	99
47) 1,2-Dichloropropane	10.91	63	9897446	95.96	ug/l	97
48) 1,4-Dioxane	11.45	88	674602	1397.11	ug/l	100
49) Bromodichloromethane	11.35	83	12697231	94.89	ug/l	97

(#) = qualifier out of range (m) = manual integration
RIW084.D VO06I19B.M Mon Oct 14 14:22:31 2024 10/14/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW084.D Vial: 11
Acq On : 19 Sep 2024 3:02 pm Operator: PMai
Sample : VO06I1910 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:22 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Dibromomethane	11.41	93	4869988	99.68	ug/l	99
51) 2-Chloroethyl vinyl ether	12.04	63	3453726	106.42	ug/l	99
52) 4-Methyl-2-pentanone	12.08	43	28518293	414.44	ug/l	94
53) cis-1,3-Dichloropropene	12.40	75	15322464	93.56	ug/l	95
56) Toluene	12.94	91	30993514	74.21	ug/l	77
57) Ethyl methacrylate	13.38	69	8778547	95.63	ug/l	97
58) trans-1,3-Dichloropropene	13.32	75	12179497	103.76	ug/l	98
59) 1,1,2-Trichloroethane	13.59	97	6159591	102.68	ug/l	97
60) 2-Hexanone	13.65	43	19993828	456.57	ug/l	95
61) 1,3-Dichloropropane	14.03	76	10905182	98.41	ug/l	96
62) Tetrachloroethene	14.09	164	8110952	94.37	ug/l	99
63) Dibromochloromethane	14.43	129	7608400	102.96	ug/l	100
65) 1,2-Dibromoethane	14.76	107	5909656	103.66	ug/l	100
66) 1-Chlorohexane	15.12	91	12432614	69.88	ug/l	99
67) Chlorobenzene	15.51	112	22182109	86.74	ug/l	94
68) 1,1,1,2-Tetrachloroethane	15.60	131	7353439	90.94	ug/l	99
69) Ethylbenzene	15.61	91	29012419	56.37	ug/l	74
70) m-Xylene & p-Xylene	15.74	91	33785553	85.90	ug/l	59
71) o-Xylene	16.47	91	26138674	67.49	ug/l	84
72) Styrene	16.53	104	23457621	81.06	ug/l	90
73) Isopropylbenzene	17.08	105	27993271	55.71	ug/l	84
75) Bromoform	17.08	173	3605522	91.52	ug/l	99
76) 1,1,2,2-Tetrachloroethane	17.36	83	6675080	91.20	ug/l	97
78) 1,2,3-Trichloropropane	17.58	110	1946195	96.48	ug/l	98
79) trans-1,4-Dichloro-2-buten	17.69	53	2025472	90.99	ug/l	99
80) n-Propylbenzene	17.67	91	27098555	38.81	ug/l	63
81) Bromobenzene	17.73	156	8617954	86.17	ug/l	99
82) 1,3,5-Trimethylbenzene	17.91	105	23512433	55.21	ug/l	76
83) 2-Chlorotoluene	17.91	91	24174119	59.09	ug/l	90
85) tert-Butylbenzene	18.36	134	7385473	82.03	ug/l	89
86) 1,2,4-Trimethylbenzene	18.40	105	22219874	50.32	ug/l	60
87) sec-Butylbenzene	18.59	105	24895570	41.41	ug/l	64
88) p-Isopropyltoluene	18.76	119	23545361	46.08	ug/l	62
89) 1,3-Dichlorobenzene	18.87	146	17456839	78.08	ug/l	86
90) 1,2,3-Trimethylbenzene	18.95	105	21405952	53.57	ug/l	65
91) 1,4-Dichlorobenzene	18.98	146	17091668	77.18	ug/l	86
92) n-Butylbenzene	19.20	91	23352113	42.41	ug/l	67
93) 1,2-Dichlorobenzene	19.37	146	15839316	85.60	ug/l	94
94) 1,2-Dibromo-3-chloropropan	20.15	157	1352744	104.56	ug/l	94
95) 1,2,4-Trichlorobenzene	20.97	180	12816606	88.14	ug/l	99
96) Hexachlorobutadiene	21.10	225	7015618	89.29	ug/l	96
97) Naphthalene	21.24	128	19279030	98.43	ug/l	96
98) 1,2,3-Trichlorobenzene	21.49	180	10114903	92.18	ug/l	97

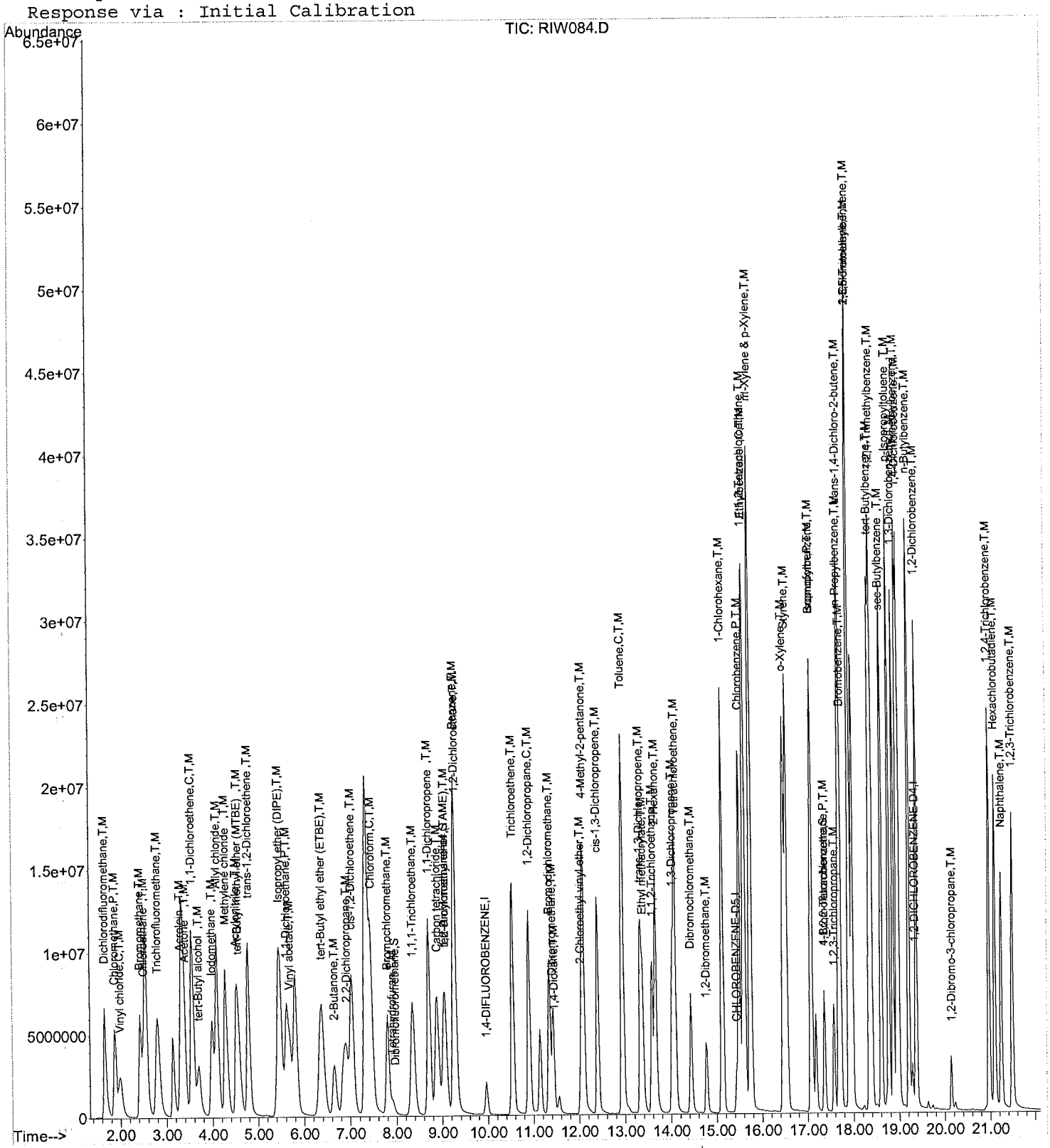
SU 10/14/24

(#) = qualifier out of range (m) = manual integration
RIW084.D VO06I19B.M Mon Oct 14 14:22:31 2024

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW084.D Vial: 11
Acq On : 19 Sep 2024 3:02 pm Operator: PMai
Sample : VO06I1910 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:22 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SU 10/14/24

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :06
IC_Beginning DateTime :09/19/24 11:07
Spike Amount :10 PPB
CC/CV File :RIW087
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
IC_Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B
Date_Time :09/19/24 16:20

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	3818306	1	1	9.965	9.966	0				
	2	Dichlorodifluoromethane	8.173	-18.3	1318386	0.345	0.422	1.676	1.661	13.33				
	3	Chloromethane	9.284	-7.2	1372699	0.360	0.387	1.893	1.883	13.07				
	4	Vinyl chloride	8.915	-10.9	1032595	0.270	0.303	2.012	1.993	14.03				
	5	Bromomethane	8.747	-12.5	833581	0.218	0.239	2.446	2.433	15.81	-0.0024	0.2523		0.9963
	6	Chloroethane	8.517	-14.8	638699	0.167	0.203	2.525	2.511	22.40	0.0009	0.1954		0.9954
	7	Dichlorofluoromethane	7.718	-22.8	2094253	0.548	0.725	2.565	2.557	19.79	0.0047	0.7229	-0.0239	0.9954
	8	Trichlorofluoromethane	9.175	-8.2	1397459	0.366	0.399	2.821	2.803	13.35				
5	9	Acrolein	45.514	-9.0	244115	0.013	0.014	3.321	3.318	13.03				
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	6.721	-32.8	853126	0.223	0.305	3.363	3.360	21.85	-0.0018	0.3517	-0.0248	0.9955
5	11	Acetone	46.243	-7.5	713175	0.037	0.040	3.426	3.412	5.70				
	12	1,1-Dichloroethene	9.129	-8.7	1843846	0.483	0.529	3.573	3.559	13.18				
25	13	tert-Butyl alcohol	245.553	-1.8	1171446	0.012	0.012	3.719	3.708	12.15				
	14	Acetonitrile												
	15	Methyl acetate	11.114	11.1	91600	0.024	0.022	4.097	4.092	9.28				
	16	Iodomethane	9.402	-6.0	1779527	0.466	0.496	4.013	3.997	9.49				
	17	Allyl chloride	9.917	-0.8	641278	0.168	0.169	4.117	4.113	8.27				
	18	Methylene chloride	9.084	-9.2	1434804	0.376	0.456	4.306	4.292	16.08	0.0208	0.3908		0.9991
	19	Carbon disulfide	8.431	-15.7	2007412	0.526	0.550	4.264	4.261	22.27	-0.0093	0.6346		0.9977
5	20	Acrylonitrile	49.089	-1.8	940474	0.049	0.050	4.537	4.532	11.25				
	21	tert-Butyl methyl ether (MTBE)	9.920	-0.8	1920764	0.503	0.507	4.579	4.578	9.55				
	22	trans-1,2-Dichloroethene	10.066	0.7	1214526	0.318	0.316	4.809	4.796	9.01				
	23	Isopropyl ether (DIPE)	10.318	3.2	4116889	1.078	1.045	5.480	5.473	9.74				
	24	Vinyl acetate	11.001	10.0	1585507	0.415	0.377	5.731	5.707	11.84				
	25	1,1-Dichloroethane	10.047	0.5	2027215	0.531	0.528	5.648	5.632	8.85				
25	26	2-Butanol	241.534	-3.4	1307812	0.014	0.011	6.213	6.218	34.89	-0.0108	0.0146		0.9959
	27	tert-Butyl ethyl ether (ETBE)	10.198	2.0	2950819	0.773	0.758	6.402	6.387	10.20				
5	28	2-Butanone	46.704	-6.6	1223832	0.064	0.069	6.674	6.671	8.30				
	29	2,2-Dichloropropane	10.802	8.0	1360181	0.356	0.330	6.926	6.921	10.70				
	30	cis-1,2-Dichloroethene	9.968	-0.3	1242418	0.325	0.326	7.052	7.041	5.38				
	31	Chloroform	9.678	-3.2	1932134	0.506	0.523	7.450	7.439	8.09				
	32	Bromochloromethane	10.087	0.9	544578	0.143	0.141	7.827	7.816	8.96				
	33	Tetrahydrofuran	8.878	-11.2	124557	0.033	0.037	7.953	7.929	7.29				
5	34	tert-Amyl alcohol												
	35	Dibromofluoromethane	10.515	5.2	1137646	0.298	0.231	7.974	7.968	27.01	-0.0065	0.2895		0.9975
	36	1,1,1-Trichloroethane	10.055	0.6	1614830	0.423	0.421	8.372	8.355	7.56				
	37	Cyclohexane	9.753	-2.5	2008066	0.526	0.539	8.351	8.337	10.75				
	38	2,2,4-Trimethylpentane												
	39	1,1-Dichloropropene	9.739	-2.6	528272	0.138	0.142	8.729	8.713	5.75				
	40	Carbon tetrachloride	10.124	1.2	1347587	0.353	0.349	8.896	8.891	9.23				
	41	tert-Amyl methyl ether (TAME)	10.157	1.6	2404011	0.630	0.620	9.064	9.067	8.76				
	42	1,2-Dichloroethane-d4	10.339	3.4	872922	0.229	0.221	9.106	9.084	11.06				
	43	1,2-Dichloroethane	10.152	1.5	1020146	0.267	0.263	9.294	9.287	11.07				
	44	Benzene	10.295	3.0	4505632	1.180	1.146	9.273	9.271	10.43				
	45	Trichloroethene	10.383	3.8	1183254	0.310	0.298	10.552	10.551	8.68				
	46	Methylcyclohexane	10.310	3.1	2234441	0.585	0.568	10.636	10.621	13.50				
	47	1,2-Dichloropropane	10.108	1.1	1094292	0.287	0.284	10.908	10.907	8.52				
20	48	1,4-Dioxane	207.747	3.9	105285	0.001	0.001	11.453	11.458	11.21				
	49	Bromodichloromethane	9.672	-3.3	1358411	0.356	0.368	11.348	11.348	7.61				
	50	Dibromomethane	9.722	-2.8	498553	0.131	0.134	11.432	11.417	9.25				
	51	2-Chloroethyl vinyl ether	9.360	-6.4	318858	0.084	0.089	12.040	12.042	9.82				
5	52	4-Methyl-2-pentanone	49.956	-0.1	3608051	0.189	0.189	12.082	12.087	11.78				
	53	cis-1,3-Dichloropropene	9.954	-0.5	1711128	0.448	0.450	12.417	12.398	9.21				
	54	CHLOROBENZENE-D5	10.000	0	3098667	1	1	15.442	15.432	0				
	55	Toluene-d8	11.006	10.1	4414110	1.425	1.294	12.815	12.802	6.71				
	56	Toluene	10.716	7.2	5009219	1.617	1.509	12.941	12.940	13.73				
	57	Ethyl methacrylate	9.549	-4.5	981122	0.317	0.332	13.381	13.380	5.91				
	58	trans-1,3-Dichloropropene	10.259	2.6	1347799	0.435	0.424	13.339	13.326	9.58				
	59	1,1,2-Trichloroethane	9.967	-0.3	669166	0.216	0.217	13.591	13.580	10.21				
5	60	2-Hexanone	48.622	-2.8	2383054	0.154	0.158	13.654	13.658	8.03				
	61	1,3-Dichloropropane	9.971	-0.3	1236711	0.399	0.400	14.031	14.030	9.06				
	62	Tetrachloroethene	10.301	3.0	990939	0.320	0.310	14.094	14.083	8.33				
	63	Dibromochloromethane	9.992	-0.1	826369	0.267	0.267	14.429	14.429	7.03				
	64	2-Ethyl-1-butanol												
	65	1,2-Dibromoethane	9.889	-1.1	631008	0.204	0.206	14.786	14.766	10.05				
	66	1-Chlorohexane	9.103	-9.0	1812595	0.585	0.643	15.121	15.120	9.33				
	67	Chlorobenzene	10.365	3.6	2966933	0.957	0.924	15.507	15.497	9.47				
	68	1,1,1,2-Tetrachloroethane	10.802	8.0	977595	0.315	0.292	15.597	15.589	11.30				
	69	Ethylbenzene	10.030	0.3	5777806	1.865	1.859	15.610	15.608	8.30				
2	70	m-Xylene & p-Xylene	19.978	-0.1	8794452	1.419	1.421	15.740	15.741	8.61				
	71	o-Xylene	10.024	0.2	4345475	1.402	1.399	16.467	16.466	9.46				
	72	Styrene	10.204	2.0	3305187	1.067	1.045	16.532	16.533	9.82				
	73	Isopropylbenzene	9.877	-1.2	5555064	1.793	1.815	17.077	17.078	8.91				
	74	1,2-DICHLOROBENZENE-D4	10.000	0	1315965	1	1	19.347	19.348	0				
	75	Bromoform	9.207	-7.9	373678	0.284	0.290	17.077	17.068	15.86	-0.0029	0.3116		0.9955
	76	1,1,2,2-Tetrachloroethane	9.945	-0.6	756918	0.575	0.578	17.362	17.360	11.29				
	77	4-Bromofluorobenzene	10.758	7.6	1580640	1.201	1.116	17.466	17.454	7.32				
	78	1,2,3-Trichloropropane	9.515	-4.8	199584	0.152	0.159	17.583	17.573	9.99				
	79	trans-1,4-Dichloro-2-butene	9.461	-5.4	219018	0.166	0.176	17.686	17.683	6.51				
	80	n-Propylbenzene	10.009	0.1	7267387	5.522	5.517	17.686	17.676	10.27				
	81	Bromobenzene	10.604	6.0	1102805	0.838	0.790	17.725	17.722	13.37				
	82	1,3,5-Trimethylbenzene	10.309	3.1	4565969	3.470	3.365	17.894	17.895	10.62				
	83	2-Chlorotoluene	10.658	6.6	4534547	3.446	3.233	17.907	17.908	11.15				
	84	4-Chlorotoluene	10.275	2.7	4006499	3.045	2.963	17.972	17.973	13.81				
	85	tert-Butylbenzene	10.939	9.4	1024187	0.778	0.711	18.348	18.350	11.84				
	86	1,2,4-Trimethylbenzene	10.018	0.2	4600062	3.496	3.489	18.400	18.388	9.18				
	87	sec-Butylbenzene	9.989	-0.1	6245391	4.746	4.751	18.608	18.601	9.32				
	88	p-Isopropyltoluene	10.055	0.6	5342599	4.060	4.038	18.763	18.764	8.88				
	89	1,3-Dichlorobenzene	10.248	2.5	2382410	1.810	1.767	18.867	18.867	11.22				
	90	1,2,3-Trimethylbenzene	9.955	-0.5	4136599	3.143	3.158	18.945	18.946	9.29				
	91	1,4-Dichlorobenzene	10.290	2.9	2369782	1.801	1.750	18.984	18.985	11.18				
	92	n-Butylbenzene	9.726	-2.7	5568496	4.231	4.351	19.204	19.205	9.21				
	93	1,2-Dichlorobenzene	10.443	4.4	2009595	1.527	1.462	19.373	19.374	10.78				
	94	1,2-Dibromo-3-chloropropane	8.919	-10.8	120000	0.091	0.102	20.152	20.141	3.78				
	95	1,2,4-Trichlorobenzene	10.120	1.2	1530251	1.163	1.149	20.982	20.970	11.27				
	96	Hexachlorobutadiene	10.742	7.4	877702	0.667	0.621	21.099	21.100	11.09				
	97	Naphthalene	10.212	2.1	2079964	1.581	1.548	21.241	21.242	7.87				
	98	1,2,3-Trichlorobenzene	10.484	4.8	1196302	0.909	0.867	21.488	21.489	14.10				

Spike Amount = Nominal Amount * M

SM 10/14/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	110	0.00
2	T,M	Dichlorodifluoromethane	10.000	8.173	18.3	106	0.00
3	P,T,M	Chloromethane	10.000	9.285	7.1	114	0.00
4	C,T,M	Vinyl chloride	10.000	8.915	10.9	123	0.00
5	T,M	Bromomethane	10.000	8.747	12.5	113	0.00
6	T,M	Chloroethane	10.000	8.518	14.8	106	0.00
7	T,M	Dichlorofluoromethane **	10.000	7.719	22.8#	91	0.00
8	T,M	Trichlorofluoromethane	10.000	9.175	8.2	113	0.00
9	T,M	Acrolein	50.000	45.515	9.0	117	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl**	10.000	6.721	32.8#	85	0.00
11	T,M	Acetone	50.000	46.244	7.5	104	0.00
12	C,T,M	1,1-Dichloroethene	10.000	9.129	8.7	99	0.00
13	T,M	tert-Butyl alcohol	250.000	245.553	1.8	97	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	11.115	-11.2	112	0.00
16	T,M	Iodomethane	10.000	9.402	6.0	104	0.00
17	T,M	Allyl chloride	10.000	9.917	0.8	105	0.00
18	T,M	Methylene chloride	10.000	9.084	9.2	102	0.00
19	T,M	Carbon disulfide	10.000	8.432	15.7	91	0.00
20	T,M	Acrylonitrile	50.000	49.089	1.8	105	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	9.920	0.8	100	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.067	-0.7	109	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.318	-3.2	106	0.00
24	T,M	Vinyl acetate	10.000	11.001	-10.0	126	0.02
25	P,T,M	1,1-Dichloroethane	10.000	10.047	-0.5	107	0.00
26	T,M	2-Butanol	250.000	241.534	3.4	102	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.198	-2.0	104	0.02
28	T,M	2-Butanone	50.000	46.705	6.6	102	0.00
29	T,M	2,2-Dichloropropane	10.000	10.803	-8.0	113	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	9.969	0.3	109	0.00
31	C,T,M	Chloroform	10.000	9.679	3.2	106	0.00
32	T,M	Bromochloromethane	10.000	10.087	-0.9	105	0.00
33	T,M	Tetrahydrofuran	10.000	8.879	11.2	103	0.02
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-0.06
35	S	Dibromofluoromethane	10.000	10.515	-5.2	114	0.00
36	T,M	1,1,1-Trichloroethane	10.000	10.055	-0.5	106	0.02
37	T,M	Cyclohexane	10.000	9.753	2.5	101	0.00
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.08
39	T,M	1,1-Dichloropropene	10.000	9.740	2.6	105	0.00
40	T,M	Carbon tetrachloride	10.000	10.124	-1.2	106	0.00
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.158	-1.6	103	0.00
42	S	1,2-Dichloroethane-d4	10.000	10.340	-3.4	106	0.02
43	T,M	1,2-Dichloroethane	10.000	10.152	-1.5	105	0.00
44	T,M	Benzene	10.000	10.296	-3.0	106	0.00
45	T,M	Trichloroethene	10.000	10.383	-3.8	107	0.00
46	T,M	Methylcyclohexane	10.000	10.310	-3.1	102	0.00
47	C,T,M	1,2-Dichloropropane	10.000	10.109	-1.1	108	0.00
48	T,M	1,4-Dioxane	200.000	207.748	-3.9	100	0.00
49	T,M	Bromodichloromethane	10.000	9.672	3.3	104	0.00
50	T,M	Dibromomethane	10.000	9.723	2.8	103	0.02

(#) = Out of Range

Sa 10/14/24

** to be evaluated from IVO06I1902 (File ID: RIW093)

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M 2-Chloroethyl vinyl ether	10.000	9.361	6.4	102	0.00
52	T,M 4-Methyl-2-pentanone	50.000	49.957	0.1	101	0.00
53	T,M cis-1,3-Dichloropropene	10.000	9.955	0.4	104	0.02
54	I CHLOROBENZENE-D5	10.000	10.000	0.0	106	0.01
55	S Toluene-d8	10.000	11.006	-10.1	113	0.00
56	C,T,M Toluene	10.000	10.716	-7.2	107	0.00
57	T,M Ethyl methacrylate	10.000	9.549	4.5	101	0.00
58	T,M trans-1,3-Dichloropropene	10.000	10.259	-2.6	106	0.02
59	T,M 1,1,2-Trichloroethane	10.000	9.967	0.3	103	0.02
60	T,M 2-Hexanone	50.000	48.623	2.8	100	0.00
61	T,M 1,3-Dichloropropane	10.000	9.972	0.3	103	0.00
62	T,M Tetrachloroethene	10.000	10.301	-3.0	106	0.02
63	T,M Dibromochloromethane	10.000	9.992	0.1	105	0.00
64	T,M 2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
65	T,M 1,2-Dibromoethane	10.000	9.890	1.1	102	0.02
66	T,M 1-Chlorohexane	10.000	9.103	9.0	105	0.00
67	P,T,M Chlorobenzene	10.000	10.366	-3.7	106	0.01
68	T,M 1,1,1,2-Tetrachloroethane	10.000	10.803	-8.0	104	0.01
69	C,T,M Ethylbenzene	10.000	10.030	-0.3	106	0.01
70	T,M m-Xylene & p-Xylene	20.000	19.978	0.1	107	0.00
71	T,M o-Xylene	10.000	10.024	-0.2	103	0.00
72	T,M Styrene	10.000	10.204	-2.0	104	0.00
73	T,M Isopropylbenzene	10.000	9.878	1.2	104	0.00
74	I 1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	102	0.00
75	P,T,M Bromoform	10.000	9.207	7.9	98	0.01
76	P,T,M 1,1,2,2-Tetrachloroethane	10.000	9.946	0.5	98	0.00
77	S 4-Bromofluorobenzene	10.000	10.758	-7.6	109	0.01
78	T,M 1,2,3-Trichloropropane	10.000	9.515	4.8	97	0.01
79	T,M trans-1,4-Dichloro-2-butene	10.000	9.462	5.4	102	0.01
80	T,M n-Propylbenzene	10.000	10.010	-0.1	104	0.01
81	T,M Bromobenzene	10.000	10.604	-6.0	104	0.01
82	T,M 1,3,5-Trimethylbenzene	10.000	10.310	-3.1	104	0.00
83	T,M 2-Chlorotoluene	10.000	10.658	-6.6	110	0.00
84	T,M 4-Chlorotoluene	10.000	10.276	-2.8	99	0.00
85	T,M tert-Butylbenzene	10.000	10.940	-9.4	106	0.00
86	T,M 1,2,4-Trimethylbenzene	10.000	10.018	-0.2	103	0.01
87	T,M sec-Butylbenzene	10.000	9.990	0.1	103	0.01
88	T,M p-Isopropyltoluene	10.000	10.055	-0.5	103	0.00
89	T,M 1,3-Dichlorobenzene	10.000	10.248	-2.5	101	0.00
90	T,M 1,2,3-Trimethylbenzene	10.000	9.955	0.4	101	0.00
91	T,M 1,4-Dichlorobenzene	10.000	10.291	-2.9	103	0.00
92	T,M n-Butylbenzene	10.000	9.726	2.7	102	0.00
93	T,M 1,2-Dichlorobenzene	10.000	10.444	-4.4	101	0.00
94	T,M 1,2-Dibromo-3-chloropropane	10.000	8.920	10.8	92	0.01
95	T,M 1,2,4-Trichlorobenzene	10.000	10.121	-1.2	100	0.01
96	T,M Hexachlorobutadiene	10.000	10.742	-7.4	101	0.00
97	T,M Naphthalene	10.000	10.213	-2.1	98	0.00
98	T,M 1,2,3-Trichlorobenzene	10.000	10.485	-4.8	103	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	110	0.00
2	T,M	Dichlorodifluoromethane	0.422	0.345	18.2	106	0.00
3	P,T,M	Chloromethane	0.387	0.360	7.0	114	0.00
4	C,T,M	Vinyl chloride	0.303	0.270	10.9	123	0.00
5	T,M	Bromomethane	0.239	0.218	8.8	113	0.00
6	T,M	Chloroethane	0.203	0.167	17.7	106	0.00
7	T,M	Dichlorofluoromethane	0.725	0.548	24.4#	91	0.00
8	T,M	Trichlorofluoromethane	0.399	0.366	8.3	113	0.00
9	T,M	Acrolein	0.014	0.013	7.1	117	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.305	0.223	26.9#	85	0.00
11	T,M	Acetone	0.040	0.037	7.5	104	0.00
12	C,T,M	1,1-Dichloroethene	0.529	0.483	8.7	99	0.00
13	T,M	tert-Butyl alcohol	0.012	0.012	0.0	97	0.00
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.022	0.024	-9.1	112	0.00
16	T,M	Iodomethane	0.496	0.466	6.0	104	0.00
17	T,M	Allyl chloride	0.169	0.168	0.6	105	0.00
18	T,M	Methylene chloride	0.456	0.376	17.5	102	0.00
19	T,M	Carbon disulfide	0.550	0.526	4.4	91	0.00
20	T,M	Acrylonitrile	0.050	0.049	2.0	105	0.00
21	T,M	tert-Butyl methyl ether (MT	0.507	0.503	0.8	100	0.00
22	T,M	trans-1,2-Dichloroethene	0.316	0.318	-0.6	109	0.00
23	T,M	Isopropyl ether (DIPE)	1.045	1.078	-3.2	106	0.00
24	T,M	Vinyl acetate	0.377	0.415	-10.1	126	0.02
25	P,T,M	1,1-Dichloroethane	0.528	0.531	-0.6	107	0.00
26	T,M	2-Butanol	0.011	0.014	-27.3#	102	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.758	0.773	-2.0	104	0.02
28	T,M	2-Butanone	0.069	0.064	7.2	102	0.00
29	T,M	2,2-Dichloropropane	0.330	0.356	-7.9	113	0.00
30	T,M	cis-1,2-Dichloroethene	0.326	0.325	0.3	109	0.00
31	C,T,M	Chloroform	0.523	0.506	3.3	106	0.00
32	T,M	Bromochloromethane	0.141	0.143	-1.4	105	0.00
33	T,M	Tetrahydrofuran	0.037	0.033	10.8	103	0.02
34	T,M	tert-Amyl alcohol	0.000	0.000	0.0	0#	-0.06
35	S	Dibromofluoromethane	0.231	0.298	-29.0#	114	0.00
36	T,M	1,1,1-Trichloroethane	0.421	0.423	-0.5	106	0.02
37	T,M	Cyclohexane	0.539	0.526	2.4	101	0.00
38	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	0.08
39	T,M	1,1-Dichloropropene	0.142	0.138	2.8	105	0.00
40	T,M	Carbon tetrachloride	0.349	0.353	-1.1	106	0.00
41	T,M	tert-Amyl methyl ether (TAM	0.620	0.630	-1.6	103	0.00
42	S	1,2-Dichloroethane-d4	0.221	0.229	-3.6	106	0.02
43	T,M	1,2-Dichloroethane	0.263	0.267	-1.5	105	0.00
44	T,M	Benzene	1.146	1.180	-3.0	106	0.00
45	T,M	Trichloroethene	0.298	0.310	-4.0	107	0.00
46	T,M	Methylcyclohexane	0.568	0.585	-3.0	102	0.00
47	C,T,M	1,2-Dichloropropane	0.284	0.287	-1.1	108	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	100	0.00
49	T,M	Bromodichloromethane	0.368	0.356	3.3	104	0.00
50	T,M	Dibromomethane	0.134	0.131	2.2	103	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	0.089	0.084	5.6	102	0.00
52	T,M	4-Methyl-2-pentanone	0.189	0.189	0.0	101	0.00
53	T,M	cis-1,3-Dichloropropene	0.450	0.448	0.4	104	0.02
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	106	0.01
55	S	Toluene-d8	1.294	1.425	-10.1	113	0.00
56	C,T,M	Toluene	1.509	1.617	-7.2	107	0.00
57	T,M	Ethyl methacrylate	0.332	0.317	4.5	101	0.00
58	T,M	trans-1,3-Dichloropropene	0.424	0.435	-2.6	106	0.02
59	T,M	1,1,2-Trichloroethane	0.217	0.216	0.5	103	0.02
60	T,M	2-Hexanone	0.158	0.154	2.5	100	0.00
61	T,M	1,3-Dichloropropane	0.400	0.399	0.3	103	0.00
62	T,M	Tetrachloroethene	0.310	0.320	-3.2	106	0.02
63	T,M	Dibromochloromethane	0.267	0.267	0.0	105	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.206	0.204	1.0	102	0.02
66	T,M	1-Chlorohexane	0.643	0.585	9.0	105	0.00
67	P,T,M	Chlorobenzene	0.924	0.957	-3.6	106	0.01
68	T,M	1,1,1,2-Tetrachloroethane	0.292	0.315	-7.9	104	0.01
69	C,T,M	Ethylbenzene	1.859	1.865	-0.3	106	0.01
70	T,M	m-Xylene & p-Xylene	1.421	1.419	0.1	107	0.00
71	T,M	o-Xylene	1.399	1.402	-0.2	103	0.00
72	T,M	Styrene	1.045	1.067	-2.1	104	0.00
73	T,M	Isopropylbenzene	1.815	1.793	1.2	104	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	102	0.00
75	P,T,M	Bromoform	0.290	0.284	2.1	98	0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	0.578	0.575	0.5	98	0.00
77	S	4-Bromofluorobenzene	1.116	1.201	-7.6	109	0.01
78	T,M	1,2,3-Trichloropropane	0.159	0.152	4.4	97	0.01
79	T,M	trans-1,4-Dichloro-2-butene	0.176	0.166	5.7	102	0.01
80	T,M	n-Propylbenzene	5.517	5.522	-0.1	104	0.01
81	T,M	Bromobenzene	0.790	0.838	-6.1	104	0.01
82	T,M	1,3,5-Trimethylbenzene	3.365	3.470	-3.1	104	0.00
83	T,M	2-Chlorotoluene	3.233	3.446	-6.6	110	0.00
84	T,M	4-Chlorotoluene	2.963	3.045	-2.8	99	0.00
85	T,M	tert-Butylbenzene	0.711	0.778	-9.4	106	0.00
86	T,M	1,2,4-Trimethylbenzene	3.489	3.496	-0.2	103	0.01
87	T,M	sec-Butylbenzene	4.751	4.746	0.1	103	0.01
88	T,M	p-Isopropyltoluene	4.038	4.060	-0.5	103	0.00
89	T,M	1,3-Dichlorobenzene	1.767	1.810	-2.4	101	0.00
90	T,M	1,2,3-Trimethylbenzene	3.158	3.143	0.5	101	0.00
91	T,M	1,4-Dichlorobenzene	1.750	1.801	-2.9	103	0.00
92	T,M	n-Butylbenzene	4.351	4.231	2.8	102	0.00
93	T,M	1,2-Dichlorobenzene	1.462	1.527	-4.4	101	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.102	0.091	10.8	92	0.01
95	T,M	1,2,4-Trichlorobenzene	1.149	1.163	-1.2	100	0.01
96	T,M	Hexachlorobutadiene	0.621	0.667	-7.4	101	0.00
97	T,M	Naphthalene	1.548	1.581	-2.1	98	0.00
98	T,M	1,2,3-Trichlorobenzene	0.867	0.909	-4.8	103	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.97	114	3818306	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.44	117	3098667	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1315965	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	1137646	10.52	ug/l	0.00
Spiked Amount 10.000			Recovery = 105.20%			
42) 1,2-Dichloroethane-d4	9.11	65	872922	10.34	ug/l	0.02
Spiked Amount 10.000			Recovery = 103.40%			
55) Toluene-d8	12.82	98	4414110	11.01	ug/l	0.00
Spiked Amount 10.000			Recovery = 110.10%			
77) 4-Bromofluorobenzene	17.47	95	1580640	10.76	ug/l	0.01
Spiked Amount 10.000			Recovery = 107.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.68	85	1318386	8.17	ug/l	99
3) Chloromethane	1.89	50	1372699	9.28	ug/l	98
4) Vinyl chloride	2.01	62	1032595	8.92	ug/l	99
5) Bromomethane	2.45	94	833581	8.75	ug/l	99
6) Chloroethane	2.53	64	638699	8.52	ug/l	95
7) Dichlorofluoromethane **	2.56	67	2094253	7.72	ug/l	99
8) Trichlorofluoromethane	2.82	101	1397459	9.18	ug/l	98
9) Acrolein	3.32	56	244115	45.51	ug/l	95
10) 1,1,2-Trichloro-1,2,2-trif **	3.36	151	853126	6.72	ug/l	99
11) Acetone	3.43	43	713175	46.24	ug/l	96
12) 1,1-Dichloroethene	3.57	61	1843846	9.13	ug/l	99
13) tert-Butyl alcohol	3.72	59	1171446	245.55	ug/l	99
15) Methyl acetate	4.10	74	91600	11.11	ug/l	82
16) Iodomethane	4.01	142	1779527	9.40	ug/l	99
17) Allyl chloride	4.12	76	641278	9.92	ug/l	100
18) Methylene chloride	4.31	49	1434804	9.08	ug/l	99
19) Carbon disulfide	4.26	76	2007412	8.43	ug/l	100
20) Acrylonitrile	4.54	53	940474	49.09	ug/l	99
21) tert-Butyl methyl ether (M	4.58	73	1920764	9.92	ug/l	98
22) trans-1,2-Dichloroethene	4.81	96	1214526	10.07	ug/l	99
23) Isopropyl ether (DIPE)	5.48	45	4116889	10.32	ug/l	99
24) Vinyl acetate	5.73	43	1585507	11.00	ug/l	97
25) 1,1-Dichloroethane	5.65	63	2027215	10.05	ug/l	99
26) 2-Butanol	6.21	45	1307812	241.53	ug/l	99
27) tert-Butyl ethyl ether (ET	6.40	59	2950819	10.20	ug/l	100
28) 2-Butanone	6.67	43	1223832	46.70	ug/l	99
29) 2,2-Dichloropropane	6.93	77	1360181	10.80	ug/l	99
30) cis-1,2-Dichloroethene	7.05	96	1242418	9.97	ug/l	100
31) Chloroform	7.45	83	1932134	9.68	ug/l	99
32) Bromochloromethane	7.83	130	544578	10.09	ug/l	98
33) Tetrahydrofuran	7.95	42	124557	8.88	ug/l	98
36) 1,1,1-Trichloroethane	8.37	97	1614830	10.06	ug/l	99
37) Cyclohexane	8.35	84	2008066	9.75	ug/l	99
39) 1,1-Dichloropropene	8.73	110	528272	9.74	ug/l	100
40) Carbon tetrachloride	8.90	119	1347587	10.12	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	2404011	10.16	ug/l	99

(#) = qualifier out of range (m) = manual integration

Su 10/14/24

** REPORT ID #244027 evaluated from IVO06I1902 (File ID: RIW093)

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	1020146	10.15	ug/l	99
44)	Benzene	9.27	78	4505632	10.30	ug/l	99
45)	Trichloroethene	10.55	130	1183254	10.38	ug/l	99
46)	Methylcyclohexane	10.64	83	2234441	10.31	ug/l	99
47)	1,2-Dichloropropane	10.91	63	1094292	10.11	ug/l	98
48)	1,4-Dioxane	11.45	88	105285	207.75	ug/l	95
49)	Bromodichloromethane	11.35	83	1358411	9.67	ug/l	100
50)	Dibromomethane	11.43	93	498553	9.72	ug/l	98
51)	2-Chloroethyl vinyl ether	12.04	63	318858	9.36	ug/l	99
52)	4-Methyl-2-pentanone	12.08	43	3608051	49.96	ug/l	99
53)	cis-1,3-Dichloropropene	12.42	75	1711128	9.95	ug/l	99
56)	Toluene	12.94	91	5009219	10.72	ug/l	100
57)	Ethyl methacrylate	13.38	69	981122	9.55	ug/l	98
58)	trans-1,3-Dichloropropene	13.34	75	1347799	10.26	ug/l	99
59)	1,1,2-Trichloroethane	13.59	97	669166	9.97	ug/l	99
60)	2-Hexanone	13.65	43	2383054	48.62	ug/l	99
61)	1,3-Dichloropropane	14.03	76	1236711	9.97	ug/l	99
62)	Tetrachloroethene	14.09	164	990939	10.30	ug/l	99
63)	Dibromochloromethane	14.43	129	826369	9.99	ug/l	99
65)	1,2-Dibromoethane	14.79	107	631008	9.89	ug/l	99
66)	1-Chlorohexane	15.12	91	1812595	9.10	ug/l	99
67)	Chlorobenzene	15.51	112	2966933	10.37	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.60	131	977595	10.80	ug/l	99
69)	Ethylbenzene	15.61	91	5777806	10.03	ug/l	100
70)	m-Xylene & p-Xylene	15.74	91	8794452	19.98	ug/l	100
71)	o-Xylene	16.47	91	4345475	10.02	ug/l	99
72)	Styrene	16.53	104	3305187	10.20	ug/l	99
73)	Isopropylbenzene	17.08	105	5555064	9.88	ug/l	99
75)	Bromoform	17.08	173	373678	9.21	ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.36	83	756918	9.95	ug/l	98
78)	1,2,3-Trichloropropane	17.58	110	199584	9.52	ug/l	96
79)	trans-1,4-Dichloro-2-buten	17.69	53	219018	9.46	ug/l	95
80)	n-Propylbenzene	17.69	91	7267387	10.01	ug/l	100
81)	Bromobenzene	17.73	156	1102805	10.60	ug/l	98
82)	1,3,5-Trimethylbenzene	17.89	105	4565969	10.31	ug/l	100
83)	2-Chlorotoluene	17.91	91	4534547	10.66	ug/l	93
84)	4-Chlorotoluene	17.97	91	4006499	10.28	ug/l	95
85)	tert-Butylbenzene	18.35	134	1024187	10.94	ug/l	99
86)	1,2,4-Trimethylbenzene	18.40	105	4600062	10.02	ug/l	99
87)	sec-Butylbenzene	18.61	105	6245391	9.99	ug/l	98
88)	p-Isopropyltoluene	18.76	119	5342599	10.06	ug/l	99
89)	1,3-Dichlorobenzene	18.87	146	2382410	10.25	ug/l	96
90)	1,2,3-Trimethylbenzene	18.94	105	4136599	9.96	ug/l	100
91)	1,4-Dichlorobenzene	18.98	146	2369782	10.29	ug/l	100
92)	n-Butylbenzene	19.20	91	5568496	9.73	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	2009595	10.44	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.15	157	120000	8.92	ug/l	93
95)	1,2,4-Trichlorobenzene	20.98	180	1530251	10.12	ug/l	99
96)	Hexachlorobutadiene	21.10	225	877702	10.74	ug/l	98
97)	Naphthalene	21.24	128	2079964	10.21	ug/l	100

(#) = qualifier out of range (m) = manual integration

SU 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

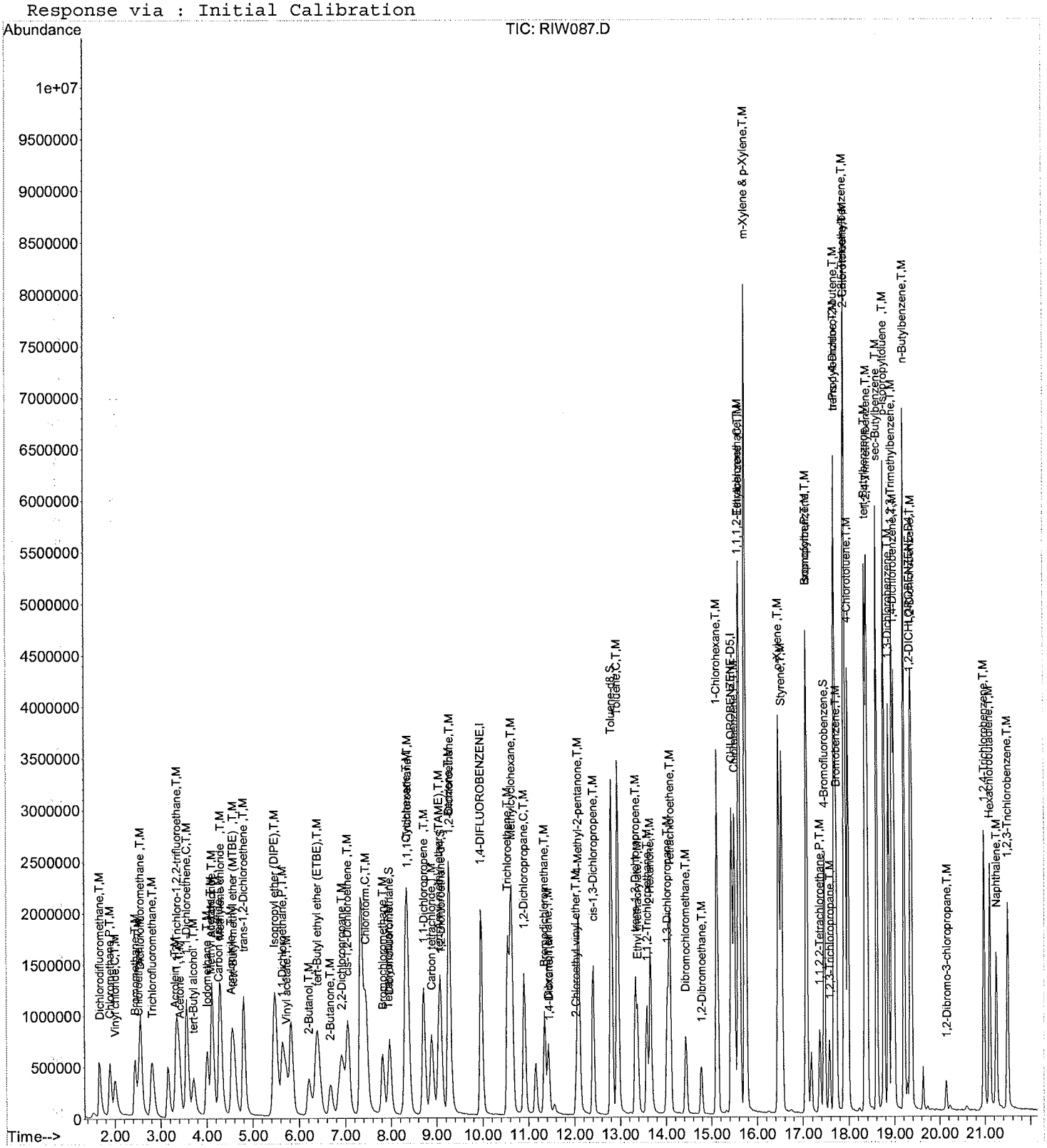
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1196302	10.48	ug/l	99

(#) = qualifier out of range (m) = manual integration
RIW087.D VO06I19B.M Mon Oct 14 13:39:27 2024 SU 10/14/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SA 10/14/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :06
IC_Beginning DateTime :09/19/24 11:07
Spike Amount :10 PPB
CC/CV File :RIW093
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
IC_Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B
Date_Time :09/19/24 19:59

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	2935645	1	1	9.985	9.966	0				
	2	Dichlorodifluoromethane												
	3	Chloromethane												
	4	Vinyl chloride												
	5	Bromomethane												
	6	Chloroethane												
	7	Dichlorofluoromethane	11.370	13.7	2336339	0.796	0.725	2.564	2.557	19.79	0.0047	0.7229	-0.0239	0.9954
	8	Trichlorofluoromethane												
5	9	Acrolein												
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	11.027	10.3	1044991	0.356	0.305	3.383	3.360	21.85	-0.0018	0.3517	-0.0248	0.9955
5	11	Acetone												
	12	1,1-Dichloroethene												
25	13	tert-Butyl alcohol												
	14	Acetonitrile												
	15	Methyl acetate												
	16	Iodomethane												
	17	Allyl chloride												
	18	Methylene chloride												
	19	Carbon disulfide												
5	20	Acrylonitrile												
	21	tert-Butyl methyl ether (MTBE)												
	22	trans-1,2-Dichloroethene												
	23	Isopropyl ether (DIPE)												
	24	Vinyl acetate												
	25	1,1-Dichloroethane												
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)												
5	28	2-Butanone												
	29	2,2-Dichloropropane												
	30	cis-1,2-Dichloroethene												
	31	Chloroform												
	32	Bromochloromethane												
	33	Tetrahydrofuran												
5	34	tert-Amyl alcohol												
	35	Dibromofluoromethane	10.508	5.1	874088	0.298	0.231	7.973	7.968	27.01	-0.0065	0.2895		0.9975
	36	1,1,1-Trichloroethane												
	37	Cyclohexane												
	38	2,2,4-Trimethylpentane												
	39	1,1-Dichloropropene												
	40	Carbon tetrachloride												
	41	tert-Amyl methyl ether (TAME)												
	42	1,2-Dichloroethane-d4	10.349	3.5	671780	0.229	0.221	9.105	9.084	11.06				
	43	1,2-Dichloroethane												
	44	Benzene												
	45	Trichloroethene												
	46	Methylcyclohexane												
	47	1,2-Dichloropropane												
20	48	1,4-Dioxane												
	49	Bromodichloromethane												
	50	Dibromomethane												
	51	2-Chloroethyl vinyl ether												
5	52	4-Methyl-2-pentanone												
	53	cis-1,3-Dichloropropene												
	54	CHLOROBENZENE-D5	10.000	0	2248957	1	1	15.442	15.432	0				
	55	Toluene-d8	11.363	13.6	3307626	1.471	1.294	12.815	12.802	6.71				
	56	Toluene												
	57	Ethyl methacrylate												
	58	trans-1,3-Dichloropropene												
	59	1,1,2-Trichloroethane												
5	60	2-Hexanone												
	61	1,3-Dichloropropane												
	62	Tetrachloroethene												
	63	Dibromochloromethane												
	64	2-Ethyl-1-butanol												
	65	1,2-Dibromoethane												
	66	1-Chlorohexane												
	67	Chlorobenzene												
	68	1,1,1,2-Tetrachloroethane												
	69	Ethylbenzene												
2	70	m-Xylene & p-Xylene												
	71	o-Xylene												
	72	Styrene												
	73	Isopropylbenzene												
	74	1,2-DICHLOROBENZENE-D4	10.000	0	1030195	1	1	19.347	19.348	0				
	75	Bromoform												
	76	1,1,2,2-Tetrachloroethane												
	77	4-Bromofluorobenzene	9.718	-2.8	1117852	1.085	1.116	17.453	17.454	7.32				
	78	1,2,3-Trichloropropane												
	79	trans-1,4-Dichloro-2-butene												
	80	n-Propylbenzene												
	81	Bromobenzene												
	82	1,3,5-Trimethylbenzene												
	83	2-Chlorotoluene												
	84	4-Chlorotoluene												
	85	tert-Butylbenzene												
	86	1,2,4-Trimethylbenzene												
	87	sec-Butylbenzene												
	88	p-Isopropyltoluene												
	89	1,3-Dichlorobenzene												
	90	1,2,3-Trimethylbenzene												
	91	1,4-Dichlorobenzene												
	92	n-Butylbenzene												
	93	1,2-Dichlorobenzene												
	94	1,2-Dibromo-3-chloropropane												
	95	1,2,4-Trichlorobenzene												
	96	Hexachlorobutadiene												
	97	Naphthalene												
	98	1,2,3-Trichlorobenzene												

Spike Amount = Nominal Amount * M

SM 10/14/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	84	0.02
2	T,M	Dichlorodifluoromethane	10.000	0.000	100.0#	0	-1.68#
3	P,T,M	Chloromethane	10.000	0.000	100.0#	0	-1.89#
4	C,T,M	Vinyl chloride	10.000	0.000	100.0#	0	-2.01#
5	T,M	Bromomethane	10.000	0.094	99.1#	0	-2.45#
6	T,M	Chloroethane	10.000	-0.043	100.4#	0	-2.52#
7	T,M	Dichlorofluoromethane	10.000	11.371	-13.7	101	0.00
8	T,M	Trichlorofluoromethane	10.000	0.000	100.0#	0	-2.82#
9	T,M	Acrolein	50.000	0.000	100.0#	0	-3.32#
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.028	-10.3	104	0.02
11	T,M	Acetone	50.000	0.000	100.0#	0	-3.43#
12	C,T,M	1,1-Dichloroethene	10.000	0.000	100.0#	0	-3.57#
13	T,M	tert-Butyl alcohol	250.000	0.000	100.0#	0	-3.72#
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	0.000	100.0#	0	-4.10#
16	T,M	Iodomethane	10.000	0.000	100.0#	0	-4.01#
17	T,M	Allyl chloride	10.000	0.000	100.0#	0	-4.12#
18	T,M	Methylene chloride	10.000	-0.532	105.3#	0	-4.31#
19	T,M	Carbon disulfide	10.000	0.147	98.5#	0	-4.26#
20	T,M	Acrylonitrile	50.000	0.000	100.0#	0	-4.54#
21	T,M	tert-Butyl methyl ether (MT	10.000	0.000	100.0#	0	-4.58#
22	T,M	trans-1,2-Dichloroethene	10.000	0.000	100.0#	0	-4.81#
23	T,M	Isopropyl ether (DIPE)	10.000	0.000	100.0#	0	-5.48#
24	T,M	Vinyl acetate	10.000	0.000	100.0#	0	-5.71#
25	P,T,M	1,1-Dichloroethane	10.000	0.000	100.0#	0	-5.65#
26	T,M	2-Butanol	250.000	7.374	97.1#	0	-6.21#
27	T,M	tert-Butyl ethyl ether (ETB	10.000	0.000	100.0#	0	-6.38#
28	T,M	2-Butanone	50.000	0.000	100.0#	0	-6.67#
29	T,M	2,2-Dichloropropane	10.000	0.000	100.0#	0	-6.93#
30	T,M	cis-1,2-Dichloroethene	10.000	0.000	100.0#	0	-7.05#
31	C,T,M	Chloroform	10.000	0.000	100.0#	0	-7.45#
32	T,M	Bromochloromethane	10.000	0.000	100.0#	0	-7.83#
33	T,M	Tetrahydrofuran	10.000	0.000	100.0#	0	-7.93#
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-8.12#
35	S	Dibromofluoromethane	10.000	10.509	-5.1	88	0.00
36	T,M	1,1,1-Trichloroethane	10.000	0.000	100.0#	0	-8.35#
37	T,M	Cyclohexane	10.000	0.000	100.0#	0	-8.35#
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-8.69#
39	T,M	1,1-Dichloropropene	10.000	0.000	100.0#	0	-8.73#
40	T,M	Carbon tetrachloride	10.000	0.000	100.0#	0	-8.90#
41	T,M	tert-Amyl methyl ether (TAM	10.000	0.000	100.0#	0	-9.06#
42	S	1,2-Dichloroethane-d4	10.000	10.350	-3.5	82	0.02
43	T,M	1,2-Dichloroethane	10.000	0.000	100.0#	0	-9.29#
44	T,M	Benzene	10.000	0.000	100.0#	0	-9.27#
45	T,M	Trichloroethene	10.000	0.000	100.0#	0	-10.55#
46	T,M	Methylcyclohexane	10.000	0.000	100.0#	0	-10.64#
47	C,T,M	1,2-Dichloropropane	10.000	0.000	100.0#	0	-10.91#
48	T,M	1,4-Dioxane	200.000	0.000	100.0#	0	-11.45#
49	T,M	Bromodichloromethane	10.000	0.000	100.0#	0	-11.35#
50	T,M	Dibromomethane	10.000	0.000	100.0#	0	-11.41#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	10.000	0.000	100.0#	0	-12.04#
52	T,M	4-Methyl-2-pentanone	50.000	0.000	100.0#	0	-12.08#
53	T,M	cis-1,3-Dichloropropene	10.000	0.000	100.0#	0	-12.40#
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	77	0.01
55	S	Toluene-d8	10.000	11.364	-13.6	85	0.00
56	C,T,M	Toluene	10.000	0.000	100.0#	0	-12.94#
57	T,M	Ethyl methacrylate	10.000	0.000	100.0#	0	-13.38#
58	T,M	trans-1,3-Dichloropropene	10.000	0.000	100.0#	0	-13.32#
59	T,M	1,1,2-Trichloroethane	10.000	0.000	100.0#	0	-13.57#
60	T,M	2-Hexanone	50.000	0.000	100.0#	0	-13.65#
61	T,M	1,3-Dichloropropane	10.000	0.000	100.0#	0	-14.03#
62	T,M	Tetrachloroethene	10.000	0.000	100.0#	0	-14.07#
63	T,M	Dibromochloromethane	10.000	0.000	100.0#	0	-14.43#
64	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
65	T,M	1,2-Dibromoethane	10.000	0.000	100.0#	0	-14.76#
66	T,M	1-Chlorohexane	10.000	0.000	100.0#	0	-15.12#
67	P,T,M	Chlorobenzene	10.000	0.000	100.0#	0	-15.50#
68	T,M	1,1,1,2-Tetrachloroethane	10.000	0.000	100.0#	0	-15.59#
69	C,T,M	Ethylbenzene	10.000	0.000	100.0#	0	-15.60#
70	T,M	m-Xylene & p-Xylene	20.000	0.000	100.0#	0	-15.74#
71	T,M	o-Xylene	10.000	0.000	100.0#	0	-16.47#
72	T,M	Styrene	10.000	0.000	100.0#	0	-16.53#
73	T,M	Isopropylbenzene	10.000	0.000	100.0#	0	-17.08#
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	80	0.00
75	P,T,M	Bromoform	10.000	0.094	99.1#	0	-17.07#
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	0.000	100.0#	0	-17.36#
77	S	4-Bromofluorobenzene	10.000	9.719	2.8	77	0.00
78	T,M	1,2,3-Trichloropropane	10.000	0.000	100.0#	0	-17.57#
79	T,M	trans-1,4-Dichloro-2-butene	10.000	0.000	100.0#	0	-17.68#
80	T,M	n-Propylbenzene	10.000	0.000	100.0#	0	-17.68#
81	T,M	Bromobenzene	10.000	0.000	100.0#	0	-17.71#
82	T,M	1,3,5-Trimethylbenzene	10.000	0.000	100.0#	0	-17.90#
83	T,M	2-Chlorotoluene	10.000	0.000	100.0#	0	-17.91#
84	T,M	4-Chlorotoluene	10.000	0.000	100.0#	0	-17.97#
85	T,M	tert-Butylbenzene	10.000	0.000	100.0#	0	-18.35#
86	T,M	1,2,4-Trimethylbenzene	10.000	0.000	100.0#	0	-18.39#
87	T,M	sec-Butylbenzene	10.000	0.000	100.0#	0	-18.60#
88	T,M	p-Isopropyltoluene	10.000	0.000	100.0#	0	-18.76#
89	T,M	1,3-Dichlorobenzene	10.000	0.000	100.0#	0	-18.87#
90	T,M	1,2,3-Trimethylbenzene	10.000	0.000	100.0#	0	-18.95#
91	T,M	1,4-Dichlorobenzene	10.000	0.000	100.0#	0	-18.99#
92	T,M	n-Butylbenzene	10.000	0.000	100.0#	0	-19.21#
93	T,M	1,2-Dichlorobenzene	10.000	0.000	100.0#	0	-19.37#
94	T,M	1,2-Dibromo-3-chloropropane	10.000	0.000	100.0#	0	-20.14#
95	T,M	1,2,4-Trichlorobenzene	10.000	0.000	100.0#	0	-20.97#
96	T,M	Hexachlorobutadiene	10.000	0.000	100.0#	0	-21.10#
97	T,M	Naphthalene	10.000	0.000	100.0#	0	-21.24#
98	T,M	1,2,3-Trichlorobenzene	10.000	0.000	100.0#	0	-21.49#

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	84	0.02
2	T,M	Dichlorodifluoromethane	0.422	0.000	100.0#	0#	-1.68#
3	P,T,M	Chloromethane	0.387	0.000#	100.0#	0#	-1.89#
4	C,T,M	Vinyl chloride	0.303	0.000	100.0#	0#	-2.01#
5	T,M	Bromomethane	0.239	0.000	100.0#	0#	-2.45#
6	T,M	Chloroethane	0.203	0.000	100.0#	0#	-2.52#
7	T,M	Dichlorofluoromethane	0.725	0.796	-9.8	101	0.00
8	T,M	Trichlorofluoromethane	0.399	0.000	100.0#	0#	-2.82#
9	T,M	Acrolein	0.014	0.000	100.0#	0#	-3.32#
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.305	0.356	-16.7	104	0.02
11	T,M	Acetone	0.040	0.000	100.0#	0#	-3.43#
12	C,T,M	1,1-Dichloroethene	0.529	0.000	100.0#	0#	-3.57#
13	T,M	tert-Butyl alcohol	0.012	0.000	100.0#	0#	-3.72#
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.022	0.000	100.0#	0#	-4.10#
16	T,M	Iodomethane	0.496	0.000	100.0#	0#	-4.01#
17	T,M	Allyl chloride	0.169	0.000	100.0#	0#	-4.12#
18	T,M	Methylene chloride	0.456	0.000	100.0#	0#	-4.31#
19	T,M	Carbon disulfide	0.550	0.000	100.0#	0#	-4.26#
20	T,M	Acrylonitrile	0.050	0.000	100.0#	0#	-4.54#
21	T,M	tert-Butyl methyl ether (MT	0.507	0.000	100.0#	0#	-4.58#
22	T,M	trans-1,2-Dichloroethene	0.316	0.000	100.0#	0#	-4.81#
23	T,M	Isopropyl ether (DIPE)	1.045	0.000	100.0#	0#	-5.48#
24	T,M	Vinyl acetate	0.377	0.000	100.0#	0#	-5.71#
25	P,T,M	1,1-Dichloroethane	0.528	0.000#	100.0#	0#	-5.65#
26	T,M	2-Butanol	0.011	0.000	100.0#	0#	-6.21#
27	T,M	tert-Butyl ethyl ether (ETB	0.758	0.000	100.0#	0#	-6.38#
28	T,M	2-Butanone	0.069	0.000	100.0#	0#	-6.67#
29	T,M	2,2-Dichloropropane	0.330	0.000	100.0#	0#	-6.93#
30	T,M	cis-1,2-Dichloroethene	0.326	0.000	100.0#	0#	-7.05#
31	C,T,M	Chloroform	0.523	0.000	100.0#	0#	-7.45#
32	T,M	Bromochloromethane	0.141	0.000	100.0#	0#	-7.83#
33	T,M	Tetrahydrofuran	0.037	0.000	100.0#	0#	-7.93#
34	T,M	tert-Amyl alcohol	0.000	0.000	0.0	0#	-8.12#
35	S	Dibromofluoromethane	0.231	0.298	-29.0#	88	0.00
36	T,M	1,1,1-Trichloroethane	0.421	0.000	100.0#	0#	-8.35#
37	T,M	Cyclohexane	0.539	0.000	100.0#	0#	-8.35#
38	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	-8.69#
39	T,M	1,1-Dichloropropene	0.142	0.000	100.0#	0#	-8.73#
40	T,M	Carbon tetrachloride	0.349	0.000	100.0#	0#	-8.90#
41	T,M	tert-Amyl methyl ether (TAM	0.620	0.000	100.0#	0#	-9.06#
42	S	1,2-Dichloroethane-d4	0.221	0.229	-3.6	82	0.02
43	T,M	1,2-Dichloroethane	0.263	0.000	100.0#	0#	-9.29#
44	T,M	Benzene	1.146	0.000	100.0#	0#	-9.27#
45	T,M	Trichloroethene	0.298	0.000	100.0#	0#	-10.55#
46	T,M	Methylcyclohexane	0.568	0.000	100.0#	0#	-10.64#
47	C,T,M	1,2-Dichloropropane	0.284	0.000	100.0#	0#	-10.91#
48	T,M	1,4-Dioxane	0.001	0.000	100.0#	0#	-11.45#
49	T,M	Bromodichloromethane	0.368	0.000	100.0#	0#	-11.35#
50	T,M	Dibromomethane	0.134	0.000	100.0#	0#	-11.41#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	0.089	0.000	100.0#	0#	-12.04#
52	T,M	4-Methyl-2-pentanone	0.189	0.000	100.0#	0#	-12.08#
53	T,M	cis-1,3-Dichloropropene	0.450	0.000	100.0#	0#	-12.40#
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	77	0.01
55	S	Toluene-d8	1.294	1.471	-13.7	85	0.00
56	C,T,M	Toluene	1.509	0.000	100.0#	0#	-12.94#
57	T,M	Ethyl methacrylate	0.332	0.000	100.0#	0#	-13.38#
58	T,M	trans-1,3-Dichloropropene	0.424	0.000	100.0#	0#	-13.32#
59	T,M	1,1,2-Trichloroethane	0.217	0.000	100.0#	0#	-13.57#
60	T,M	2-Hexanone	0.158	0.000	100.0#	0#	-13.65#
61	T,M	1,3-Dichloropropane	0.400	0.000	100.0#	0#	-14.03#
62	T,M	Tetrachloroethene	0.310	0.000	100.0#	0#	-14.07#
63	T,M	Dibromochloromethane	0.267	0.000	100.0#	0#	-14.43#
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.206	0.000	100.0#	0#	-14.76#
66	T,M	1-Chlorohexane	0.643	0.000	100.0#	0#	-15.12#
67	P,T,M	Chlorobenzene	0.924	0.000#	100.0#	0#	-15.50#
68	T,M	1,1,1,2-Tetrachloroethane	0.292	0.000	100.0#	0#	-15.59#
69	C,T,M	Ethylbenzene	1.859	0.000	100.0#	0#	-15.60#
70	T,M	m-Xylene & p-Xylene	1.421	0.000	100.0#	0#	-15.74#
71	T,M	o-Xylene	1.399	0.000	100.0#	0#	-16.47#
72	T,M	Styrene	1.045	0.000	100.0#	0#	-16.53#
73	T,M	Isopropylbenzene	1.815	0.000	100.0#	0#	-17.08#
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	80	0.00
75	P,T,M	Bromoform	0.290	0.000#	100.0#	0#	-17.07#
76	P,T,M	1,1,2,2-Tetrachloroethane	0.578	0.000#	100.0#	0#	-17.36#
77	S	4-Bromofluorobenzene	1.116	1.085	2.8	77	0.00
78	T,M	1,2,3-Trichloropropane	0.159	0.000	100.0#	0#	-17.57#
79	T,M	trans-1,4-Dichloro-2-butene	0.176	0.000	100.0#	0#	-17.68#
80	T,M	n-Propylbenzene	5.517	0.000	100.0#	0#	-17.68#
81	T,M	Bromobenzene	0.790	0.000	100.0#	0#	-17.71#
82	T,M	1,3,5-Trimethylbenzene	3.365	0.000	100.0#	0#	-17.90#
83	T,M	2-Chlorotoluene	3.233	0.000	100.0#	0#	-17.91#
84	T,M	4-Chlorotoluene	2.963	0.000	100.0#	0#	-17.97#
85	T,M	tert-Butylbenzene	0.711	0.000	100.0#	0#	-18.35#
86	T,M	1,2,4-Trimethylbenzene	3.489	0.000	100.0#	0#	-18.39#
87	T,M	sec-Butylbenzene	4.751	0.000	100.0#	0#	-18.60#
88	T,M	p-Isopropyltoluene	4.038	0.000	100.0#	0#	-18.76#
89	T,M	1,3-Dichlorobenzene	1.767	0.000	100.0#	0#	-18.87#
90	T,M	1,2,3-Trimethylbenzene	3.158	0.000	100.0#	0#	-18.95#
91	T,M	1,4-Dichlorobenzene	1.750	0.000	100.0#	0#	-18.99#
92	T,M	n-Butylbenzene	4.351	0.000	100.0#	0#	-19.21#
93	T,M	1,2-Dichlorobenzene	1.462	0.000	100.0#	0#	-19.37#
94	T,M	1,2-Dibromo-3-chloropropane	0.102	0.000	100.0#	0#	-20.14#
95	T,M	1,2,4-Trichlorobenzene	1.149	0.000	100.0#	0#	-20.97#
96	T,M	Hexachlorobutadiene	0.621	0.000	100.0#	0#	-21.10#
97	T,M	Naphthalene	1.548	0.000	100.0#	0#	-21.24#
98	T,M	1,2,3-Trichlorobenzene	0.867	0.000	100.0#	0#	-21.49#

(#) = Out of Range SPCC's out = 5 CCC's out = 6

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 13:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.99	114	2935645	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.44	117	2248957	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1030195	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	874088	10.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.10%		
42) 1,2-Dichloroethane-d4	9.11	65	671780	10.35	ug/l	0.02
Spiked Amount 10.000			Recovery =	103.50%		
55) Toluene-d8	12.81	98	3307626	11.36	ug/l	0.00
Spiked Amount 10.000			Recovery =	113.60%		
77) 4-Bromofluorobenzene	17.45	95	1117852	9.72	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.20%		
Target Compounds						Qvalue
7) Dichlorofluoromethane	2.56	67	2336339	11.37	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	1044991	11.03	ug/l	99

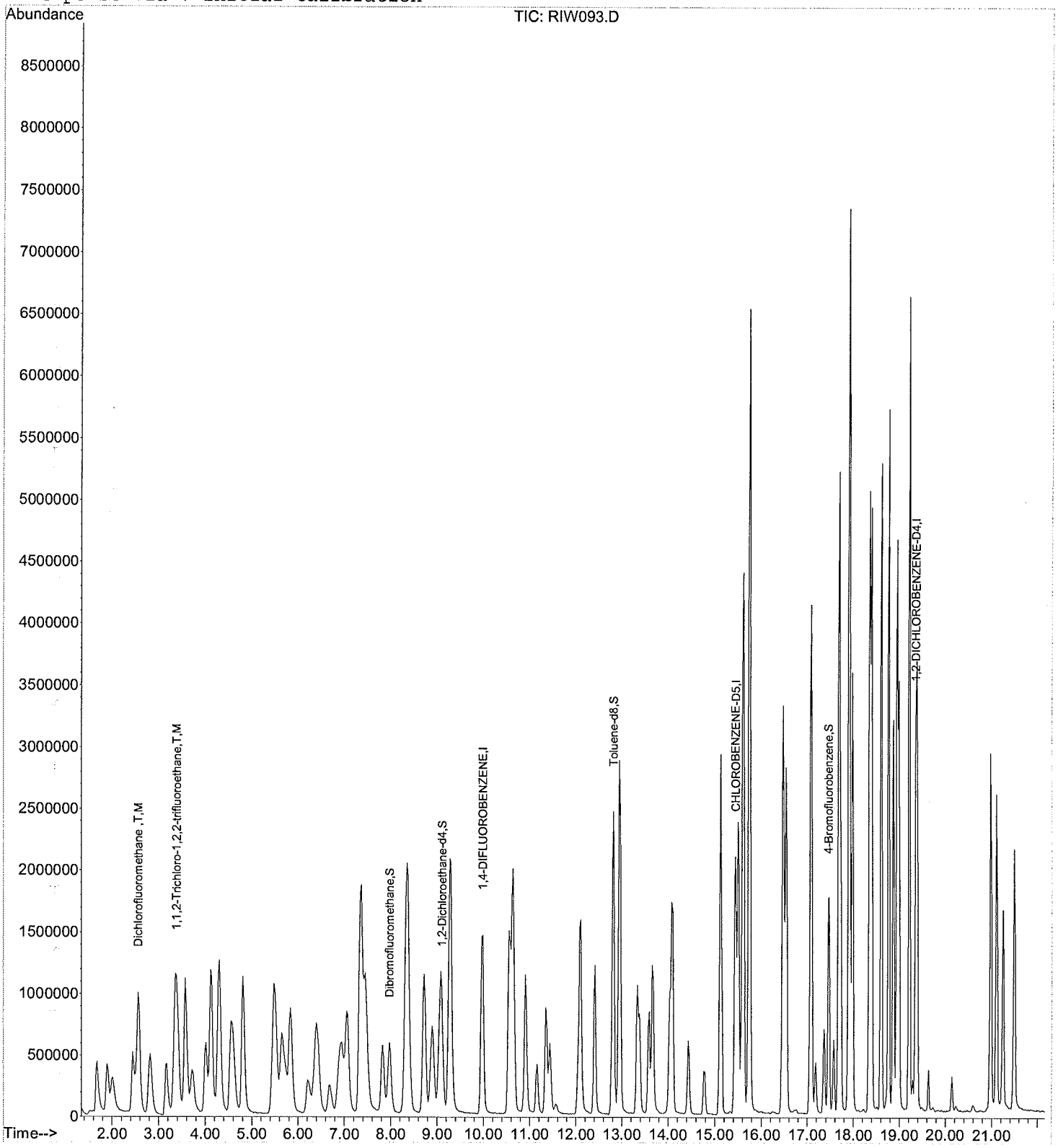
SM 10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 13:43 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



RIW093.D VO06I19B.M Mon Oct 14 13:43:47 2024 SA 10/14/24 Page 2

DAILY CALIBRATION(S)

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SDG No : 24I027
Lab File ID: RIW125 BFB Injection Date: 09/21/24
Instrument ID: 06 BFB Injection Time: 07:29

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.666
75	30 - 60% of mass 95	39.445
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.974
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	73.248
175	5 - 9% of mass 174	6.361(8.68)1
176	95 - 101% % of mass 174	69.686(95.14)1
177	5 - 9% % of mass 176	4.845(6.95)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CVO06I192	RIW126	09/21/24	08:05
2	LCS1W	VO06I06L	RIW127	09/21/24	08:33
3	LCD1W	VO06I06C	RIW128	09/21/24	08:59
4	MBLK1W	VO06I06B	RIW130	09/21/24	09:51
5	TB03-GW090924	24I027-15	RIW132	09/21/24	10:44
6	MW16D-GW090824	24I027-04	RIW139	09/21/24	13:47
7	MW16S-GW090824	24I027-05	RIW140	09/21/24	14:14
8	FD04-GW090824	24I027-06	RIW141	09/21/24	14:40
9	MW21-GW090824	24I027-07	RIW142	09/21/24	15:06
10	MW22-GW090824	24I027-08	RIW143	09/21/24	15:33
11	MW24-GW090824	24I027-09	RIW144	09/21/24	15:59
12	MW26A-GW090824	24I027-10	RIW145	09/21/24	16:25
13	MW26D-GW090824	24I027-11	RIW146	09/21/24	16:52
14	MW30RA-GW090824	24I027-12	RIW147	09/21/24	17:18
15	MW30RB-GW090824	24I027-13	RIW148	09/21/24	17:44
16	MW32A-GW090824	24I027-14	RIW149	09/21/24	18:11
17	MW05R-GW090824	24I027-01	RIW150	09/21/24	18:37

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

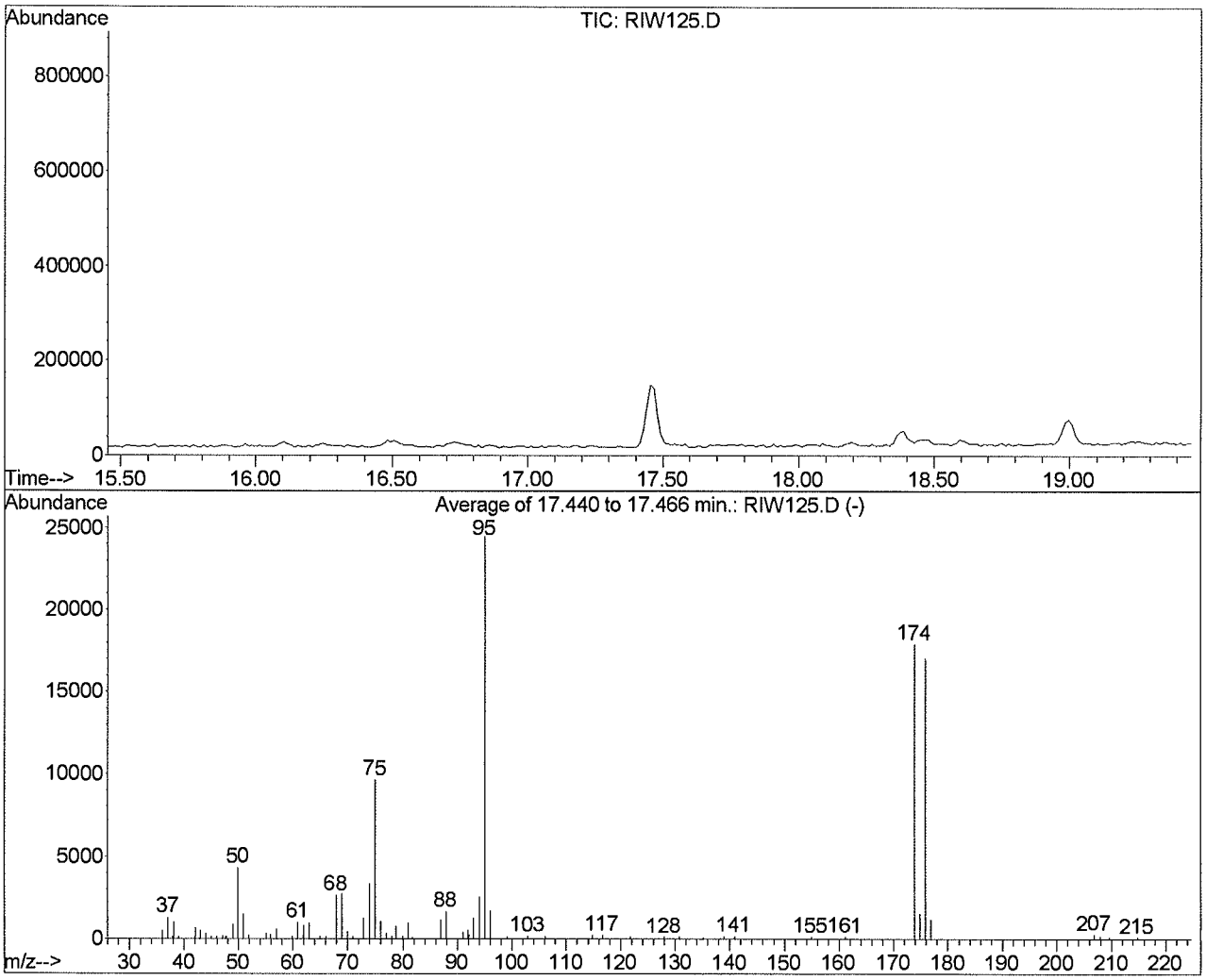
Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RIW080
Instrument ID: 06

Project: VA SALT LAKE CITY
SDG No: 24I027
Date Analyzed: 09/19/24
Time Analyzed: 13:18

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	3477436	9.96	2910329	15.43	1285376	19.35
	UPPER LIMIT	6954872	10.1	5820658	15.60	2570752	19.52
	LOWER LIMIT	1738718	9.79	1455165	15.26	642688	19.18
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	3304508	9.96	2395912	15.43	1194124	19.35
2	LCS1W	3599838	9.96	2851913	15.43	1372629	19.35
3	LCD1W	3758345	9.96	2942290	15.43	1398011	19.35
4	MBLK1W	3585929	9.96	2935993	15.43	1386567	19.35
5	TB03-GW090924	4180343	9.96	3292175	15.43	1476084	19.35
6	MW16D-GW090824	3099334	9.96	2533596	15.43	1226570	19.35
7	MW16S-GW090824	3441245	9.97	2699299	15.43	1281430	19.35
8	FD04-GW090824	3258237	9.96	2639265	15.43	1212999	19.35
9	MW21-GW090824	3016940	9.96	2540582	15.43	1247044	19.35
10	MW22-GW090824	2787707	9.96	2316435	15.43	1144182	19.35
11	MW24-GW090824	3185517	9.96	2629254	15.43	1190653	19.35
12	MW26A-GW090824	2991185	9.96	2438645	15.43	1150692	19.35
13	MW26D-GW090824	3048408	9.96	2483807	15.43	1211760	19.35
14	MW30RA-GW090824	3182159	9.97	2604119	15.43	1274123	19.35
15	MW30RB-GW090824	3251630	9.96	2605680	15.43	1247135	19.35
16	MW32A-GW090824	2922269	9.96	2414939	15.43	1136780	19.35
17	MW05R-GW090824	3149549	9.96	2576465	15.43	1207567	19.35

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data File : D:\HPCHEM\1\DATA\24I21\RIW125.D Vial: 1
Acq On : 21 Sep 2024 7:29 am Operator: DHguye
Sample : BFB06I06 Inst : 06
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06I19.M (RTE Integrator)
Title : METHOD 8260



AutoFind: Scans 839, 840, 841; Background Corrected with Scan 832

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	4324	PASS
75	95	30	60	39.4	9655	PASS
95	95	100	100	100.0	24477	PASS
96	95	5	9	7.0	1707	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	73.2	17929	PASS
175	174	5	9	8.7	1557	PASS
176	174	95	101	95.1	17057	PASS
177	176	5	9	7.0	1186	PASS

RIW125.D VO06I19.M Sat Oct 05 09:18:18 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	95	0.00
2	T,M	Dichlorodifluoromethane	10.000	10.715	-7.1	120	-0.02
3	P,T,M	Chloromethane	10.000	9.770	2.3	104	-0.02
4	C,T,M	Vinyl chloride	10.000	10.421	-4.2	124	-0.02
5	T,M	Bromomethane	10.000	10.538	-5.4	118	-0.02
6	T,M	Chloroethane	10.000	9.060	9.4	98	-0.02
7	T,M	Dichlorofluoromethane	10.000	9.923	0.8	100	-0.02
8	T,M	Trichlorofluoromethane	10.000	10.357	-3.6	111	-0.02
9	T,M	Acrolein	50.000	44.006	12.0	98	-0.02
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.782	2.2	105	-0.02
11	T,M	Acetone	50.000	40.996	18.0	80	-0.02
12	C,T,M	1,1-Dichloroethene	10.000	9.453	5.5	89	-0.02
13	T,M	tert-Butyl alcohol	250.000	218.678	12.5	75	-0.02
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	10.783	-7.8	94	-0.02
16	T,M	Iodomethane	10.000	10.398	-4.0	99	-0.02
17	T,M	Allyl chloride	10.000	10.551	-5.5	97	0.00
18	T,M	Methylene chloride	10.000	9.010	9.9	88	-0.02
19	T,M	Carbon disulfide	10.000	9.850	1.5	92	-0.02
20	T,M	Acrylonitrile	50.000	46.538	6.9	86	-0.02
21	T,M	tert-Butyl methyl ether (MT	10.000	10.463	-4.6	92	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.616	-6.2	100	-0.02
23	T,M	Isopropyl ether (DIPE)	10.000	9.686	3.1	86	-0.02
24	T,M	Vinyl acetate	10.000	7.986	20.1#	79	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.005	-0.1	92	-0.02
26	T,M	2-Butanol	250.000	183.528	26.6#	66	-0.02
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.241	-2.4	91	0.00
28	T,M	2-Butanone	50.000	39.697	20.6#	75	-0.02
29	T,M	2,2-Dichloropropane	10.000	11.704	-17.0	106	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.146	-1.5	96	-0.02
31	C,T,M	Chloroform	10.000	9.820	1.8	93	-0.02
32	T,M	Bromochloromethane	10.000	10.510	-5.1	95	-0.02
33	T,M	Tetrahydrofuran	10.000	7.368	26.3#	74	-0.02
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-0.02
35	S	Dibromofluoromethane	10.000	10.168	-1.7	95	-0.02
36	T,M	1,1,1-Trichloroethane	10.000	10.381	-3.8	95	0.00
37	T,M	Cyclohexane	10.000	10.869	-8.7	97	-0.02
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.06
39	T,M	1,1-Dichloropropene	10.000	9.871	1.3	93	-0.02
40	T,M	Carbon tetrachloride	10.000	10.339	-3.4	93	-0.02
41	T,M	tert-Amyl methyl ether (TAM	10.000	9.934	0.7	88	0.00
42	S	1,2-Dichloroethane-d4	10.000	9.235	7.7	82	0.00
43	T,M	1,2-Dichloroethane	10.000	9.010	9.9	80	-0.02
44	T,M	Benzene	10.000	10.127	-1.3	90	-0.02
45	T,M	Trichloroethene	10.000	9.853	1.5	88	0.00
46	T,M	Methylcyclohexane	10.000	10.703	-7.0	92	-0.02
47	C,T,M	1,2-Dichloropropane	10.000	8.981	10.2	83	0.00
48	T,M	1,4-Dioxane	200.000	144.365	27.8#	60	0.00
49	T,M	Bromodichloromethane	10.000	8.939	10.6	83	0.00
50	T,M	Dibromomethane	10.000	9.371	6.3	86	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	10.000	6.927	30.7#	65	0.00
52	T,M	4-Methyl-2-pentanone	50.000	41.953	16.1	74	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	8.500	15.0	77	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	82	0.00
55	S	Toluene-d8	10.000	10.922	-9.2	87	-0.02
56	C,T,M	Toluene	10.000	10.546	-5.5	82	0.00
57	T,M	Ethyl methacrylate	10.000	8.300	17.0	68	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	9.201	8.0	74	0.00
59	T,M	1,1,2-Trichloroethane	10.000	9.512	4.9	76	0.00
60	T,M	2-Hexanone	50.000	39.822	20.4#	64	0.00
61	T,M	1,3-Dichloropropane	10.000	9.066	9.3	72	0.00
62	T,M	Tetrachloroethene	10.000	10.722	-7.2	86	0.00
63	T,M	Dibromochloromethane	10.000	9.291	7.1	75	0.00
64	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
65	T,M	1,2-Dibromoethane	10.000	8.937	10.6	71	0.00
66	T,M	1-Chlorohexane	10.000	8.126	18.7	73	0.00
67	P,T,M	Chlorobenzene	10.000	9.917	0.8	78	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	11.571	-15.7	86	0.00
69	C,T,M	Ethylbenzene	10.000	9.787	2.1	80	0.00
70	T,M	m-Xylene & p-Xylene	20.000	19.466	2.7	81	-0.01
71	T,M	o-Xylene	10.000	10.643	-6.4	84	-0.01
72	T,M	Styrene	10.000	9.430	5.7	74	-0.01
73	T,M	Isopropylbenzene	10.000	10.569	-5.7	86	-0.01
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	93	0.00
75	P,T,M	Bromoform	10.000	7.641	23.6#	74	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	8.731	12.7	78	-0.01
77	S	4-Bromofluorobenzene	10.000	8.275	17.2	76	0.00
78	T,M	1,2,3-Trichloropropane	10.000	7.472	25.3#	69	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	6.136	38.6#	60	0.00
80	T,M	n-Propylbenzene	10.000	8.580	14.2	81	0.00
81	T,M	Bromobenzene	10.000	8.942	10.6	79	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	9.471	5.3	87	0.00
83	T,M	2-Chlorotoluene	10.000	9.204	8.0	86	0.00
84	T,M	4-Chlorotoluene	10.000	8.591	14.1	75	0.00
85	T,M	tert-Butylbenzene	10.000	10.098	-1.0	89	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	9.072	9.3	85	0.00
87	T,M	sec-Butylbenzene	10.000	9.389	6.1	88	0.00
88	T,M	p-Isopropyltoluene	10.000	9.006	9.9	84	0.00
89	T,M	1,3-Dichlorobenzene	10.000	8.587	14.1	77	-0.01
90	T,M	1,2,3-Trimethylbenzene	10.000	9.539	4.6	87	-0.01
91	T,M	1,4-Dichlorobenzene	10.000	8.404	16.0	76	0.00
92	T,M	n-Butylbenzene	10.000	8.833	11.7	84	0.00
93	T,M	1,2-Dichlorobenzene	10.000	9.505	4.9	83	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	8.443	15.6	79	0.00
95	T,M	1,2,4-Trichlorobenzene	10.000	10.014	-0.1	90	0.00
96	T,M	Hexachlorobutadiene	10.000	9.901	1.0	84	0.00
97	T,M	Naphthalene	10.000	10.875	-8.8	95	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	10.779	-7.8	96	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	95	0.00
2	T,M	Dichlorodifluoromethane	0.422	0.453	-7.3	120	-0.02
3	P,T,M	Chloromethane	0.387	0.378	2.3	104	-0.02
4	C,T,M	Vinyl chloride	0.303	0.316	-4.3	124	-0.02
5	T,M	Bromomethane	0.239	0.263	-10.0	118	-0.02
6	T,M	Chloroethane	0.203	0.178	12.3	98	-0.02
7	T,M	Dichlorofluoromethane	0.725	0.699	3.6	100	-0.02
8	T,M	Trichlorofluoromethane	0.399	0.413	-3.5	111	-0.02
9	T,M	Acrolein	0.014	0.012	14.3	98	-0.02
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.305	0.319	-4.6	105	-0.02
11	T,M	Acetone	0.040	0.033	17.5	80	-0.02
12	C,T,M	1,1-Dichloroethene	0.529	0.500	5.5	89	-0.02
13	T,M	tert-Butyl alcohol	0.012	0.011	8.3	75	-0.02
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.022	0.023	-4.5	94	-0.02
16	T,M	Iodomethane	0.496	0.515	-3.8	99	-0.02
17	T,M	Allyl chloride	0.169	0.179	-5.9	97	0.00
18	T,M	Methylene chloride	0.456	0.373	18.2	88	-0.02
19	T,M	Carbon disulfide	0.550	0.616	-12.0	92	-0.02
20	T,M	Acrylonitrile	0.050	0.047	6.0	86	-0.02
21	T,M	tert-Butyl methyl ether (MT	0.507	0.531	-4.7	92	0.00
22	T,M	trans-1,2-Dichloroethene	0.316	0.335	-6.0	100	-0.02
23	T,M	Isopropyl ether (DIPE)	1.045	1.012	3.2	86	-0.02
24	T,M	Vinyl acetate	0.377	0.301	20.2#	79	0.00
25	P,T,M	1,1-Dichloroethane	0.528	0.529	-0.2	92	-0.02
26	T,M	2-Butanol	0.011	0.010	9.1	66	-0.02
27	T,M	tert-Butyl ethyl ether (ETB	0.758	0.776	-2.4	91	0.00
28	T,M	2-Butanone	0.069	0.054	21.7#	75	-0.02
29	T,M	2,2-Dichloropropane	0.330	0.386	-17.0	106	0.00
30	T,M	cis-1,2-Dichloroethene	0.326	0.331	-1.5	96	-0.02
31	C,T,M	Chloroform	0.523	0.513	1.9	93	-0.02
32	T,M	Bromochloromethane	0.141	0.149	-5.7	95	-0.02
33	T,M	Tetrahydrofuran	0.037	0.027	27.0#	74	-0.02
34	T,M	tert-Amyl alcohol	0.000	0.000	0.0	0#	-0.02
35	S	Dibromofluoromethane	0.231	0.288	-24.7#	95	-0.02
36	T,M	1,1,1-Trichloroethane	0.421	0.437	-3.8	95	0.00
37	T,M	Cyclohexane	0.539	0.586	-8.7	97	-0.02
38	T,M	2,2,4-Trimethylpentane	0.000	0.001	0.0	0#	0.06
39	T,M	1,1-Dichloropropene	0.142	0.140	1.4	93	-0.02
40	T,M	Carbon tetrachloride	0.349	0.360	-3.2	93	-0.02
41	T,M	tert-Amyl methyl ether (TAM	0.620	0.616	0.6	88	0.00
42	S	1,2-Dichloroethane-d4	0.221	0.204	7.7	82	0.00
43	T,M	1,2-Dichloroethane	0.263	0.237	9.9	80	-0.02
44	T,M	Benzene	1.146	1.161	-1.3	90	-0.02
45	T,M	Trichloroethene	0.298	0.294	1.3	88	0.00
46	T,M	Methylcyclohexane	0.568	0.607	-6.9	92	-0.02
47	C,T,M	1,2-Dichloropropane	0.284	0.255	10.2	83	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	60	0.00
49	T,M	Bromodichloromethane	0.368	0.329	10.6	83	0.00
50	T,M	Dibromomethane	0.134	0.126	6.0	86	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	0.089	0.062	30.3#	65	0.00
52	T,M	4-Methyl-2-pentanone	0.189	0.159	15.9	74	0.00
53	T,M	cis-1,3-Dichloropropene	0.450	0.383	14.9	77	0.00
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	82	0.00
55	S	Toluene-d8	1.294	1.414	-9.3	87	-0.02
56	C,T,M	Toluene	1.509	1.591	-5.4	82	0.00
57	T,M	Ethyl methacrylate	0.332	0.275	17.2	68	0.00
58	T,M	trans-1,3-Dichloropropene	0.424	0.390	8.0	74	0.00
59	T,M	1,1,2-Trichloroethane	0.217	0.206	5.1	76	0.00
60	T,M	2-Hexanone	0.158	0.126	20.3#	64	0.00
61	T,M	1,3-Dichloropropane	0.400	0.363	9.3	72	0.00
62	T,M	Tetrachloroethene	0.310	0.333	-7.4	86	0.00
63	T,M	Dibromochloromethane	0.267	0.248	7.1	75	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.206	0.184	10.7	71	0.00
66	T,M	1-Chlorohexane	0.643	0.522	18.8	73	0.00
67	P,T,M	Chlorobenzene	0.924	0.916	0.9	78	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.292	0.338	-15.8	86	0.00
69	C,T,M	Ethylbenzene	1.859	1.820	2.1	80	0.00
70	T,M	m-Xylene & p-Xylene	1.421	1.383	2.7	81	-0.01
71	T,M	o-Xylene	1.399	1.489	-6.4	84	-0.01
72	T,M	Styrene	1.045	0.986	5.6	74	-0.01
73	T,M	Isopropylbenzene	1.815	1.918	-5.7	86	-0.01
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	93	0.00
75	P,T,M	Bromoform	0.290	0.235	19.0	74	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.578	0.505	12.6	78	-0.01
77	S	4-Bromofluorobenzene	1.116	0.924	17.2	76	0.00
78	T,M	1,2,3-Trichloropropane	0.159	0.119	25.2#	69	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.176	0.108	38.6#	60	0.00
80	T,M	n-Propylbenzene	5.517	4.734	14.2	81	0.00
81	T,M	Bromobenzene	0.790	0.707	10.5	79	0.00
82	T,M	1,3,5-Trimethylbenzene	3.365	3.187	5.3	87	0.00
83	T,M	2-Chlorotoluene	3.233	2.976	7.9	86	0.00
84	T,M	4-Chlorotoluene	2.963	2.545	14.1	75	0.00
85	T,M	tert-Butylbenzene	0.711	0.718	-1.0	89	0.00
86	T,M	1,2,4-Trimethylbenzene	3.489	3.165	9.3	85	0.00
87	T,M	sec-Butylbenzene	4.751	4.461	6.1	88	0.00
88	T,M	p-Isopropyltoluene	4.038	3.636	10.0	84	0.00
89	T,M	1,3-Dichlorobenzene	1.767	1.517	14.1	77	-0.01
90	T,M	1,2,3-Trimethylbenzene	3.158	3.012	4.6	87	-0.01
91	T,M	1,4-Dichlorobenzene	1.750	1.471	15.9	76	0.00
92	T,M	n-Butylbenzene	4.351	3.843	11.7	84	0.00
93	T,M	1,2-Dichlorobenzene	1.462	1.390	4.9	83	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.102	0.086	15.7	79	0.00
95	T,M	1,2,4-Trichlorobenzene	1.149	1.151	-0.2	90	0.00
96	T,M	Hexachlorobutadiene	0.621	0.615	1.0	84	0.00
97	T,M	Naphthalene	1.548	1.683	-8.7	95	0.00
98	T,M	1,2,3-Trichlorobenzene	0.867	0.935	-7.8	96	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:53 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3304508	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2395912	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1194124	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	951311	10.17	ug/l	-0.02
Spiked Amount 10.000			Recovery = 101.70%			
42) 1,2-Dichloroethane-d4	9.08	65	674768	9.24	ug/l	0.00
Spiked Amount 10.000			Recovery = 92.40%			
55) Toluene-d8	12.79	98	3386770	10.92	ug/l	-0.02
Spiked Amount 10.000			Recovery = 109.20%			
77) 4-Bromofluorobenzene	17.45	95	1103240	8.27	ug/l	0.00
Spiked Amount 10.000			Recovery = 82.70%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1495805	10.71	ug/l	99
3) Chloromethane	1.87	50	1250010	9.77	ug/l	100
4) Vinyl chloride	1.99	62	1044543	10.42	ug/l	99
5) Bromomethane	2.42	94	870681	10.54	ug/l	100
6) Chloroethane	2.50	64	587748	9.06	ug/l	94
7) Dichlorofluoromethane	2.54	67	2308281	9.92	ug/l	100
8) Trichlorofluoromethane	2.80	101	1365188	10.36	ug/l	99
9) Acrolein	3.30	56	204265	44.01	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.34	151	1052702	9.78	ug/l	100
11) Acetone	3.40	43	547172	41.00	ug/l	95
12) 1,1-Dichloroethene	3.55	61	1652366	9.45	ug/l	97
13) tert-Butyl alcohol	3.70	59	902855	218.68	ug/l	100
15) Methyl acetate	4.07	74	76905	10.78	ug/l	82
16) Iodomethane	3.99	142	1703179	10.40	ug/l	99
17) Allyl chloride	4.12	76	590465	10.55	ug/l	97
18) Methylene chloride	4.28	49	1232168	9.01	ug/l	92
19) Carbon disulfide	4.24	76	2034797	9.85	ug/l	100
20) Acrylonitrile	4.51	53	771622	46.54	ug/l	99
21) tert-Butyl methyl ether (M	4.58	73	1753195	10.46	ug/l	100
22) trans-1,2-Dichloroethene	4.79	96	1108491	10.62	ug/l	97
23) Isopropyl ether (DIPE)	5.46	45	3344679	9.69	ug/l	96
24) Vinyl acetate	5.71	43	996119	7.99	ug/l	99
25) 1,1-Dichloroethane	5.62	63	1746992	10.00	ug/l	98
26) 2-Butanol	6.19	45	851452	183.53	ug/l	100
27) tert-Butyl ethyl ether (ET	6.38	59	2564592	10.24	ug/l	99
28) 2-Butanone	6.65	43	900220	39.70	ug/l	96
29) 2,2-Dichloropropane	6.92	77	1275354	11.70	ug/l	99
30) cis-1,2-Dichloroethene	7.03	96	1094314	10.15	ug/l	99
31) Chloroform	7.43	83	1696577	9.82	ug/l	99
32) Bromochloromethane	7.80	130	491050	10.51	ug/l	98
33) Tetrahydrofuran	7.91	42	89452	7.37	ug/l	92
36) 1,1,1-Trichloroethane	8.35	97	1442766	10.38	ug/l	99
37) Cyclohexane	8.33	84	1936719	10.87	ug/l	98
39) 1,1-Dichloropropene	8.71	110	463340	9.87	ug/l	97
40) Carbon tetrachloride	8.87	119	1190927	10.34	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	2034686	9.93	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:53 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.27	62	783573	9.01	ug/l	98
44)	Benzene	9.25	78	3835233	10.13	ug/l	99
45)	Trichloroethene	10.55	130	971687	9.85	ug/l	100
46)	Methylcyclohexane	10.61	83	2007462	10.70	ug/l	95
47)	1,2-Dichloropropane	10.91	63	841436	8.98	ug/l	98
48)	1,4-Dioxane	11.45	88	63318	144.36	ug/l	100
49)	Bromodichloromethane	11.35	83	1086490	8.94	ug/l	99
50)	Dibromomethane	11.41	93	415866	9.37	ug/l	98
51)	2-Chloroethyl vinyl ether	12.04	63	204214	6.93	ug/l	99
52)	4-Methyl-2-pentanone	12.08	43	2622257	41.95	ug/l	96
53)	cis-1,3-Dichloropropene	12.39	75	1264418	8.50	ug/l	97
56)	Toluene	12.94	91	3811768	10.55	ug/l	99
57)	Ethyl methacrylate	13.38	69	659332	8.30	ug/l	90
58)	trans-1,3-Dichloropropene	13.32	75	934642	9.20	ug/l	91
59)	1,1,2-Trichloroethane	13.57	97	493796	9.51	ug/l	98
60)	2-Hexanone	13.65	43	1509084	39.82	ug/l	97
61)	1,3-Dichloropropane	14.03	76	869328	9.07	ug/l	98
62)	Tetrachloroethene	14.07	164	797460	10.72	ug/l	97
63)	Dibromochloromethane	14.43	129	594110	9.29	ug/l	100
65)	1,2-Dibromoethane	14.76	107	440866	8.94	ug/l	98
66)	1-Chlorohexane	15.12	91	1251021	8.13	ug/l	97
67)	Chlorobenzene	15.49	112	2194647	9.92	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.59	131	809631	11.57	ug/l	96
69)	Ethylbenzene	15.60	91	4359380	9.79	ug/l	99
70)	m-Xylene & p-Xylene	15.73	91	6625587	19.47	ug/l	99
71)	o-Xylene	16.45	91	3567213	10.64	ug/l	99
72)	Styrene	16.52	104	2361666	9.43	ug/l	99
73)	Isopropylbenzene	17.06	105	4595766	10.57	ug/l	99
75)	Bromoform	17.06	173	280807	7.64	ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.35	83	602916	8.73	ug/l	99
78)	1,2,3-Trichloropropane	17.57	110	142214	7.47	ug/l	94
79)	trans-1,4-Dichloro-2-buten	17.67	53	128880	6.14	ug/l	98
80)	n-Propylbenzene	17.67	91	5652733	8.58	ug/l	99
81)	Bromobenzene	17.71	156	843875	8.94	ug/l	97
82)	1,3,5-Trimethylbenzene	17.89	105	3806022	9.47	ug/l	99
83)	2-Chlorotoluene	17.91	91	3553252	9.20	ug/l	94
84)	4-Chlorotoluene	17.97	91	3039543	8.59	ug/l	96
85)	tert-Butylbenzene	18.35	134	857838	10.10	ug/l	96
86)	1,2,4-Trimethylbenzene	18.39	105	3779842	9.07	ug/l	99
87)	sec-Butylbenzene	18.60	105	5326537	9.39	ug/l	99
88)	p-Isopropyltoluene	18.76	119	4342133	9.01	ug/l	99
89)	1,3-Dichlorobenzene	18.86	146	1811415	8.59	ug/l	97
90)	1,2,3-Trimethylbenzene	18.93	105	3596909	9.54	ug/l	99
91)	1,4-Dichlorobenzene	18.98	146	1756211	8.40	ug/l	99
92)	n-Butylbenzene	19.21	91	4588739	8.83	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	1659597	9.50	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	103069	8.44	ug/l	95
95)	1,2,4-Trichlorobenzene	20.97	180	1373866	10.01	ug/l	100
96)	Hexachlorobutadiene	21.10	225	734075	9.90	ug/l	99
97)	Naphthalene	21.24	128	2009773	10.88	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:53 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

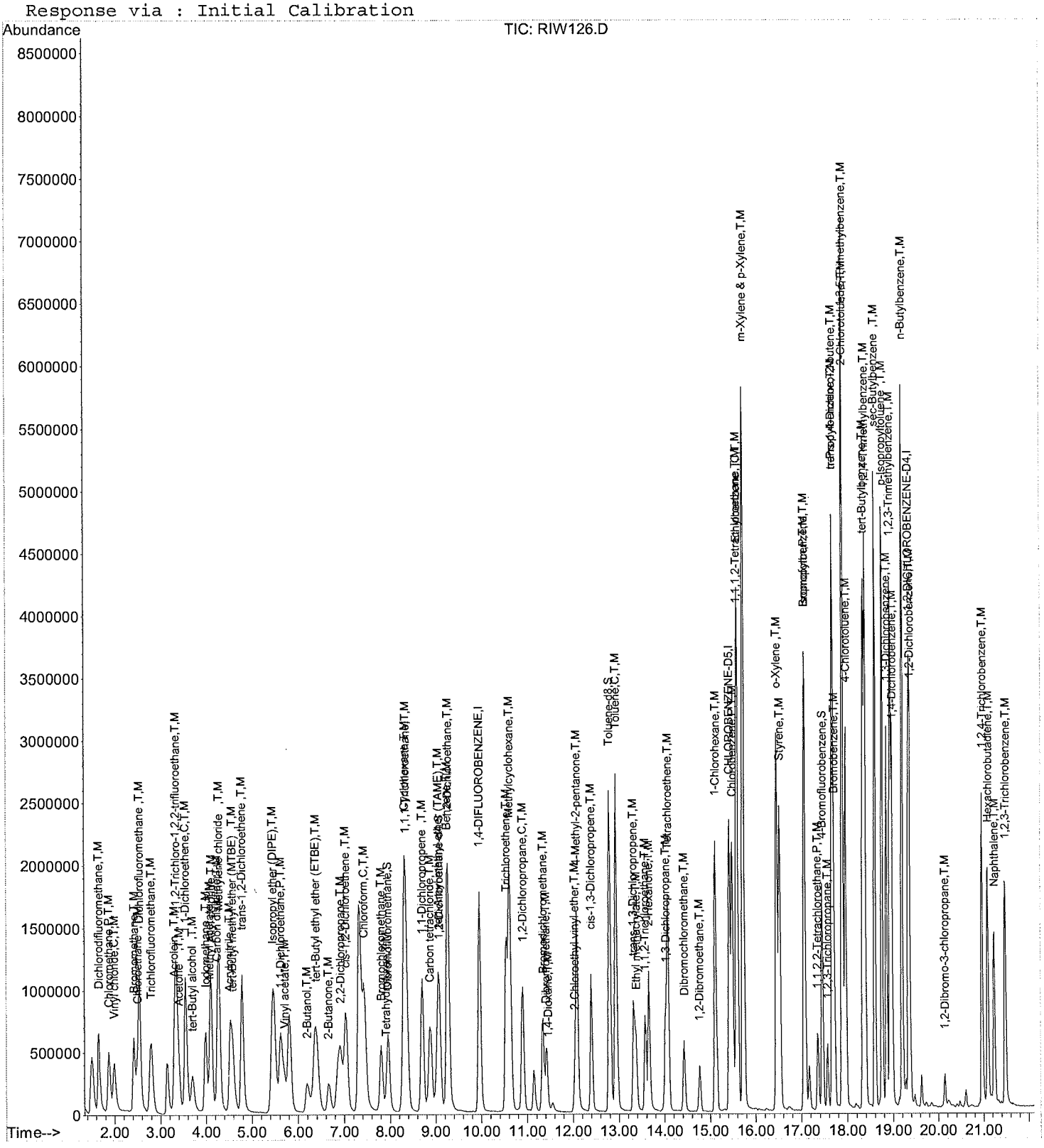
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	1115956	10.78	ug/l	99

(#) = qualifier out of range (m) = manual integration
RIW126.D VO06I19B.M Tue Oct 22 18:53:54 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:53 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SDG No : 24I027
Lab File ID: RIW152 BFB Injection Date: 09/22/24
Instrument ID: 06 BFB Injection Time: 12:04

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	15.378
75	30 - 60% of mass 95	42.012
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.754
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	75.946
175	5 - 9% of mass 174	5.570(7.33)1
176	95 - 101% % of mass 174	76.434(100.64)1
177	5 - 9% % of mass 176	4.629(6.06)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CVO06I193	RIW153	09/22/24	12:45
2	LCS2W	VO06I07L	RIW154	09/22/24	13:33
3	LCD2W	VO06I07C	RIW155	09/22/24	13:59
4	MBLK2W	VO06I07B	RIW157	09/22/24	15:05
5	MW15D-GW090B24	24I027-02N	RIW158	09/22/24	15:31
6	MW15S-GW090B24	24I027-03	RIW159	09/22/24	15:57

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

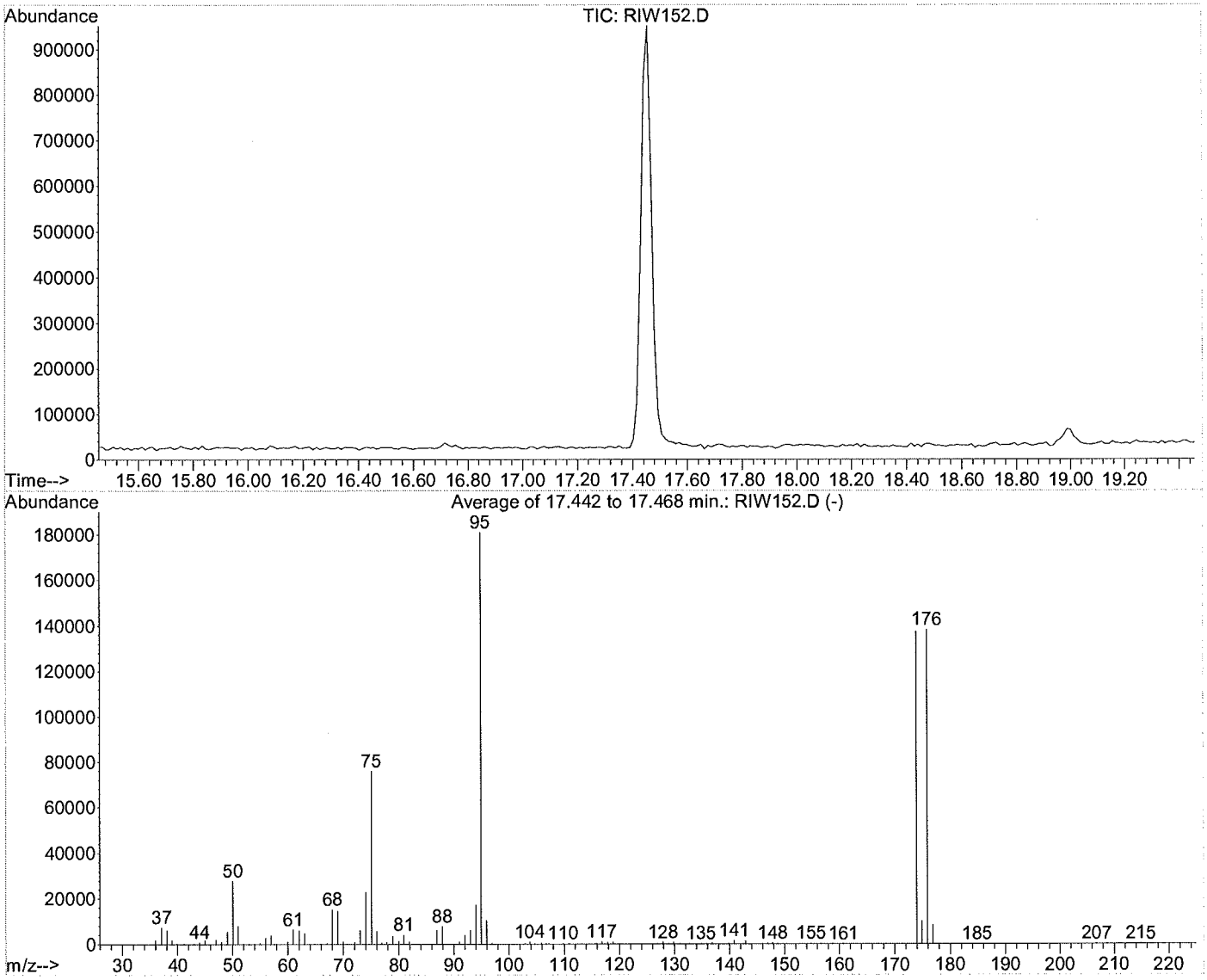
Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RIW080
Instrument ID: 06

Project: VA SALT LAKE CITY
SDG No: 24I027
Date Analyzed: 09/19/24
Time Analyzed: 13:18

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	3477436	9.96	2910329	15.43	1285376	19.35
	UPPER LIMIT	6954872	10.1	5820658	15.60	2570752	19.52
	LOWER LIMIT	1738718	9.79	1455165	15.26	642688	19.18
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	3054049	9.96	2263578	15.43	1096091	19.35
2	LCS2W	3511581	9.96	2802334	15.43	1335200	19.35
3	LCD2W	4201223	9.96	3307964	15.43	1430277	19.35
4	MBLK2W	3325575	9.96	2769816	15.44	1330626	19.35
5	MW15D-GW090824	3464020	9.96	2761320	15.44	1306343	19.35
6	MW15S-GW090824	3308367	9.96	2697247	15.44	1296942	19.35

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data File : D:\HPCHEM\1\DATA\24I22\RIW152.D Vial: 1
Acq On : 22 Sep 2024 12:04 pm Operator: DHguye
Sample : BFB06I07 Inst : 06
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06I19.M (RTE Integrator)
Title : METHOD 8260



Spectrum Information: Average of 17.442 to 17.468 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.4	27837	PASS
75	95	30	60	42.0	76048	PASS
95	95	100	100	100.0	181013	PASS
96	95	5	9	5.8	10415	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.9	137472	PASS
175	174	5	9	7.3	10082	PASS
176	174	95	101	100.6	138355	PASS
177	176	5	9	6.1	8379	PASS

RIW152.D VO06I19.M Tue Oct 08 14:31:37 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I22\RIW153.D Vial: 2
Acq On : 22 Sep 2024 12:45 pm Operator: DHguye
Sample : CVO06I193 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	88	0.00
2	T,M	Dichlorodifluoromethane	10.000	10.338	-3.4	107	-0.04
3	P,T,M	Chloromethane	10.000	10.565	-5.6	104	-0.02
4	C,T,M	Vinyl chloride	10.000	9.977	0.2	110	-0.04
5	T,M	Bromomethane	10.000	9.859	1.4	102	-0.02
6	T,M	Chloroethane	10.000	8.944	10.6	89	-0.04
7	T,M	Dichlorofluoromethane	10.000	9.422	5.8	88	-0.02
8	T,M	Trichlorofluoromethane	10.000	10.524	-5.2	104	-0.02
9	T,M	Acrolein	50.000	47.076	5.8	97	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.152	8.5	91	-0.02
11	T,M	Acetone	50.000	49.188	1.6	89	-0.02
12	C,T,M	1,1-Dichloroethene	10.000	9.915	0.9	86	-0.02
13	T,M	tert-Butyl alcohol	250.000	254.790	-1.9	80	-0.02
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	9.725	2.8	78	0.00
16	T,M	Iodomethane	10.000	10.512	-5.1	93	-0.02
17	T,M	Allyl chloride	10.000	10.879	-8.8	92	0.00
18	T,M	Methylene chloride	10.000	9.504	5.0	85	-0.02
19	T,M	Carbon disulfide	10.000	11.740	-17.4	101	0.00
20	T,M	Acrylonitrile	50.000	53.554	-7.1	92	-0.02
21	T,M	tert-Butyl methyl ether (MT	10.000	10.695	-7.0	87	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	11.073	-10.7	96	-0.02
23	T,M	Isopropyl ether (DIPE)	10.000	10.153	-1.5	84	-0.02
24	T,M	Vinyl acetate	10.000	8.968	10.3	82	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.688	-6.9	91	-0.02
26	T,M	2-Butanol	250.000	202.247	19.1	68	-0.02
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.314	-3.1	84	0.00
28	T,M	2-Butanone	50.000	45.833	8.3	80	-0.02
29	T,M	2,2-Dichloropropane	10.000	12.528	-25.3#	105	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.729	-7.3	93	0.00
31	C,T,M	Chloroform	10.000	10.371	-3.7	91	-0.02
32	T,M	Bromochloromethane	10.000	10.551	-5.5	88	0.00
33	T,M	Tetrahydrofuran	10.000	7.578	24.2#	70	0.00
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	0.04
35	S	Dibromofluoromethane	10.000	9.835	1.6	85	-0.02
36	T,M	1,1,1-Trichloroethane	10.000	11.199	-12.0	95	0.00
37	T,M	Cyclohexane	10.000	10.789	-7.9	89	-0.02
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.06
39	T,M	1,1-Dichloropropene	10.000	10.536	-5.4	91	-0.02
40	T,M	Carbon tetrachloride	10.000	10.897	-9.0	91	0.00
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.355	-3.6	84	0.00
42	S	1,2-Dichloroethane-d4	10.000	9.213	7.9	76	0.00
43	T,M	1,2-Dichloroethane	10.000	9.613	3.9	79	0.00
44	T,M	Benzene	10.000	10.481	-4.8	86	0.00
45	T,M	Trichloroethene	10.000	10.638	-6.4	88	0.00
46	T,M	Methylcyclohexane	10.000	11.034	-10.3	87	-0.02
47	C,T,M	1,2-Dichloropropane	10.000	9.673	3.3	82	0.00
48	T,M	1,4-Dioxane	200.000	168.290	15.9	65	0.00
49	T,M	Bromodichloromethane	10.000	9.600	4.0	83	0.00
50	T,M	Dibromomethane	10.000	9.756	2.4	83	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I22\RIW153.D Vial: 2
Acq On : 22 Sep 2024 12:45 pm Operator: DHguye
Sample : CVO06I193 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	10.000	7.787	22.1#	68	0.00
52	T,M	4-Methyl-2-pentanone	50.000	47.928	4.1	78	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	9.431	5.7	79	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	78	0.00
55	S	Toluene-d8	10.000	10.875	-8.8	82	-0.02
56	C,T,M	Toluene	10.000	11.239	-12.4	82	0.00
57	T,M	Ethyl methacrylate	10.000	8.998	10.0	69	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	9.835	1.6	75	0.00
59	T,M	1,1,2-Trichloroethane	10.000	10.007	-0.1	75	0.02
60	T,M	2-Hexanone	50.000	47.505	5.0	72	0.00
61	T,M	1,3-Dichloropropane	10.000	9.766	2.3	74	0.00
62	T,M	Tetrachloroethene	10.000	10.970	-9.7	83	0.00
63	T,M	Dibromochloromethane	10.000	9.673	3.3	74	0.00
64	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
65	T,M	1,2-Dibromoethane	10.000	9.620	3.8	72	0.00
66	T,M	1-Chlorohexane	10.000	9.609	3.9	81	0.00
67	P,T,M	Chlorobenzene	10.000	10.762	-7.6	80	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	12.028	-20.3#	85	0.00
69	C,T,M	Ethylbenzene	10.000	10.591	-5.9	82	0.01
70	T,M	m-Xylene & p-Xylene	20.000	20.751	-3.8	81	0.00
71	T,M	o-Xylene	10.000	11.071	-10.7	83	0.00
72	T,M	Styrene	10.000	10.554	-5.5	78	0.00
73	T,M	Isopropylbenzene	10.000	11.221	-12.2	86	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	85	0.00
75	P,T,M	Bromoform	10.000	8.025	19.7	71	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.455	5.4	77	0.00
77	S	4-Bromofluorobenzene	10.000	8.814	11.9	74	0.00
78	T,M	1,2,3-Trichloropropane	10.000	8.537	14.6	73	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	7.079	29.2#	64	0.01
80	T,M	n-Propylbenzene	10.000	9.594	4.1	83	0.00
81	T,M	Bromobenzene	10.000	9.544	4.6	78	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	10.468	-4.7	88	0.00
83	T,M	2-Chlorotoluene	10.000	9.866	1.3	85	0.00
84	T,M	4-Chlorotoluene	10.000	9.879	1.2	80	0.00
85	T,M	tert-Butylbenzene	10.000	10.981	-9.8	88	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	10.009	-0.1	86	0.00
87	T,M	sec-Butylbenzene	10.000	10.469	-4.7	90	0.00
88	T,M	p-Isopropyltoluene	10.000	10.331	-3.3	88	0.00
89	T,M	1,3-Dichlorobenzene	10.000	9.535	4.6	78	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	10.423	-4.2	88	0.00
91	T,M	1,4-Dichlorobenzene	10.000	9.338	6.6	78	0.00
92	T,M	n-Butylbenzene	10.000	10.106	-1.1	89	0.00
93	T,M	1,2-Dichlorobenzene	10.000	10.363	-3.6	83	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	9.173	8.3	79	0.00
95	T,M	1,2,4-Trichlorobenzene	10.000	10.845	-8.5	89	0.00
96	T,M	Hexachlorobutadiene	10.000	11.876	-18.8	93	0.00
97	T,M	Naphthalene	10.000	11.419	-14.2	91	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	11.447	-14.5	94	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I22\RIW153.D Vial: 2
Acq On : 22 Sep 2024 12:45 pm Operator: DHguye
Sample : CVO06I193 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	88	0.00
2	T,M	Dichlorodifluoromethane	0.422	0.437	-3.6	107	-0.04
3	P,T,M	Chloromethane	0.387	0.409	-5.7	104	-0.02
4	C,T,M	Vinyl chloride	0.303	0.303	0.0	110	-0.04
5	T,M	Bromomethane	0.239	0.246	-2.9	102	-0.02
6	T,M	Chloroethane	0.203	0.176	13.3	89	-0.04
7	T,M	Dichlorofluoromethane	0.725	0.665	8.3	88	-0.02
8	T,M	Trichlorofluoromethane	0.399	0.420	-5.3	104	-0.02
9	T,M	Acrolein	0.014	0.013	7.1	97	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.305	0.299	2.0	91	-0.02
11	T,M	Acetone	0.040	0.040	0.0	89	-0.02
12	C,T,M	1,1-Dichloroethene	0.529	0.524	0.9	86	-0.02
13	T,M	tert-Butyl alcohol	0.012	0.013	-8.3	80	-0.02
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.022	0.021	4.5	78	0.00
16	T,M	Iodomethane	0.496	0.521	-5.0	93	-0.02
17	T,M	Allyl chloride	0.169	0.184	-8.9	92	0.00
18	T,M	Methylene chloride	0.456	0.392	14.0	85	-0.02
19	T,M	Carbon disulfide	0.550	0.736	-33.8#	101	0.00
20	T,M	Acrylonitrile	0.050	0.054	-8.0	92	-0.02
21	T,M	tert-Butyl methyl ether (MT	0.507	0.542	-6.9	87	0.00
22	T,M	trans-1,2-Dichloroethene	0.316	0.350	-10.8	96	-0.02
23	T,M	Isopropyl ether (DIPE)	1.045	1.061	-1.5	84	-0.02
24	T,M	Vinyl acetate	0.377	0.338	10.3	82	0.00
25	P,T,M	1,1-Dichloroethane	0.528	0.565	-7.0	91	-0.02
26	T,M	2-Butanol	0.011	0.011	0.0	68	-0.02
27	T,M	tert-Butyl ethyl ether (ETB	0.758	0.782	-3.2	84	0.00
28	T,M	2-Butanone	0.069	0.063	8.7	80	-0.02
29	T,M	2,2-Dichloropropane	0.330	0.413	-25.2#	105	0.00
30	T,M	cis-1,2-Dichloroethene	0.326	0.350	-7.4	93	0.00
31	C,T,M	Chloroform	0.523	0.542	-3.6	91	-0.02
32	T,M	Bromochloromethane	0.141	0.149	-5.7	88	0.00
33	T,M	Tetrahydrofuran	0.037	0.028	24.3#	70	0.00
34	T,M	tert-Amyl alcohol	0.000	0.000	0.0	0#	0.04
35	S	Dibromofluoromethane	0.231	0.278	-20.3#	85	-0.02
36	T,M	1,1,1-Trichloroethane	0.421	0.471	-11.9	95	0.00
37	T,M	Cyclohexane	0.539	0.582	-8.0	89	-0.02
38	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	-0.06
39	T,M	1,1-Dichloropropene	0.142	0.150	-5.6	91	-0.02
40	T,M	Carbon tetrachloride	0.349	0.380	-8.9	91	0.00
41	T,M	tert-Amyl methyl ether (TAM	0.620	0.642	-3.5	84	0.00
42	S	1,2-Dichloroethane-d4	0.221	0.204	7.7	76	0.00
43	T,M	1,2-Dichloroethane	0.263	0.253	3.8	79	0.00
44	T,M	Benzene	1.146	1.201	-4.8	86	0.00
45	T,M	Trichloroethene	0.298	0.317	-6.4	88	0.00
46	T,M	Methylcyclohexane	0.568	0.626	-10.2	87	-0.02
47	C,T,M	1,2-Dichloropropane	0.284	0.274	3.5	82	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	65	0.00
49	T,M	Bromodichloromethane	0.368	0.353	4.1	83	0.00
50	T,M	Dibromomethane	0.134	0.131	2.2	83	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I22\RIW153.D Vial: 2
Acq On : 22 Sep 2024 12:45 pm Operator: DHguye
Sample : CVO06I193 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	0.089	0.069	22.5#	68	0.00
52	T,M	4-Methyl-2-pentanone	0.189	0.181	4.2	78	0.00
53	T,M	cis-1,3-Dichloropropene	0.450	0.425	5.6	79	0.00
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	78	0.00
55	S	Toluene-d8	1.294	1.407	-8.7	82	-0.02
56	C,T,M	Toluene	1.509	1.695	-12.3	82	0.00
57	T,M	Ethyl methacrylate	0.332	0.298	10.2	69	0.00
58	T,M	trans-1,3-Dichloropropene	0.424	0.417	1.7	75	0.00
59	T,M	1,1,2-Trichloroethane	0.217	0.217	0.0	75	0.02
60	T,M	2-Hexanone	0.158	0.150	5.1	72	0.00
61	T,M	1,3-Dichloropropane	0.400	0.391	2.3	74	0.00
62	T,M	Tetrachloroethene	0.310	0.341	-10.0	83	0.00
63	T,M	Dibromochloromethane	0.267	0.258	3.4	74	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.206	0.198	3.9	72	0.00
66	T,M	1-Chlorohexane	0.643	0.617	4.0	81	0.00
67	P,T,M	Chlorobenzene	0.924	0.994	-7.6	80	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.292	0.351	-20.2#	85	0.00
69	C,T,M	Ethylbenzene	1.859	1.969	-5.9	82	0.01
70	T,M	m-Xylene & p-Xylene	1.421	1.474	-3.7	81	0.00
71	T,M	o-Xylene	1.399	1.549	-10.7	83	0.00
72	T,M	Styrene	1.045	1.103	-5.6	78	0.00
73	T,M	Isopropylbenzene	1.815	2.037	-12.2	86	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	85	0.00
75	P,T,M	Bromoform	0.290	0.247	14.8	71	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.578	0.547	5.4	77	0.00
77	S	4-Bromofluorobenzene	1.116	0.984	11.8	74	0.00
78	T,M	1,2,3-Trichloropropane	0.159	0.136	14.5	73	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.176	0.125	29.0#	64	0.01
80	T,M	n-Propylbenzene	5.517	5.293	4.1	83	0.00
81	T,M	Bromobenzene	0.790	0.754	4.6	78	0.00
82	T,M	1,3,5-Trimethylbenzene	3.365	3.523	-4.7	88	0.00
83	T,M	2-Chlorotoluene	3.233	3.190	1.3	85	0.00
84	T,M	4-Chlorotoluene	2.963	2.927	1.2	80	0.00
85	T,M	tert-Butylbenzene	0.711	0.781	-9.8	88	0.00
86	T,M	1,2,4-Trimethylbenzene	3.489	3.492	-0.1	86	0.00
87	T,M	sec-Butylbenzene	4.751	4.974	-4.7	90	0.00
88	T,M	p-Isopropyltoluene	4.038	4.171	-3.3	88	0.00
89	T,M	1,3-Dichlorobenzene	1.767	1.684	4.7	78	0.00
90	T,M	1,2,3-Trimethylbenzene	3.158	3.291	-4.2	88	0.00
91	T,M	1,4-Dichlorobenzene	1.750	1.634	6.6	78	0.00
92	T,M	n-Butylbenzene	4.351	4.397	-1.1	89	0.00
93	T,M	1,2-Dichlorobenzene	1.462	1.515	-3.6	83	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.102	0.094	7.8	79	0.00
95	T,M	1,2,4-Trichlorobenzene	1.149	1.246	-8.4	89	0.00
96	T,M	Hexachlorobutadiene	0.621	0.737	-18.7	93	0.00
97	T,M	Naphthalene	1.548	1.767	-14.1	91	0.00
98	T,M	1,2,3-Trichlorobenzene	0.867	0.993	-14.5	94	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I22\RIW153.D Vial: 2
Acq On : 22 Sep 2024 12:45 pm Operator: DHguye
Sample : CVO06I193 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:55 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3054049	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2263578	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1096091	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	849810	9.84	ug/l	-0.02
Spiked Amount 10.000			Recovery = 98.40%			
42) 1,2-Dichloroethane-d4	9.08	65	622136	9.21	ug/l	0.00
Spiked Amount 10.000			Recovery = 92.10%			
55) Toluene-d8	12.79	98	3185883	10.87	ug/l	-0.02
Spiked Amount 10.000			Recovery = 108.70%			
77) 4-Bromofluorobenzene	17.45	95	1078615	8.81	ug/l	0.00
Spiked Amount 10.000			Recovery = 88.10%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.64	85	1333792	10.34	ug/l	99
3) Chloromethane	1.88	50	1249279	10.56	ug/l	99
4) Vinyl chloride	1.98	62	924245	9.98	ug/l	98
5) Bromomethane	2.43	94	752370	9.86	ug/l	100
6) Chloroethane	2.49	64	536307	8.94	ug/l	97
7) Dichlorofluoromethane	2.55	67	2029782	9.42	ug/l	99
8) Trichlorofluoromethane	2.80	101	1282109	10.52	ug/l	97
9) Acrolein	3.32	56	201952	47.08	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.34	151	914333	9.15	ug/l	99
11) Acetone	3.40	43	606745	49.19	ug/l	99
12) 1,1-Dichloroethene	3.55	61	1601743	9.91	ug/l	97
13) tert-Butyl alcohol	3.70	59	972220	254.79	ug/l	100
15) Methyl acetate	4.10	74	64102	9.72	ug/l	85
16) Iodomethane	3.99	142	1591246	10.51	ug/l	98
17) Allyl chloride	4.12	76	562657	10.88	ug/l	97
18) Methylene chloride	4.28	49	1197728	9.50	ug/l	96
19) Carbon disulfide	4.26	76	2246726	11.74	ug/l	99
20) Acrylonitrile	4.52	53	820657	53.55	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	1656336	10.70	ug/l	100
22) trans-1,2-Dichloroethene	4.79	96	1068569	11.07	ug/l	99
23) Isopropyl ether (DIPE)	5.46	45	3240157	10.15	ug/l	98
24) Vinyl acetate	5.71	43	1033752	8.97	ug/l	100
25) 1,1-Dichloroethane	5.63	63	1724856	10.69	ug/l	98
26) 2-Butanol	6.19	45	870540	202.25	ug/l	96
27) tert-Butyl ethyl ether (ET	6.38	59	2387097	10.31	ug/l	98
28) 2-Butanone	6.65	43	960595	45.83	ug/l	98
29) 2,2-Dichloropropane	6.93	77	1261677	12.53	ug/l	98
30) cis-1,2-Dichloroethene	7.05	96	1069513	10.73	ug/l	100
31) Chloroform	7.43	83	1655972	10.37	ug/l	99
32) Bromochloromethane	7.83	130	455575	10.55	ug/l	99
33) Tetrahydrofuran	7.93	42	85036	7.58	ug/l	91
36) 1,1,1-Trichloroethane	8.35	97	1438545	11.20	ug/l	98
37) Cyclohexane	8.33	84	1776715	10.79	ug/l	96
39) 1,1-Dichloropropene	8.71	110	457094	10.54	ug/l	99
40) Carbon tetrachloride	8.90	119	1160134	10.90	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	1960233	10.36	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I22\RIW153.D Vial: 2
Acq On : 22 Sep 2024 12:45 pm Operator: DHguye
Sample : CVO06I193 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:55 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	772639	9.61	ug/l	98
44)	Benzene	9.27	78	3668625	10.48	ug/l	99
45)	Trichloroethene	10.55	130	969605	10.64	ug/l	99
46)	Methylcyclohexane	10.61	83	1912664	11.03	ug/l	97
47)	1,2-Dichloropropane	10.91	63	837499	9.67	ug/l	99
48)	1,4-Dioxane	11.45	88	68217	168.29	ug/l	94
49)	Bromodichloromethane	11.35	83	1078396	9.60	ug/l	99
50)	Dibromomethane	11.43	93	400115	9.76	ug/l	98
51)	2-Chloroethyl vinyl ether	12.04	63	212153	7.79	ug/l	94
52)	4-Methyl-2-pentanone	12.08	43	2768685	47.93	ug/l	98
53)	cis-1,3-Dichloropropene	12.40	75	1296672	9.43	ug/l	98
56)	Toluene	12.94	91	3837631	11.24	ug/l	100
57)	Ethyl methacrylate	13.38	69	675329	9.00	ug/l	98
58)	trans-1,3-Dichloropropene	13.32	75	943890	9.84	ug/l	93
59)	1,1,2-Trichloroethane	13.59	97	490797	10.01	ug/l	99
60)	2-Hexanone	13.65	43	1700814	47.51	ug/l	97
61)	1,3-Dichloropropane	14.03	76	884737	9.77	ug/l	98
62)	Tetrachloroethene	14.07	164	770842	10.97	ug/l	99
63)	Dibromochloromethane	14.43	129	584390	9.67	ug/l	100
65)	1,2-Dibromoethane	14.76	107	448357	9.62	ug/l	100
66)	1-Chlorohexane	15.12	91	1397661	9.61	ug/l	94
67)	Chlorobenzene	15.49	112	2250145	10.76	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.58	131	795143	12.03	ug/l	98
69)	Ethylbenzene	15.61	91	4456792	10.59	ug/l	99
70)	m-Xylene & p-Xylene	15.74	91	6672870	20.75	ug/l	99
71)	o-Xylene	16.47	91	3505655	11.07	ug/l	99
72)	Styrene	16.53	104	2497122	10.55	ug/l	99
73)	Isopropylbenzene	17.08	105	4609913	11.22	ug/l	99
75)	Bromoform	17.06	173	270867	8.02	ug/l	98
76)	1,1,2,2-Tetrachloroethane	17.36	83	599323	9.45	ug/l	98
78)	1,2,3-Trichloropropane	17.57	110	149137	8.54	ug/l	98
79)	trans-1,4-Dichloro-2-buten	17.69	53	136473	7.08	ug/l	96
80)	n-Propylbenzene	17.67	91	5802010	9.59	ug/l	100
81)	Bromobenzene	17.71	156	826705	9.54	ug/l	99
82)	1,3,5-Trimethylbenzene	17.89	105	3861332	10.47	ug/l	99
83)	2-Chlorotoluene	17.91	91	3496076	9.87	ug/l	97
84)	4-Chlorotoluene	17.97	91	3208341	9.88	ug/l	100
85)	tert-Butylbenzene	18.35	134	856336	10.98	ug/l	97
86)	1,2,4-Trimethylbenzene	18.39	105	3827736	10.01	ug/l	100
87)	sec-Butylbenzene	18.59	105	5451598	10.47	ug/l	98
88)	p-Isopropyltoluene	18.76	119	4571943	10.33	ug/l	100
89)	1,3-Dichlorobenzene	18.87	146	1846243	9.53	ug/l	95
90)	1,2,3-Trimethylbenzene	18.94	105	3607243	10.42	ug/l	99
91)	1,4-Dichlorobenzene	18.98	146	1791070	9.34	ug/l	98
92)	n-Butylbenzene	19.20	91	4819185	10.11	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	1660884	10.36	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.14	157	102791	9.17	ug/l	87
95)	1,2,4-Trichlorobenzene	20.97	180	1365811	10.85	ug/l	99
96)	Hexachlorobutadiene	21.10	225	808195	11.88	ug/l	99
97)	Naphthalene	21.24	128	1937025	11.42	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I22\RIW153.D Vial: 2
Acq On : 22 Sep 2024 12:45 pm Operator: DHguye
Sample : CVO06I193 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:55 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

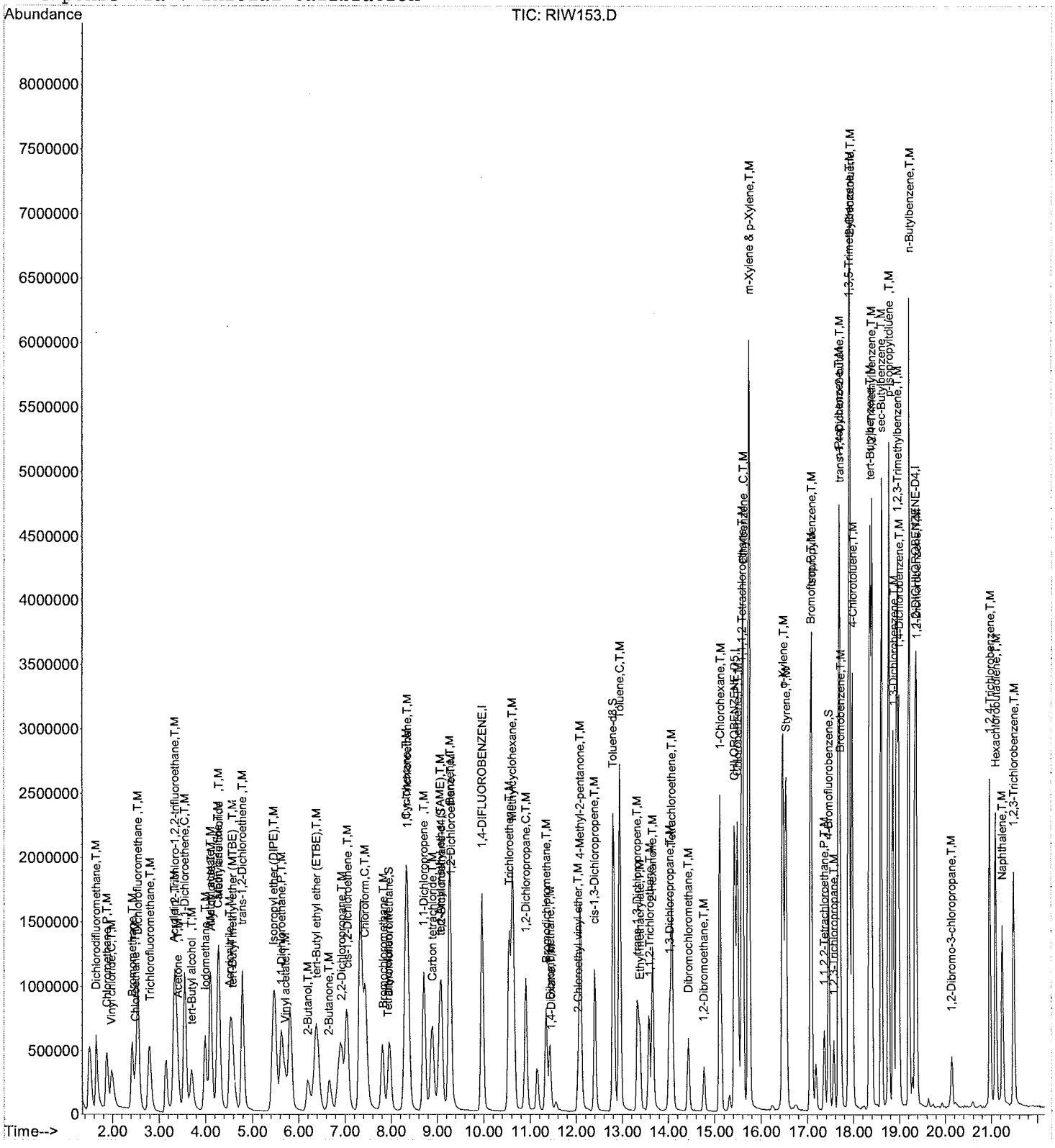
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	1087902	11.45	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I22\RIW153.D Vial: 2
Acq On : 22 Sep 2024 12:45 pm Operator: DHguye
Sample : CVO06I193 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 22 18:55 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed refer to attached analytical sequence.

Comments: ★ = varied amount

Book #: A06-083
Instrument No.: 06
Analytical Sequence: 24I19
Method File: V006I19
Analytical Batch: V006I196

INITIAL CALIBRATION REFERENCE			
DATE	9/19/2024		
ICAL ID	V006 L 19		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SV1-45-24-03 SV1-45-27-02	★	250 250
DCC 4ADD	SV1-45-32-02	↓	250
DCC 8260	SV1-45-32-03	↓	50
DCC KET	SV1-45-19-02	↓	250
BFB	SV1-45-01-01	1	50
IS/SURR. IS SS	SV1-43-95-01 SV1-38-15-15	1 ★	250 250
ICV/LCS CS2 GAS	SV1-45-25-02 SV1-43-80-02	1 1	250 250
ICV/LCS 3ADD	SV1-43-81-03	5	50
ICV/LCS 8260	SV1-43-85-02	5	50
ICV/LCS KET 2-BUT	SV1-45-21-03	5 12.5	250 500
Data File Folder	24I19		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-4	
Chlorine strip		MSV-03-04-12-6	
Methanol		MSV-03-~~26~~03-26	
$NaHSO_4$		MSV-03-02-24	
Reagent Water	RW3-24-001		
Sand			

SOP #
☒ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10 mL Purge
☒ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☐ Water
☐ pH <2. Outliers indicated on analytical sequence.
☐ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☒ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: MM
Date: 9/19/2024
Disposed By: MM
Date Disposed: 4/20/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24I19

Line	Vial	FileName	Multiplier	SampleName		Misc Info	Injected
1	1	RIW074.D	1.	BFB06I04		T/CHK	19 Sep 2024 09:28
2	2	RIW075.D	1.	VO06I191	0.03/0.15uL	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	19 Sep 2024 11:07
3	3	RIW076.D	1.	VO06I192	0.05/0.25uL	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	19 Sep 2024 11:33
4	4	RIW077.D	1.	VO06I193	0.10/0.50uL	1.0ppb 8260/5.0ppb KET-AA/25ppb TBA	19 Sep 2024 11:59
5	5	RIW078.D	1.	VO06I194	0.20/1.00uL	2.0ppb 8260/10ppb KET-AA/50ppb TBA	19 Sep 2024 12:25
6	6	RIW079.D	1.	VO06I195	0.50/2.50uL	5.0ppb 8260/25ppb KET-AA/125ppb TBA	19 Sep 2024 12:51
7	7	RIW080.D	1.	VO06I196	1.00/5.00uL	10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 13:18
8	8	RIW081.D	1.	VO06I197	2.00/10.0uL	20ppb 8260/100ppb KET-AA/500ppb TBA	19 Sep 2024 13:44
9	9	RIW082.D	1.	VO06I198	3.00/15.0uL	30ppb 8260/150ppb KET-AA/750ppb TBA	19 Sep 2024 14:10
10	10	RIW083.D	1.	VO06I199	5.00/25.0uL	50ppb 8260/250ppb KET-AA/1250ppb TBA	19 Sep 2024 14:36
11	11	RIW084.D	1.	VO06I1910	10.0/50.0uL	100ppb 8260/500ppb KET-AA/2500ppb TBA	19 Sep 2024 15:02
12	12	RIW085.D	1.	RINSE			19 Sep 2024 15:28
13	13	RIW086.D	1.	RINSE			19 Sep 2024 15:54
14	14	RIW087.D	1.	IVO06I1891		10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 16:20
15	15	RIW088.D	1.	RINSE			19 Sep 2024 16:59
16	16	RIW089.D	1.	LOD1 0.02/0.10		0.2ppb 8260/4.0ppb KET-AA/5.0ppb TBA	19 Sep 2024 17:26
17	17	RIW090.D	1.	LOD2 0.03/0.15		0.4ppb 8260/4.0ppb KET-AA/10ppb TBA	19 Sep 2024 17:52
18	18	RIW091.D	1.	LOQ		80ppb 1,4-Dioxane	19 Sep 2024 18:18
19	1	RIW092.D	1.	BFB06I05		T/CHK	19 Sep 2024 18:52
20	2	RIW093.D	1.	IVO06I192		10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 19:59

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
VOLATILES

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A06-083
Instrument No.:	06
Analytical Sequence:	24I21
Method File:	V006I19B
Analytical Batch:	CV006I192

SOP #
☒ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☒ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☒ Water
☒ pH <2. Outliers indicated on analytical sequence.
☒ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	9/19/2024		
ICAL ID	V006 I19B		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2	SV1 45 24 03	1	250
DCC GAS	SV1 45 27 02	1	250
DCC 4ADD	SV1 45 32 02	1	250
DCC ~~8260~~ KET	SV1 45 19 02	5	250
DCC 8260	SV1 45 32 03	5	50
BFB	SV1 45 01 01	1	50
IS/SURR.	SV1 45 33 02	5	250
ICV/LCS CS2	SV1 45 25 02	1	250
ICV/LCS GAS	SV1 43 88 02	1	250
ICV/LCS 4ADD	SV1 45 81 03	5	50
ICV/LCS 8260	SV1 43 85 02	5	50
ICV/LCS KET	SV1 45 21 03	5	250
Data File Folder	24I21		
	LOT #	Syringe Lot #	
pH strip	HCH39975	MSV 03 04 12 6	
Chlorine strip		MSV 03 04 12 4	
Methanol			
$NaHSO_4$			
Reagent Water	RW4 23 001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: AM/PM
Date: 9/21/2024
Disposed By: AM
Date Disposed: 9/22/2024

Injection Log

Directory: D:\HPCHEM\1\DATA\24I21

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RIW125.D	1.	BFB06I06	T/CHK	21 Sep 2024 07:29
2	2	RIW126.D	1.	CVO06I192	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Sep 2024 08:05
3	3	RIW127.D	1.	VO06I06L	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Sep 2024 08:33
4	4	RIW128.D	1.	VO06I06C	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Sep 2024 08:59
5	5	RIW129.D	1.	RINSE	25mL	21 Sep 2024 09:25
6	6	RIW130.D	1.	VO06I06B	25mL	21 Sep 2024 09:51
7	7	RIW131.D	1.	24I028-19	25mL	21 Sep 2024 10:18
8	8	RIW132.D	1.	24I027-15	25mL	21 Sep 2024 10:44
9	9	RIW133.D	1.	24I028-16	25mL	21 Sep 2024 11:10
10	10	RIW134.D	1.	24I028-17	25mL	21 Sep 2024 11:37
11	11	RIW135.D	1.	24I028-18	25mL	21 Sep 2024 12:03
12	12	RIW136.D	1.	24I039-17	25mL	21 Sep 2024 12:29
13	13	RIW137.D	1.	24I025-02	25mL	21 Sep 2024 12:55
14	14	RIW138.D	1.	24I025-01	25mL	21 Sep 2024 13:21
15	15	RIW139.D	1.	24I027-04	25mL	21 Sep 2024 13:47
16	16	RIW140.D	1.	24I027-05	25mL	21 Sep 2024 14:14
17	17	RIW141.D	1.	24I027-06	25mL	21 Sep 2024 14:40
18	18	RIW142.D	1.	24I027-07	25mL	21 Sep 2024 15:06
19	19	RIW143.D	1.	24I027-08	25mL	21 Sep 2024 15:33
20	20	RIW144.D	1.	24I027-09	25mL	21 Sep 2024 15:59
21	21	RIW145.D	1.	24I027-10	25mL	21 Sep 2024 16:25
22	22	RIW146.D	1.	24I027-11	25mL	21 Sep 2024 16:52
23	23	RIW147.D	1.	24I027-12	25mL	21 Sep 2024 17:18
24	24	RIW148.D	1.	24I027-13	25mL	21 Sep 2024 17:44
25	25	RIW149.D	1.	24I027-14	25mL	21 Sep 2024 18:11
26	26	RIW150.D	1.	24I027-01	25mL	21 Sep 2024 18:37
27	27	RIW151.D	1.	24I027-02 out of 12-Hr BFB window.	25mL	22 Sep 2024 07:34

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
VOLATILES

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: A06-083
Instrument No.: 06
Analytical Sequence: 24I22
Method File: V006I19B
Analytical Batch: CV006I193

INITIAL CALIBRATION REFERENCE	
DATE	9/19/2024
ICAL ID	VO06I19B

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
CS2	SV1 45 24 03	1	125
DCC GAS	SV1 45 27 02	1	250
DCC 4ADD	SV1 45 32 02	1	250
DCC 8260	SV1 45 32 03	5	50
DCC KET	SV1 45 19 02	5	250
BFB	SV1 45 01 01	1	50
IS/SURR.	SV1 45 33 02	5	250
ICV/LCS			
ICV/LCS			
ICV/LCS			
ICV/LCS			
Data File Folder			

	LOT #	Syringe Lot #
pH strip	HC439975	MSV 03 0412 6
Chlorine strip	233301B	MSV 03 04 12 4
Methanol		
$NaHSO_4$		
Reagent Water	RW4 23 001	
Sand		

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☒ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☒ Water
☒ pH <2. Outliers indicated on analytical sequence.
☒ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: MM /PM
Date: 9/22/2024
Disposed By: MM
Date Disposed: 9/23/2024

Injection Log

Directory: D:\HPCHEM\1\DATA\24I22

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RIW152.D	1.	BFB06I07	T/CHK	22 Sep 2024 12:04
2	2	RIW153.D	1.	CVO06I193	10ppb 8260/50ppb KET-AA/250ppb TBA	22 Sep 2024 12:45
3	3	RIW154.D	1.	VO06I07L	10ppb 8260/50ppb KET-AA/250ppb TBA	22 Sep 2024 13:33
4	4	RIW155.D	1.	VO06I07C	10ppb 8260/50ppb KET-AA/250ppb TBA	22 Sep 2024 13:59
5	5	RIW156.D	1.	RINSE	25mL	22 Sep 2024 14:38
6	6	RIW157.D	1.	VO06I07B	25mL	22 Sep 2024 15:05
7	7	RIW158.D	1.	24I027-02N	25mL	22 Sep 2024 15:31
8	8	RIW159.D	1.	24I027-03	25mL	22 Sep 2024 15:57
9	9	RIW160.D	1.	24I035-01	25mL	22 Sep 2024 16:23
10	10	RIW161.D	1.	24I035-02	25mL	22 Sep 2024 16:49
11	11	RIW162.D	1.	24I026-01	25mL	22 Sep 2024 17:15
12	12	RIW163.D	1.	24I071-05	25mL	22 Sep 2024 17:41
13	13	RIW164.D	1.	24I071-06	25mL	22 Sep 2024 18:07
14	14	RIW165.D	1.	24I071-01	25mL	22 Sep 2024 18:33
15	15	RIW166.D	1.	24I071-02	25mL	22 Sep 2024 18:59
16	16	RIW167.D	1.	24I071-03	25mL	22 Sep 2024 19:25
17	17	RIW168.D	1.	24I071-04	25mL	22 Sep 2024 19:52
18	18	RIW169.D	1.	24I026-02	25mL	22 Sep 2024 20:18
19	19	RIW170.D	1.	24I026-03	25mL	22 Sep 2024 20:44
20	20	RIW171.D	1.	24I052-01I 5X	5mL	22 Sep 2024 21:10
21	21	RIW172.D	1.	24I052-04I 5X	5mL	22 Sep 2024 21:36
22	22	RIW173.D	1.	24I071-01M	25mL	22 Sep 2024 22:02
23	23	RIW174.D	1.	24I071-01S	25mL	22 Sep 2024 22:29
24	24	RIW175.D	1.	24I071-03M	25mL	22 Sep 2024 22:55
25	25	RIW176.D	1.	24I071-03S	25mL	22 Sep 2024 23:21
26	26	RIW177.D	1.	EVO06I193	25mL	22 Sep 2024 23:47
27	27	RIW178.D	1.	EVO06I1931	10ppb 8260/50ppb KET-AA/250ppb TBA	23 Sep 2024 00:14
28	28	RIW179.D	1.	EVO06I1932	10ppb 8260/50ppb KET-AA/250ppb TBA	23 Sep 2024 00:40
29	29	RIW180.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	23 Sep 2024 01:06

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 10-15-2024
EMAX Batch No.: 24I028

Attn: Cherie Zakowski

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202

Subject: Laboratory Report
Project: VA SALT LAKE CITY

Enclosed is the Laboratory report for samples received on 09/10/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
MW13D-GW090724	I028-01	09/07/24	WATER	VOCS BY 8260C
MW13L-GW090724	I028-02	09/07/24	WATER	VOCS BY 8260C
MW13S-GW090724	I028-03	09/07/24	WATER	VOCS BY 8260C
MW18-GW090724	I028-04	09/07/24	WATER	VOCS BY 8260C
FD03-GW090724	I028-05	09/07/24	WATER	VOCS BY 8260C
MW19-GW090724	I028-06	09/07/24	WATER	VOCS BY 8260C
MW20D-GW090724	I028-07	09/07/24	WATER	VOCS BY 8260C
FD05-GW090724	I028-08	09/07/24	WATER	VOCS BY 8260C
FD06-GW090724	I028-09	09/07/24	WATER	VOCS BY 8260C
MW20S-GW090724	I028-10	09/07/24	WATER	VOCS BY 8260C
MW25A-GW090724	I028-11	09/07/24	WATER	VOCS BY 8260C
MW25B-GW090724	I028-12	09/07/24	WATER	VOCS BY 8260C
MW25C-GW090724	I028-13	09/07/24	WATER	VOCS BY 8260C
MW26C-GW090724	I028-14	09/07/24	WATER	VOCS BY 8260C
MW28-GW090724	I028-15	09/07/24	WATER	VOCS BY 8260C
MW45-GW090724	I028-16	09/07/24	WATER	VOCS BY 8260C
FB01-GW090724	I028-17	09/07/24	WATER	VOCS BY 8260C
EB01-GW090724	I028-18	09/07/24	WATER	VOCS BY 8260C
TB02-GW090924	I028-19	09/09/24	WATER	VOCS BY 8260C
MW13D-GW090724MS	I028-01M	09/07/24	WATER	VOCS BY 8260C
MW13D-GW090724MSD	I028-01S	09/07/24	WATER	VOCS BY 8260C
MW28-GW090724MS	I028-15M	09/07/24	WATER	VOCS BY 8260C
MW28-GW090724MSD	I028-15S	09/07/24	WATER	VOCS BY 8260C

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912023-25
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

CHAIN OF CUSTODY

EMAX Laboratories, Inc.
3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE
EMAX CONTROL NO. 24I028
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEI 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sl	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

ANALYSIS REQUIRED: VOCs (8260C); Anions (Cl, SO4); Nitrate/Nitrite (SM4500-NO3E); Alkalinity (SM2320B); TOC (SW9060); TDS (SM 2540C); Dissolved Gases (RSK-175)

TAT
- ☐ Rush __24__hrs.
- ☐ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☑ 21 days

	SAMPLE ID		SAMPLING			CONTAINER			MATRIX CODE	QC	PRESERVATIVE CODE									COMMENTS
LAB	CLIENT	LOCATION	DATE	TIME	NO.	SIZE	TYPE			HCl	IC	HS	IC	HS	IC	HCl				
1	MW13D-GW090724	MW13D	9/7/24	0914	9	40mL	VOA	GW	X	X										MS/MSD
2	MW13L-GW090724	MW13L	9/7/24	1131	3	40mL	VOA	GW		X										
3	MW13S-GW090724	MW13S	9/7/24	1030	3	40mL	VOA	GW		X										
4	MW18-GW090724	MW18	9/7/24	1500	3	40mL	VOA	GW		X										
5	FD03-GW090724	—	9/7/24	1131	3	40mL	VOA	GW	X	X										
6	MW19-GW090724	MW19	9/7/24	1335	3	40mL	VOA	GW		X										
7	MW20D-GW090724	MW20D	9/7/24	1206	3	40mL	VOA	GW		X										
8	FD05-GW090724	—	9/7/24	1505	3	40 mL	VOA	GW	X	X										
9	FD08-GW090724	—	9/7/24	1340	3	40 mL	VOA	GW	X	X										

Instructions
Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s
2	1.9	

SAMPLER
COURIER/AIRBILL FedEx

RELINQUISHED BY	Date	Time	RECEIVED BY
CDM Smith	09/09/24	1100	
	9/10/24	9:20	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

CHAIN OF CUSTODY

EMAX Laboratories, Inc.
3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE
EMAX CONTROL NO. 24I028
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEL 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE: DW=Drinking Water; GW=Ground Water; WW=Waste Water; SD=Solid Waste SL=Sl; SS=Soil/ Sediment; WP=Wipes PP=Pure P; AR=Air; O=Blanks (trip/rinse/fie

PRESERVATIVE: IC = Ice; HC = HCl; HN=HNO3; SH=NaO3; ST=Na2S2O3; ZA=Zinc Acetate; HS=H2SO4

ANALYSIS REQUIRED: VOCs (8260C); Anions (Cl, SO4); Nitrate/Nitrite (SM4500-NO3E); Alkalinity (SM2320B); TOC (SW9060); TDS (SM 2540C); Dissolved Gases (RSK-175)

TAT: ☐ Rush __24__hrs. ☐ Rush __48_hrs ☐ Rush_72_hrs ☐ 7 days ☐ 14 days ☑ 21 days

	SAMPLE ID LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	SAMPLING DATE	SAMPLING TIME	CONTAINER NO.	CONTAINER SIZE	CONTAINER TYPE	MATRIX CODE	QC	PRESERVATIVE CODE	COMMENTS
10	1	MW20S-GW090724	MW20S	9/7/24	1202	3	40mL	VOA	GW		X	
11	2	MW25A-GW090724	MW25A	9/7/24	1150	3	40mL	VOA	GW		X	
12	3	MW25B-GW090724	MW25B	9/7/24	1325	3	40mL	VOA	GW		X	
13	4	MW25C-GW090724	MW25C	9/7/24	1050	3	40mL	VOA	GW		X	
14	5	MW26C-GW090724	MW26C	9/7/24	1620	3	40mL	VOA	GW		X	
15	6	MW28-GW090724	MW28	9/7/24	1456	9	~~40mL~~ EG 9/9/24	VOA	GW	X	X	MS/MSD
16	7	MW45-GW090724	MW45	9/7/24	1026	3	40mL	VOA	GW		X	
17	8	FB01-~~GW~~ EG 9/9/24 GW090724	—	9/7/24	1640	3	40mL	VOA	GW EG 9/9/24		X	
18	9	EB01-GW090724	—	9/7/24	1635	3	40mL	VOA	GW EG 9/9/24		X	

Instructions
Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler # | Temp. (oC) | Sample #s

SAMPLER

COURIER/AIRBILL FedEx

RELINQUISHED BY	Date	Time	RECEIVED BY
CDM Smith	09/09/24	1100	
	9/10/24	9:20	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined hy CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

CHAIN OF CUSTODY

EMAX Laboratories, Inc.

3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE
EMAX CONTROL NO. 24I028
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEI 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sl	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

ANALYSIS REQUIRED: VOCs (8260C); Anions (Cl, SO4); Nitrate/Nitrite (SM4500-NO3E); Alkalinity (SM2320B); TOC (SW9060); TDS (SM 2540C); Dissolved Gases (RSK-175)

TAT
- ☐ Rush __24__hrs.
- ☐ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☑ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	PRESERVATIVE CODE HCl	IC	HS	IC	HS	IC	HCl	COMMENTS
1	~~TB02-0909~~ Eq 9/9/24																
19 2	TB02-GW090924	—	9/9/24	0940	3	40mL	VOA	O		X							Trip blanks
3																	
4																	
5																	
6																	
7																	
8																	
9																	

Instructions
Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s

SAMPLER
COURIER/AIRBILL FedEx

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EMAX LABORATORIES, INC.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 24I028
☒ Fedex ☐ UPS ☐ GSO ☐ Others	7784 7117 6350	Recipient Maria Rivera
☐ EMAX Courier ☐ Client Delivery		Date 09/10/24 Time 9:20

COC INSPECTION

☒ Client Name	☒ Client PM/FC	☐ Sampler Name	☒ Sampling Date/Time	☒ Sample ID	☒ Matrix
☒ Address	☒ Tel # / Fax #	☐ Courier Signature	☒ Analysis Required	☒ Preservative (if any)	☒ TAT
Safety Issues (if any)	☐ High concentrations expected	☐ From Superfund Site	☐ Rad screening required		

Note:

PACKAGING INSPECTION

Container	☒ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☒ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☒ bag
Temperatures (Cool, ≤6 °C but not frozen)	☐ Cooler 1 ____ °C	☒ Cooler 2 1.9 °C	☐ Cooler 3 ____ °C	☐ Cooler 4 ____ °C	☐ Cooler 5 ____ °C
	☐ Cooler 6 ____ °C	☐ Cooler 7 ____ °C	☐ Cooler 8 ____ °C	☐ Cooler 9 ____ °C	☐ Cooler 10 ____ °C
Thermometer:	*A - S/N* ~~216766272~~ 240412221 JSR 08/14	*B - S/N* 230044860	*C - S/N* 230044897	(D) *S/N* 230044857	

Comments: ☐ **Temperature is out of range. PM was informed IMMEDIATELY.**

Note:

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
2	10,11	D10		RJ

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

NOTES/OBSERVATIONS:

SAMPLE MATRIX IS DRINKING WATER? ☐ YES ☒ NO

LEGEND:

☐ **Continue to next page.**

Code	Description- Sample Management
D1	Analysis is not indicated in _____
D2	Analysis mismatch COC vs label
D3	Sample ID mismatch COC vs label
D4	Sample ID is not indicated in _____
D5	Container -[improper] [leaking] [broken]
D6	Date/Time is not indicated in _____
D7	Date/Time mismatch COC vs label
D8	Sample listed in COC is not received
D9	Sample received is not listed in COC
D10	No initial/date on corrections in COC/label
D11	Container count mismatch COC vs received
D12	Container size mismatch COC vs received

Code	Description-Sample Management
D13	Out of Holding Time
D14	Bubble is >6mm
D15	No trip blank in cooler
D16	Preservation not indicated in _____
D17	Preservation mismatch COC vs label
D18	Insufficient chemical preservative
D19	Insufficient Sample
D20	No filtration info for dissolved analysis
D21	No sample for moisture determination
D22	_____
D23	_____
D24	_____

Code	Description-Sample Management
R1	Proceed as indicated in ☒ COC ☐ Label
R2	Refer to attached instruction
R3	Cancel the analysis
R4	Use vial with smallest bubble first
R5	Log-in with latest sampling date and time+1 min
R6	Adjust pH as necessary
R7	Filter and preserved as necessary
R8	_____
R9	_____
R10	_____
R11	_____
R12	_____

REVIEWS:

Sample Labeling Maria Rivera Date 09/10/24 — 9/10/24

SRF Date 9/10/24

PM Date 9/10/24

ORIGIN ID:NPHA (303) 383-2300
TRACY NEAL
CDM SMITH, INC
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHIP DATE: 09SEP24
ACTWGT: 51.75 LB
CAD: 6571361/ROSA2550
DIMS: 23x12x14 IN

BILL THIRD PARTY

Part # 156297-4[illegible]
EXP 08/25

TO 275859-6545-F3063-TKS.GWSAMPL.GW
EMAX LAB.S INC-ATTN: SAMPLE RECIEVE
3051 FUJITA ST

TORRANCE CA 90505
(999) 999-9999
INV:
PO:
REF:
DEPT:

FedEx
Express

E

J243024071301uv

2 of 2
MPS# 0263 7784 7117 6350
Mstr# 7784 7117 6340 0201

TUE - 10 SEP 10:30A
PRIORITY OVERNIGHT

WZ HHRA

90505
CA-US LAX

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range or estimated value.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

SDG#: 24I028

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I028

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of nineteen(19) water samples were received on 09/10/24 to be analyzed for Volatile Organics by GC/MS in accordance with Method SW5030B/8260C and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Instrument Performance and Calibration
Instrument tune check was performed prior to calibration. Result was within acceptance criteria. Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using secondary source (ICV). Continuing calibration (CCV) was carried out at a frequency required by the project. All calibration requirements were satisfied. Note that" Minimum Response Factor" for all analytes were within method recommended response factors with the exception of Acetone and 2-Butanone. However, percent recoveries for all target analytes were within 70-130% on all calibration points. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, two(2) method blanks were analyzed. VO06I05B and VO06I06B were compliant to project requirement. Refer to sample result summary forms for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, two(2) sets of LCS/LCD were analyzed. All analytes were within LCS limits in VO06I05X/VO06I05Y. All analytes were within LCS limits in VO06I06L/VO06I06C, except for RPD for Chloroethane was not within QC limits. Refer to LCS summary forms for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, two(2) sets of MS/MSD were analyzed and the following were noted:

STEP 1. 24I028-01M/24I028-01S - All analytes were within project QC limits except for results qualified with [*]. No reanalysis was performed because same result was observed in MS/MSD, which is indicative that sample reanalysis will provide similar results. All RPD'S were within limits. Refer to Matrix QC summary form for details.

STEP 2. 24I028-15M/24I028-15S - All analytes were within project QC limits except for results qualified with [*].Presence of matrix interference was suspected. Refer to Matrix QC summary forms for details.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met with the exception of those that were discussed within the associated QC parameter.

SAMPLE RESULTS

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24I028
Instrument ID : 06

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	VO06I05B	1	NA	09/20/2416:06	09/20/2416:06	RIW099	RIW080	VO06I05	Method Blank
LCS1W	VO06I05X	1	NA	09/20/2416:32	09/20/2416:32	RIW100	RIW080	VO06I05	Lab Control Sample (LCS)
LCD1W	VO06I05Y	1	NA	09/20/2416:58	09/20/2416:58	RIW101	RIW080	VO06I05	LCS Duplicate
MW13D-GW090724	24I028-01	1	NA	09/20/2417:24	09/20/2417:24	RIW102	RIW080	VO06I05	Field Sample
MW13L-GW090724	24I028-02	1	NA	09/20/2417:50	09/20/2417:50	RIW103	RIW080	VO06I05	Field Sample
MW13S-GW090724	24I028-03	1	NA	09/20/2418:17	09/20/2418:17	RIW104	RIW080	VO06I05	Field Sample
MW18-GW090724	24I028-04	1	NA	09/20/2418:43	09/20/2418:43	RIW105	RIW080	VO06I05	Field Sample
FD03-GW090724	24I028-05	1	NA	09/20/2419:09	09/20/2419:09	RIW106	RIW080	VO06I05	Field Sample
MW19-GW090724	24I028-06	1	NA	09/20/2419:35	09/20/2419:35	RIW107	RIW080	VO06I05	Field Sample
MW20D-GW090724	24I028-07	1	NA	09/20/2420:01	09/20/2420:01	RIW108	RIW080	VO06I05	Field Sample
FD05-GW090724	24I028-08	1	NA	09/20/2420:27	09/20/2420:27	RIW109	RIW080	VO06I05	Field Sample
FD06-GW090724	24I028-09	1	NA	09/20/2420:53	09/20/2420:53	RIW110	RIW080	VO06I05	Field Sample
MW20S-GW090724	24I028-10	1	NA	09/20/2421:19	09/20/2421:19	RIW111	RIW080	VO06I05	Field Sample
MW25A-GW090724	24I028-11	1	NA	09/20/2421:45	09/20/2421:45	RIW112	RIW080	VO06I05	Field Sample
MW25B-GW090724	24I028-12	1	NA	09/20/2422:11	09/20/2422:11	RIW113	RIW080	VO06I05	Field Sample
MW25C-GW090724	24I028-13	1	NA	09/20/2422:38	09/20/2422:38	RIW114	RIW080	VO06I05	Field Sample
MW28-GW090724	24I028-15	1	NA	09/20/2423:04	09/20/2423:04	RIW115	RIW080	VO06I05	Field Sample
MW28-GW090724MS	24I028-15M	1	NA	09/20/2423:31	09/20/2423:31	RIW116	RIW080	VO06I05	Matrix Spike Sample (MS)
MW28-GW090724MSD	24I028-15S	1	NA	09/20/2423:57	09/20/2423:57	RIW117	RIW080	VO06I05	MS Duplicate (MSD)
MW13D-GW090724MS	24I028-01M	1	NA	09/21/2400:23	09/21/2400:23	RIW118	RIW080	VO06I05	Matrix Spike Sample (MS)
MW13D-GW090724MSD	24I028-01S	1	NA	09/21/2400:49	09/21/2400:49	RIW119	RIW080	VO06I05	MS Duplicate (MSD)
MW26C-GW090724	24I028-14	1	NA	09/21/2401:16	09/21/2401:16	RIW120	RIW080	VO06I05	Field Sample
LCS2W	VO06I06L	1	NA	09/21/2408:33	09/21/2408:33	RIW127	RIW080	VO06I06	Lab Control Sample (LCS)
LCD2W	VO06I06C	1	NA	09/21/2408:59	09/21/2408:59	RIW128	RIW080	VO06I06	LCS Duplicate
MBLK2W	VO06I06B	1	NA	09/21/2409:51	09/21/2409:51	RIW130	RIW080	VO06I06	Method Blank
TB02-GW090924	24I028-19	1	NA	09/21/2410:18	09/21/2410:18	RIW131	RIW080	VO06I06	Field Sample
MW45-GW090724	24I028-16	1	NA	09/21/2411:10	09/21/2411:10	RIW133	RIW080	VO06I06	Field Sample
FB01-GW090724	24I028-17	1	NA	09/21/2411:37	09/21/2411:37	RIW134	RIW080	VO06I06	Field Sample
EB01-GW090724	24I028-18	1	NA	09/21/2412:03	09/21/2412:03	RIW135	RIW080	VO06I06	Field Sample

FN - Filename
% Moist - Percent Moisture

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 09:14
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 17:24
Sample ID	: MW13D-GW090724	Date Analyzed:	09/20/24 17:24
Lab Samp ID:	24I028-01	Dilution Factor:	1
Lab File ID:	RIW102	Matrix:	WATER
Ext Btch ID:	V006I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.29J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	0.12J	1.0	0.10
1,2,3-Trichlorobenzene	0.28J	1.0	0.15
1,2,4-Trichlorobenzene	0.20J	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.17J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.8	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	50	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.43	10.0	94	70-130
Bromofluorobenzene	9.35	10.0	93	70-130
Toluene-d8	10.1	10.0	101	70-130
Dibromofluoromethane	9.64	10.0	96	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW102.D Vial: 9
Acq On : 20 Sep 2024 5:24 pm Operator: PMai
Sample : 24I028-01 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:50 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

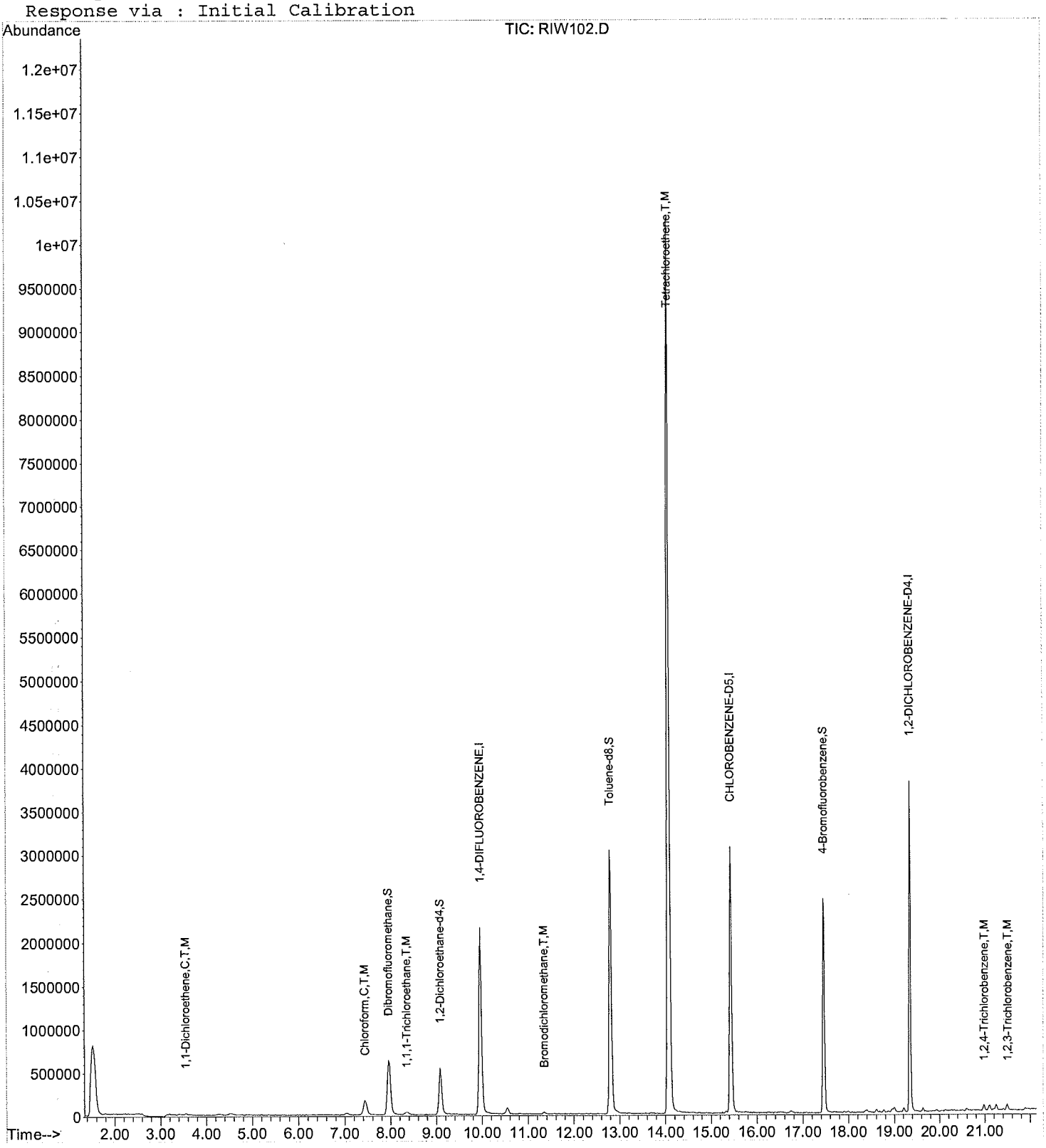
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3988349	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	3239897	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1506151	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	1086669	9.64	ug/l	-0.02
Spiked Amount 10.000			Recovery =	96.40%		
42) 1,2-Dichloroethane-d4	9.08	65	831407	9.43	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.30%		
55) Toluene-d8	12.79	98	4253278	10.14	ug/l	-0.02
Spiked Amount 10.000			Recovery =	101.40%		
77) 4-Bromofluorobenzene	17.45	95	1572005	9.35	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.50%		
Target Compounds						Qvalue
12) 1,1-Dichloroethene	3.55	61	25144	0.12	ug/l	80
31) Chloroform	7.43	83	379931	1.82	ug/l	96
36) 1,1,1-Trichloroethane	8.35	97	48216	0.29	ug/l	96
49) Bromodichloromethane	11.35	83	25481	0.17	ug/l	95
62) Tetrachloroethene	14.07	164	5046146	50.17	ug/l	99
95) 1,2,4-Trichlorobenzene	20.98	180	33970	0.20	ug/l	97
98) 1,2,3-Trichlorobenzene	21.50	180	36849	0.28	ug/l	96

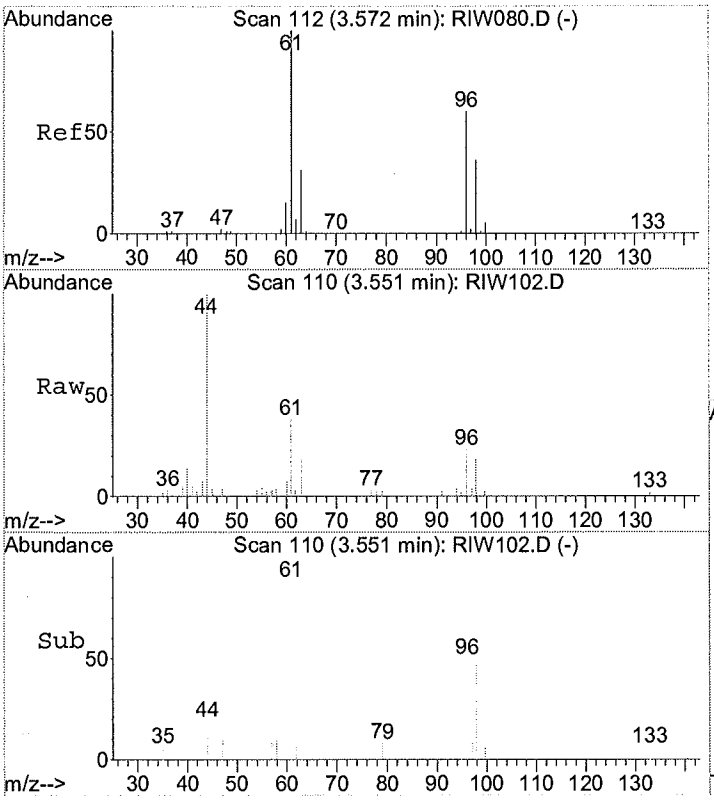
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW102.D Vial: 9
Acq On : 20 Sep 2024 5:24 pm Operator: PMai
Sample : 24I028-01 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:50 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

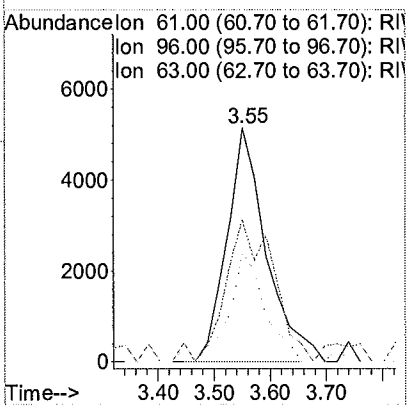


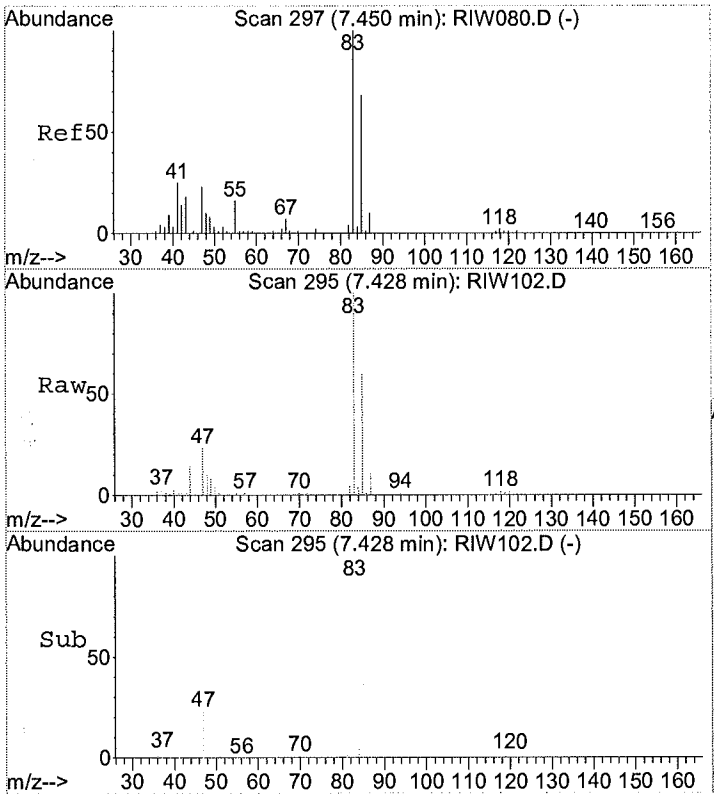


#12
1,1-Dichloroethene
Concen: 0.12 ug/l
RT: 3.55 min Scan# 110
Delta R.T. -0.02 min
Lab File: RIW102.D
Acq: 20 Sep 2024 5:24 pm

Tgt Ion: 61 Resp: 25144

Ion	Ratio	Lower	Upper
61	100		
96	74.3	29.9	89.9
63	43.8	1.0	61.0

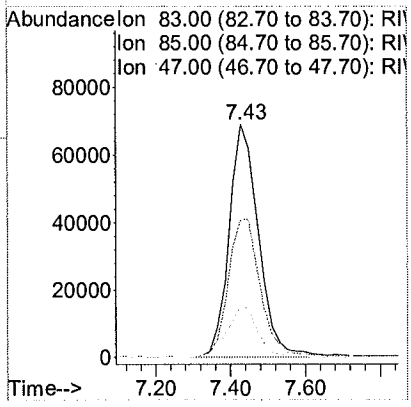


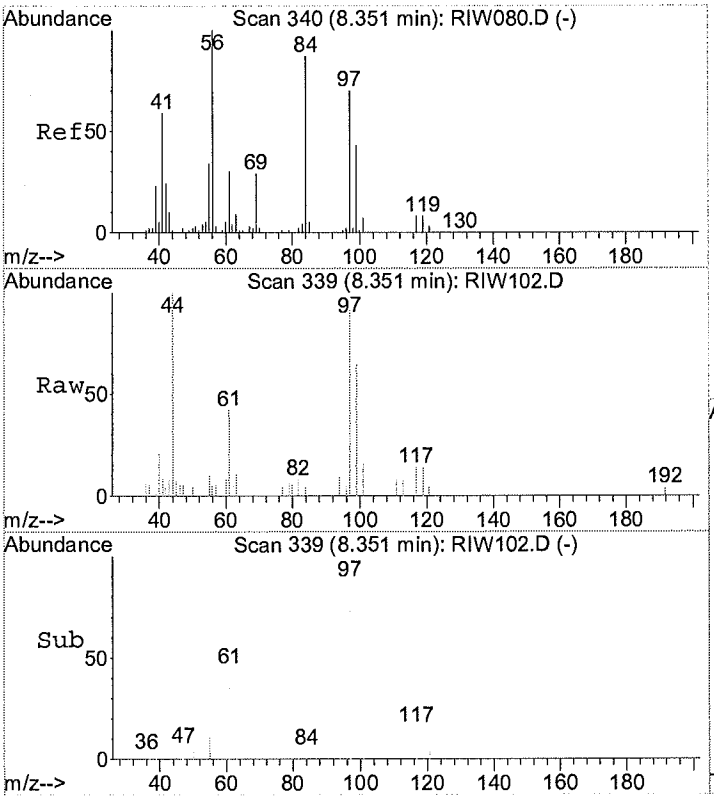


#31
Chloroform
Concen: 1.82 ug/l
RT: 7.43 min Scan# 295
Delta R.T. -0.02 min
Lab File: RIW102.D
Acq: 20 Sep 2024 5:24 pm

Tgt Ion: 83 Resp: 379931

Ion	Ratio	Lower	Upper
83	100		
85	64.6	38.6	98.6
47	22.7	0.0	53.1

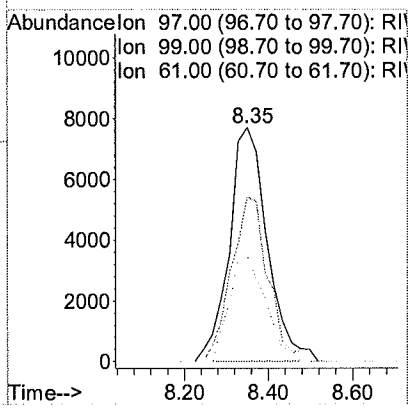


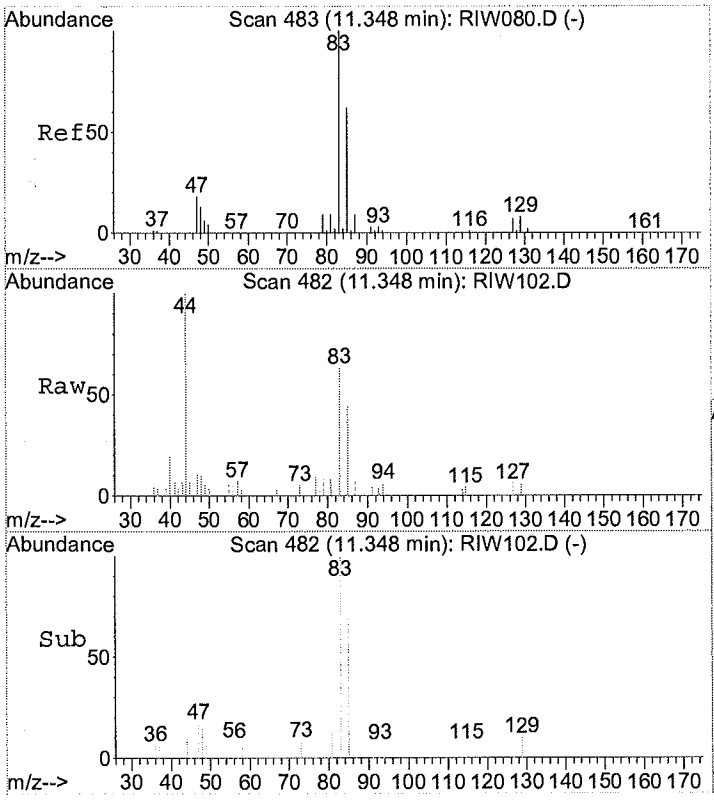


#36
1,1,1-Trichloroethane
Concen: 0.29 ug/l
RT: 8.35 min Scan# 339
Delta R.T. -0.00 min
Lab File: RIW102.D
Acq: 20 Sep 2024 5:24 pm

Tgt Ion: 97 Resp: 48216

Ion	Ratio	Lower	Upper
97	100		
99	67.5	32.6	92.6
61	43.6	12.7	72.7

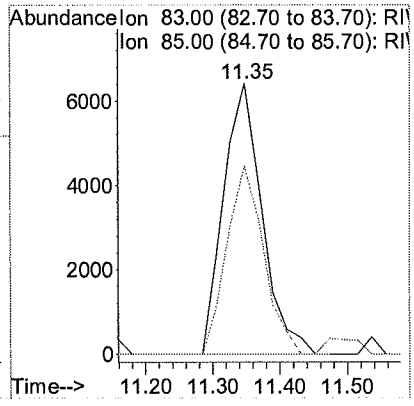


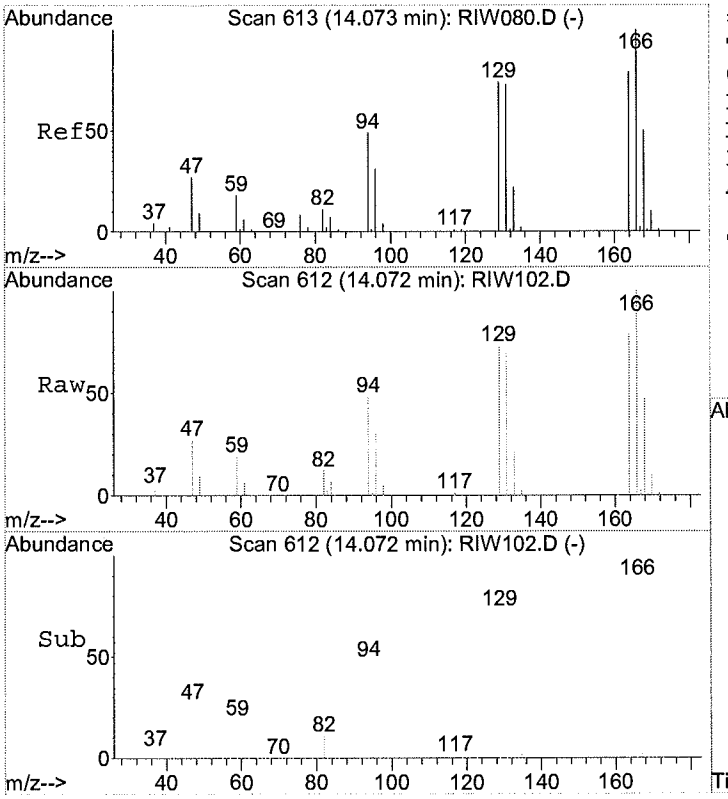


#49
Bromodichloromethane
Concen: 0.17 ug/l
RT: 11.35 min Scan# 482
Delta R.T. -0.00 min
Lab File: RIW102.D
Acq: 20 Sep 2024 5:24 pm

Tgt Ion: 83 Resp: 25481

Ion	Ratio	Lower	Upper
83	100		
85	66.8	33.1	93.1

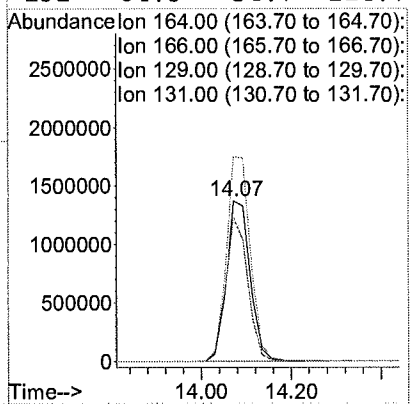


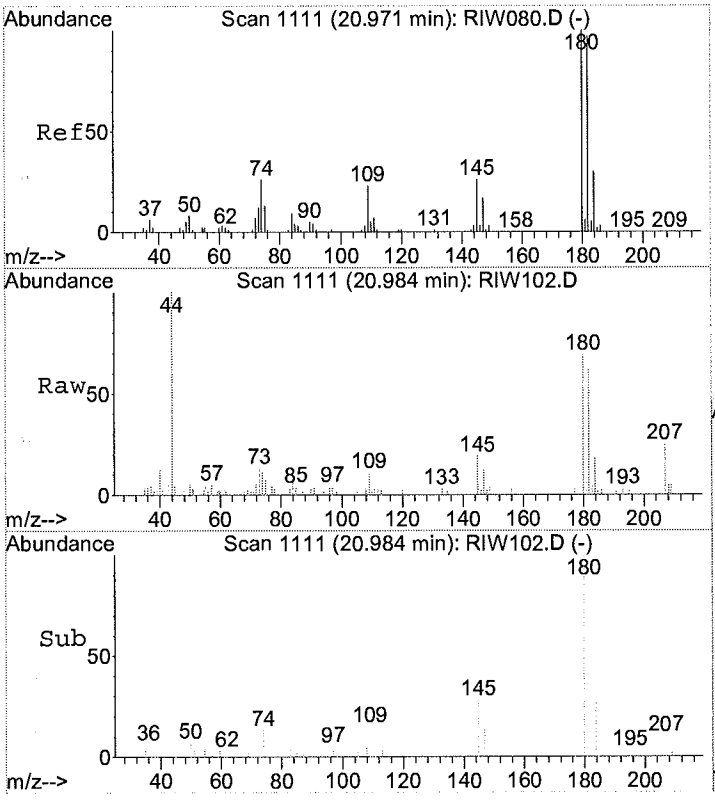


#62
Tetrachloroethene
Concen: 50.17 ug/l
RT: 14.07 min Scan# 612
Delta R.T. -0.00 min
Lab File: RIW102.D
Acq: 20 Sep 2024 5:24 pm

Tgt Ion:164 Resp: 5046146

Ion	Ratio	Lower	Upper
164	100		
166	129.0	100.5	160.5
129	86.4	57.4	117.4
131	84.3	54.7	114.7

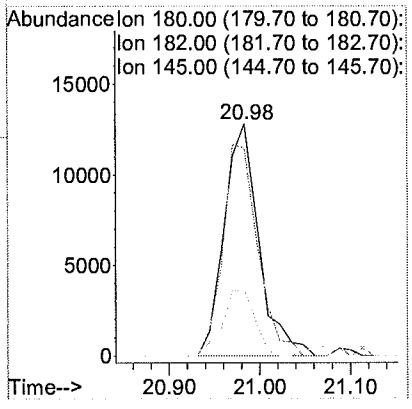


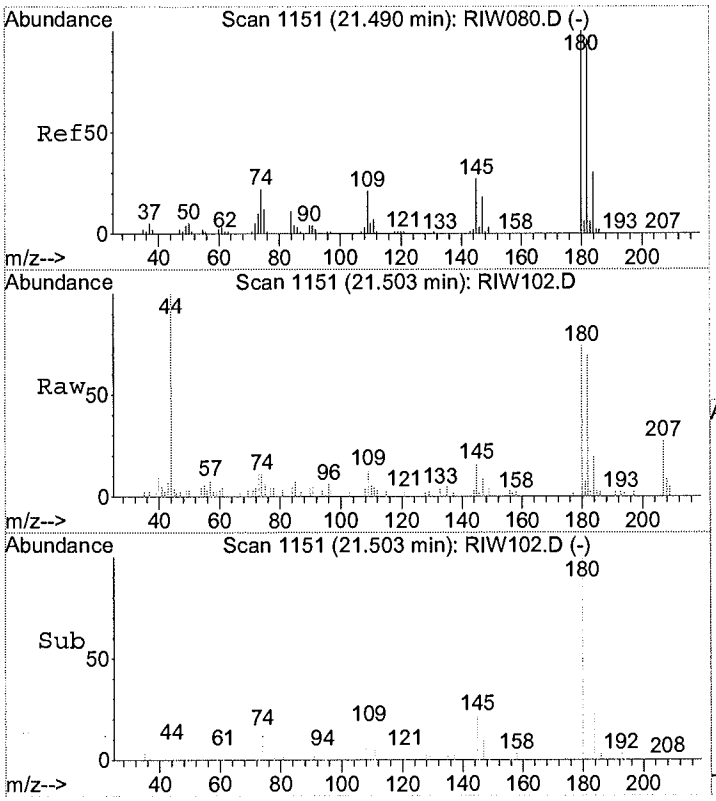


#95
1,2,4-Trichlorobenzene
Concen: 0.20 ug/l
RT: 20.98 min Scan# 1111
Delta R.T. 0.01 min
Lab File: RIW102.D
Acq: 20 Sep 2024 5:24 pm

Tgt Ion:180 Resp: 33970

Ion	Ratio	Lower	Upper
180	100		
182	92.1	65.7	125.7
145	26.4	0.0	56.3

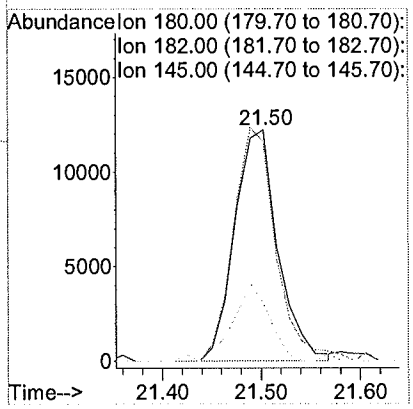




#98
1,2,3-Trichlorobenzene
Concen: 0.28 ug/l
RT: 21.50 min Scan# 1151
Delta R.T. 0.01 min
Lab File: RIW102.D
Acq: 20 Sep 2024 5:24 pm

Tgt Ion:180 Resp: 36849

Ion	Ratio	Lower	Upper
180	100		
182	99.4	64.7	124.7
145	28.4	0.0	57.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 11:31
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 17:50
Sample ID	: MW13L-GW090724	Date Analyzed:	09/20/24 17:50
Lab Samp ID	: 24I028-02	Dilution Factor:	1
Lab File ID	: RIW103	Matrix:	WATER
Ext Btch ID	: V006I05	% Moisture:	NA
Calib. Ref.	: RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.39J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	0.19J	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.19J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	0.25J	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.9	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	63	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.43	10.0	94	70-130
Bromofluorobenzene	9.04	10.0	90	70-130
Toluene-d8	10.2	10.0	102	70-130
Oibromofluoromethane	9.43	10.0	94	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW103.D Vial: 10
Acq On : 20 Sep 2024 5:50 pm Operator: PMai
Sample : 24I028-02 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:54 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

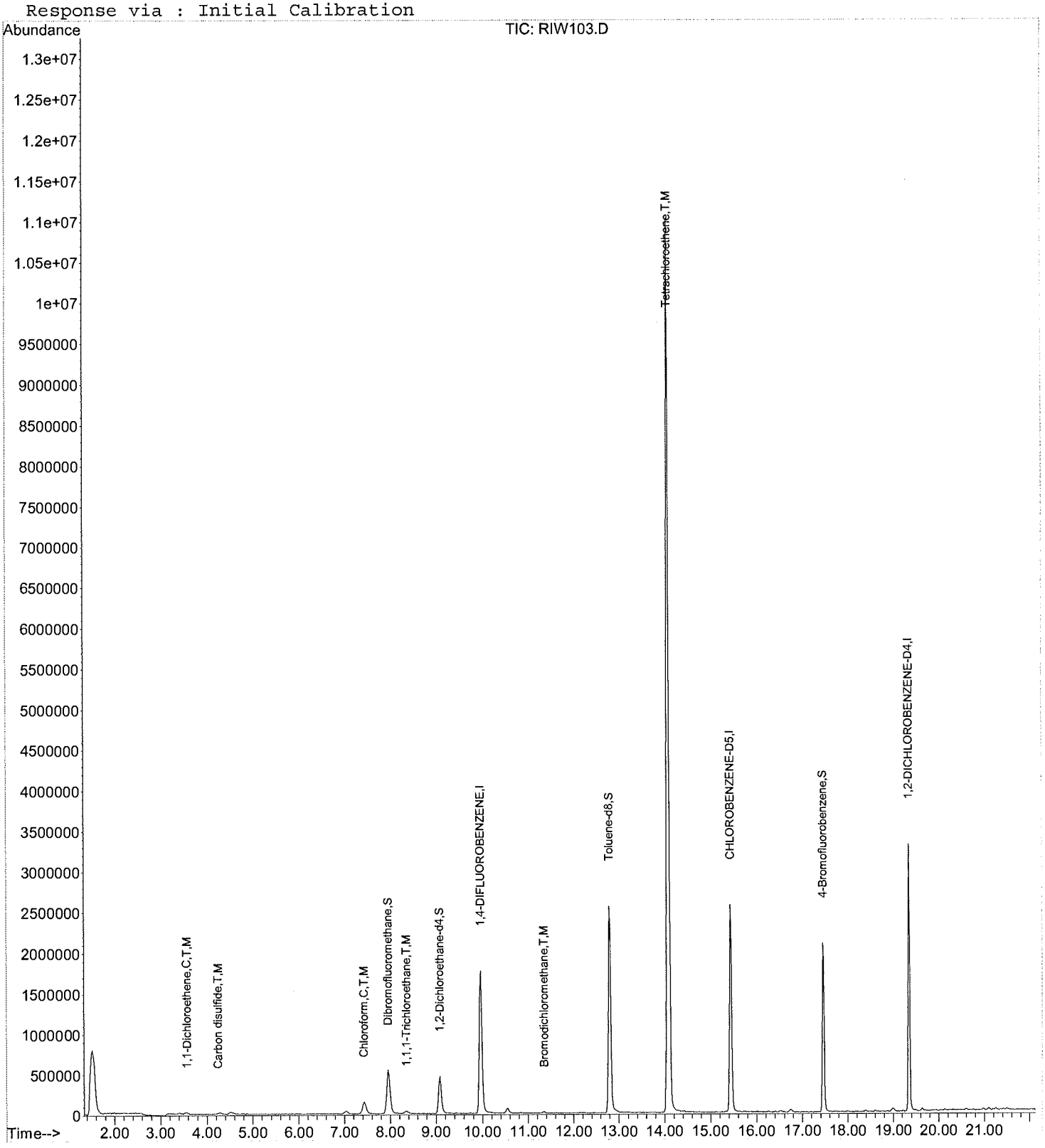
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3346647	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2726610	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1311541	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	892370	9.43	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.30%		
42) 1,2-Dichloroethane-d4	9.08	65	698086	9.43	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.30%		
55) Toluene-d8	12.79	98	3586753	10.16	ug/l	-0.02
Spiked Amount 10.000			Recovery =	101.60%		
77) 4-Bromofluorobenzene	17.45	95	1324113	9.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.40%		
Target Compounds						Qvalue
12) 1,1-Dichloroethene	3.57	61	33351	0.19	ug/l	94
19) Carbon disulfide	4.24	76	22340	0.25	ug/l	72
31) Chloroform	7.43	83	333242	1.90	ug/l	94
36) 1,1,1-Trichloroethane	8.35	97	54607	0.39	ug/l	98
49) Bromodichloromethane	11.35	83	23208	0.19	ug/l	99
62) Tetrachloroethene	14.07	164	5335772	63.04	ug/l	98

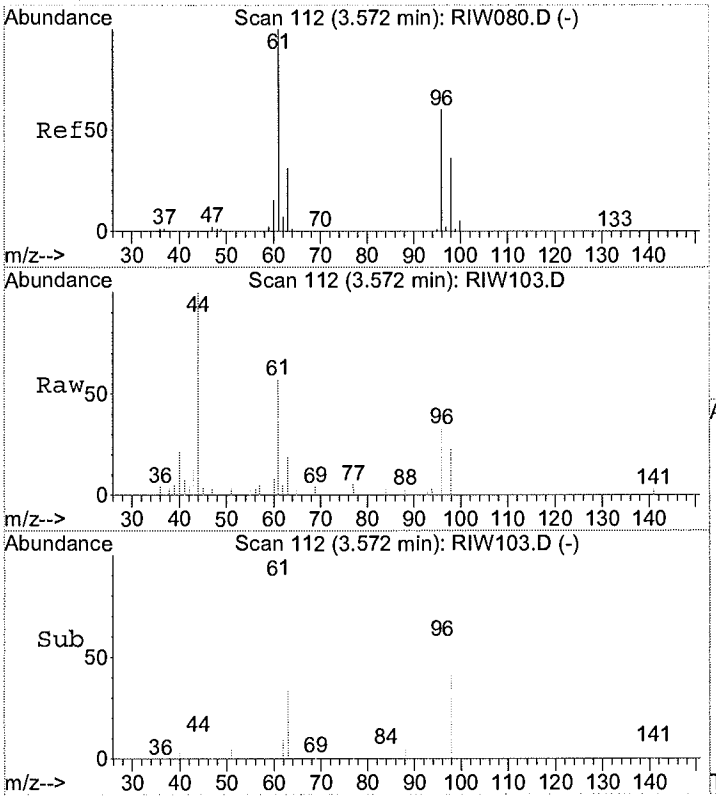
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW103.D Vial: 10
Acq On : 20 Sep 2024 5:50 pm Operator: PMai
Sample : 24I028-02 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:54 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

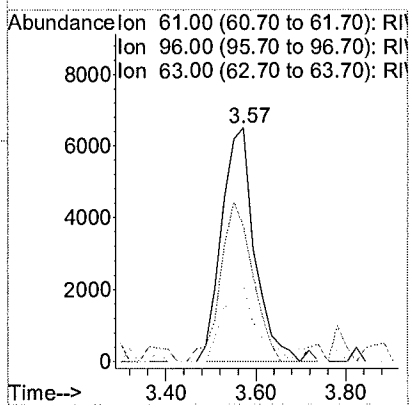


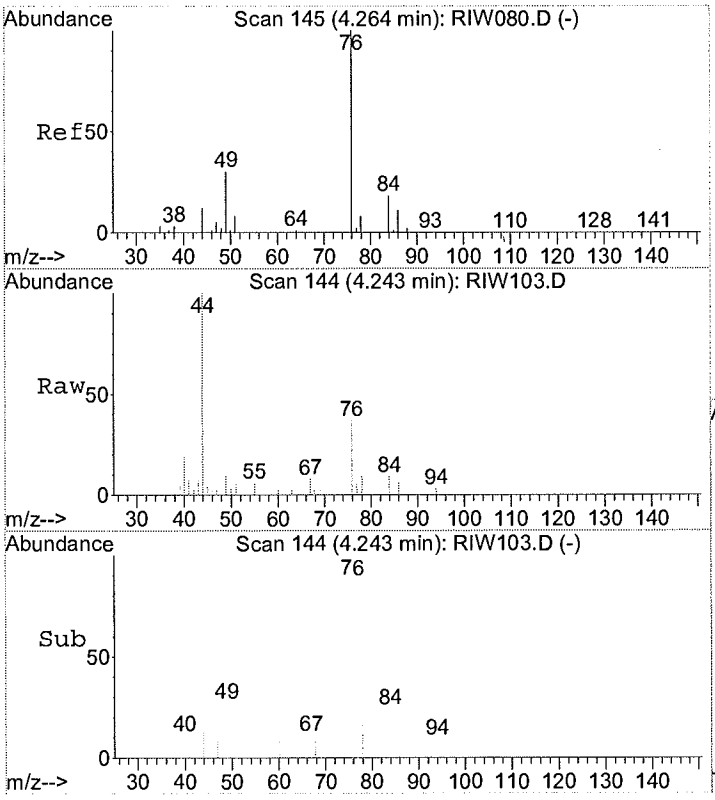


#12
1,1-Dichloroethene
Concen: 0.19 ug/l
RT: 3.57 min Scan# 112
Delta R.T. -0.00 min
Lab File: RIW103.D
Acq: 20 Sep 2024 5:50 pm

Tgt Ion: 61 Resp: 33351

Ion	Ratio	Lower	Upper
61	100		
96	66.0	29.9	89.9
63	31.8	1.0	61.0

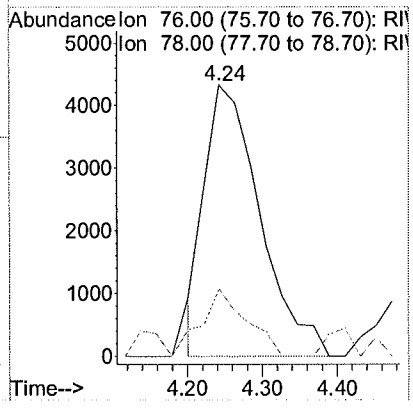


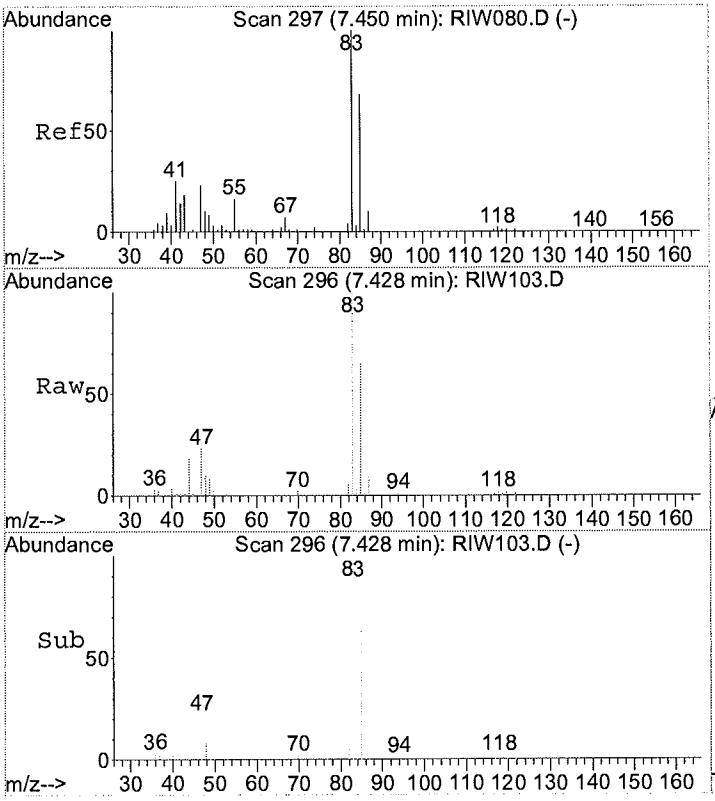


#19
Carbon disulfide
Concen: 0.25 ug/l
RT: 4.24 min Scan# 144
Delta R.T. -0.02 min
Lab File: RIW103.D
Acq: 20 Sep 2024 5:50 pm

Tgt Ion: 76 Resp: 22340

Ion	Ratio	Lower	Upper
76	100		
78	17.9	0.0	38.1

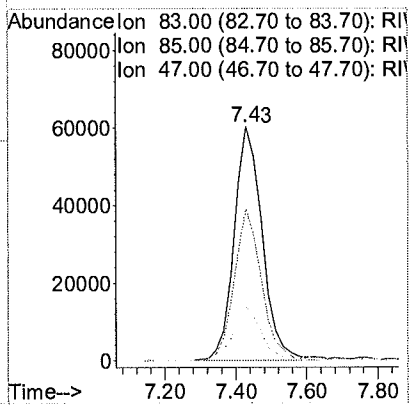


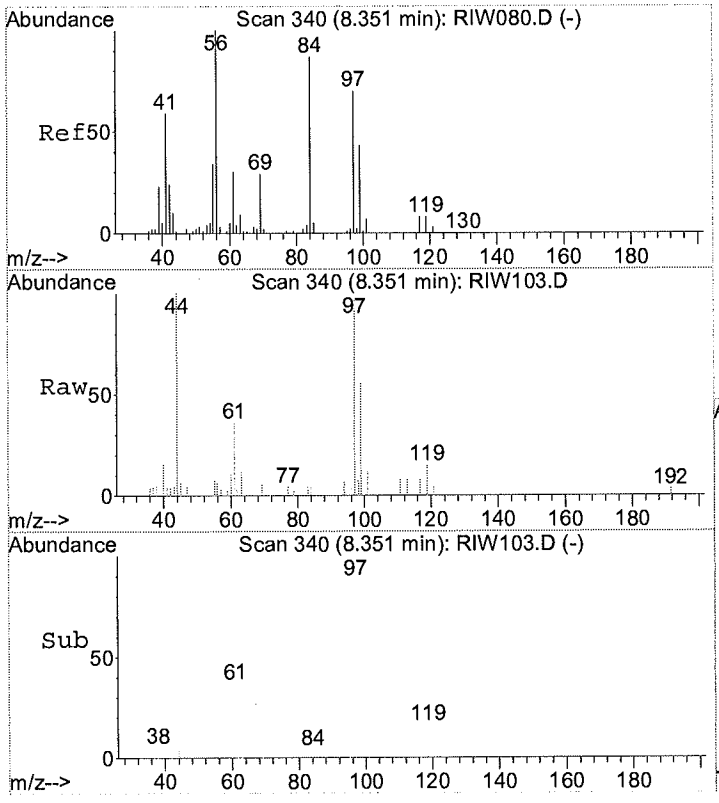


#31
Chloroform
Concen: 1.90 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW103.D
Acq: 20 Sep 2024 5:50 pm

Tgt Ion: 83 Resp: 333242

Ion	Ratio	Lower	Upper
83	100		
85	62.0	38.6	98.6
47	23.2	0.0	53.1

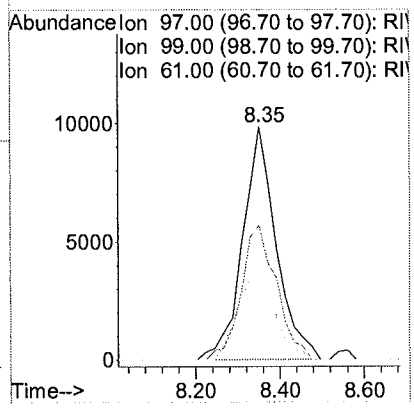


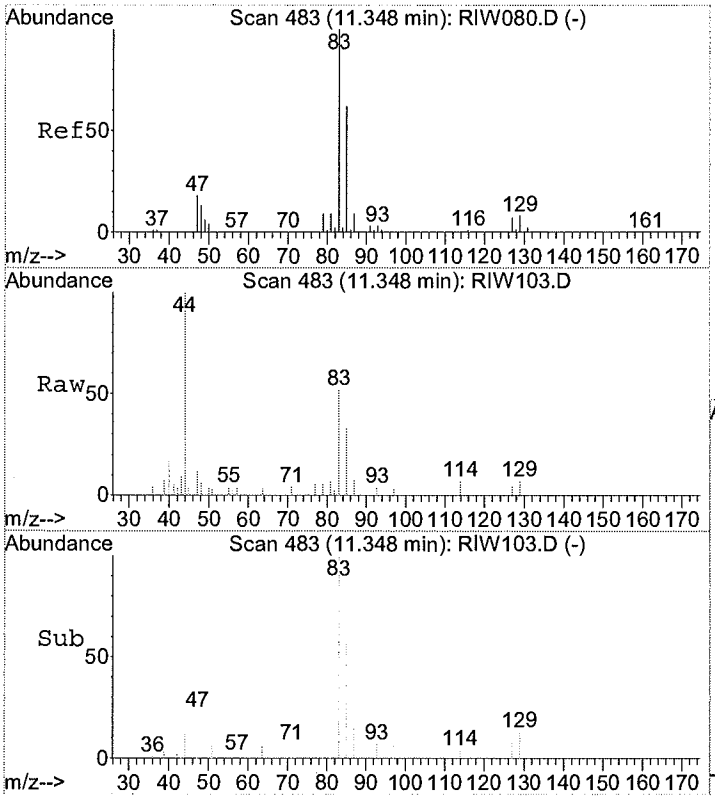


#36
1,1,1-Trichloroethane
Concen: 0.39 ug/l
RT: 8.35 min Scan# 340
Delta R.T. -0.00 min
Lab File: RIW103.D
Acq: 20 Sep 2024 5:50 pm

Tgt Ion: 97 Resp: 54607

Ion	Ratio	Lower	Upper
97	100		
99	60.9	32.6	92.6
61	43.1	12.7	72.7

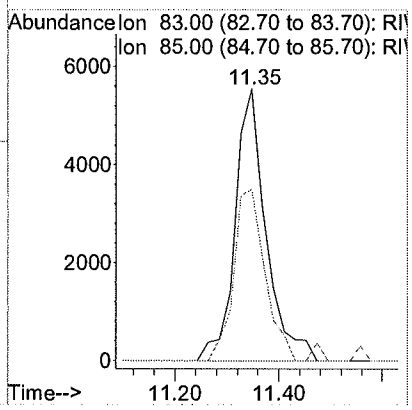


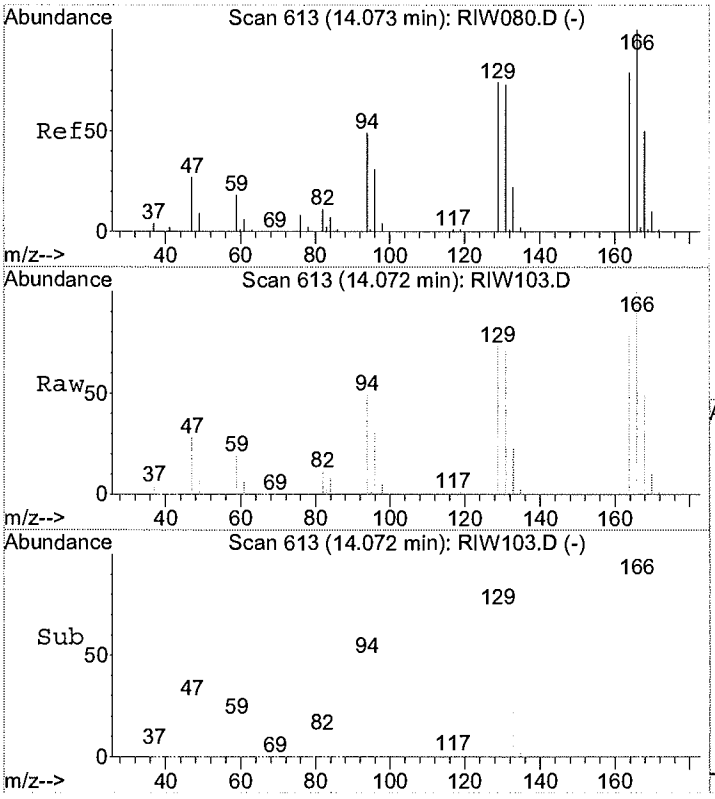


#49
Bromodichloromethane
Concen: 0.19 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW103.D
Acq: 20 Sep 2024 5:50 pm

Tgt Ion: 83 Resp: 23208

Ion	Ratio	Lower	Upper
83	100		
85	63.9	33.1	93.1

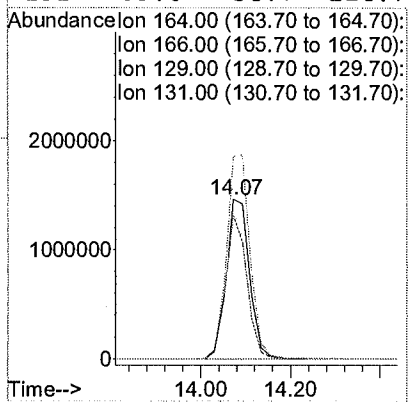




#62
Tetrachloroethene
Concen: 63.04 ug/l
RT: 14.07 min Scan# 613
Delta R.T. -0.00 min
Lab File: RIW103.D
Acq: 20 Sep 2024 5:50 pm

Tgt Ion:164 Resp: 5335772

Ion	Ratio	Lower	Upper
164	100		
166	128.8	100.5	160.5
129	85.8	57.4	117.4
131	83.0	54.7	114.7



METHDD SW5030B/8260C
VDLATILE DRGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 10:30
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 18:17
Sample ID	: MW13S-GW090724	Date Analyzed:	09/20/24 18:17
Lab Samp ID:	24I028-03	Dilution Factor:	1
Lab File ID:	RIW104	Matrix:	WATER
Ext Btch ID:	VD06I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.10J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	0.49J	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	25	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURRDGATE PARAMETER(S)	RESULT	SPK_AMT	%RECDVERY	QC LIMIT
1,2-Dichloroethane-d4	9.54	10.0	95	70-130
Bromofluorobenzene	9.42	10.0	94	70-130
Toluene-d8	10.4	10.0	104	70-130
Dibromofluoromethane	9.39	10.0	94	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW104.D Vial: 11
Acq On : 20 Sep 2024 6:17 pm Operator: PMai
Sample : 24I028-03 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:55 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

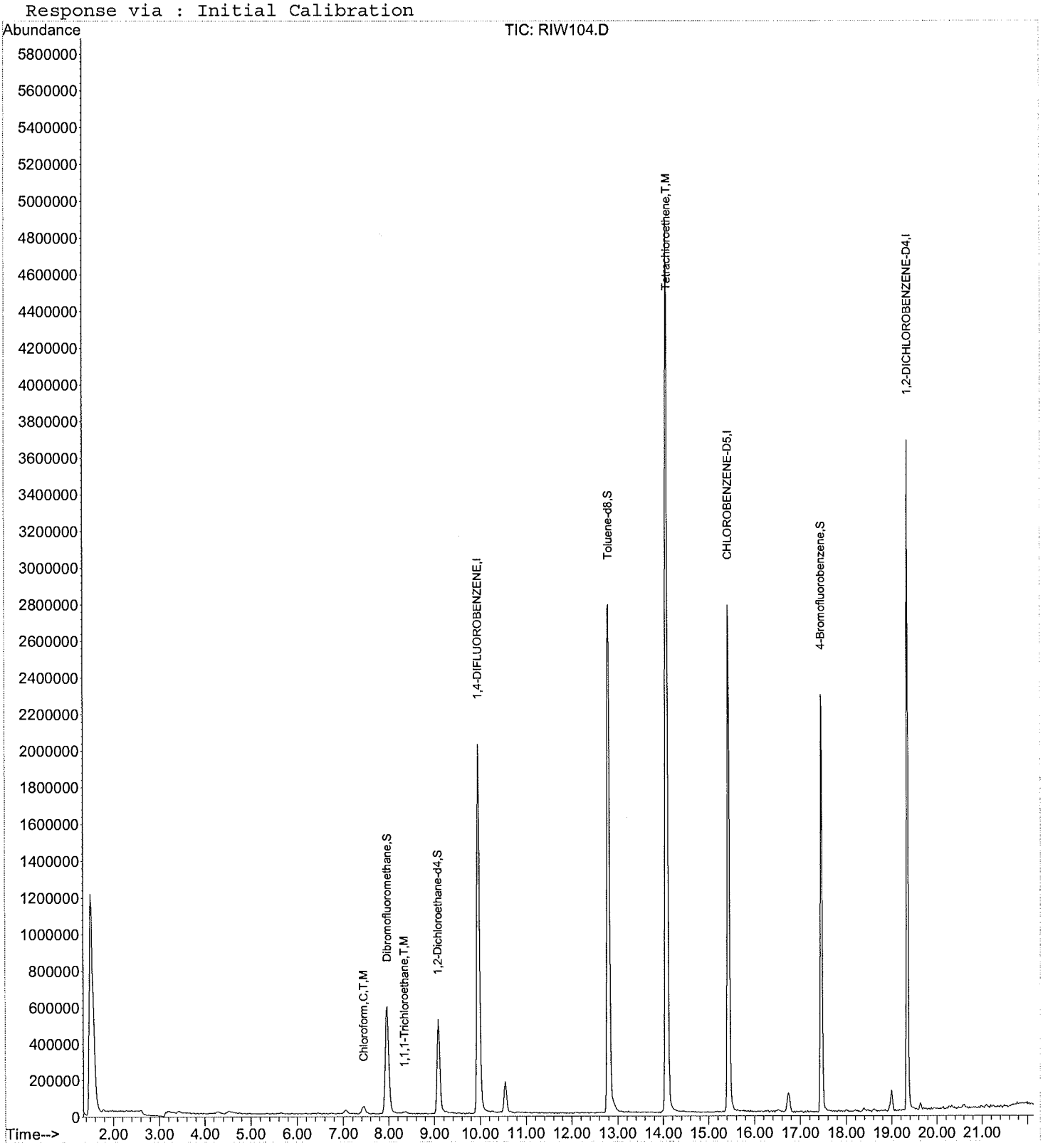
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.97	114	3788162	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	3042664	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1423258	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	1004807	9.39	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.90%		
42) 1,2-Dichloroethane-d4	9.08	65	798829	9.54	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.40%		
55) Toluene-d8	12.82	98	4093542	10.39	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.90%		
77) 4-Bromofluorobenzene	17.45	95	1497005	9.42	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.20%		
Target Compounds						Qvalue
31) Chloroform	7.45	83	96655	0.49	ug/l	95
36) 1,1,1-Trichloroethane	8.35	97	16374	0.10	ug/l	91
62) Tetrachloroethene	14.09	164	2402310	25.43	ug/l	99

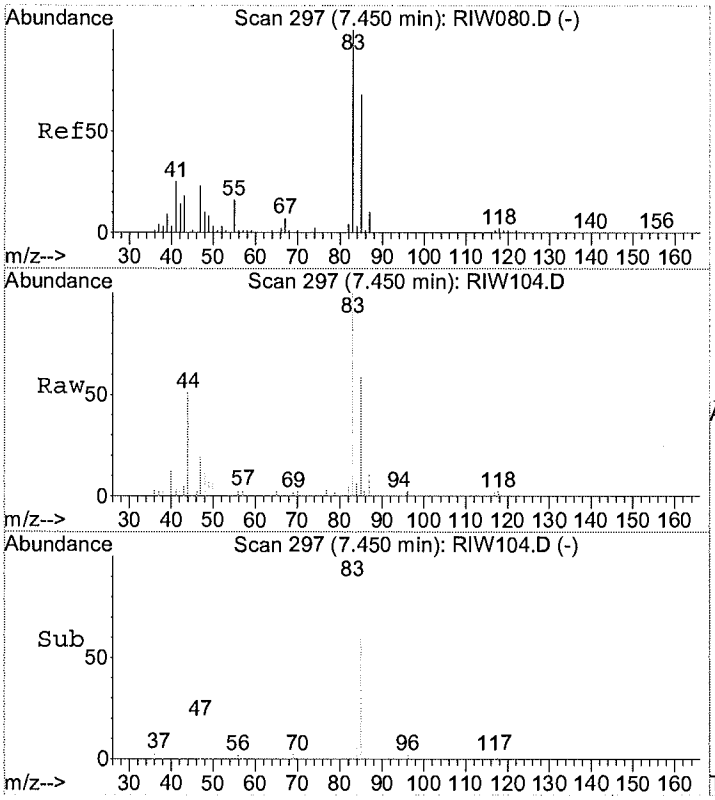
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW104.D Vial: 11
Acq On : 20 Sep 2024 6:17 pm Operator: PMai
Sample : 24I028-03 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:55 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

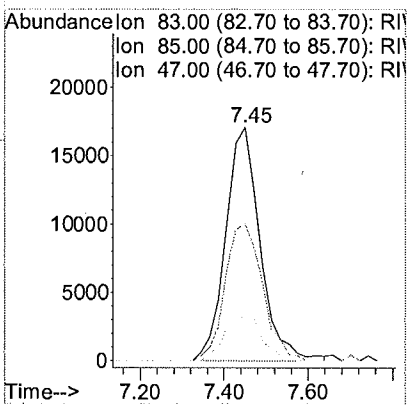


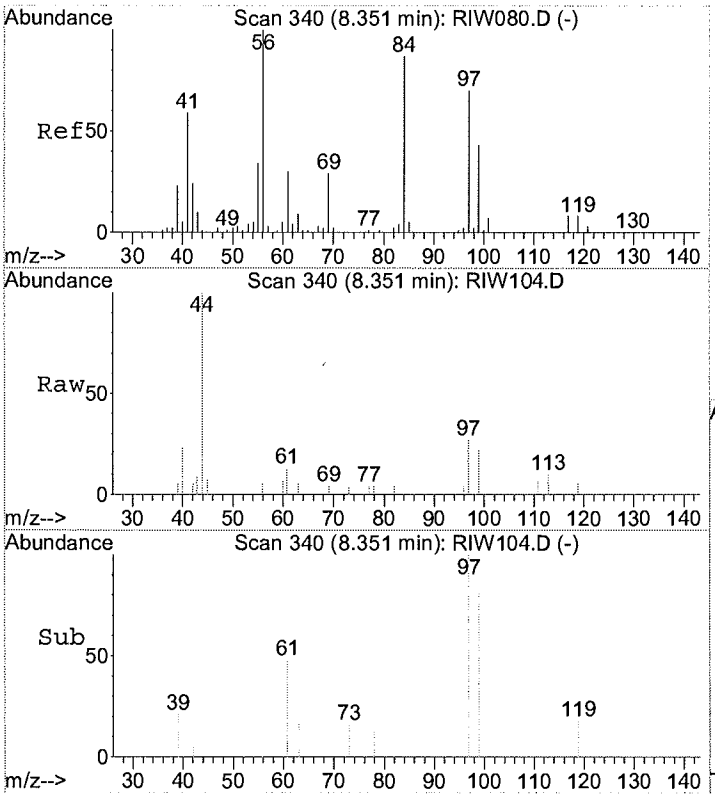


#31
Chloroform
Concen: 0.49 ug/l
RT: 7.45 min Scan# 297
Delta R.T. 0.00 min
Lab File: RIW104.D
Acq: 20 Sep 2024 6:17 pm

Tgt Ion: 83 Resp: 96655

Ion	Ratio	Lower	Upper
83	100		
85	63.7	38.6	98.6
47	21.9	0.0	53.1

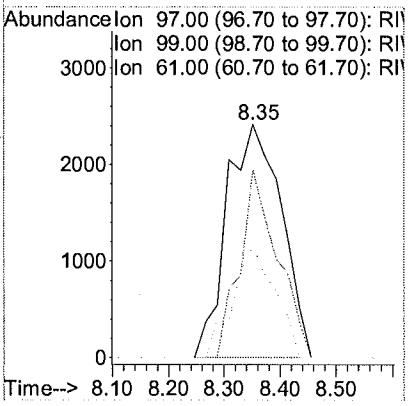


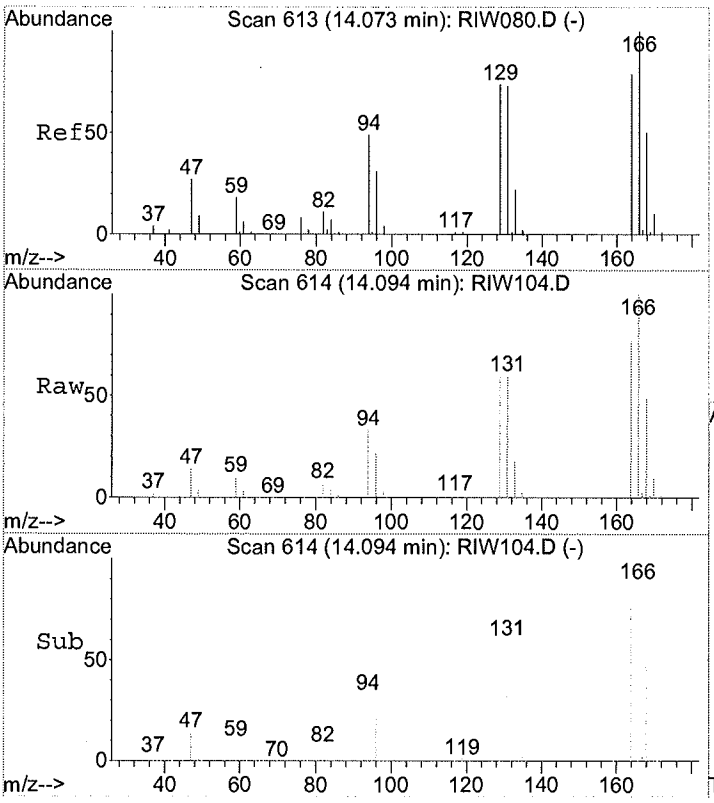


#36
1,1,1-Trichloroethane
Concen: 0.10 ug/l
RT: 8.35 min Scan# 340
Delta R.T. 0.00 min
Lab File: RIW104.D
Acq: 20 Sep 2024 6:17 pm

Tgt Ion: 97 Resp: 16374

Ion	Ratio	Lower	Upper
97	100		
99	55.7	32.6	92.6
61	37.2	12.7	72.7

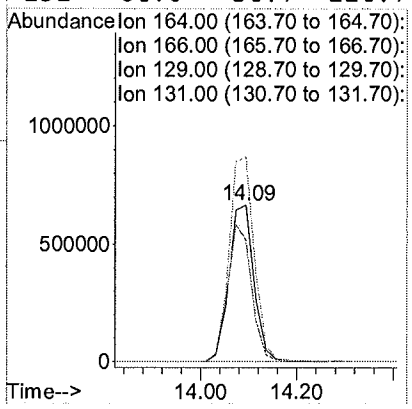




#62
Tetrachloroethene
Concen: 25.43 ug/l
RT: 14.09 min Scan# 614
Delta R.T. 0.02 min
Lab File: RIW104.D
Acq: 20 Sep 2024 6:17 pm

Tgt Ion:164 Resp: 2402310

Ion	Ratio	Lower	Upper
164	100		
166	131.7	100.5	160.5
129	86.4	57.4	117.4
131	84.6	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 15:00
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 18:43
Sample ID	: MW18-GW090724	Date Analyzed:	09/20/24 18:43
Lab Samp ID:	24I028-04	Dilution Factor:	1
Lab File ID:	RIW105	Matrix:	WATER
Ext Btch ID:	VOO6I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.38J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	0.10J	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.18J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.8	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	56	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.96	10.0	100	70-130
Bromofluorobenzene	9.24	10.0	92	70-130
Toluene-d8	10.1	10.0	101	70-130
Dibromofluoromethane	9.68	10.0	97	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW105.D Vial: 12
Acq On : 20 Sep 2024 6:43 pm Operator: PMai
Sample : 24I028-04 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:56 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

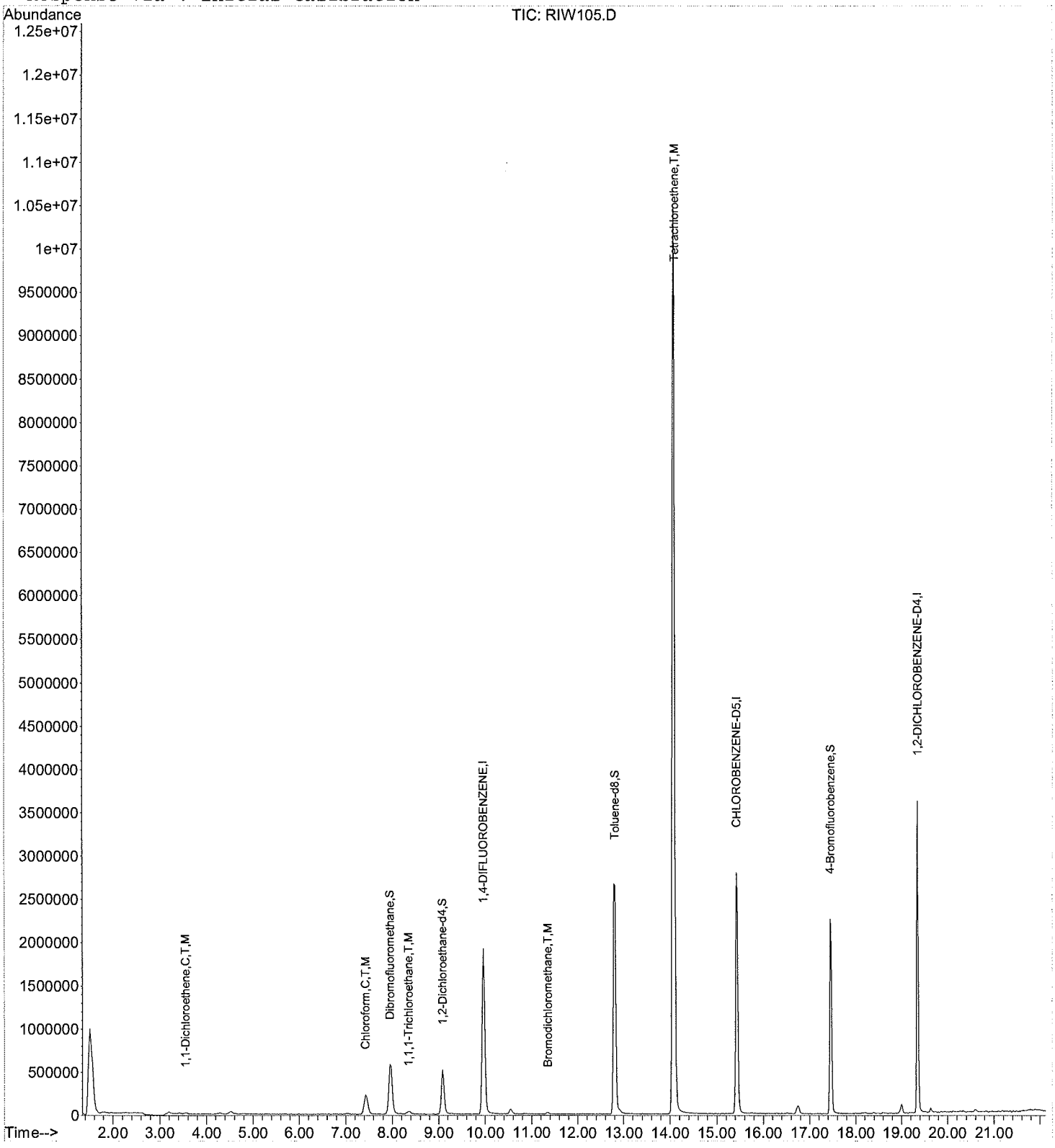
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3555161	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2978545	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1420596	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	973134	9.68	ug/l	-0.02
Spiked Amount 10.000			Recovery =	96.80%		
42) 1,2-Dichloroethane-d4	9.08	65	782638	9.96	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.60%		
55) Toluene-d8	12.81	98	3884239	10.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.80%		
77) 4-Bromofluorobenzene	17.45	95	1465376	9.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.40%		
Target Compounds						Qvalue
12) 1,1-Dichloroethene	3.55	61	19239	0.10	ug/l	73
31) Chloroform	7.43	83	523769	2.82	ug/l	95
36) 1,1,1-Trichloroethane	8.35	97	56928	0.38	ug/l	99
49) Bromodichloromethane	11.35	83	23163	0.18	ug/l	88
62) Tetrachloroethene	14.09	164	5186414	56.09	ug/l	98

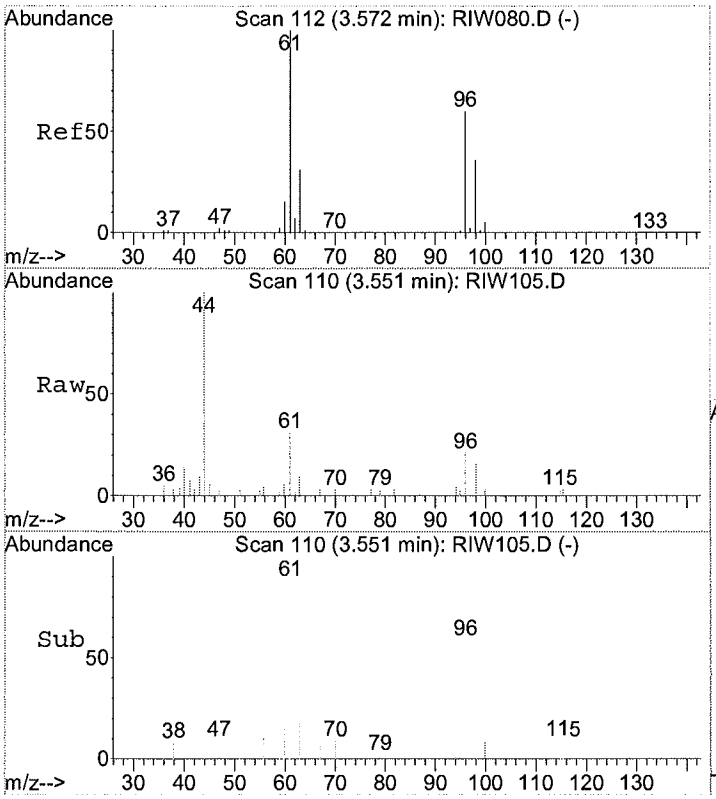
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW105.D Vial: 12
Acq On : 20 Sep 2024 6:43 pm Operator: PMai
Sample : 24I028-04 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:56 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

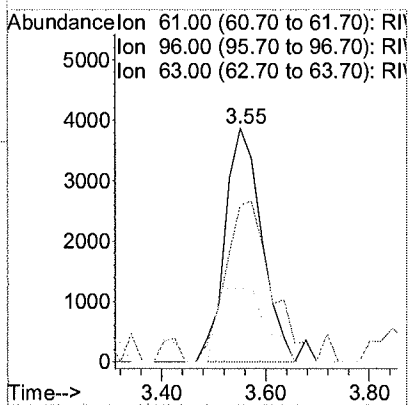


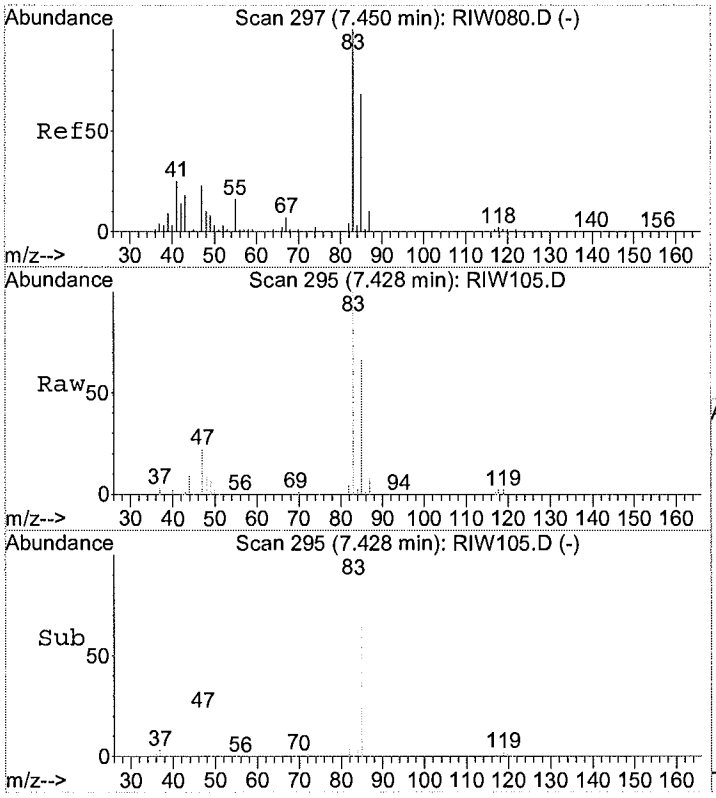


#12
1,1-Dichloroethene
Concen: 0.10 ug/l
RT: 3.55 min Scan# 110
Delta R.T. -0.02 min
Lab File: RIW105.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion: 61 Resp: 19239

Ion	Ratio	Lower	Upper
61	100		
96	84.0	29.9	89.9
63	41.0	1.0	61.0

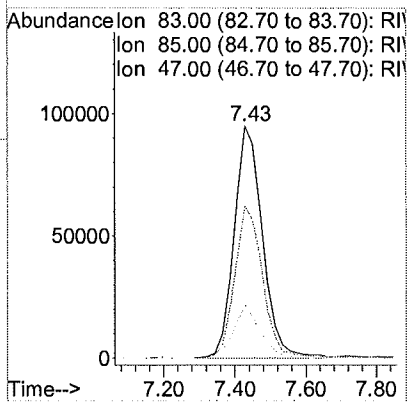


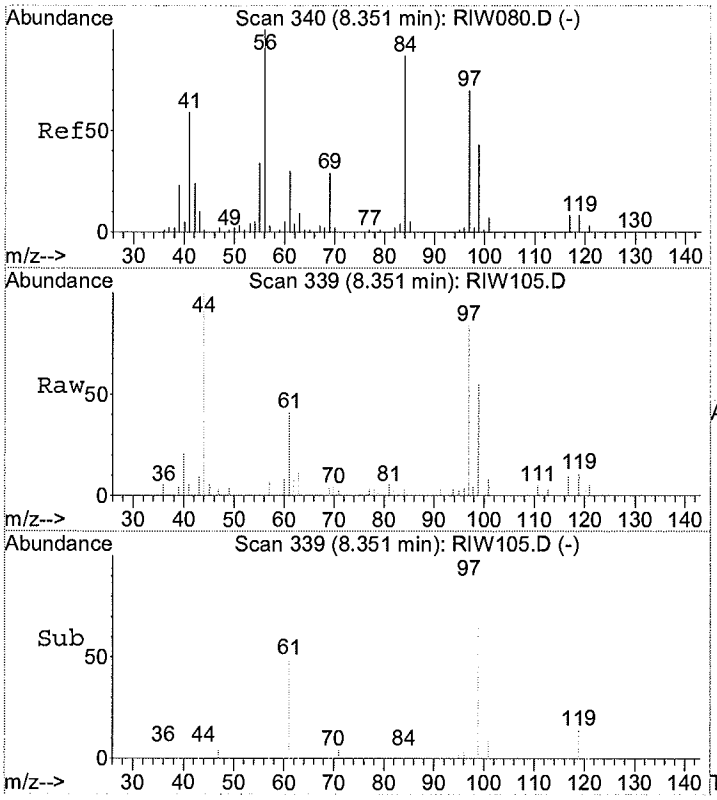


#31
Chloroform
Concen: 2.82 ug/l
RT: 7.43 min Scan# 295
Delta R.T. -0.02 min
Lab File: RIW105.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion: 83 Resp: 523769

Ion	Ratio	Lower	Upper
83	100		
85	64.4	38.6	98.6
47	21.5	0.0	53.1

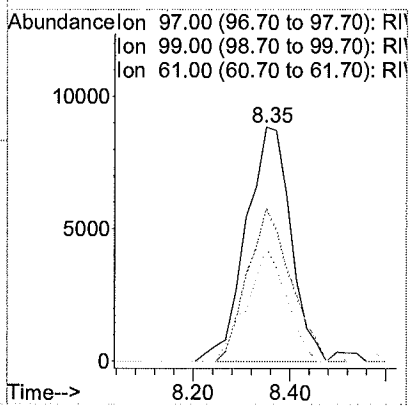


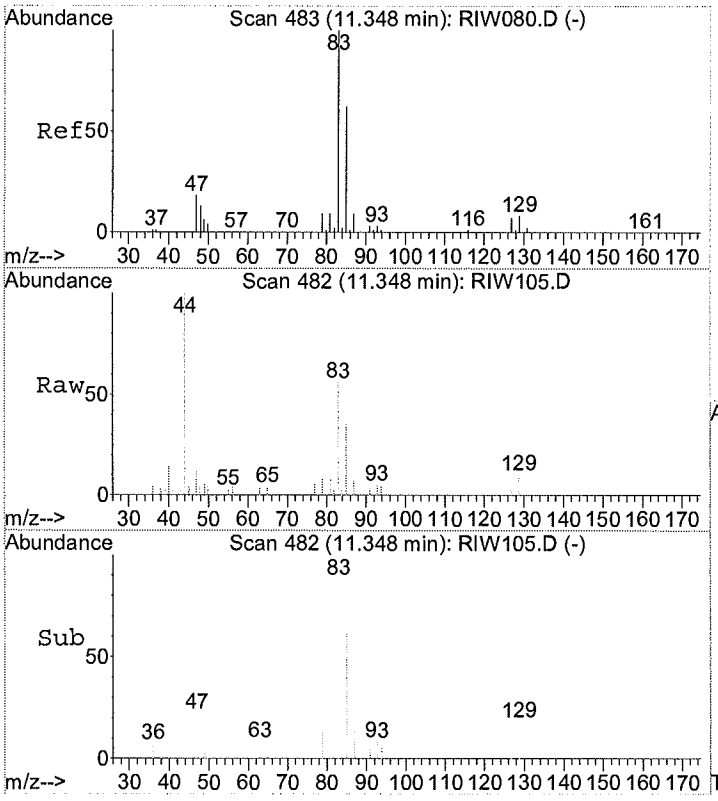


#36
1,1,1-Trichloroethane
Concen: 0.38 ug/l
RT: 8.35 min Scan# 339
Delta R.T. -0.00 min
Lab File: RIW105.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion: 97 Resp: 56928

Ion	Ratio	Lower	Upper
97	100		
99	63.1	32.6	92.6
61	43.0	12.7	72.7

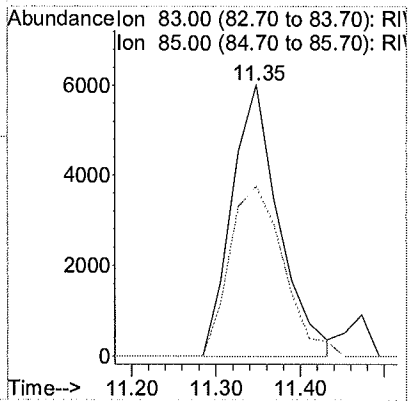


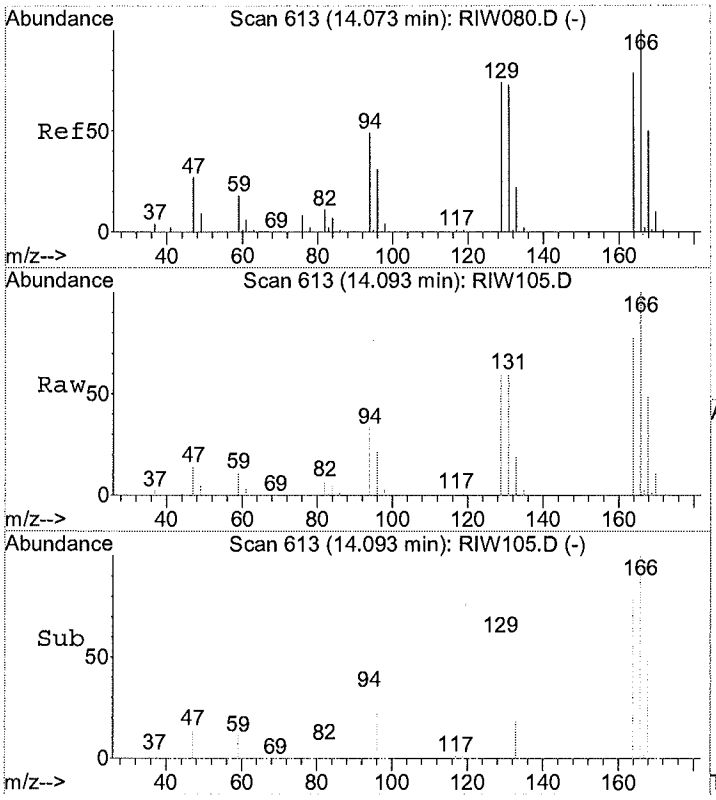


#49
Bromodichloromethane
Concen: 0.18 ug/l
RT: 11.35 min Scan# 482
Delta R.T. -0.00 min
Lab File: RIW105.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion: 83 Resp: 23163

Ion	Ratio	Lower	Upper
83	100		
85	72.1	33.1	93.1

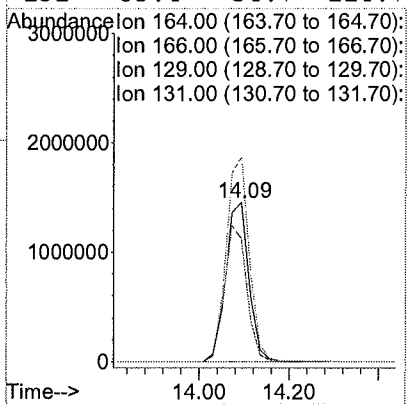




#62
Tetrachloroethene
Concen: 56.09 ug/l
RT: 14.09 min Scan# 613
Delta R.T. 0.02 min
Lab File: RIW105.D
Acq: 20 Sep 2024 6:43 pm

Tgt Ion:164 Resp: 5186414

Ion	Ratio	Lower	Upper
164	100		
166	128.3	100.5	160.5
129	86.4	57.4	117.4
131	83.4	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 11:31
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 19:09
Sample ID	: FD03-GW090724	Date Analyzed:	09/20/24 19:09
Lab Samp ID:	24I028-05	Dilution Factor:	1
Lab File ID:	RIW106	Matrix:	WATER
Ext Btch ID:	V006I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.35J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	0.15J	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.17J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.8	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	59	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.71	10.0	97	70-130
Bromofluorobenzene	9.08	10.0	91	70-130
Toluene-d8	10.2	10.0	102	70-130
Dibromofluoromethane	9.56	10.0	96	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW106.D Vial: 13
Acq On : 20 Sep 2024 7:09 pm Operator: PMai
Sample : 24I028-05 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:21 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

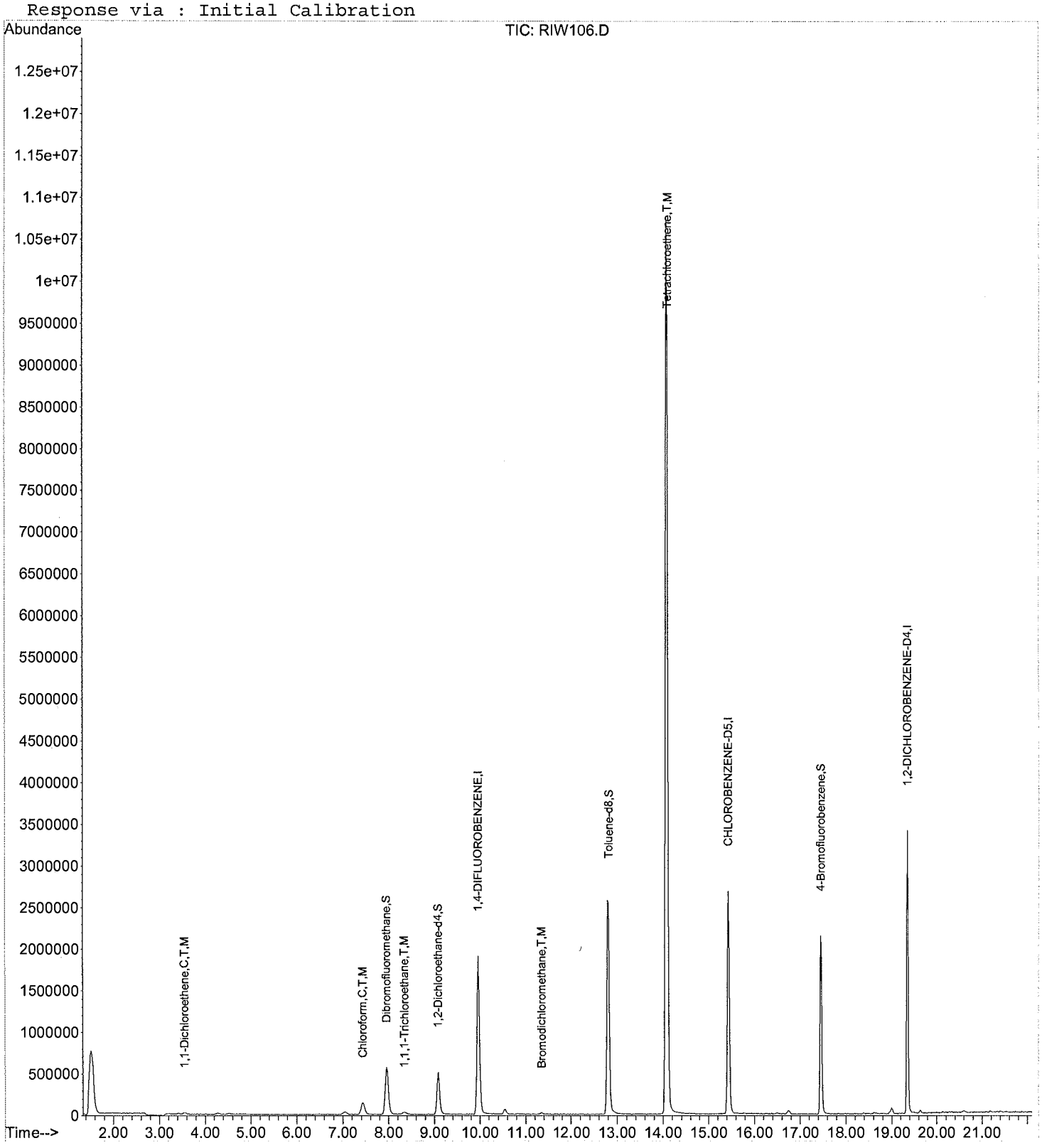
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3474319	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2847836	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1363382	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	939275	9.56	ug/l	-0.02
Spiked Amount 10.000			Recovery =	95.60%		
42) 1,2-Dichloroethane-d4	9.08	65	746150	9.71	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.10%		
55) Toluene-d8	12.81	98	3769866	10.23	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.30%		
77) 4-Bromofluorobenzene	17.45	95	1382502	9.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.80%		
Target Compounds						Qvalue
12) 1,1-Dichloroethene	3.55	61	28092	0.15	ug/l	86
31) Chloroform	7.43	83	325292	1.79	ug/l	95
36) 1,1,1-Trichloroethane	8.35	97	51839	0.35	ug/l	99
49) Bromodichloromethane	11.35	83	21994	0.17	ug/l	99
62) Tetrachloroethene	14.09	164	5187167	58.67	ug/l	99

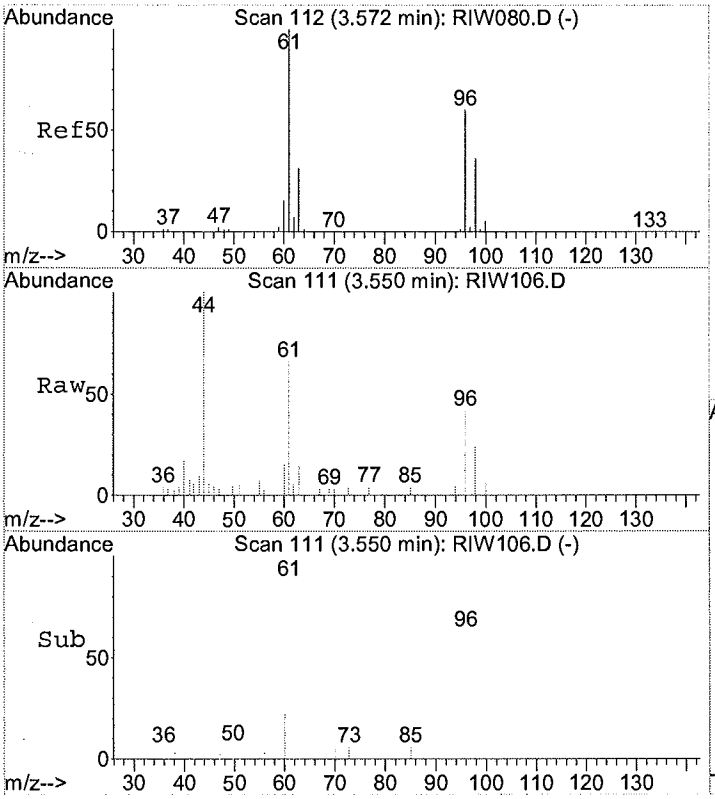
(#) = qualifier out of range (m) = manual integration
RIW106.D VO06I19B.M Mon Oct 14 08:21:26 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW106.D Vial: 13
Acq On : 20 Sep 2024 7:09 pm Operator: PMai
Sample : 24I028-05 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:21 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

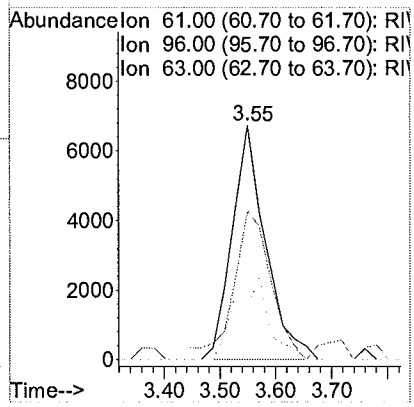


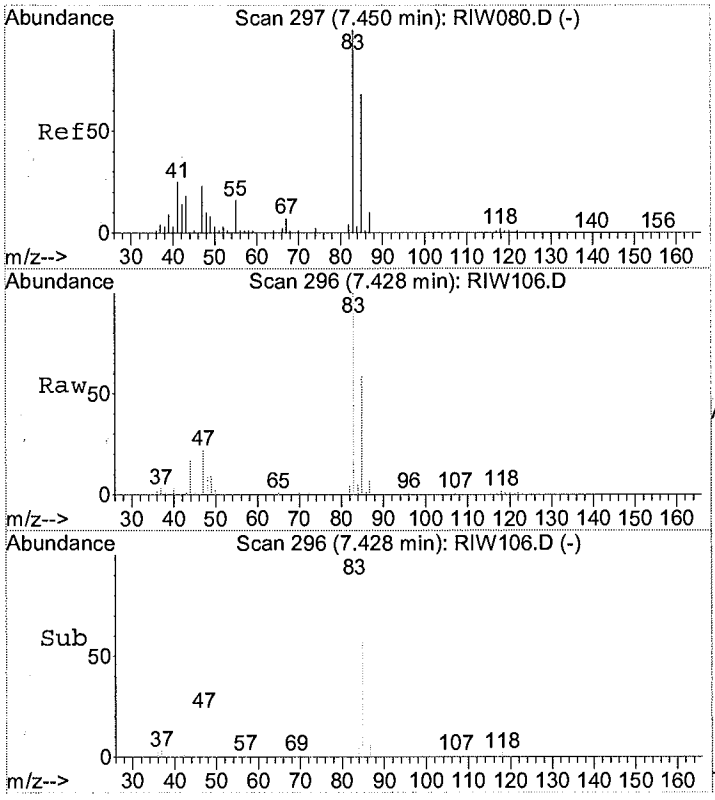


#12
1,1-Dichloroethene
Concen: 0.15 ug/l
RT: 3.55 min Scan# 111
Delta R.T. -0.02 min
Lab File: RIW106.D
Acq: 20 Sep 2024 7:09 pm

Tgt Ion: 61 Resp: 28092

Ion	Ratio	Lower	Upper
61	100		
96	71.9	29.9	89.9
63	36.0	1.0	61.0

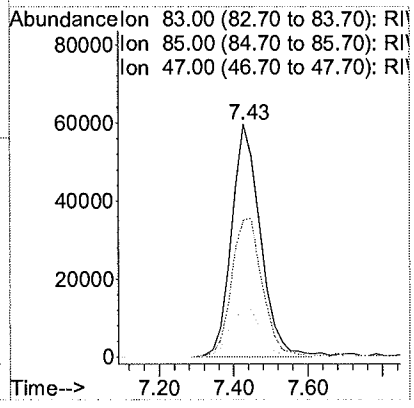


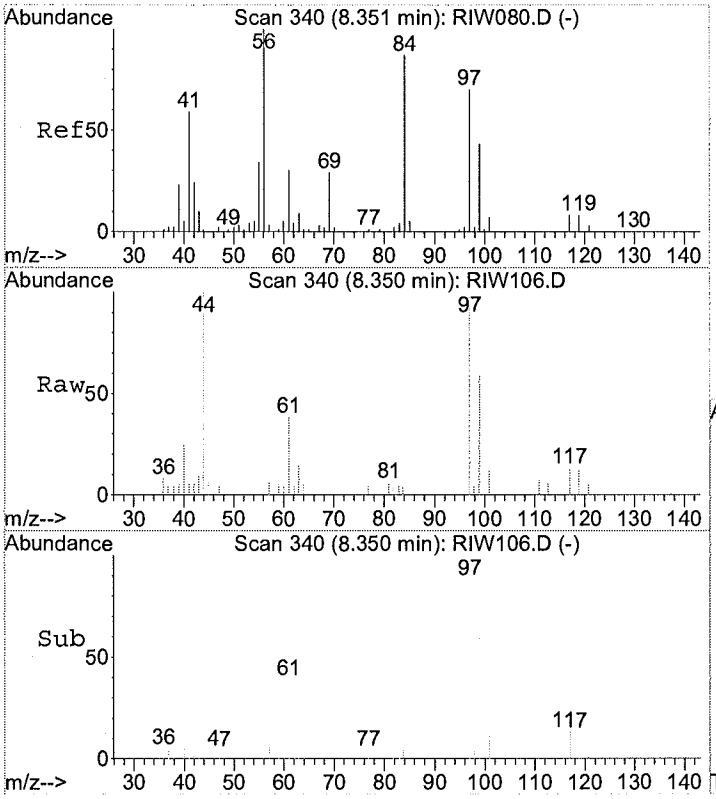


#31
Chloroform
Concen: 1.79 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW106.D
Acq: 20 Sep 2024 7:09 pm

Tgt Ion: 83 Resp: 325292

Ion	Ratio	Lower	Upper
83	100		
85	63.7	38.6	98.6
47	23.1	0.0	53.1

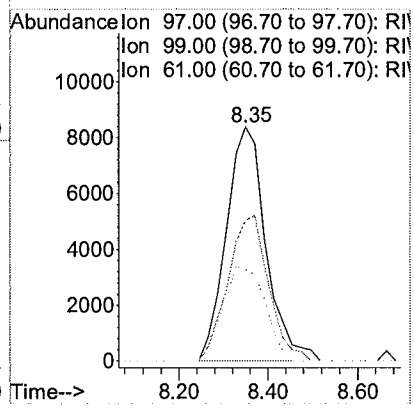


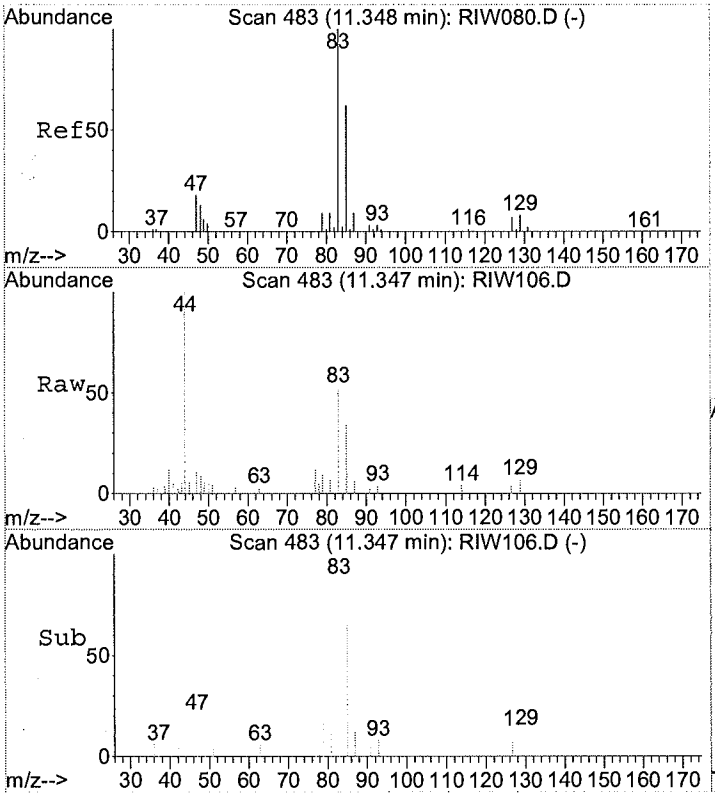


#36
1,1,1-Trichloroethane
Concen: 0.35 ug/l
RT: 8.35 min Scan# 340
Delta R.T. -0.00 min
Lab File: RIW106.D
Acq: 20 Sep 2024 7:09 pm

Tgt Ion: 97 Resp: 51839

Ion	Ratio	Lower	Upper
97	100		
99	63.6	32.6	92.6
61	43.2	12.7	72.7

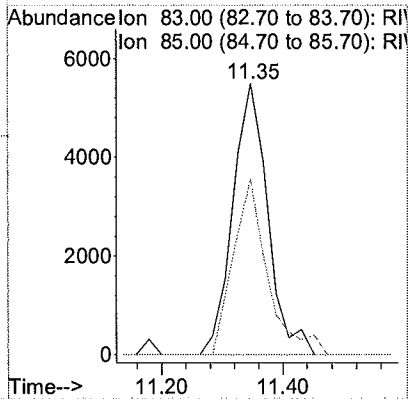


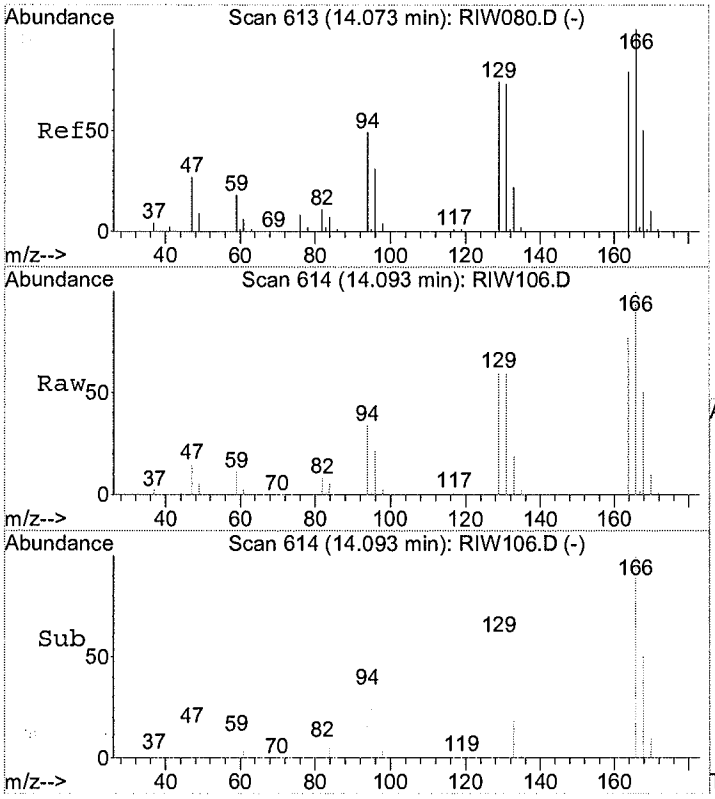


#49
Bromodichloromethane
Concen: 0.17 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW106.D
Acq: 20 Sep 2024 7:09 pm

Tgt Ion: 83 Resp: 21994

Ion	Ratio	Lower	Upper
83	100		
85	64.0	33.1	93.1

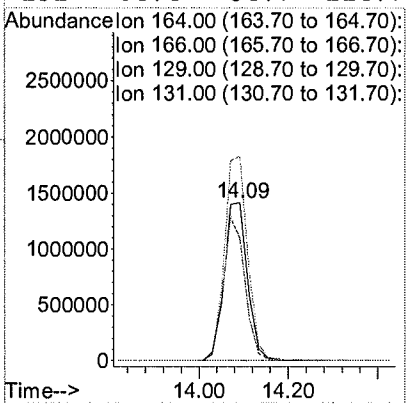




#62
Tetrachloroethene
Concen: 58.67 ug/l
RT: 14.09 min Scan# 614
Delta R.T. 0.02 min
Lab File: RIW106.D
Acq: 20 Sep 2024 7:09 pm

Tgt Ion:164 Resp: 5187167

Ion	Ratio	Lower	Upper
164	100		
166	129.2	100.5	160.5
129	86.9	57.4	117.4
131	84.4	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 13:35
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 19:35
Sample ID	: MW19-GW090724	Date Analyzed:	09/20/24 19:35
Lab Samp ID:	24I028-06	Dilution Factor:	1
Lab File ID:	RIW107	Matrix:	WATER
Ext Btch ID:	V006I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.31J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	0.13J	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.15J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.1	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	46	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.38	10.0	94	70-130
Bromofluorobenzene	9.03	10.0	90	70-130
Toluene-d8	10.2	10.0	102	70-130
Dibromofluoromethane	9.36	10.0	94	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW107.D Vial: 14
Acq On : 20 Sep 2024 7:35 pm Operator: PMai
Sample : 24I028-06 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:24 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

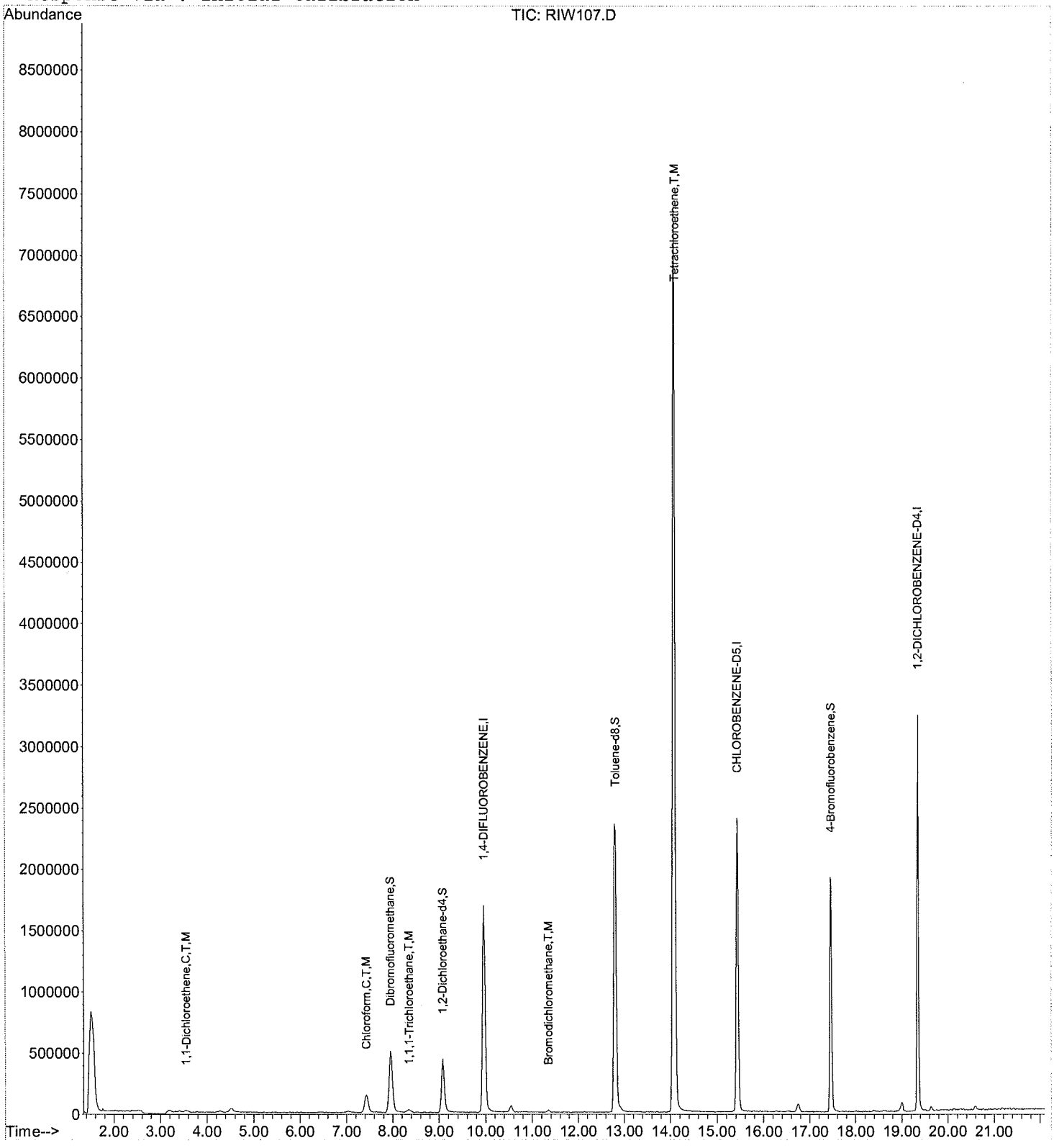
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3177899	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2589054	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1251966	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	840742	9.36	ug/l	-0.02
Spiked Amount 10.000			Recovery =	93.60%		
42) 1,2-Dichloroethane-d4	9.08	65	658853	9.38	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.80%		
55) Toluene-d8	12.81	98	3408380	10.17	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.70%		
77) 4-Bromofluorobenzene	17.45	95	1262887	9.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.30%		
Target Compounds						Qvalue
12) 1,1-Dichloroethene	3.55	61	21398	0.13	ug/l	87
31) Chloroform	7.43	83	341799	2.06	ug/l	94
36) 1,1,1-Trichloroethane	8.35	97	41392	0.31	ug/l	98
49) Bromodichloromethane	11.35	83	17084	0.15	ug/l	81
62) Tetrachloroethene	14.09	164	3685280	45.85	ug/l	97

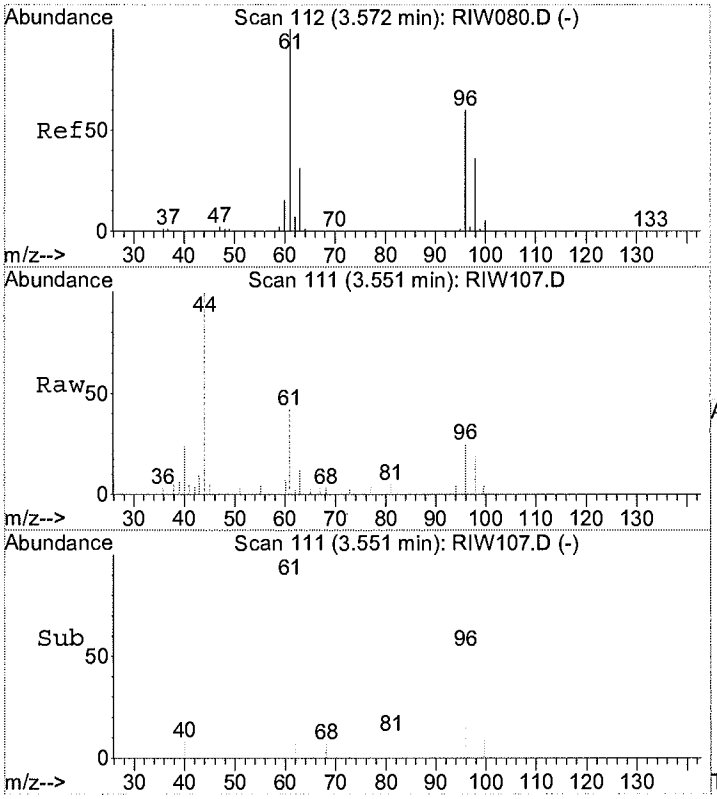
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW107.D Vial: 14
Acq On : 20 Sep 2024 7:35 pm Operator: PMai
Sample : 24I028-06 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:24 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

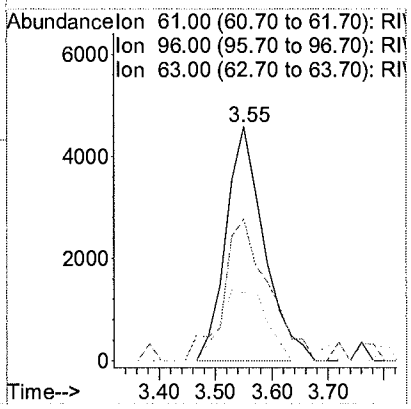


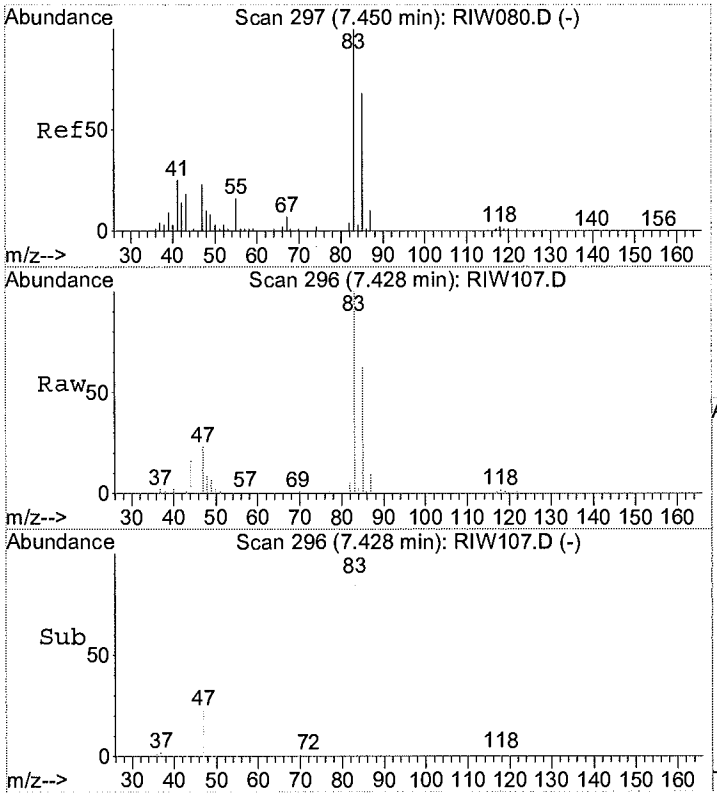


#12
1,1-Dichloroethene
Concen: 0.13 ug/l
RT: 3.55 min Scan# 111
Delta R.T. -0.02 min
Lab File: RIW107.D
Acq: 20 Sep 2024 7:35 pm

Tgt Ion: 61 Resp: 21398

Ion	Ratio	Lower	Upper
61	100		
96	71.2	29.9	89.9
63	36.3	1.0	61.0

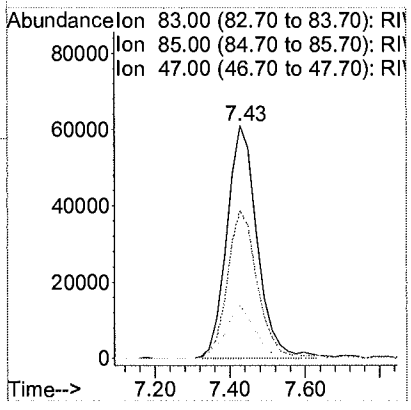


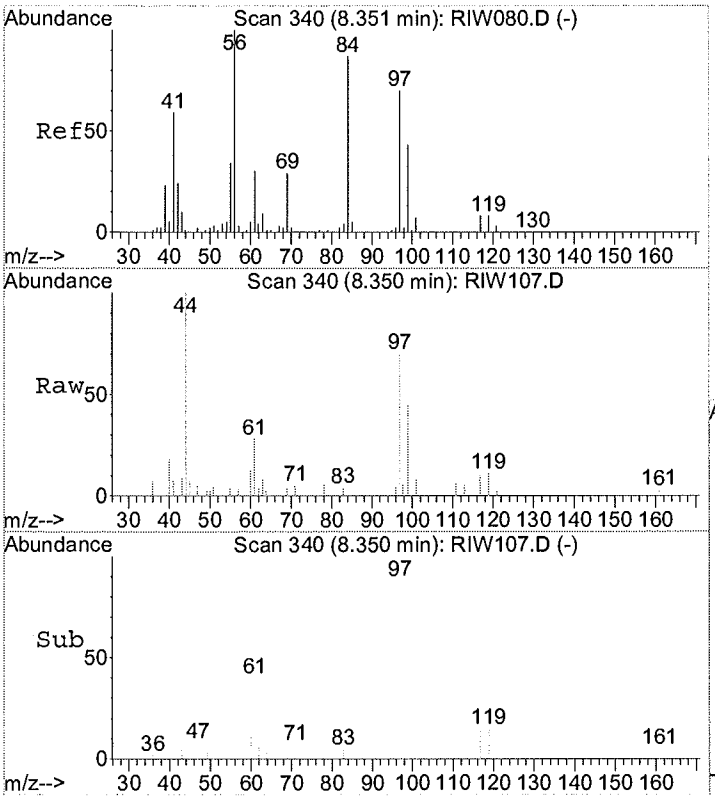


#31
Chloroform
Concen: 2.06 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW107.D
Acq: 20 Sep 2024 7:35 pm

Tgt Ion: 83 Resp: 341799

Ion	Ratio	Lower	Upper
83	100		
85	62.8	38.6	98.6
47	22.4	0.0	53.1

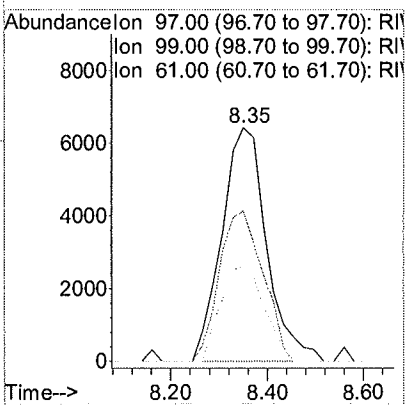


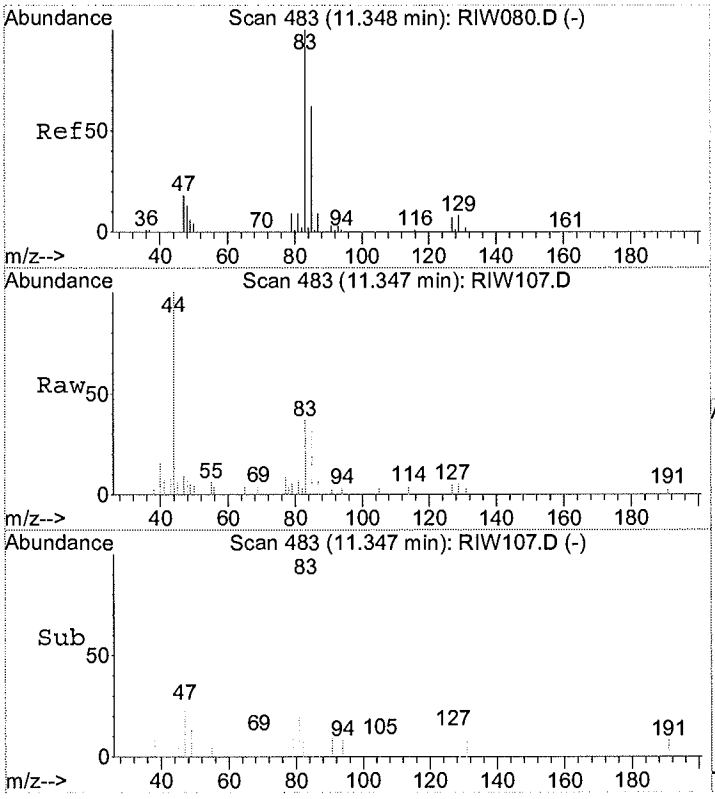


#36
1,1,1-Trichloroethane
Concen: 0.31 ug/l
RT: 8.35 min Scan# 340
Delta R.T. -0.00 min
Lab File: RIW107.D
Acq: 20 Sep 2024 7:35 pm

Tgt Ion: 97 Resp: 41392

Ion	Ratio	Lower	Upper
97	100		
99	62.8	32.6	92.6
61	39.5	12.7	72.7

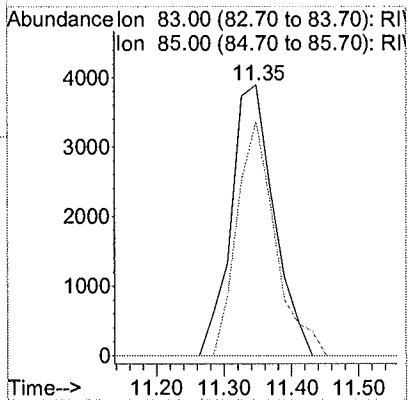


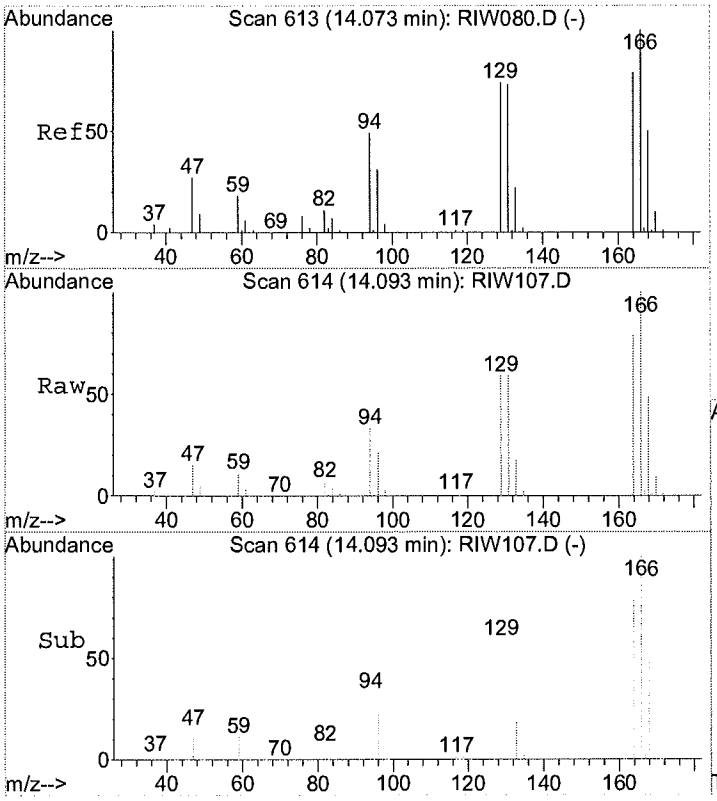


#49
Bromodichloromethane
Concen: 0.15 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW107.D
Acq: 20 Sep 2024 7:35 pm

Tgt Ion: 83 Resp: 17084

Ion	Ratio	Lower	Upper
83	100		
85	77.8	33.1	93.1

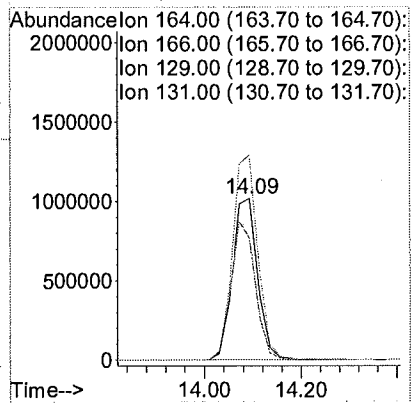




#62
Tetrachloroethene
Concen: 45.85 ug/l
RT: 14.09 min Scan# 614
Delta R.T. 0.02 min
Lab File: RIW107.D
Acq: 20 Sep 2024 7:35 pm

Tgt Ion:164 Resp: 3685280

Ion	Ratio	Lower	Upper
164	100		
166	127.1	100.5	160.5
129	85.1	57.4	117.4
131	82.8	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 12:06
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 20:01
Sample ID	: MW20D-GW090724	Date Analyzed:	09/20/24 20:01
Lab Samp ID:	24I028-07	Dilution Factor:	1
Lab File ID:	RIW108	Matrix:	WATER
Ext Btch ID:	VOO6IO5	% Moisture:	NA
Calib. Ref.:	RIWOBO	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.13J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.5	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	9.2	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.20J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.80	10.0	98	70-130
Bromofluorobenzene	9.0B	10.0	91	70-130
Toluene-d8	10.2	10.0	102	70-130
Dibromofluoromethane	9.4B	10.0	95	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW108.D Vial: 15
Acq On : 20 Sep 2024 8:01 pm Operator: PMai
Sample : 24I028-07 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:25 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

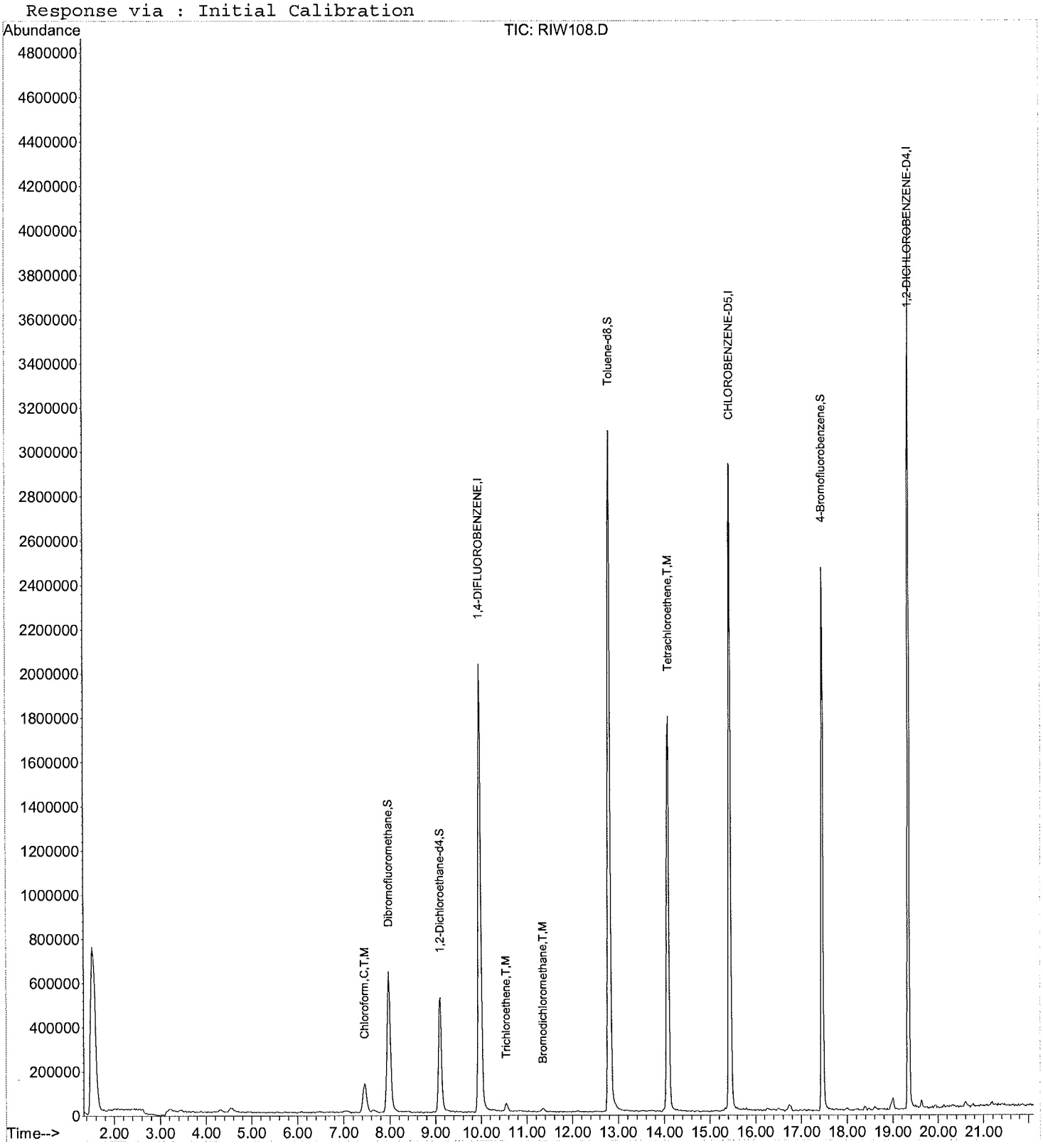
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3954650	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.44	117	3210514	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1586997	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	1059357	9.48	ug/l	0.00
Spiked Amount 10.000			Recovery = 94.80%			
42) 1,2-Dichloroethane-d4	9.10	65	856613	9.80	ug/l	0.02
Spiked Amount 10.000			Recovery = 98.00%			
55) Toluene-d8	12.81	98	4248367	10.22	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.20%			
77) 4-Bromofluorobenzene	17.45	95	1608412	9.08	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.80%			
Target Compounds						Qvalue
31) Chloroform	7.45	83	316255	1.53	ug/l	98
45) Trichloroethene	10.55	130	23329	0.20	ug/l	93
49) Bromodichloromethane	11.35	83	19494	0.13	ug/l	92
62) Tetrachloroethene	14.09	164	918267	9.21	ug/l	99

(#) = qualifier out of range (m) = manual integration

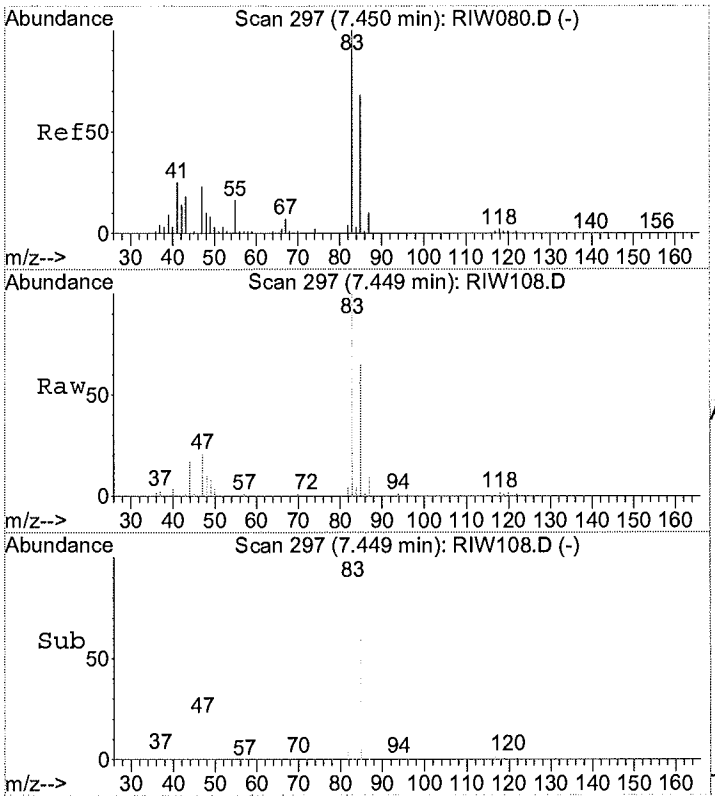
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW108.D Vial: 15
Acq On : 20 Sep 2024 8:01 pm Operator: PMai
Sample : 24I028-07 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:25 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



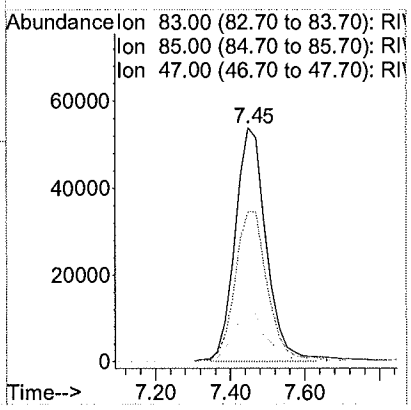
RIW108.D VO06I19B.M Mon Oct 14 08:26:11 2024 Page 2

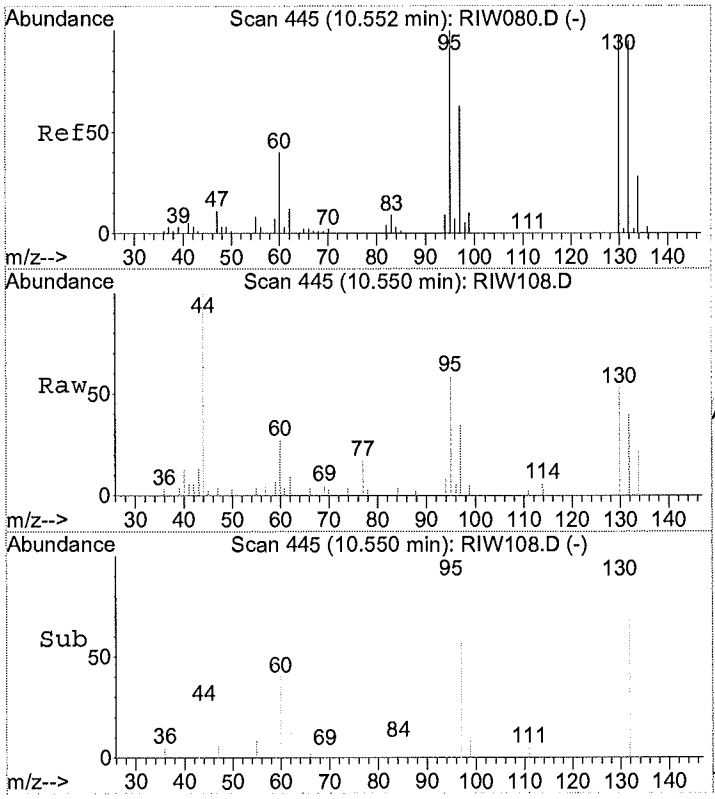


#31
Chloroform
Concen: 1.53 ug/l
RT: 7.45 min Scan# 297
Delta R.T. -0.00 min
Lab File: RIW108.D
Acq: 20 Sep 2024 8:01 pm

Tgt Ion: 83 Resp: 316255

Ion	Ratio	Lower	Upper
83	100		
85	66.7	38.6	98.6
47	22.5	0.0	53.1

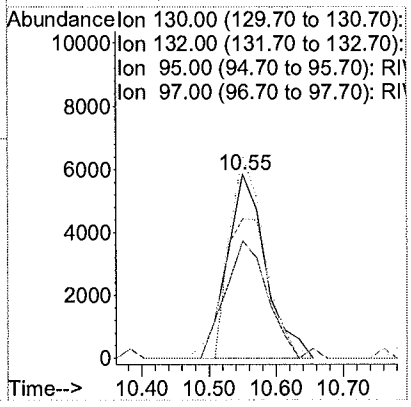


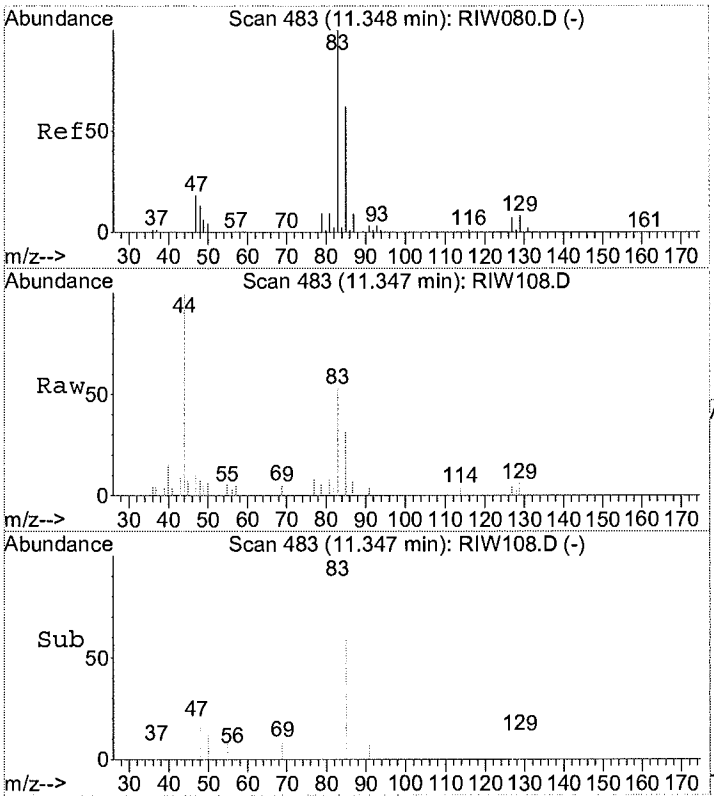


#45
Trichloroethene
Concen: 0.20 ug/l
RT: 10.55 min Scan# 445
Delta R.T. -0.00 min
Lab File: RIW108.D
Acq: 20 Sep 2024 8:01 pm

Tgt Ion:130 Resp: 23329

Ion	Ratio	Lower	Upper
130	100		
132	82.5	65.5	125.5
95	107.8	73.2	133.2
97	71.0	38.8	98.8

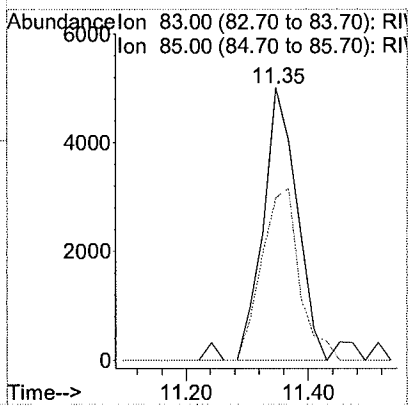


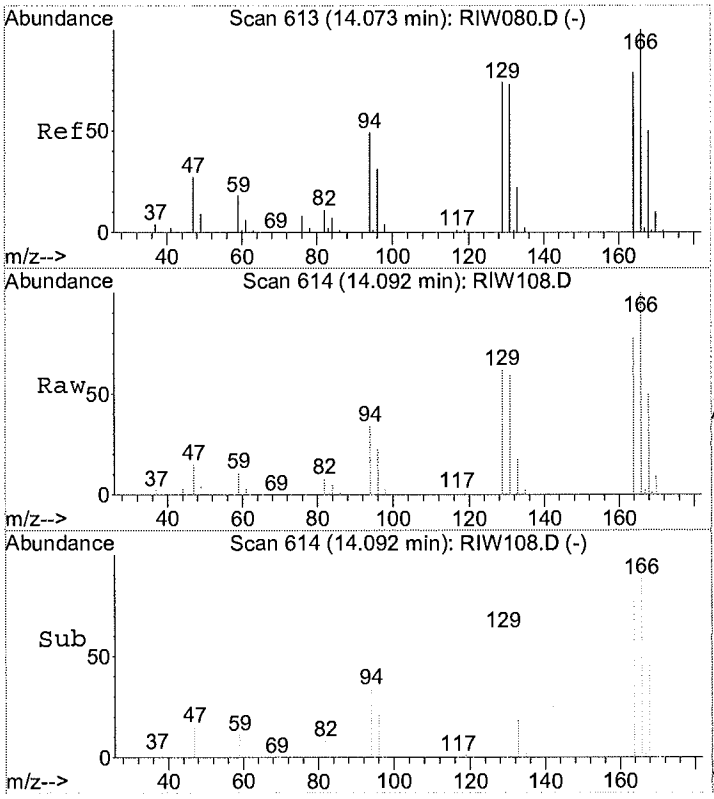


#49
Bromodichloromethane
Concen: 0.13 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW108.D
Acq: 20 Sep 2024 8:01 pm

Tgt Ion: 83 Resp: 19494

Ion	Ratio	Lower	Upper
83	100		
85	69.4	33.1	93.1

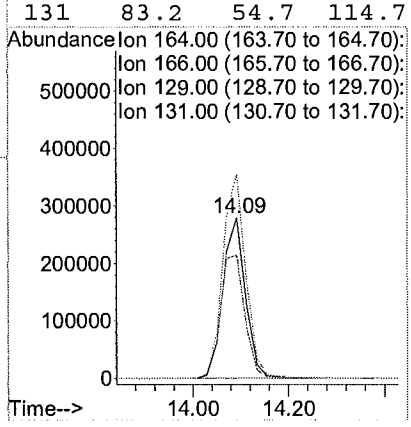




#62
Tetrachloroethene
Concen: 9.21 ug/l
RT: 14.09 min Scan# 614
Delta R.T. 0.02 min
Lab File: RIW108.D
Acq: 20 Sep 2024 8:01 pm

Tgt Ion:164 Resp: 918267

Ion	Ratio	Lower	Upper
164	100		
166	128.9	100.5	160.5
129	86.3	57.4	117.4
131	83.2	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 15:05
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 20:27
Sample ID	: FD05-GW090724	Date Analyzed:	09/20/24 20:27
Lab Samp ID:	24I028-08	Dilution Factor:	1
Lab File ID:	RIW109	Matrix:	WATER
Ext Btch ID:	V006I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.40J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.23J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.9	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	59	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.48	10.0	95	70-130
Bromofluorobenzene	9.31	10.0	93	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.45	10.0	94	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW109.D Vial: 16
Acq On : 20 Sep 2024 8:27 pm Operator: PMai
Sample : 24I028-08 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:27 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

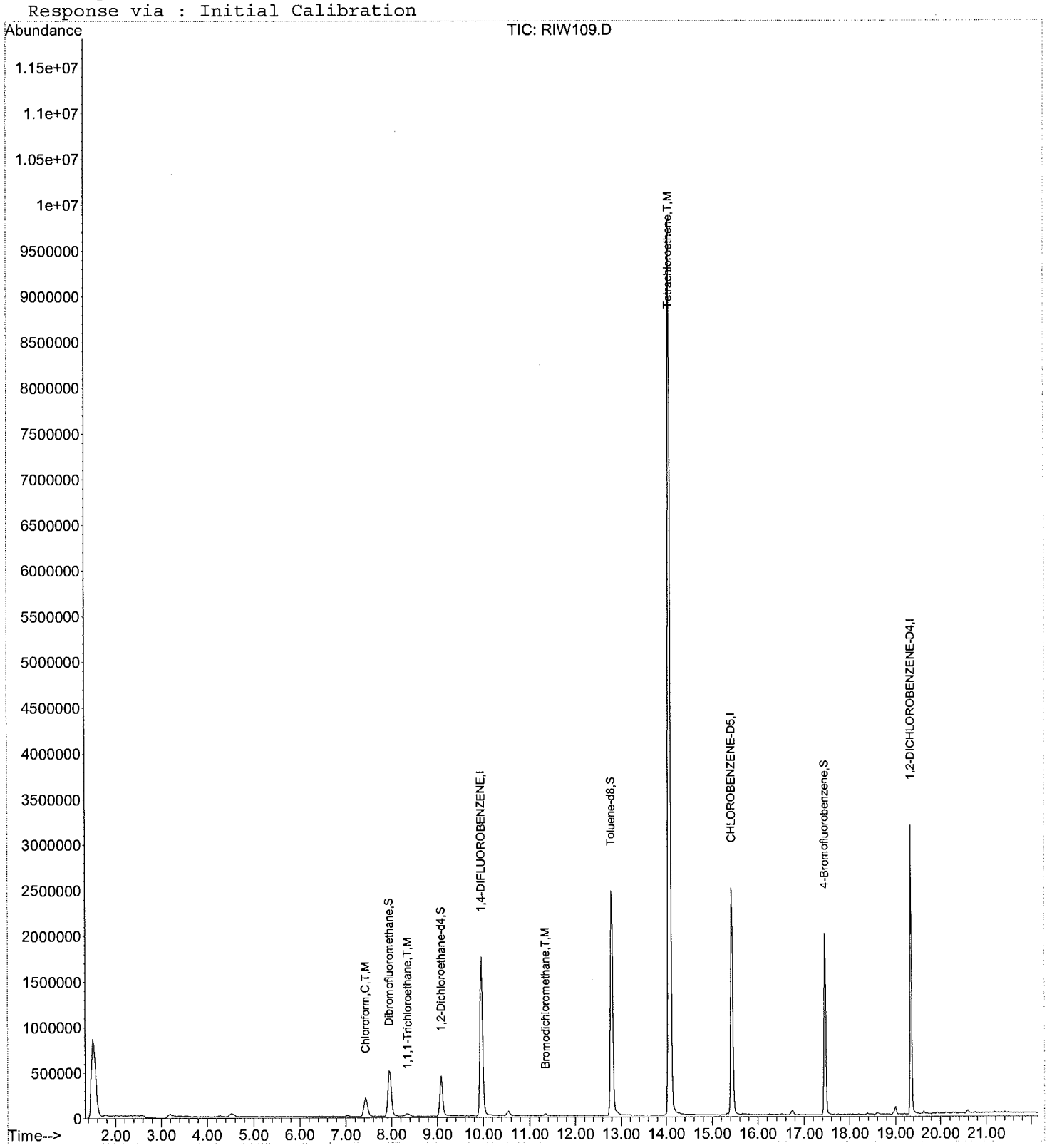
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3251103	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2627227	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1257883	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	868019	9.45	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.50%		
42) 1,2-Dichloroethane-d4	9.08	65	681651	9.48	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.80%		
55) Toluene-d8	12.79	98	3495386	10.28	ug/l	-0.02
Spiked Amount 10.000			Recovery =	102.80%		
77) 4-Bromofluorobenzene	17.45	95	1307905	9.31	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.10%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	487164	2.87	ug/l	95
36) 1,1,1-Trichloroethane	8.35	97	55303	0.40	ug/l	100
49) Bromodichloromethane	11.35	83	27712	0.23	ug/l	90
62) Tetrachloroethene	14.07	164	4774669	58.54	ug/l	99

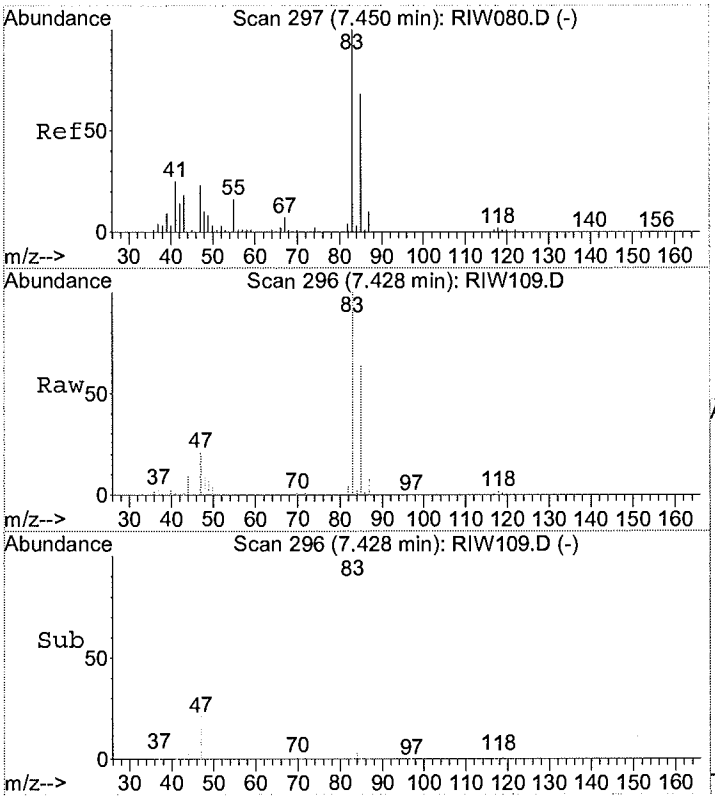
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW109.D Vial: 16
Acq On : 20 Sep 2024 8:27 pm Operator: PMai
Sample : 24I028-08 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:27 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

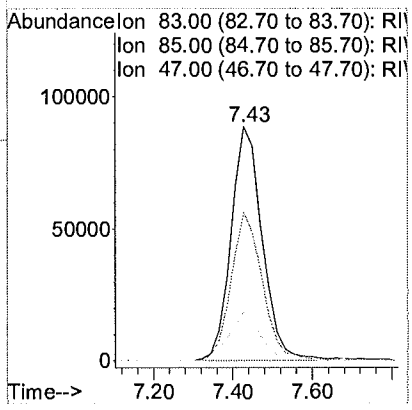


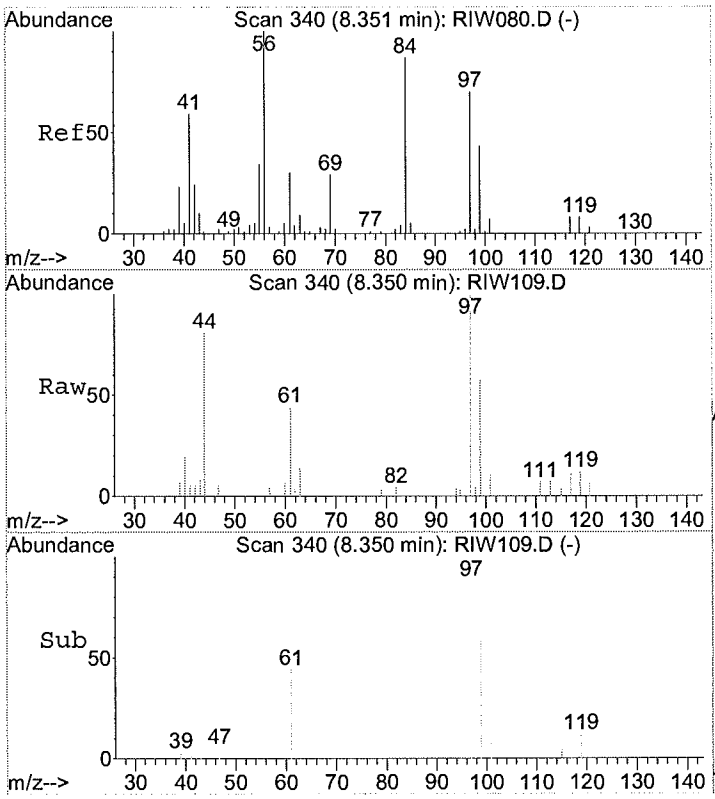


#31
Chloroform
Concen: 2.87 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW109.D
Acq: 20 Sep 2024 8:27 pm

Tgt Ion: 83 Resp: 487164

Ion	Ratio	Lower	Upper
83	100		
85	63.7	38.6	98.6
47	21.3	0.0	53.1

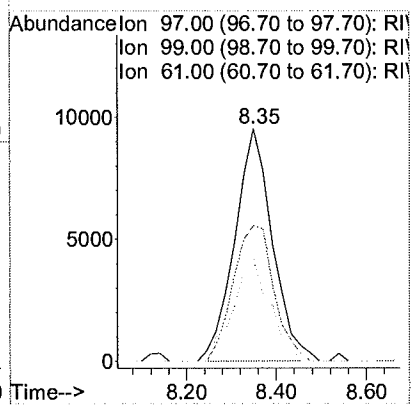


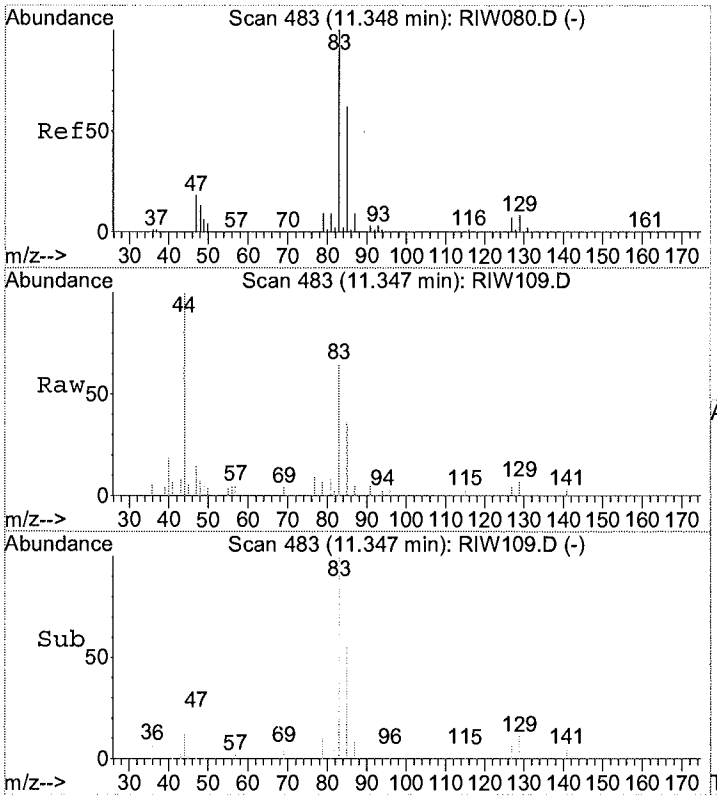


#36
1,1,1-Trichloroethane
Concen: 0.40 ug/l
RT: 8.35 min Scan# 340
Delta R.T. -0.00 min
Lab File: RIW109.D
Acq: 20 Sep 2024 8:27 pm

Tgt Ion: 97 Resp: 55303

Ion	Ratio	Lower	Upper
97	100		
99	63.2	32.6	92.6
61	42.8	12.7	72.7

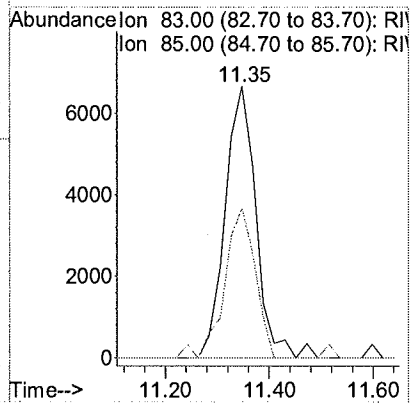


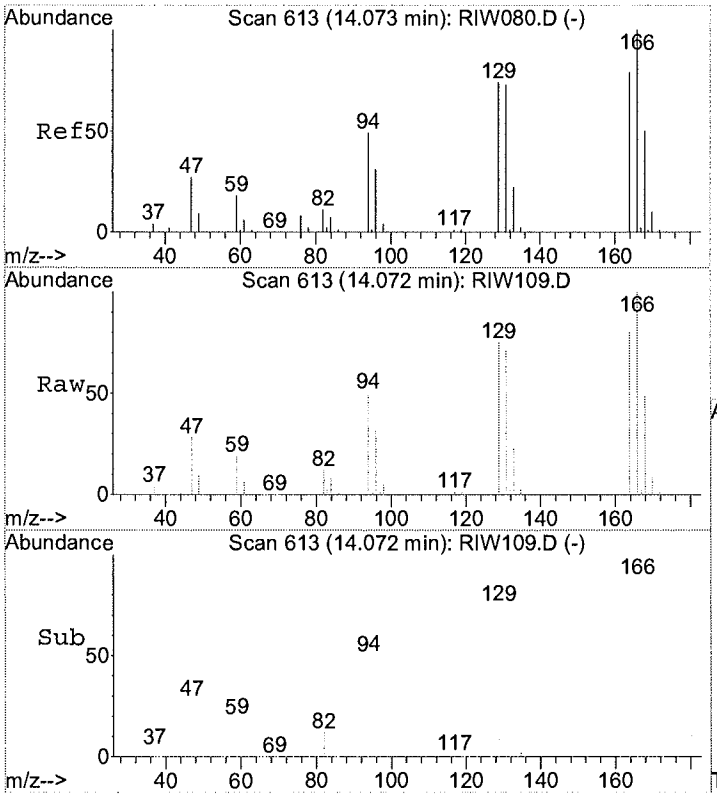


#49
Bromodichloromethane
Concen: 0.23 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW109.D
Acq: 20 Sep 2024 8:27 pm

Tgt Ion: 83 Resp: 27712

Ion	Ratio	Lower	Upper
83	100		
85	55.1	33.1	93.1

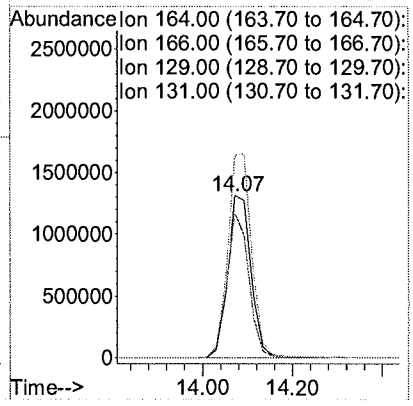




#62
Tetrachloroethene
Concen: 58.54 ug/l
RT: 14.07 min Scan# 613
Delta R.T. -0.00 min
Lab File: RIW109.D
Acq: 20 Sep 2024 8:27 pm

Tgt Ion:164 Resp: 4774669

Ion	Ratio	Lower	Upper
164	100		
166	128.1	100.5	160.5
129	86.6	57.4	117.4
131	84.2	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 13:40
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 20:53
Sample ID	: FD06-GW090724	Date Analyzed:	09/20/24 20:53
Lab Samp ID:	24I028-09	Dilution Factor:	1
Lab File ID:	RIW110	Matrix:	WATER
Ext Btch ID:	V006I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.31J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.15J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.0	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	44	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.73	10.0	97	70-130
Bromofluorobenzene	9.03	10.0	90	70-130
Toluene-d8	9.96	10.0	100	70-130
Dibromofluoromethane	9.47	10.0	95	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW110.D Vial: 17
Acq On : 20 Sep 2024 8:53 pm Operator: PMai
Sample : 24I028-09 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:29 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

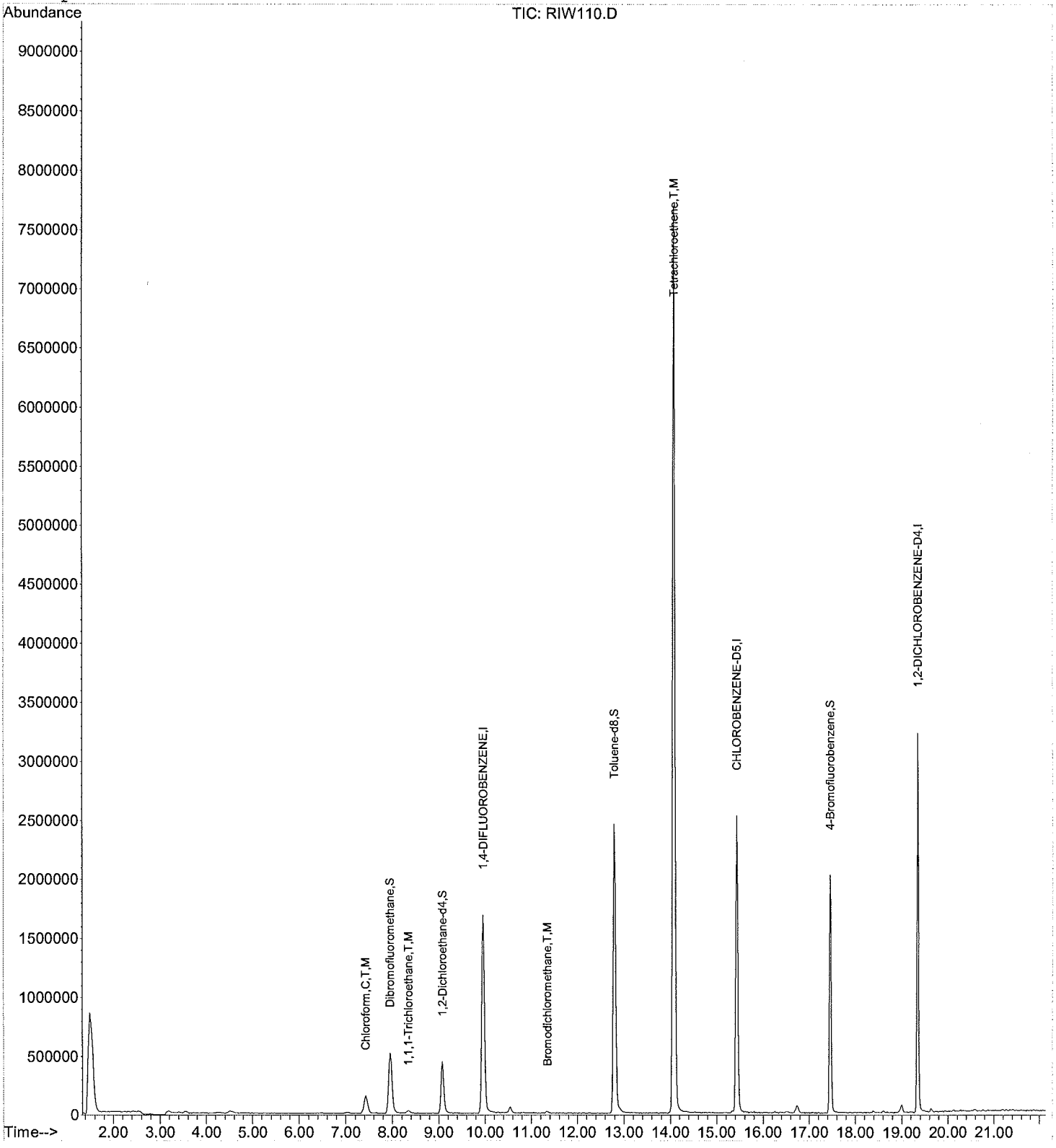
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3196192	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2651862	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1281372	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	855964	9.47	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.70%		
42) 1,2-Dichloroethane-d4	9.08	65	687561	9.73	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.30%		
55) Toluene-d8	12.79	98	3419718	9.96	ug/l	-0.02
Spiked Amount 10.000			Recovery =	99.60%		
77) 4-Bromofluorobenzene	17.45	95	1292373	9.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.30%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	331316	1.98	ug/l	99
36) 1,1,1-Trichloroethane	8.35	97	42057	0.31	ug/l	99
49) Bromodichloromethane	11.35	83	18000	0.15	ug/l	95
62) Tetrachloroethene	14.07	164	3647794	44.31	ug/l	99

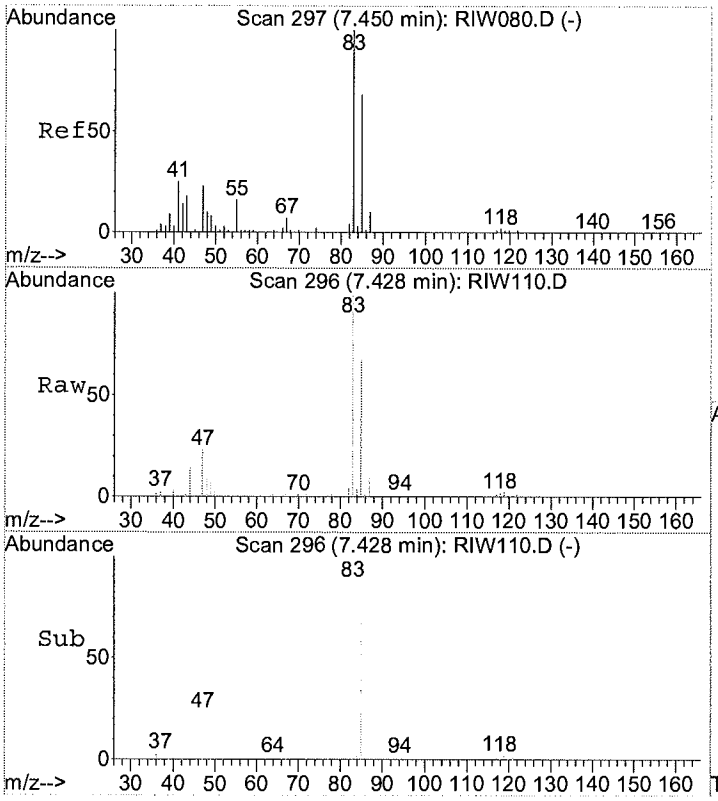
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW110.D Vial: 17
Acq On : 20 Sep 2024 8:53 pm Operator: PMai
Sample : 24I028-09 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:29 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

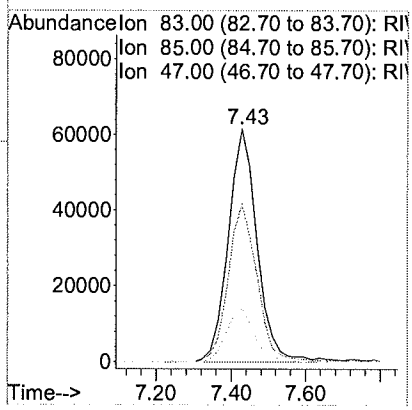


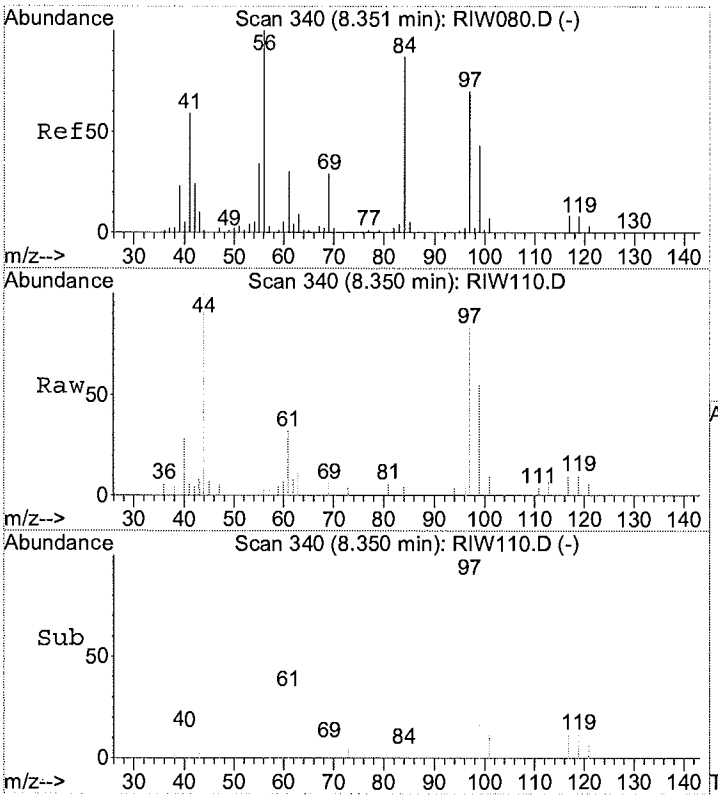


#31
Chloroform
Concen: 1.98 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW110.D
Acq: 20 Sep 2024 8:53 pm

Tgt Ion: 83 Resp: 331316

Ion	Ratio	Lower	Upper
83	100		
85	67.4	38.6	98.6
47	22.5	0.0	53.1

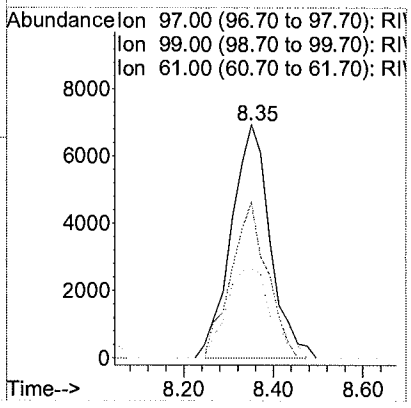


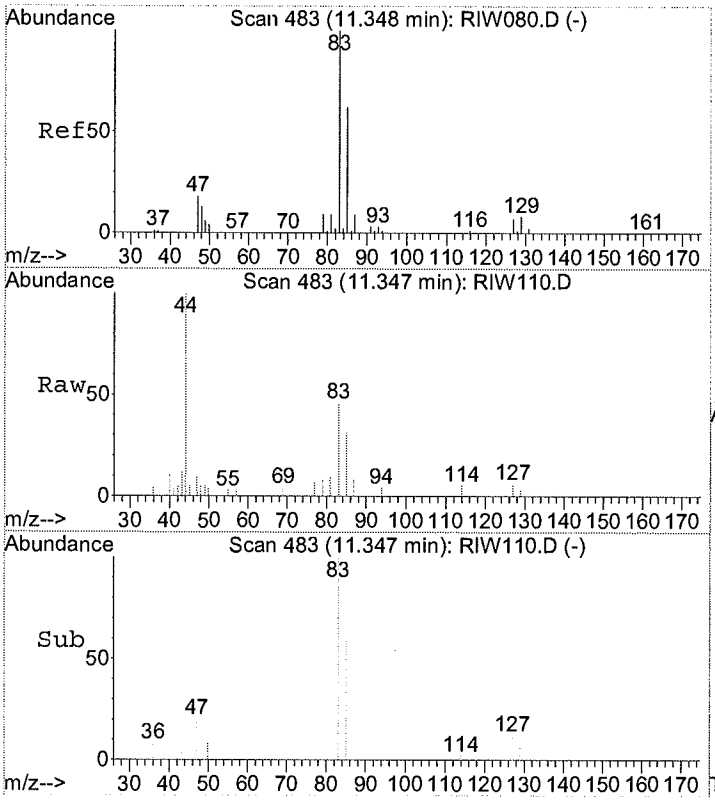


#36
1,1,1-Trichloroethane
Concen: 0.31 ug/l
RT: 8.35 min Scan# 340
Delta R.T. -0.00 min
Lab File: RIW110.D
Acq: 20 Sep 2024 8:53 pm

Tgt Ion: 97 Resp: 42057

Ion	Ratio	Lower	Upper
97	100		
99	61.9	32.6	92.6
61	43.8	12.7	72.7

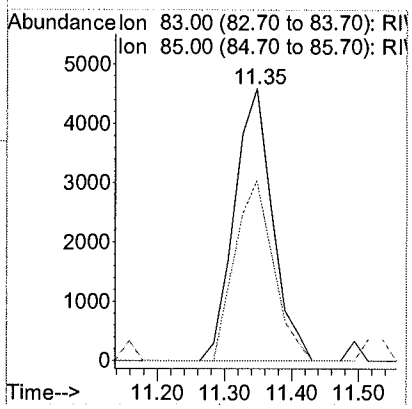


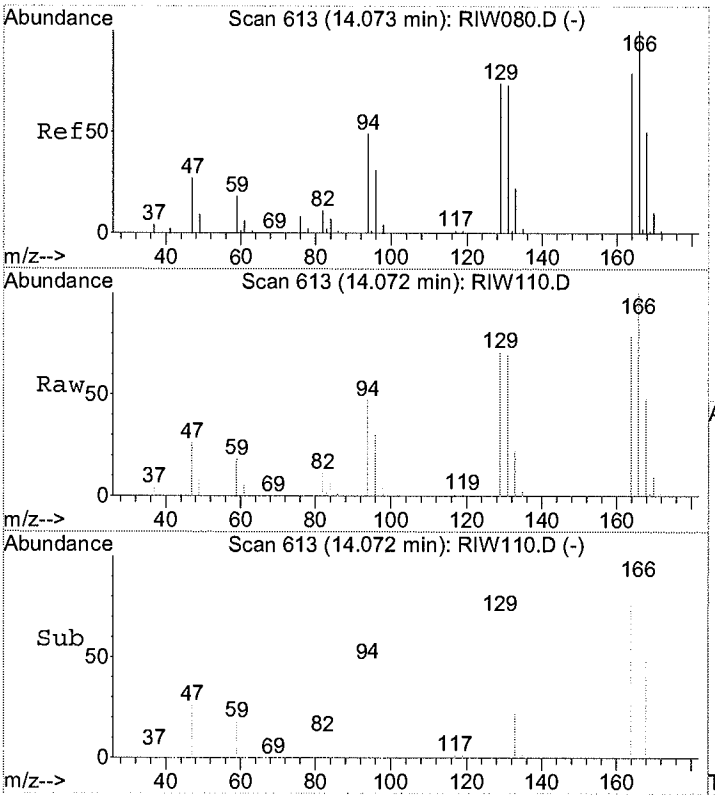


#49
Bromodichloromethane
Concen: 0.15 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW110.D
Acq: 20 Sep 2024 8:53 pm

Tgt Ion: 83 Resp: 18000

Ion	Ratio	Lower	Upper
83	100		
85	66.9	33.1	93.1

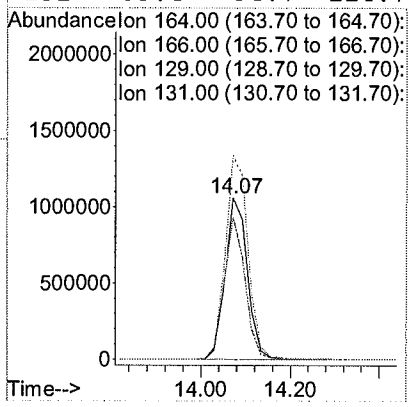




#62
Tetrachloroethene
Concen: 44.31 ug/l
RT: 14.07 min Scan# 613
Delta R.T. -0.00 min
Lab File: RIW110.D
Acq: 20 Sep 2024 8:53 pm

Tgt Ion:164 Resp: 3647794

Ion	Ratio	Lower	Upper
164	100		
166	129.2	100.5	160.5
129	86.7	57.4	117.4
131	83.4	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 12:02
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 21:19
Sample ID	: MW20S-GW090724	Date Analyzed:	09/20/24 21:19
Lab Samp ID:	24I028-10	Dilution Factor:	1
Lab File ID:	RIW111	Matrix:	WATER
Ext Btch ID:	VOO6I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.4	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	3.6	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.93	10.0	99	70-130
Bromofluorobenzene	9.04	10.0	90	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.58	10.0	96	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW111.D Vial: 18
Acq On : 20 Sep 2024 9:19 pm Operator: PMai
Sample : 24I028-10 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:30 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

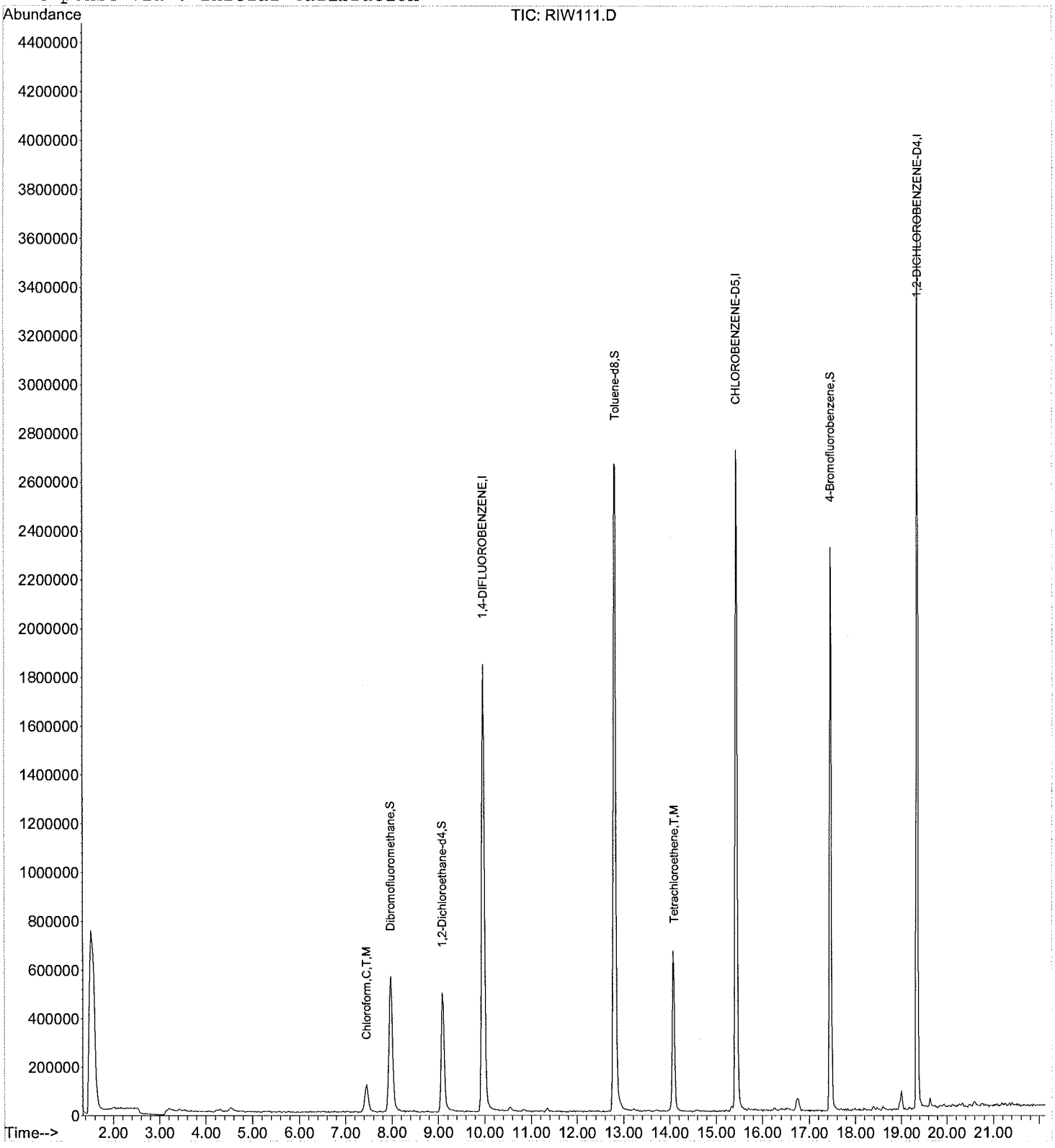
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3559771	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2954940	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1461749	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	964517	9.58	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.80%			
42) 1,2-Dichloroethane-d4	9.08	65	781890	9.93	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.30%			
55) Toluene-d8	12.82	98	3926747	10.27	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.70%			
77) 4-Bromofluorobenzene	17.45	95	1475752	9.04	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.40%			
Target Compounds						Qvalue
31) Chloroform	7.45	83	254202	1.37	ug/l	92
62) Tetrachloroethene	14.09	164	330184	3.60	ug/l	99

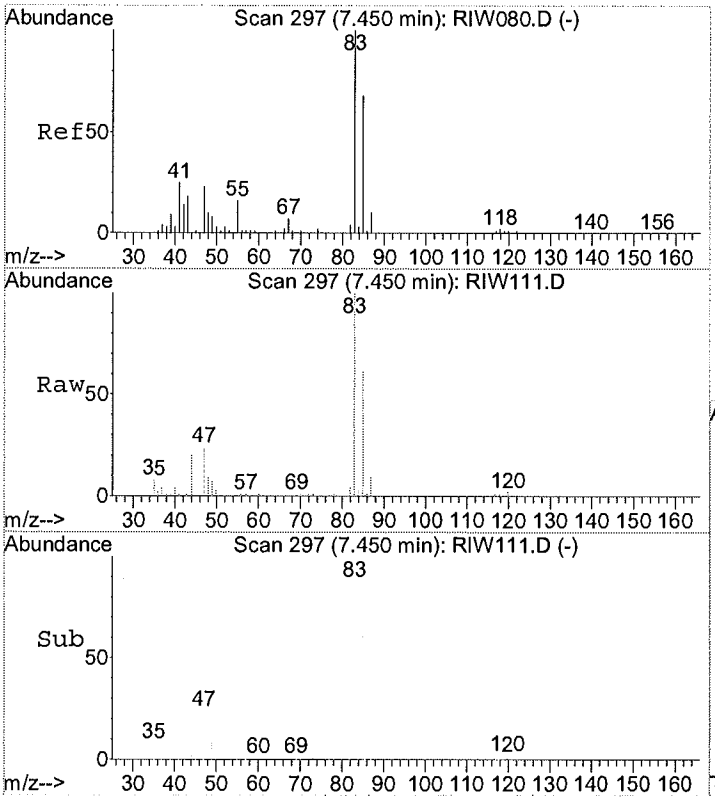
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW111.D Vial: 18
Acq On : 20 Sep 2024 9:19 pm Operator: PMai
Sample : 24I028-10 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:30 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

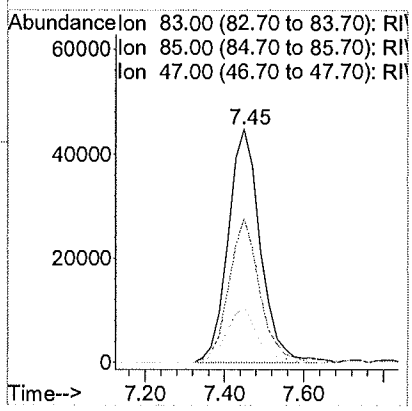


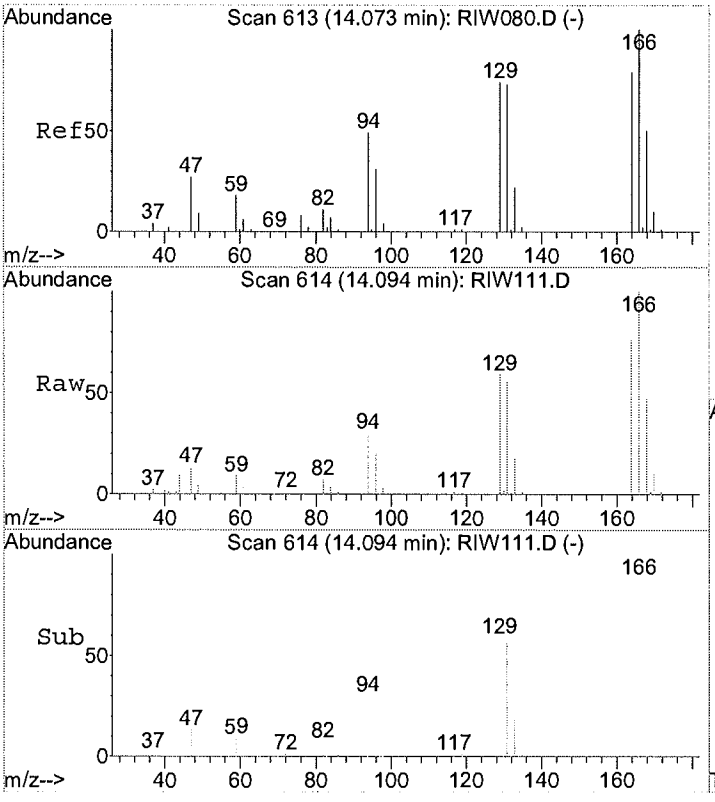


#31
Chloroform
Concen: 1.37 ug/l
RT: 7.45 min Scan# 297
Delta R.T. 0.00 min
Lab File: RIW111.D
Acq: 20 Sep 2024 9:19 pm

Tgt Ion: 83 Resp: 254202

Ion	Ratio	Lower	Upper
83	100		
85	59.9	38.6	98.6
47	22.8	0.0	53.1

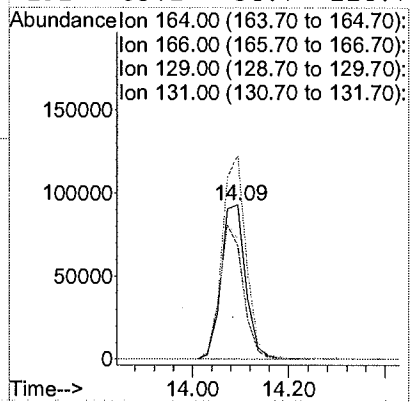




#62
Tetrachloroethene
Concen: 3.60 ug/l
RT: 14.09 min Scan# 614
Delta R.T. 0.02 min
Lab File: RIW111.D
Acq: 20 Sep 2024 9:19 pm

Tgt Ion:164 Resp: 330184

Ion	Ratio	Lower	Upper
164	100		
166	130.0	100.5	160.5
129	86.0	57.4	117.4
131	83.1	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 11:50
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 21:45
Sample ID	: MW25A-GW090724	Date Analyzed:	09/20/24 21:45
Lab Samp ID:	24I028-11	Dilution Factor:	1
Lab File ID:	RIW112	Matrix:	WATER
Ext Btch ID:	VOO6I05	% Moisture:	NA
Calib. Ref.:	RIW0B0	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.34J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.8	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	0.21J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	0.17J	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	1.9	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.61	10.0	96	70-130
Bromofluorobenzene	9.06	10.0	91	70-130
Toluene-d8	10.1	10.0	101	70-130
Dibromofluoromethane	9.55	10.0	96	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : PMai
Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW112.D Vial: 19
Acq On : 20 Sep 2024 9:45 pm Operator: PMai
Sample : 24I028-11 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:32 2024 Quant Results File: VO06I19B.RES

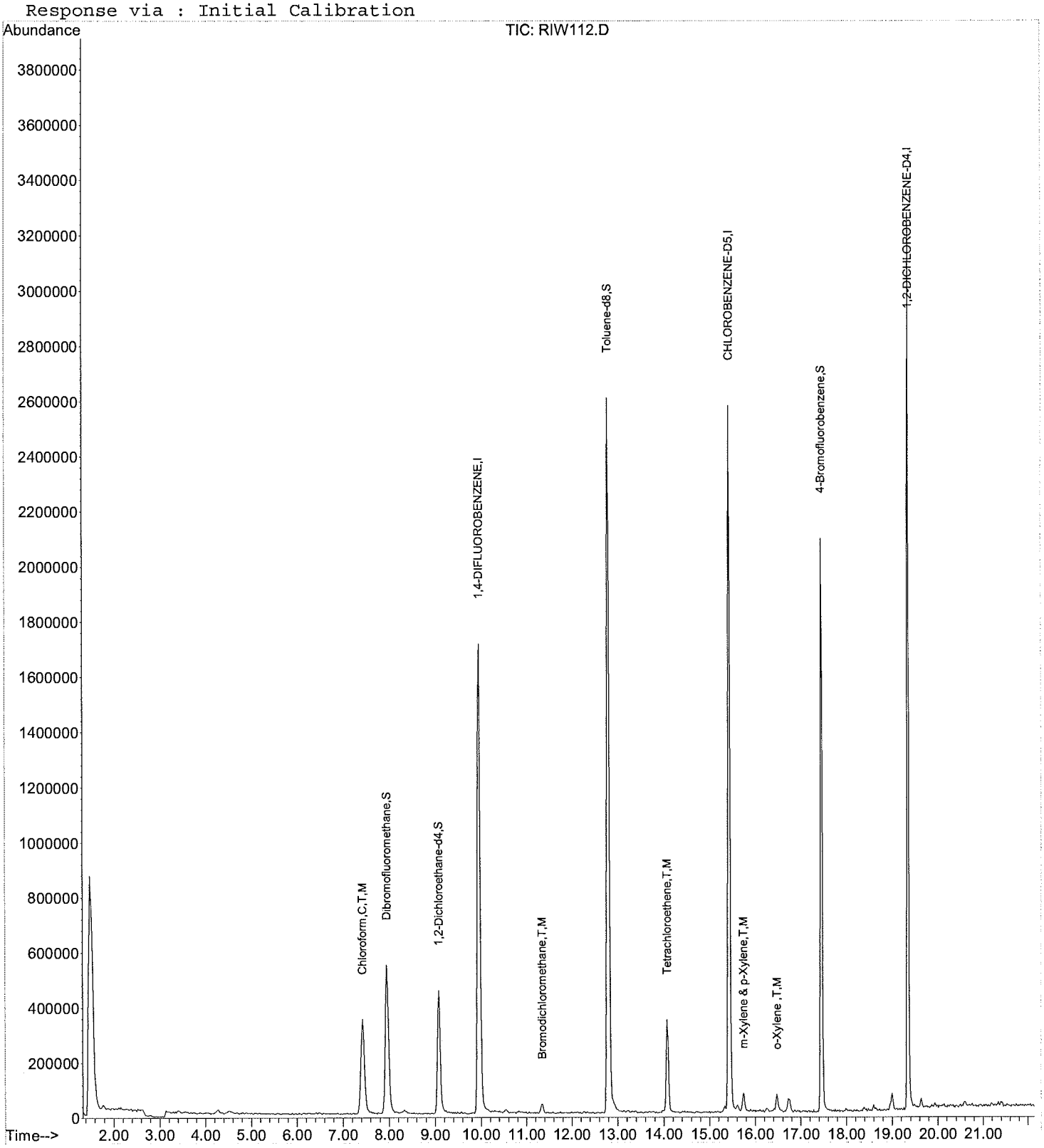
Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

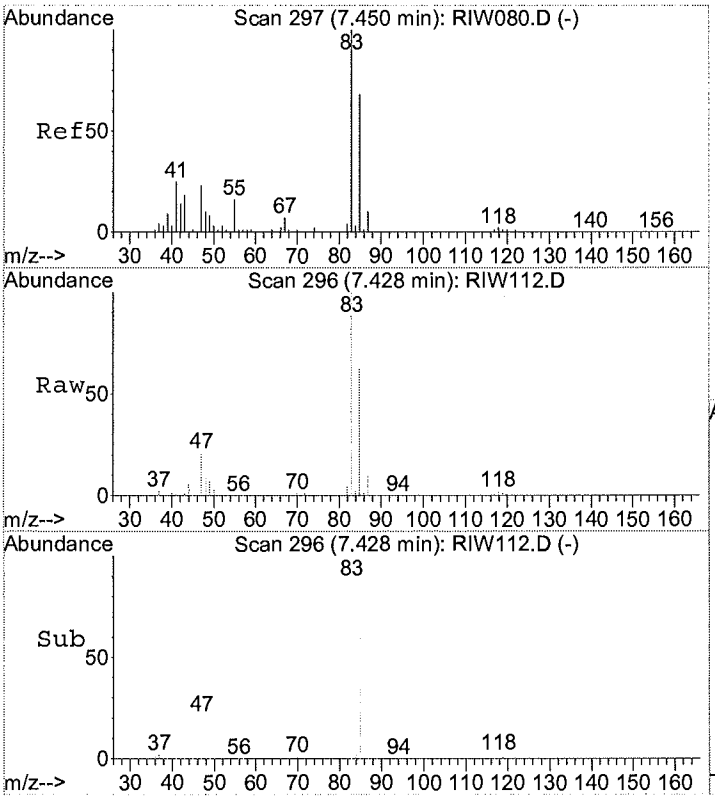
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3261010	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2688158	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1289773	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	880648	9.55	ug/l	-0.02
Spiked Amount 10.000			Recovery = 95.50%			
42) 1,2-Dichloroethane-d4	9.08	65	693033	9.61	ug/l	0.00
Spiked Amount 10.000			Recovery = 96.10%			
55) Toluene-d8	12.79	98	3513038	10.10	ug/l	0.02
Spiked Amount 10.000			Recovery = 101.00%			
77) 4-Bromofluorobenzene	17.45	95	1303988	9.06	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.60%			
Target Compounds						Qvalue
31) Chloroform	7.43	83	812651	4.77	ug/l	93
49) Bromodichloromethane	11.35	83	41287	0.34	ug/l	94
62) Tetrachloroethene	14.07	164	161810	1.94	ug/l	97
70) m-Xylene & p-Xylene	15.74	91	81585	0.21	ug/l	93
71) o-Xylene	16.47	91	65728	0.17	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I20\RIW112.D Vial: 19
Acq On : 20 Sep 2024 9:45 pm Operator: PMai
Sample : 24I028-11 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:32 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

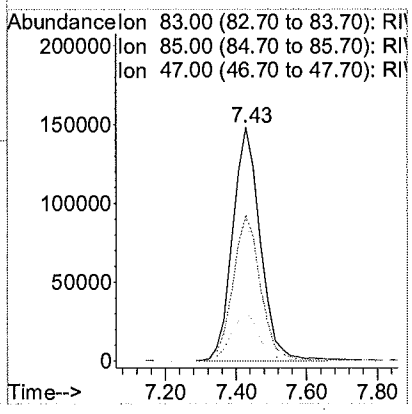


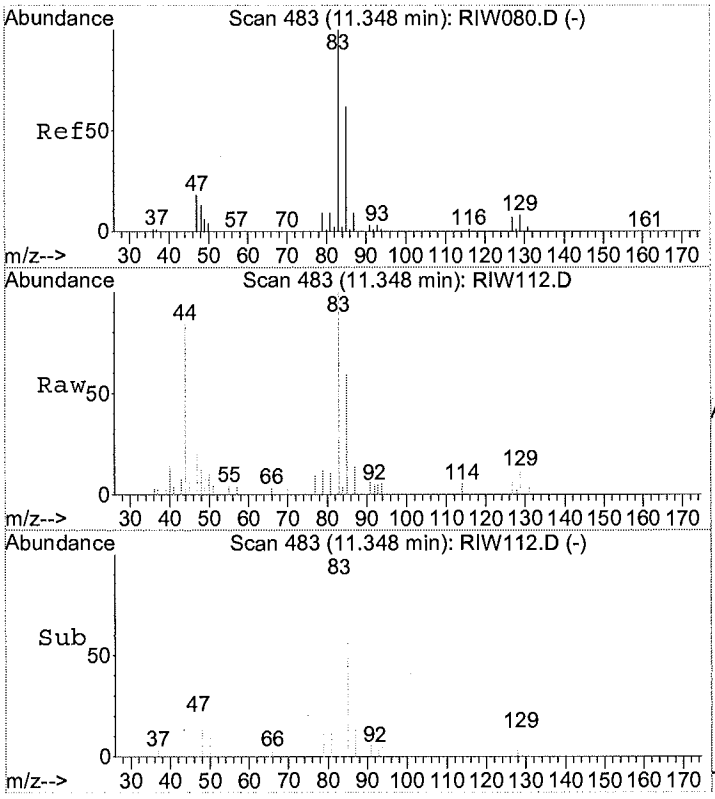


#31
Chloroform
Concen: 4.77 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW112.D
Acq: 20 Sep 2024 9:45 pm

Tgt Ion: 83 Resp: 812651

Ion	Ratio	Lower	Upper
83	100		
85	62.2	38.6	98.6
47	21.3	0.0	53.1

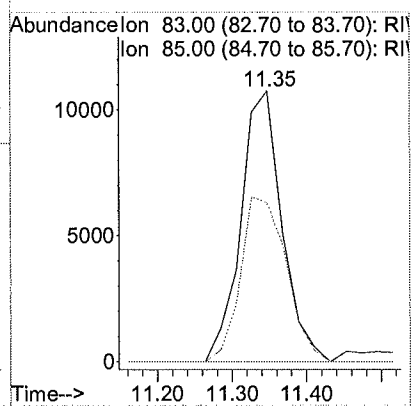


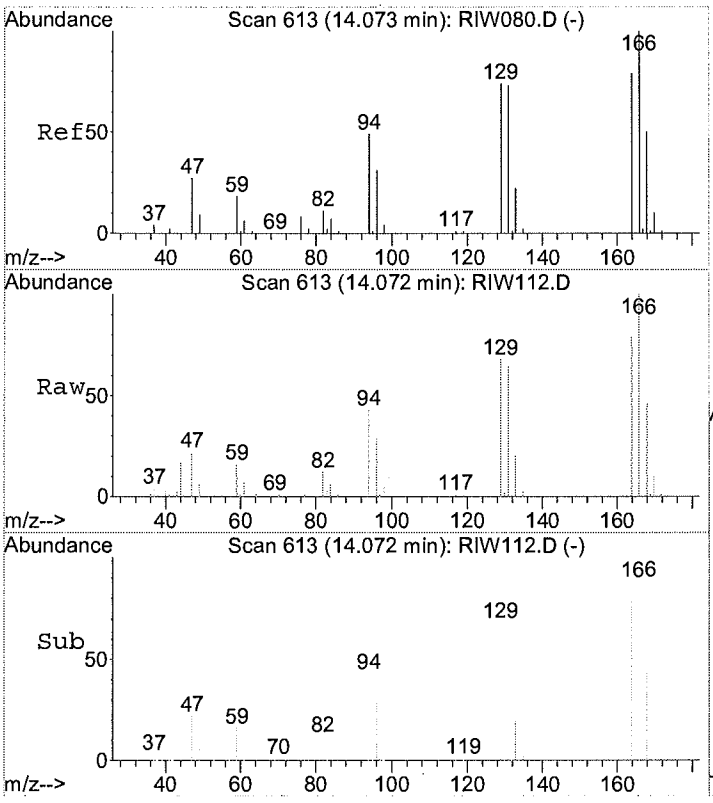


#49
Bromodichloromethane
Concen: 0.34 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW112.D
Acq: 20 Sep 2024 9:45 pm

Tgt Ion: 83 Resp: 41287

Ion	Ratio	Lower	Upper
83	100		
85	67.7	33.1	93.1

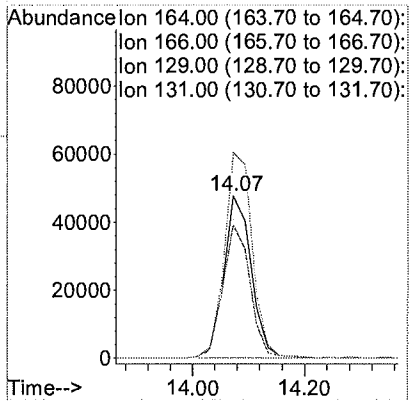


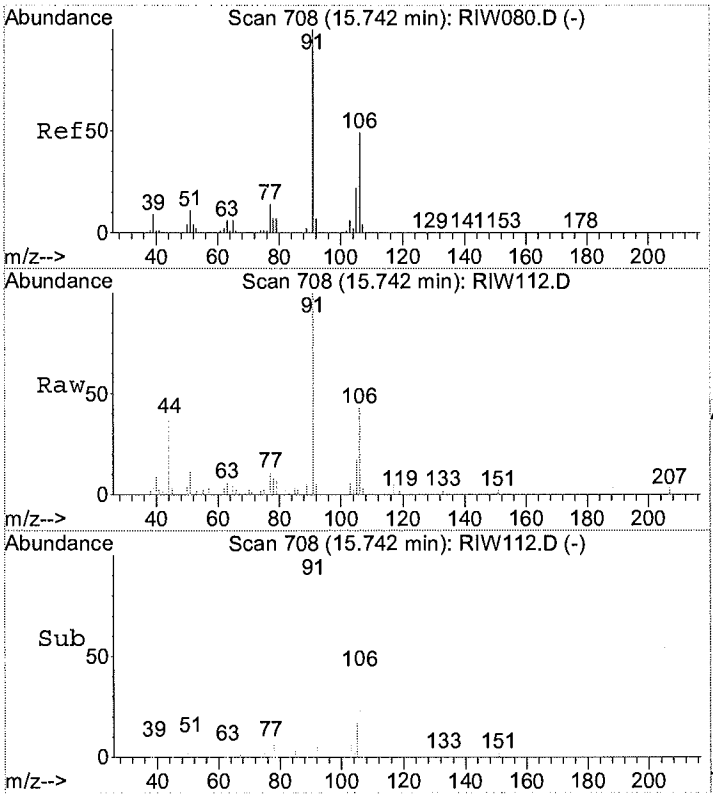


#62
Tetrachloroethene
Concen: 1.94 ug/l
RT: 14.07 min Scan# 613
Delta R.T. -0.00 min
Lab File: RIW112.D
Acq: 20 Sep 2024 9:45 pm

Tgt Ion:164 Resp: 161810

Ion	Ratio	Lower	Upper
164	100		
166	128.3	100.5	160.5
129	83.4	57.4	117.4
131	82.7	54.7	114.7

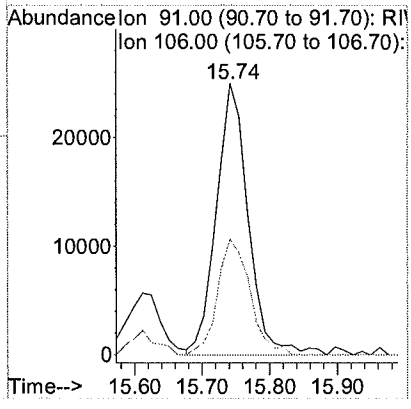


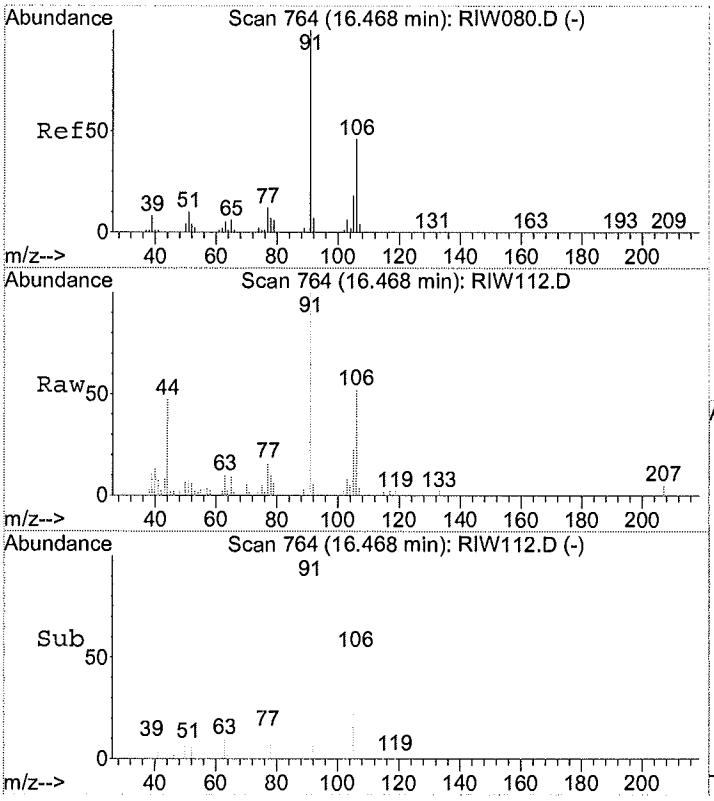


#70
m-Xylene & p-Xylene
Concen: 0.21 ug/l
RT: 15.74 min Scan# 708
Delta R.T. -0.00 min
Lab File: RIW112.D
Acq: 20 Sep 2024 9:45 pm

Tgt Ion: 91 Resp: 81585

Ion	Ratio	Lower	Upper
91	100		
106	43.2	17.6	77.6

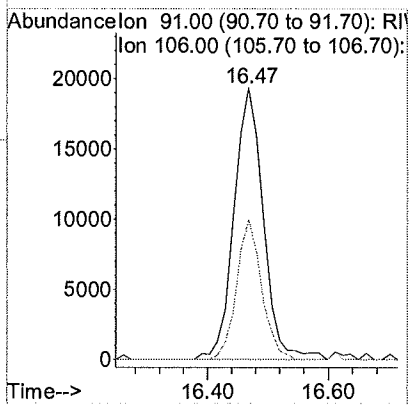




#71
o-Xylene
Concen: 0.17 ug/l
RT: 16.47 min Scan# 764
Delta R.T. -0.00 min
Lab File: RIW112.D
Acq: 20 Sep 2024 9:45 pm

Tgt Ion: 91 Resp: 65728

Ion	Ratio	Lower	Upper
91	100		
106	43.9	14.6	74.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 13:25
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 22:11
Sample ID	: MW25B-GW090724	Date Analyzed:	09/20/24 22:11
Lab Samp ID:	24I028-12	Dilution Factor:	1
Lab File ID:	RIW113	Matrix:	WATER
Ext Btch ID:	VOO6I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.37J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	6.2	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.85J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	6.0	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	4.7	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.68	10.0	97	70-130
Bromofluorobenzene	9.27	10.0	93	70-130
Toluene-d8	10.1	10.0	101	70-130
Dibromofluoromethane	9.50	10.0	95	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW113.D Vial: 20
Acq On : 20 Sep 2024 10:11 pm Operator: PMai
Sample : 24I028-12 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:34 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

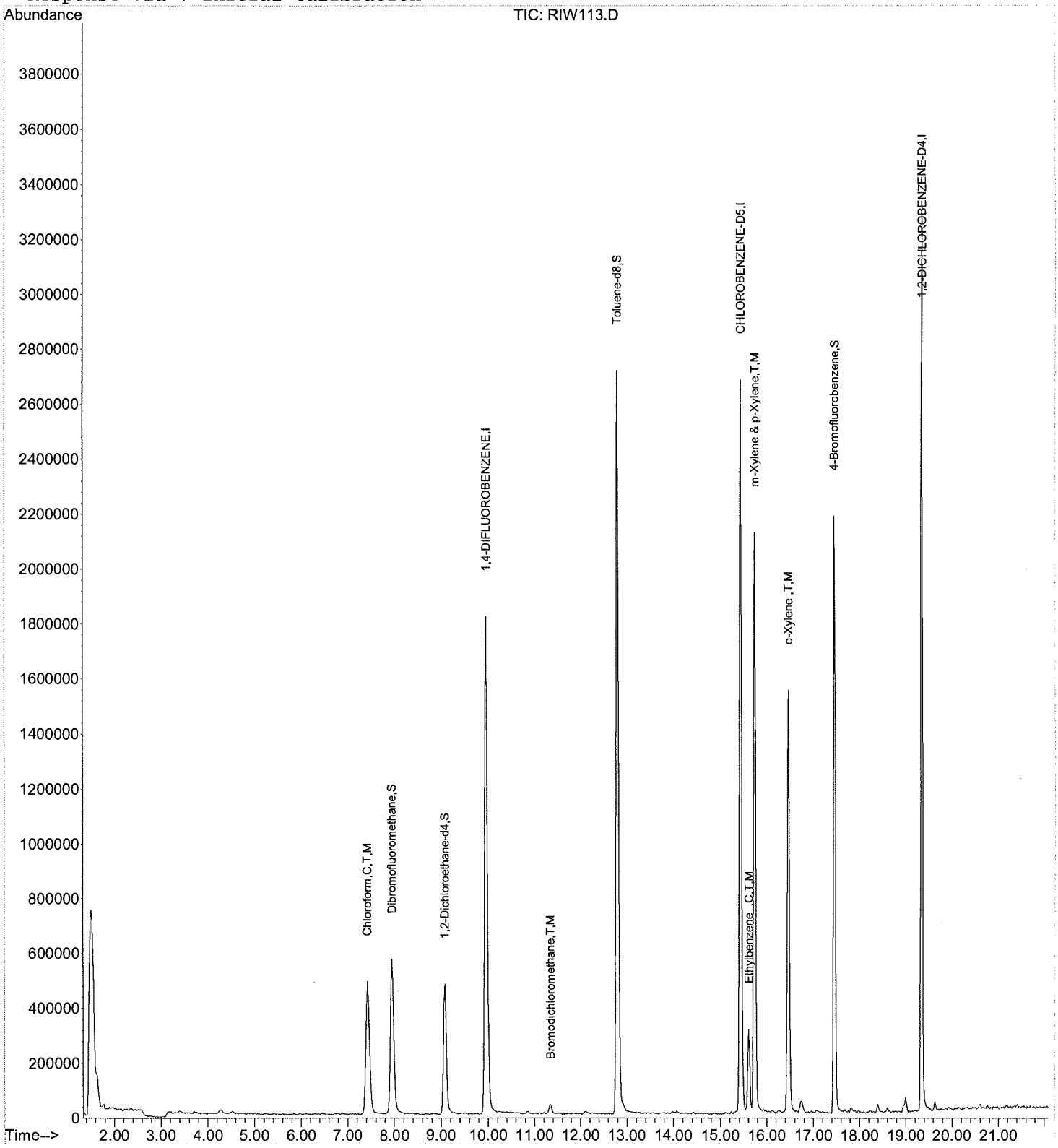
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3454078	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2827191	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1336162	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	927708	9.50	ug/l	-0.02
Spiked Amount 10.000			Recovery =	95.00%		
42) 1,2-Dichloroethane-d4	9.08	65	739632	9.68	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.80%		
55) Toluene-d8	12.79	98	3694548	10.10	ug/l	0.02
Spiked Amount 10.000			Recovery =	101.00%		
77) 4-Bromofluorobenzene	17.45	95	1382800	9.27	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.70%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	1113225	6.16	ug/l	95
49) Bromodichloromethane	11.35	83	47262	0.37	ug/l	97
69) Ethylbenzene	15.61	91	446414	0.85	ug/l	96
70) m-Xylene & p-Xylene	15.74	91	2400185	5.98	ug/l	98
71) o-Xylene	16.47	91	1854356	4.69	ug/l	99

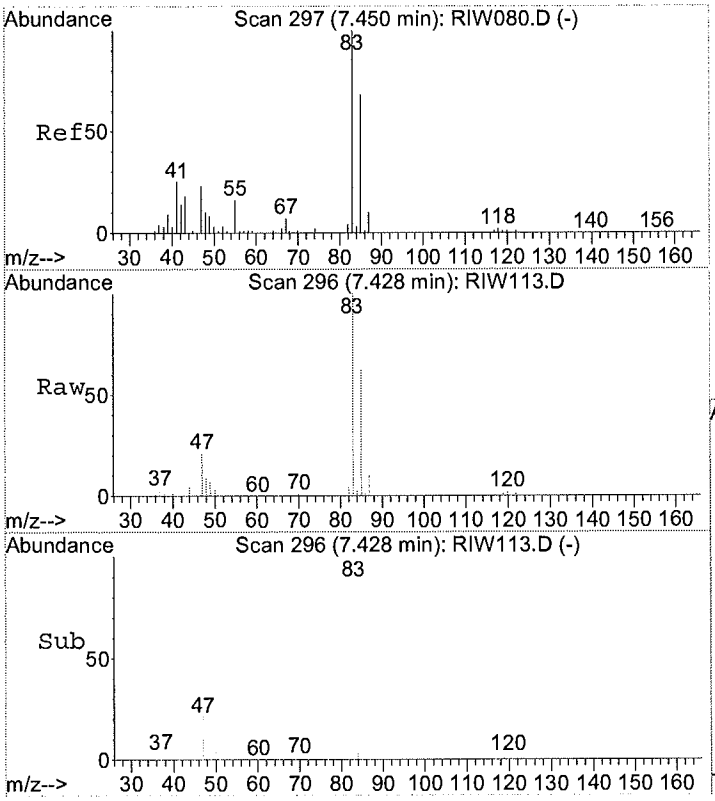
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW113.D Vial: 20
Acq On : 20 Sep 2024 10:11 pm Operator: PMai
Sample : 24I028-12 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:34 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

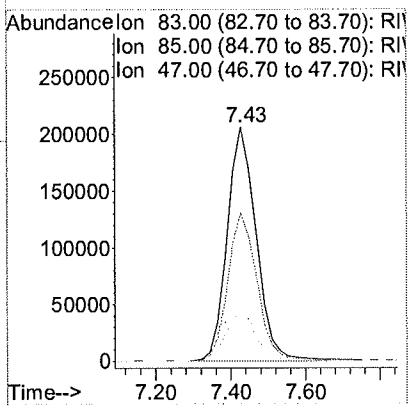


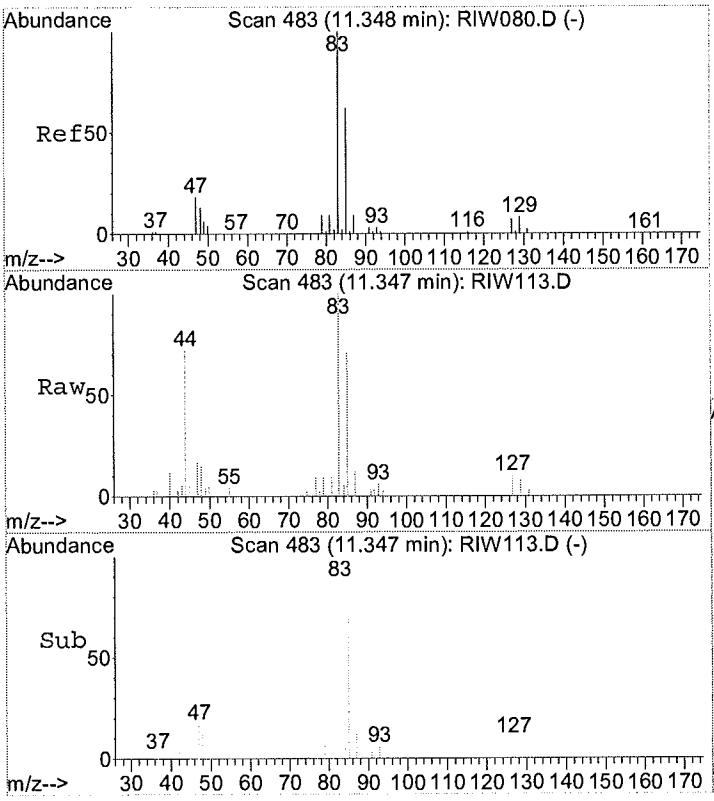


#31
Chloroform
Concen: 6.16 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW113.D
Acq: 20 Sep 2024 10:11 pm

Tgt Ion: 83 Resp: 1113225

Ion	Ratio	Lower	Upper
83	100		
85	63.7	38.6	98.6
47	22.1	0.0	53.1

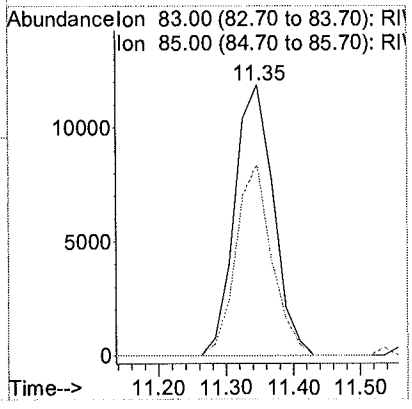


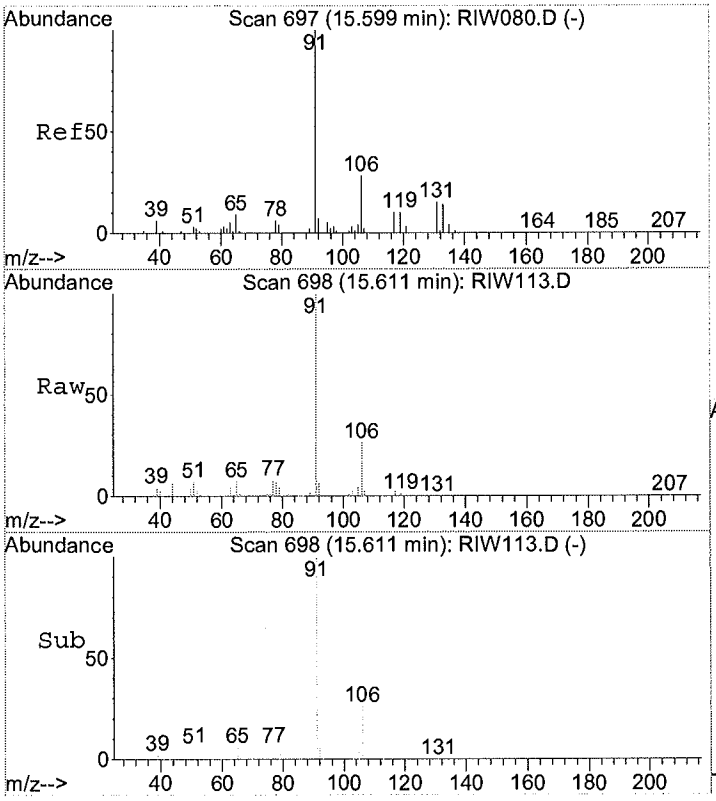


#49
Bromodichloromethane
Concen: 0.37 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW113.D
Acq: 20 Sep 2024 10:11 pm

Tgt Ion: 83 Resp: 47262

Ion	Ratio	Lower	Upper
83	100		
85	65.5	33.1	93.1

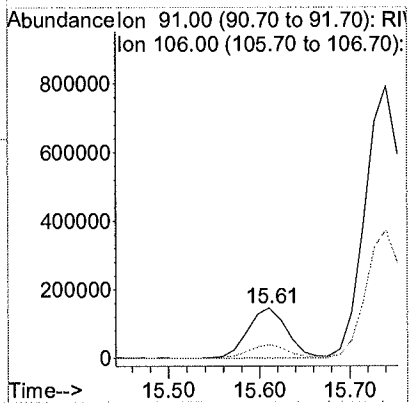


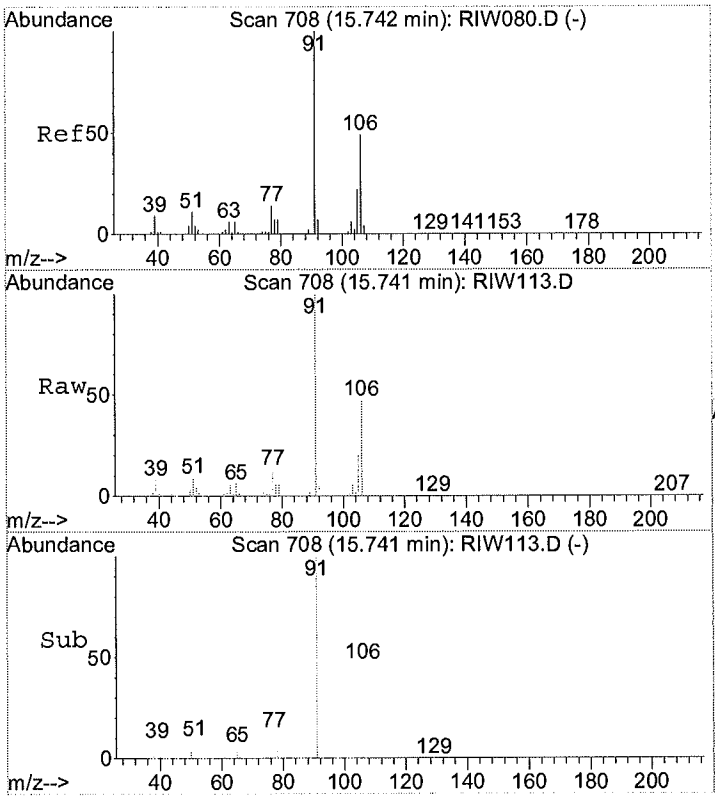


#69
Ethylbenzene
Concen: 0.85 ug/l
RT: 15.61 min Scan# 698
Delta R.T. 0.01 min
Lab File: RIW113.D
Acq: 20 Sep 2024 10:11 pm

Tgt Ion: 91 Resp: 446414

Ion	Ratio	Lower	Upper
91	100		
106	26.5	0.0	58.8

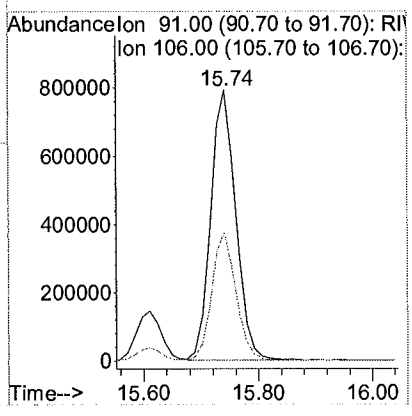


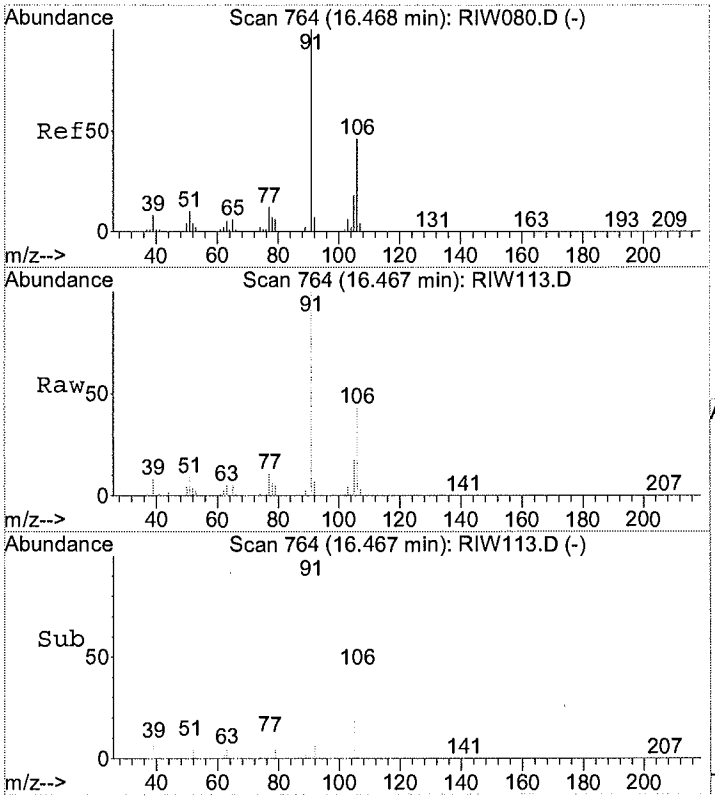


#70
m-Xylene & p-Xylene
Concen: 5.98 ug/l
RT: 15.74 min Scan# 708
Delta R.T. -0.00 min
Lab File: RIW113.D
Acq: 20 Sep 2024 10:11 pm

Tgt Ion: 91 Resp: 2400185

Ion	Ratio	Lower	Upper
91	100		
106	46.2	17.6	77.6

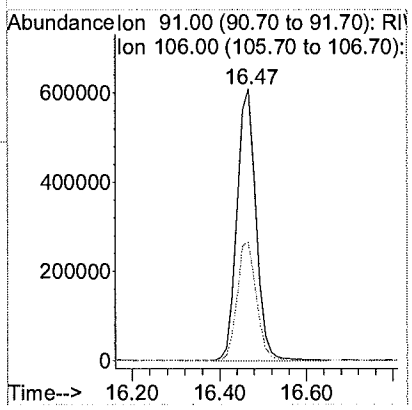




#71
o-Xylene
Concen: 4.69 ug/l
RT: 16.47 min Scan# 764
Delta R.T. -0.00 min
Lab File: RIW113.D
Acq: 20 Sep 2024 10:11 pm

Tgt Ion: 91 Resp: 1854356

Ion	Ratio	Lower	Upper
91	100		
106	44.2	14.6	74.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 10:50
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 22:38
Sample ID	: MW25C-GW090724	Date Analyzed:	09/20/24 22:38
Lab Samp ID:	24I028-13	Dilution Factor:	1
Lab File ID:	RIW114	Matrix:	WATER
Ext Btch ID:	V006I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.32J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.7	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.19J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	1.2J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	0.96J	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.86J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.91	10.0	99	70-130
Bromofluorobenzene	9.27	10.0	93	70-130
Toluene-d8	10.2	10.0	102	70-130
Dibromofluoromethane	9.81	10.0	98	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW114.D Vial: 21
Acq On : 20 Sep 2024 10:38 pm Operator: PMai
Sample : 24I028-13 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:35 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

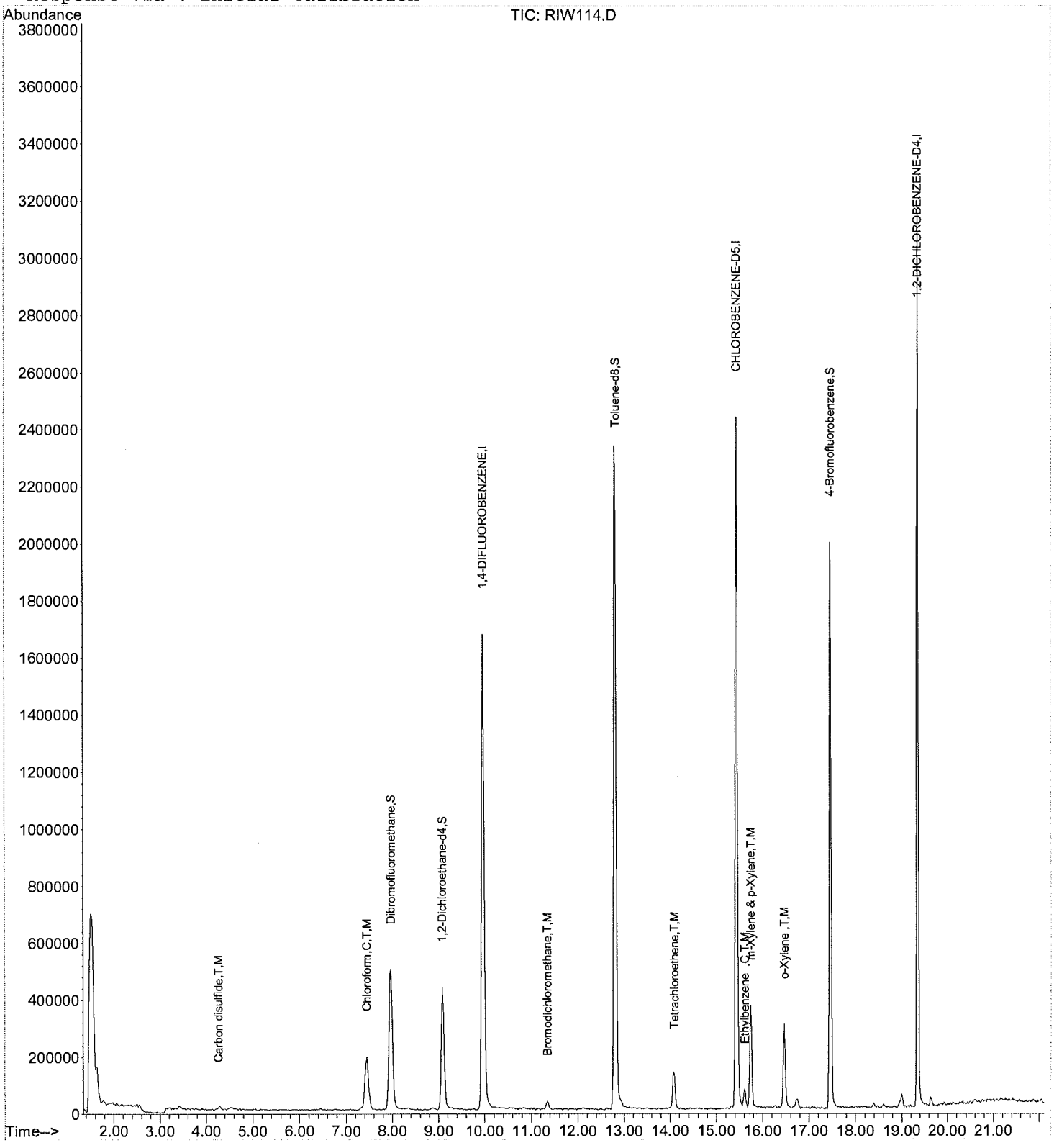
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3056682	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2557964	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1247024	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	848742	9.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.10%		
42) 1,2-Dichloroethane-d4	9.08	65	669881	9.91	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.10%		
55) Toluene-d8	12.81	98	3370427	10.18	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.80%		
77) 4-Bromofluorobenzene	17.45	95	1290167	9.27	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.70%		
Target Compounds						Qvalue
19) Carbon disulfide	4.26	76	3966	0.17	ug/l	75
31) Chloroform	7.45	83	434671	2.72	ug/l	96
49) Bromodichloromethane	11.35	83	35896	0.32	ug/l	94
62) Tetrachloroethene	14.09	164	67966	0.86	ug/l	92
69) Ethylbenzene	15.61	91	91912	0.19	ug/l	94
70) m-Xylene & p-Xylene	15.74	91	421685	1.16	ug/l	97
71) o-Xylene	16.47	91	342943	0.96	ug/l	99

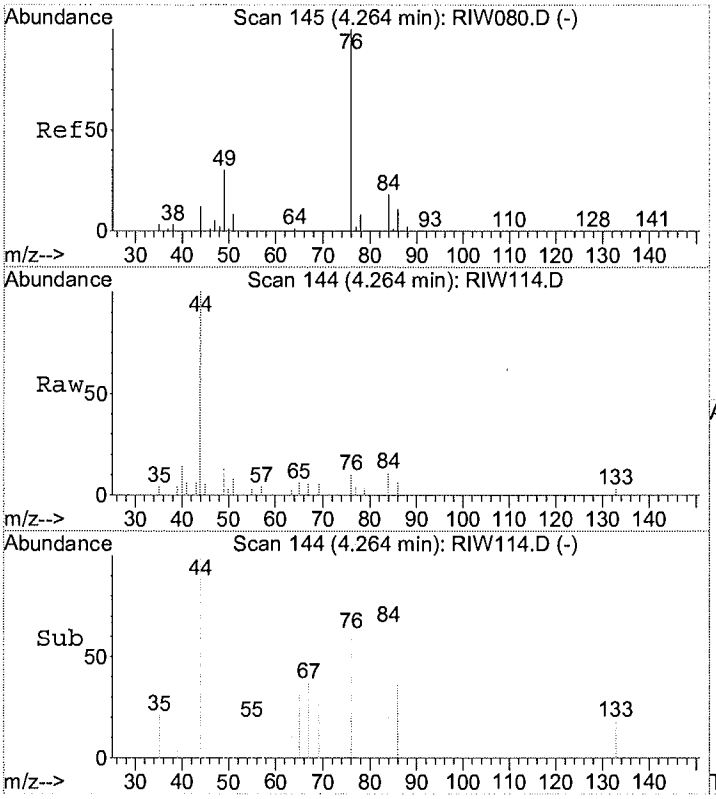
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW114.D Vial: 21
Acq On : 20 Sep 2024 10:38 pm Operator: PMai
Sample : 24I028-13 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:35 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

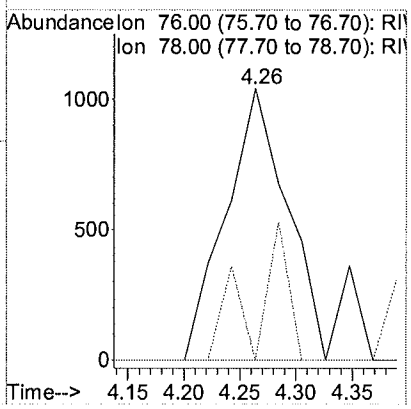


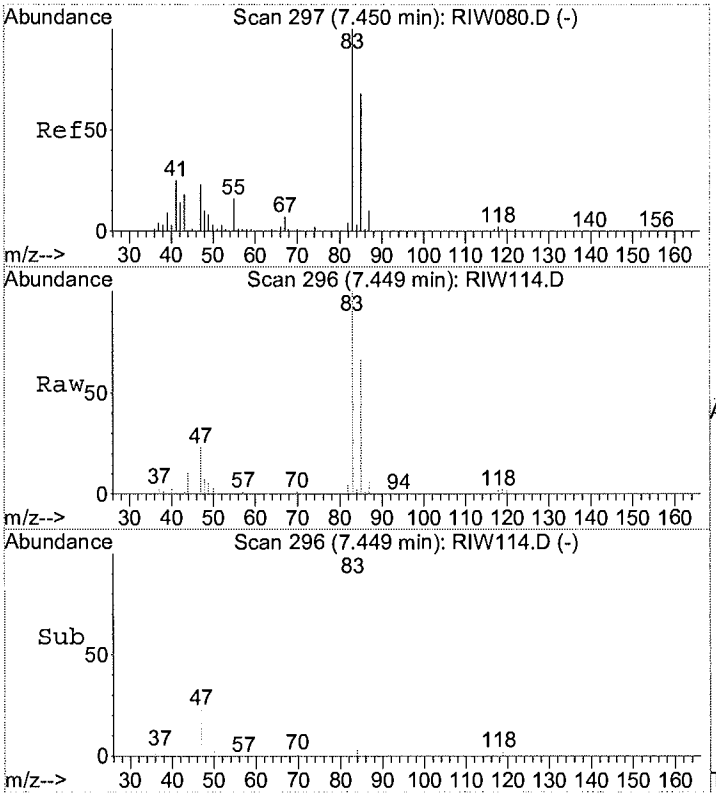


#19
Carbon disulfide
Concen: 0.17 ug/l
RT: 4.26 min Scan# 144
Delta R.T. -0.00 min
Lab File: RIW114.D
Acq: 20 Sep 2024 10:38 pm

Tgt Ion: 76 Resp: 3966

Ion	Ratio	Lower	Upper
76	100		
78	16.8	0.0	38.1

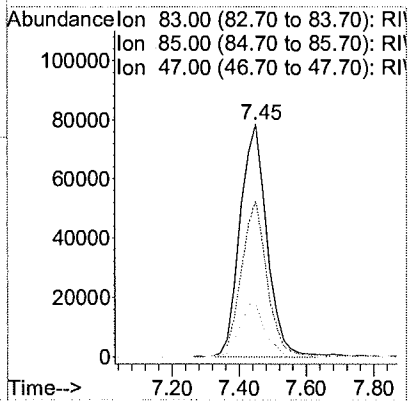


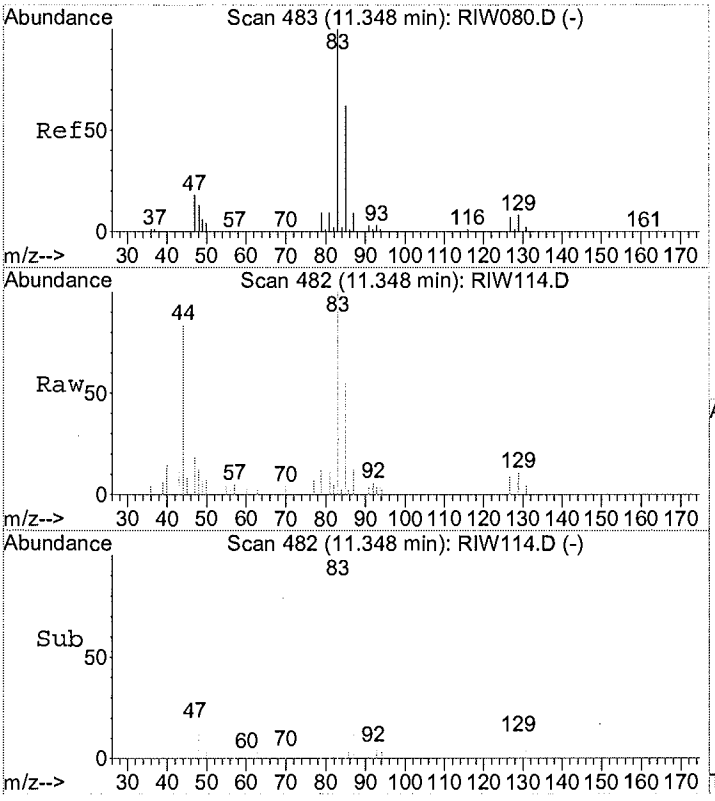


#31
Chloroform
Concen: 2.72 ug/l
RT: 7.45 min Scan# 296
Delta R.T. -0.00 min
Lab File: RIW114.D
Acq: 20 Sep 2024 10:38 pm

Tgt Ion: 83 Resp: 434671

Ion	Ratio	Lower	Upper
83	100		
85	64.1	38.6	98.6
47	22.5	0.0	53.1

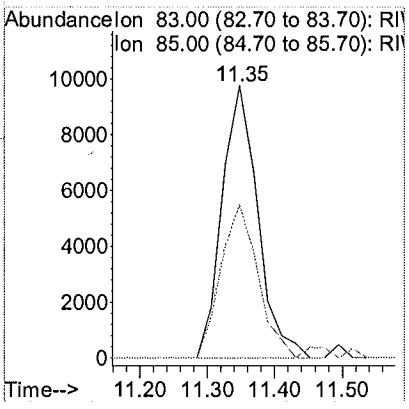


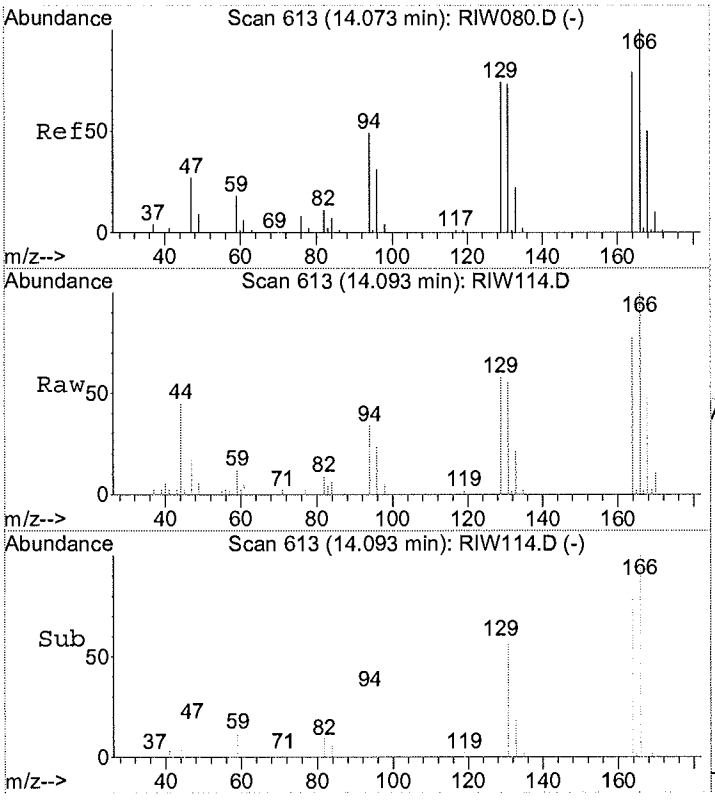


#49
Bromodichloromethane
Concen: 0.32 ug/l
RT: 11.35 min Scan# 482
Delta R.T. -0.00 min
Lab File: RIW114.D
Acq: 20 Sep 2024 10:38 pm

Tgt Ion: 83 Resp: 35896

Ion	Ratio	Lower	Upper
83	100		
85	58.5	33.1	93.1

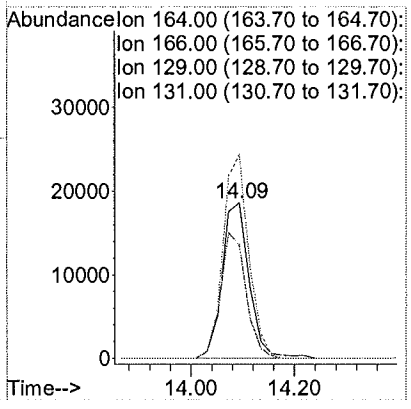


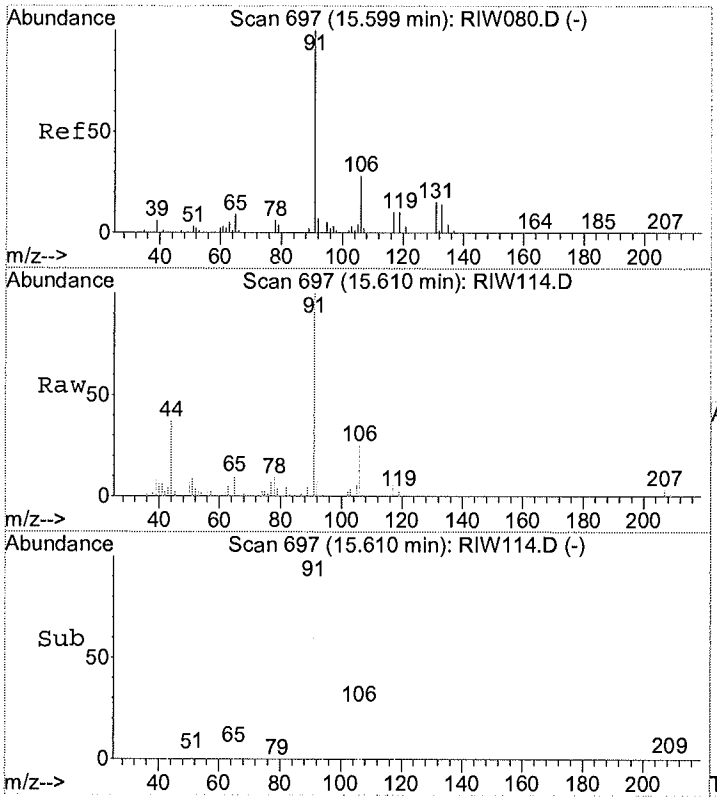


#62
Tetrachloroethene
Concen: 0.86 ug/l
RT: 14.09 min Scan# 613
Delta R.T. 0.02 min
Lab File: RIW114.D
Acq: 20 Sep 2024 10:38 pm

Tgt Ion:164 Resp: 67966

Ion	Ratio	Lower	Upper
164	100		
166	124.1	100.5	160.5
129	79.3	57.4	117.4
131	75.9	54.7	114.7

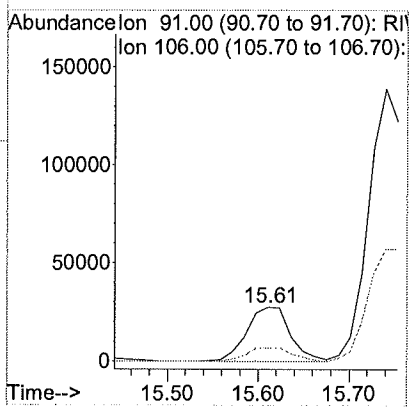


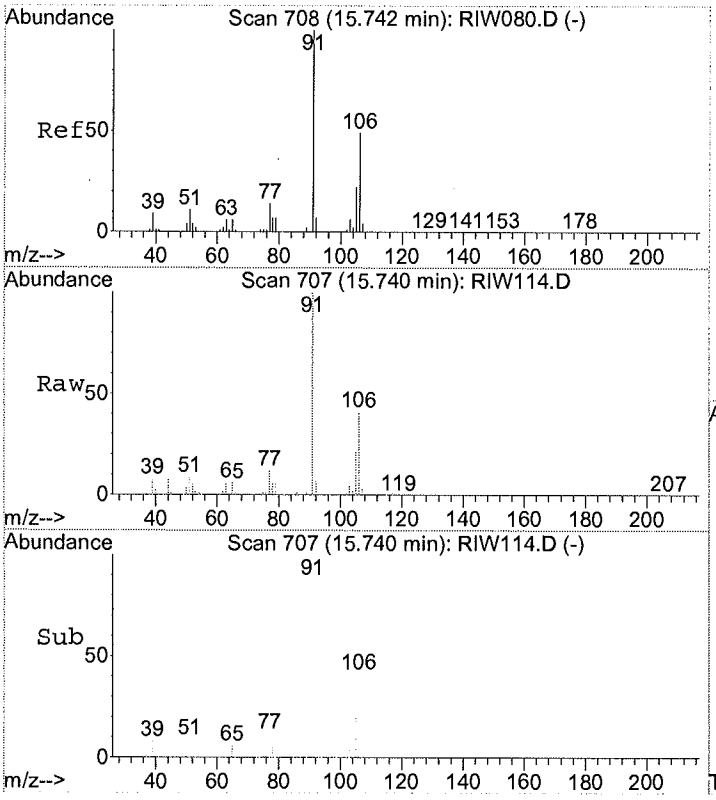


#69
Ethylbenzene
Concen: 0.19 ug/l
RT: 15.61 min Scan# 697
Delta R.T. 0.01 min
Lab File: RIW114.D
Acq: 20 Sep 2024 10:38 pm

Tgt Ion: 91 Resp: 91912

Ion	Ratio	Lower	Upper
91	100		
106	25.8	0.0	58.8

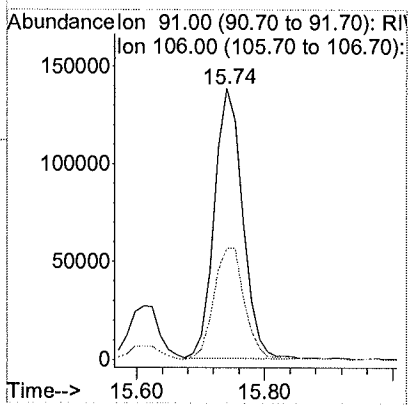


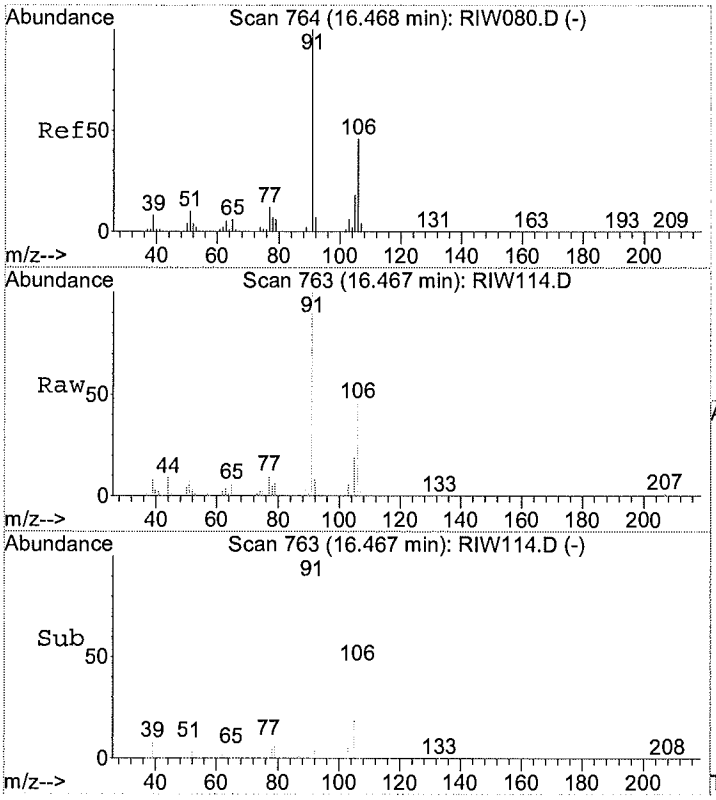


#70
m-Xylene & p-Xylene
Concen: 1.16 ug/l
RT: 15.74 min Scan# 707
Delta R.T. -0.00 min
Lab File: RIW114.D
Acq: 20 Sep 2024 10:38 pm

Tgt Ion: 91 Resp: 421685

Ion	Ratio	Lower	Upper
91	100		
106	45.4	17.6	77.6

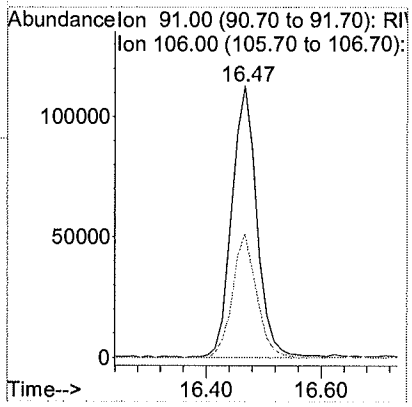




#71
o-Xylene
Concen: 0.96 ug/l
RT: 16.47 min Scan# 763
Delta R.T. -0.00 min
Lab File: RIW114.D
Acq: 20 Sep 2024 10:38 pm

Tgt Ion: 91 Resp: 342943

Ion	Ratio	Lower	Upper
91	100		
106	43.8	14.6	74.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 16:20
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/21/24 01:16
Sample ID	: MW26C-GW090724	Date Analyzed:	09/21/24 01:16
Lab Samp ID:	24I028-14	Dilution Factor:	1
Lab File ID:	RIW120	Matrix:	WATER
Ext Btch ID:	VOO6I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	0.23J	1.0	0.15
1,2,4-Trichlorobenzene	0.18J	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.36J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.1	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.35J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	2.6	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	2.1	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.68	10.0	97	70-130
Bromofluorobenzene	9.09	10.0	91	70-130
Toluene-d8	10.2	10.0	102	70-130
Dibromofluoromethane	9.58	10.0	96	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : PMai
Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW120.D Vial: 27
Acq On : 21 Sep 2024 1:16 am Operator: PMai
Sample : 24I028-14 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:37 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

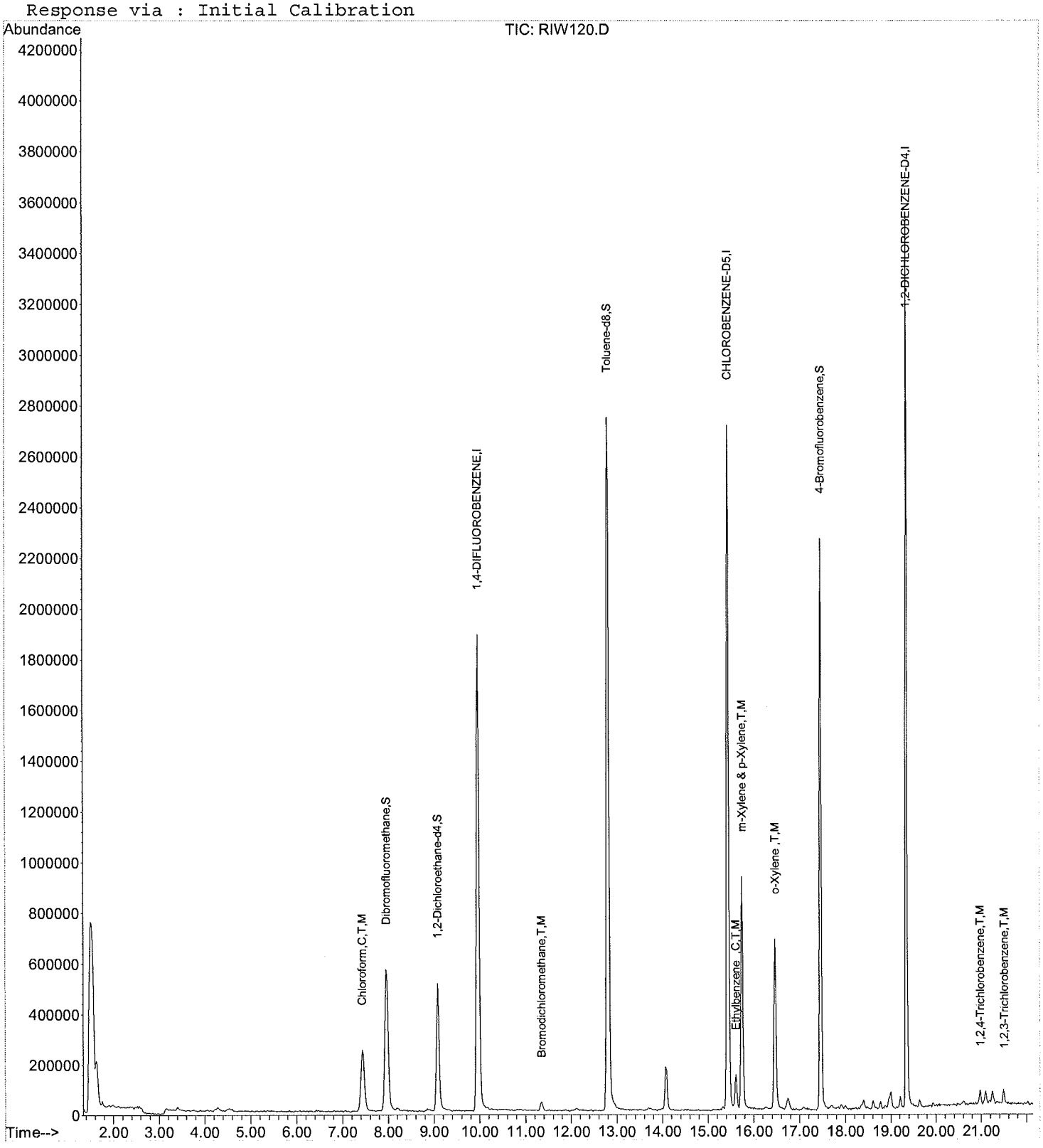
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3530341	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2903612	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1384972	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	956511	9.58	ug/l	-0.02
Spiked Amount 10.000			Recovery = 95.80%			
42) 1,2-Dichloroethane-d4	9.08	65	755731	9.68	ug/l	0.00
Spiked Amount 10.000			Recovery = 96.80%			
55) Toluene-d8	12.79	98	3826180	10.18	ug/l	0.02
Spiked Amount 10.000			Recovery = 101.80%			
77) 4-Bromofluorobenzene	17.45	95	1405481	9.09	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.90%			
Target Compounds						Qvalue
31) Chloroform	7.43	83	575471	3.12	ug/l	94
49) Bromodichloromethane	11.35	83	47179	0.36	ug/l	95
69) Ethylbenzene	15.61	91	186807	0.35	ug/l	99
70) m-Xylene & p-Xylene	15.74	91	1056752	2.56	ug/l	99
71) o-Xylene	16.47	91	836568	2.06	ug/l	97
95) 1,2,4-Trichlorobenzene	20.98	180	28460	0.18	ug/l	96
98) 1,2,3-Trichlorobenzene	21.50	180	27697	0.23	ug/l	99

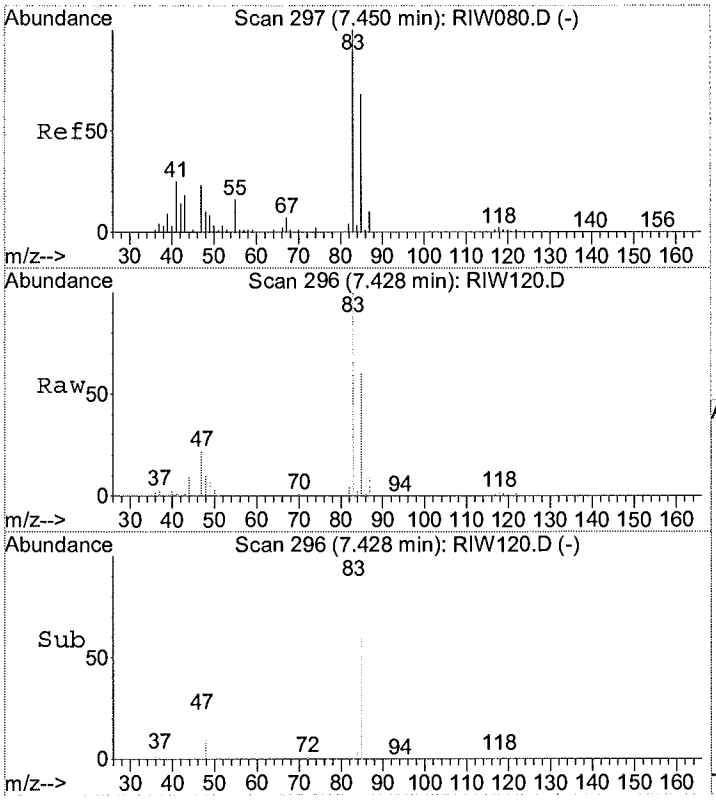
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW120.D Vial: 27
Acq On : 21 Sep 2024 1:16 am Operator: PMai
Sample : 24I028-14 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:37 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

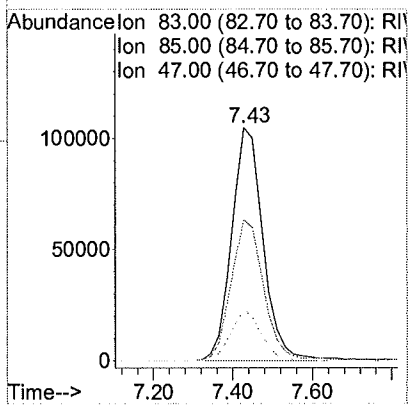


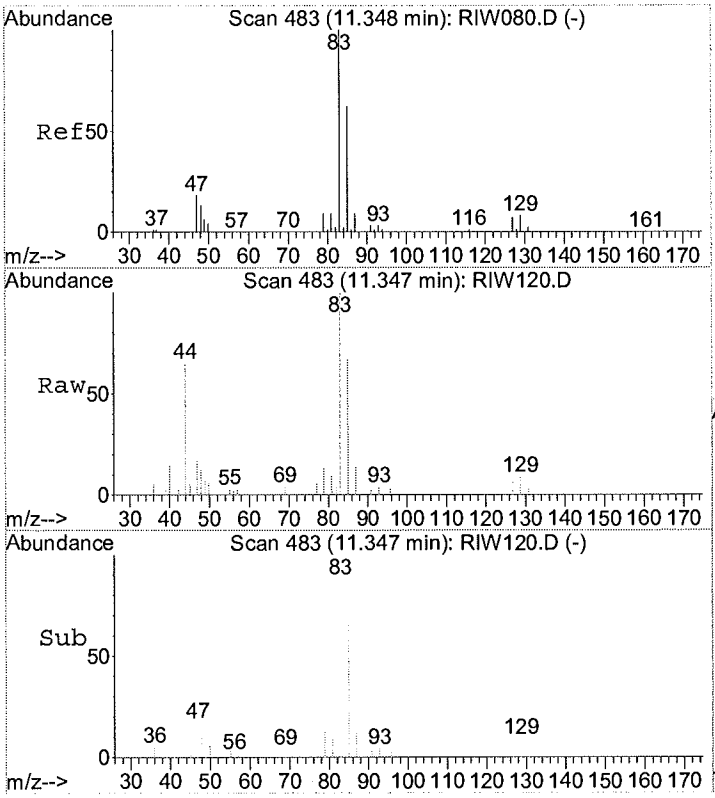


#31
Chloroform
Concen: 3.12 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW120.D
Acq: 21 Sep 2024 1:16 am

Tgt Ion: 83 Resp: 575471

Ion	Ratio	Lower	Upper
83	100		
85	62.9	38.6	98.6
47	21.3	0.0	53.1

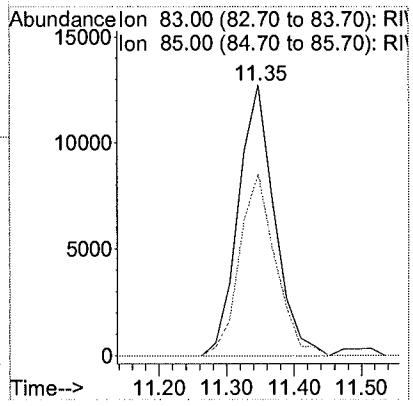


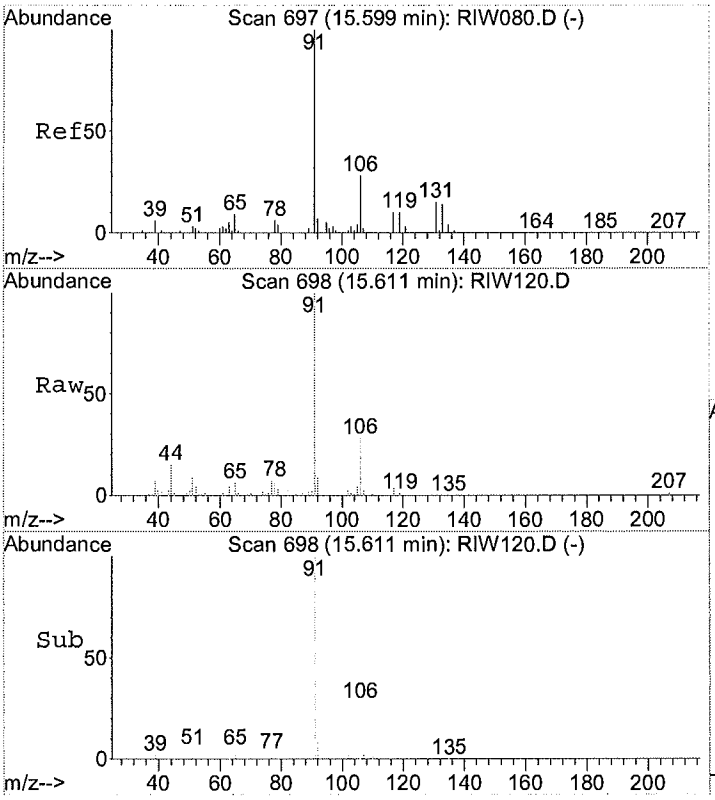


#49
Bromodichloromethane
Concen: 0.36 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW120.D
Acq: 21 Sep 2024 1:16 am

Tgt Ion: 83 Resp: 47179

Ion	Ratio	Lower	Upper
83	100		
85	66.7	33.1	93.1

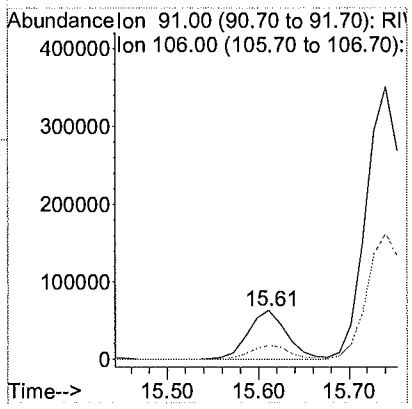


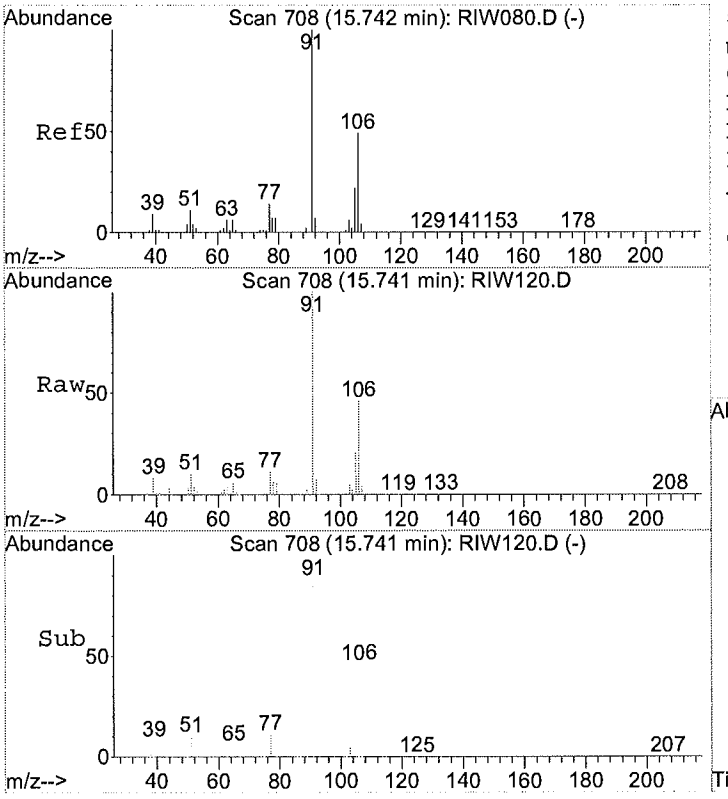


#69
Ethylbenzene
Concen: 0.35 ug/l
RT: 15.61 min Scan# 698
Delta R.T. 0.01 min
Lab File: RIW120.D
Acq: 21 Sep 2024 1:16 am

Tgt Ion: 91 Resp: 186807

Ion	Ratio	Lower	Upper
91	100		
106	28.3	0.0	58.8

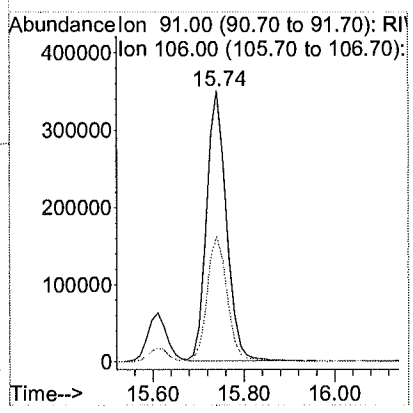


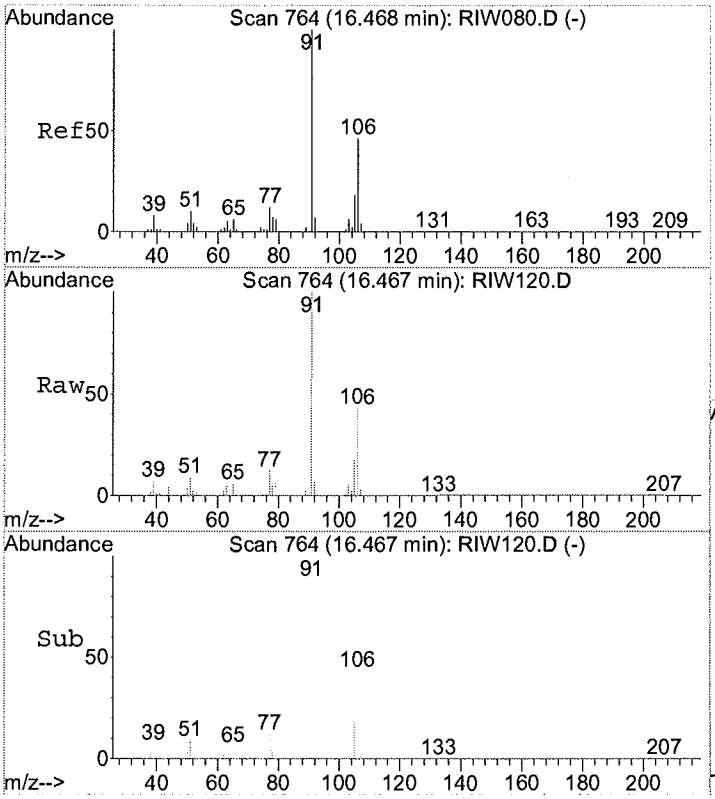


#70
m-Xylene & p-Xylene
Concen: 2.56 ug/l
RT: 15.74 min Scan# 708
Delta R.T. -0.00 min
Lab File: RIW120.D
Acq: 21 Sep 2024 1:16 am

Tgt Ion: 91 Resp: 1056752

Ion	Ratio	Lower	Upper
91	100		
106	47.0	17.6	77.6

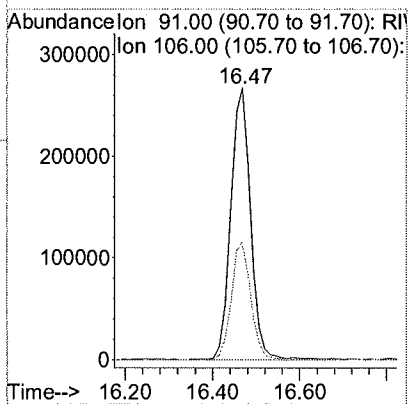


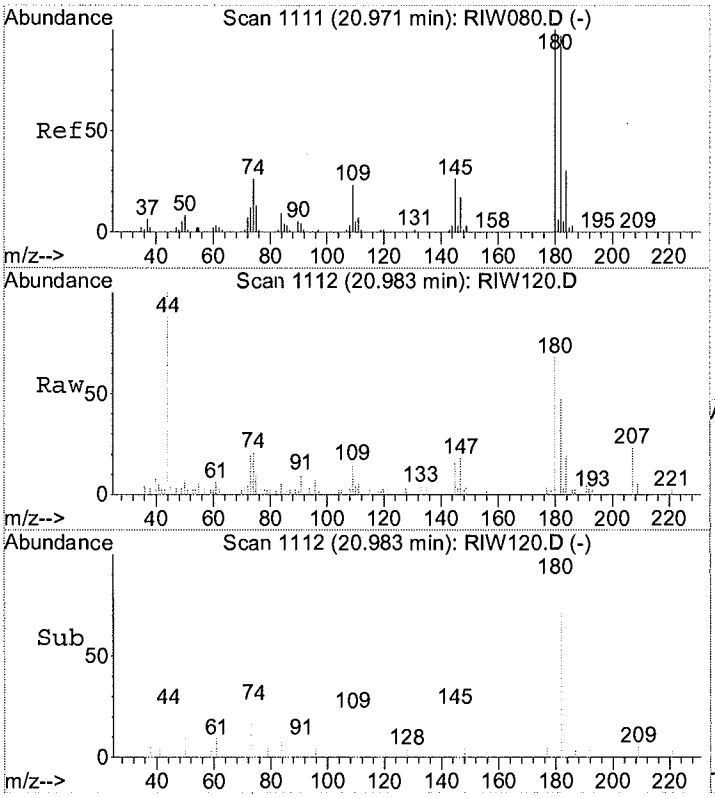


#71
o-Xylene
Concen: 2.06 ug/l
RT: 16.47 min Scan# 764
Delta R.T. -0.00 min
Lab File: RIW120.D
Acq: 21 Sep 2024 1:16 am

Tgt Ion: 91 Resp: 836568

Ion	Ratio	Lower	Upper
91	100		
106	42.7	14.6	74.6

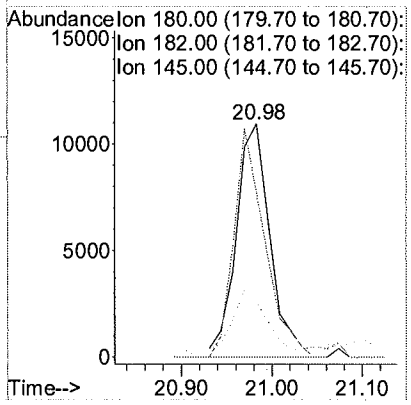


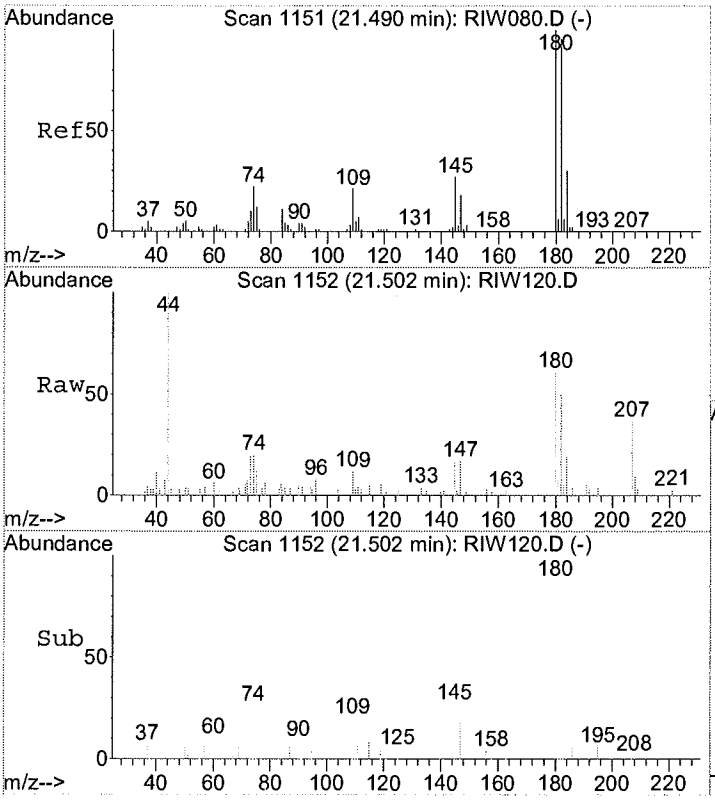


#95
1,2,4-Trichlorobenzene
Concen: 0.18 ug/l
RT: 20.98 min Scan# 1112
Delta R.T. 0.01 min
Lab File: RIW120.D
Acq: 21 Sep 2024 1:16 am

Tgt Ion:180 Resp: 28460

Ion	Ratio	Lower	Upper
180	100		
182	93.6	65.7	125.7
145	33.0	0.0	56.3

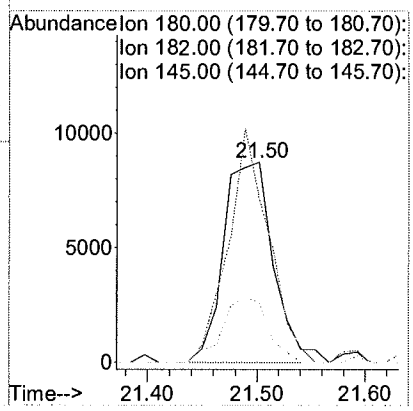




#98
1,2,3-Trichlorobenzene
Concen: 0.23 ug/l
RT: 21.50 min Scan# 1152
Delta R.T. 0.01 min
Lab File: RIW120.D
Acq: 21 Sep 2024 1:16 am

Tgt Ion:180 Resp: 27697

Ion	Ratio	Lower	Upper
180	100		
182	94.8	64.7	124.7
145	29.7	0.0	57.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 14:56
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/20/24 23:04
Sample ID	: MW28-GW090724	Date Analyzed:	09/20/24 23:04
Lab Samp ID:	24I028-15	Dilution Factor:	1
Lab File ID:	RIW115	Matrix:	WATER
Ext Btch ID:	V006I05	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.24J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.3	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.63	10.0	96	70-130
Bromofluorobenzene	9.05	10.0	91	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.52	10.0	95	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW115.D Vial: 22
Acq On : 20 Sep 2024 11:04 pm Operator: PMai
Sample : 24I028-15 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:38 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

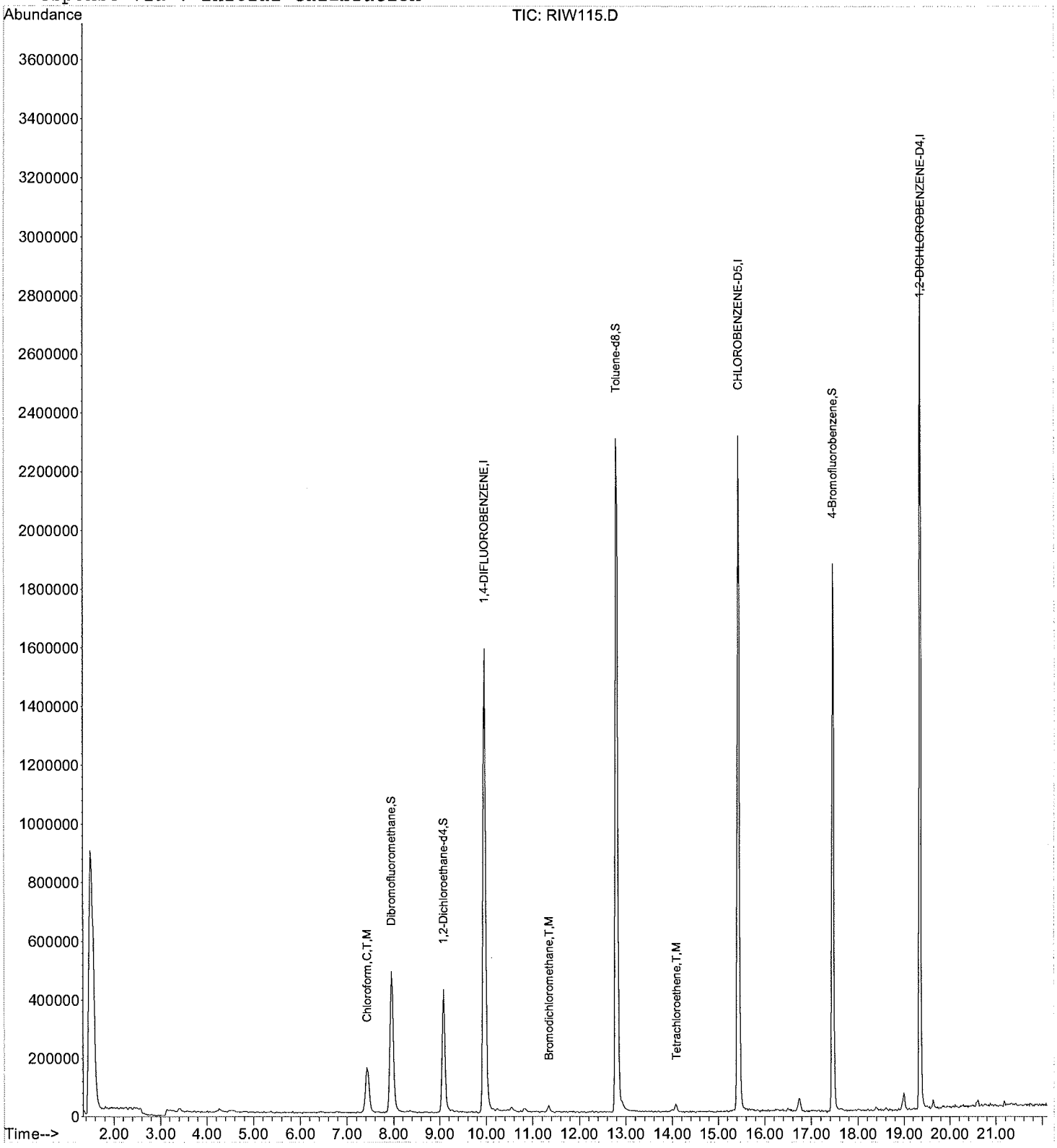
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3002167	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2427055	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1200530	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	808102	9.52	ug/l	-0.02
Spiked Amount 10.000			Recovery =	95.20%		
42) 1,2-Dichloroethane-d4	9.08	65	639341	9.63	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.30%		
55) Toluene-d8	12.79	98	3231407	10.29	ug/l	0.02
Spiked Amount 10.000			Recovery =	102.90%		
77) 4-Bromofluorobenzene	17.45	95	1213539	9.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.50%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	366645	2.34	ug/l	95
49) Bromodichloromethane	11.35	83	25962	0.24	ug/l	95
62) Tetrachloroethene	14.09	164	10771	0.14	ug/l	96

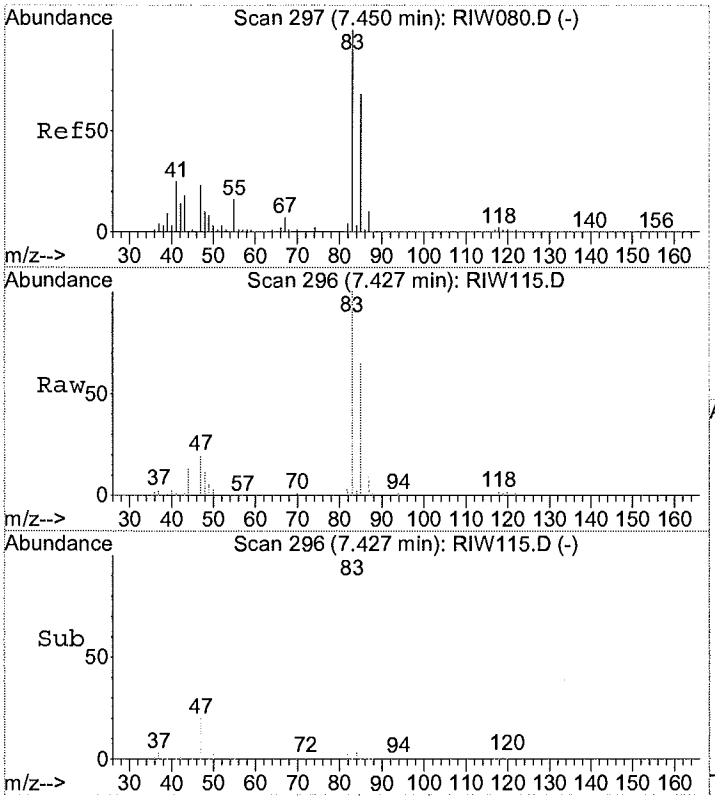
(#) = qualifier out of range (m) = manual integration
RIW115.D VO06I19B.M Mon Oct 14 08:38:54 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW115.D Vial: 22
Acq On : 20 Sep 2024 11:04 pm Operator: PMai
Sample : 24I028-15 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:38 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

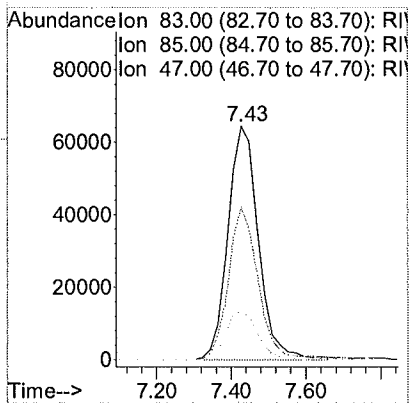


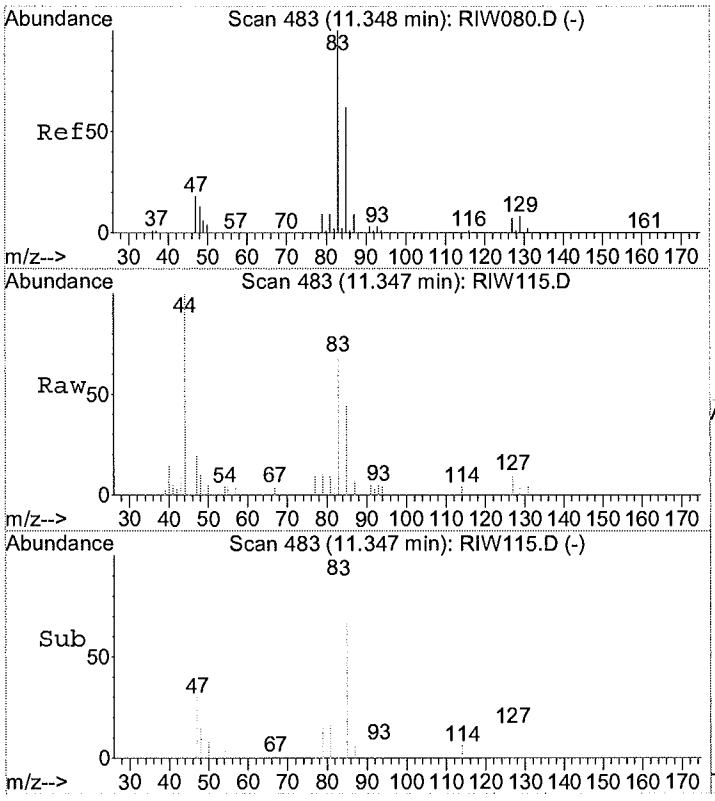


#31
Chloroform
Concen: 2.34 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW115.D
Acq: 20 Sep 2024 11:04 pm

Tgt Ion: 83 Resp: 366645

Ion	Ratio	Lower	Upper
83	100		
85	63.4	38.6	98.6
47	21.7	0.0	53.1

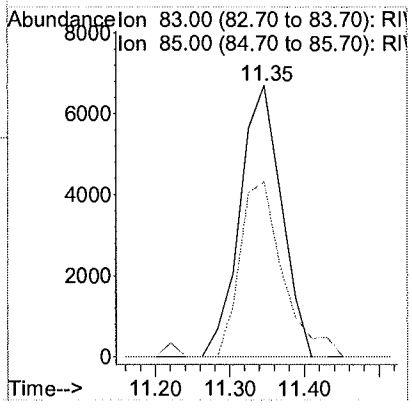


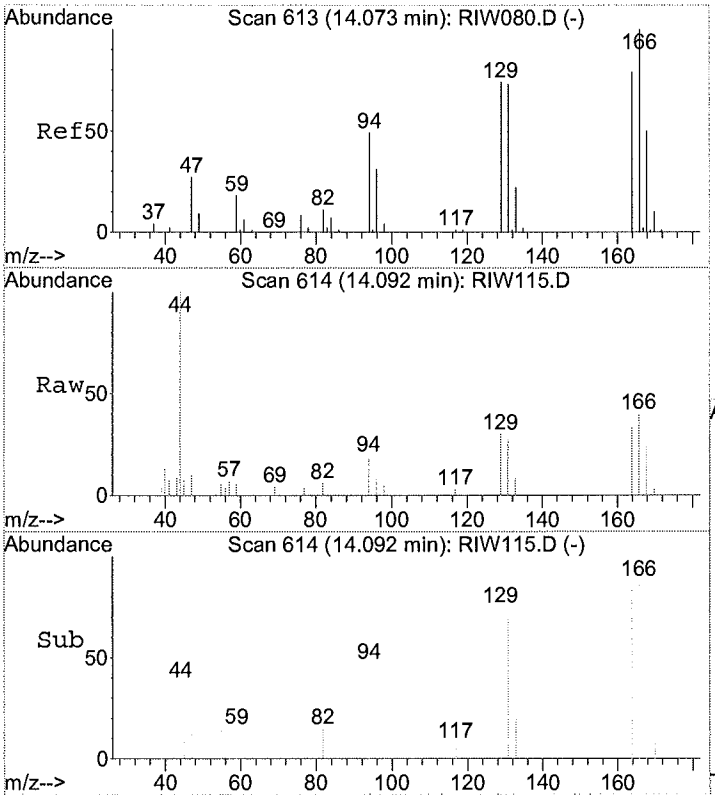


#49
Bromodichloromethane
Concen: 0.24 ug/l
RT: 11.35 min Scan# 483
Delta R.T. -0.00 min
Lab File: RIW115.D
Acq: 20 Sep 2024 11:04 pm

Tgt Ion: 83 Resp: 25962

Ion	Ratio	Lower	Upper
83	100		
85	66.7	33.1	93.1

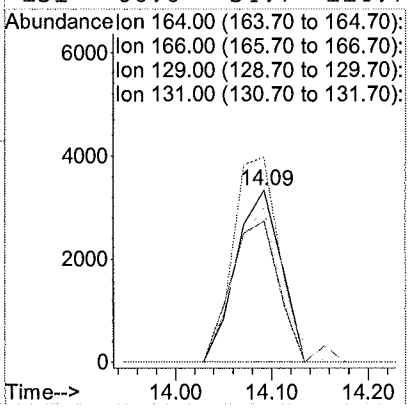




#62
Tetrachloroethene
Concen: 0.14 ug/l
RT: 14.09 min Scan# 614
Delta R.T. 0.02 min
Lab File: RIW115.D
Acq: 20 Sep 2024 11:04 pm

Tgt Ion:164 Resp: 10771

Ion	Ratio	Lower	Upper
164	100		
166	124.3	100.5	160.5
129	92.5	57.4	117.4
131	86.6	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 10:26
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/21/24 11:10
Sample ID	: MW45-GW090724	Date Analyzed:	09/21/24 11:10
Lab Samp ID:	24I028-16	Dilution Factor:	1
Lab File ID:	RIW133	Matrix:	WATER
Ext Btch ID:	V006I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.10J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.17J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.9	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	10	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.48	10.0	95	70-130
Bromofluorobenzene	9.34	10.0	93	70-130
Toluene-d8	10.5	10.0	105	70-130
Dibromofluoromethane	9.48	10.0	95	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW133.D Vial: 9
Acq On : 21 Sep 2024 11:10 am Operator: DHguye
Sample : 24I028-16 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

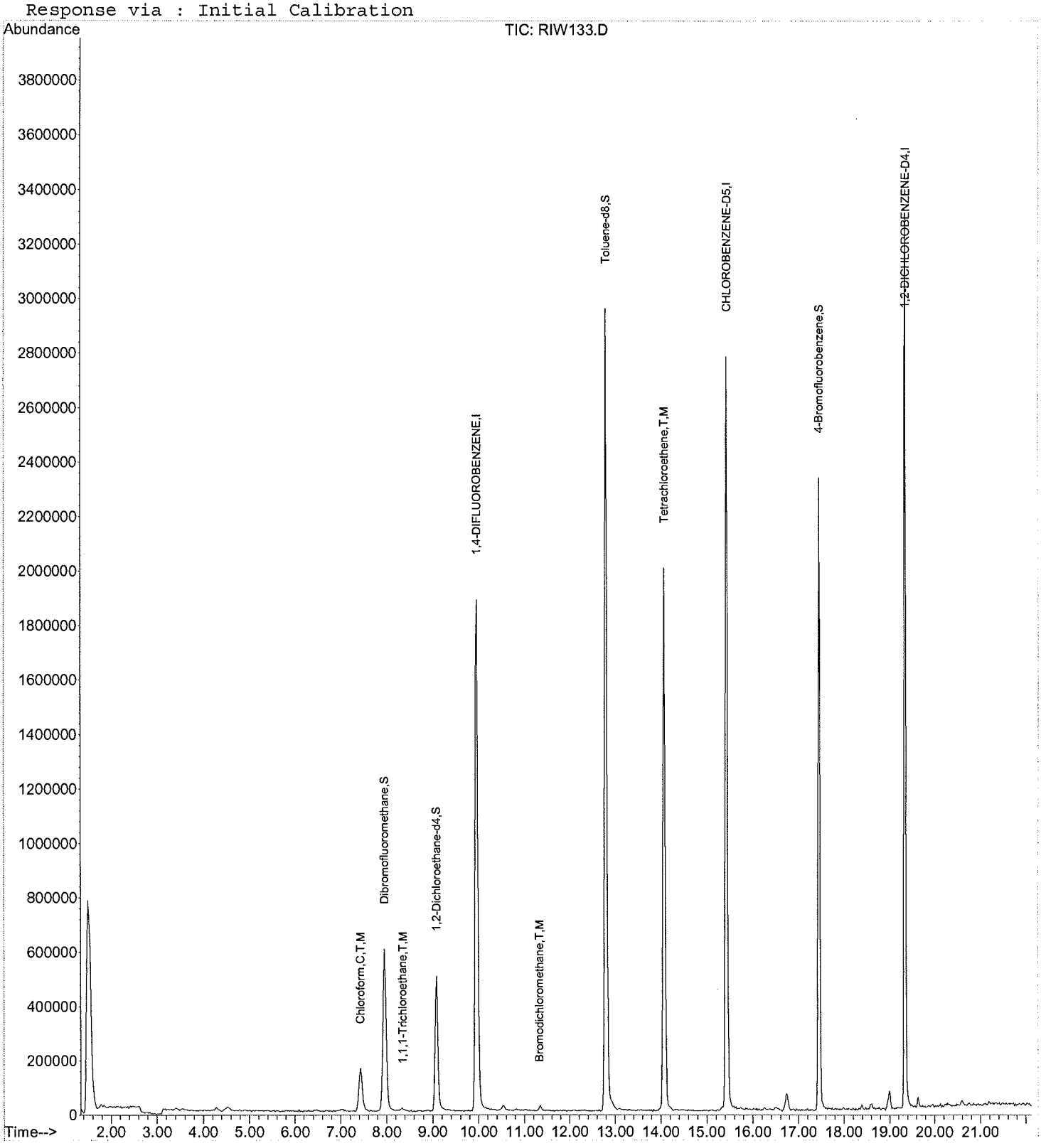
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3671079	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2913574	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1391317	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	984153	9.48	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.80%		
42) 1,2-Dichloroethane-d4	9.08	65	769660	9.48	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.80%		
55) Toluene-d8	12.79	98	3946638	10.47	ug/l	-0.02
Spiked Amount 10.000			Recovery =	104.70%		
77) 4-Bromofluorobenzene	17.45	95	1450354	9.34	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.40%		
Target Compounds						Qvalue
31) Chloroform	7.43	83	358127	1.87	ug/l	94
36) 1,1,1-Trichloroethane	8.35	97	15836	0.10	ug/l	95
49) Bromodichloromethane	11.33	83	23077	0.17	ug/l	97
62) Tetrachloroethene	14.07	164	943848	10.44	ug/l	96

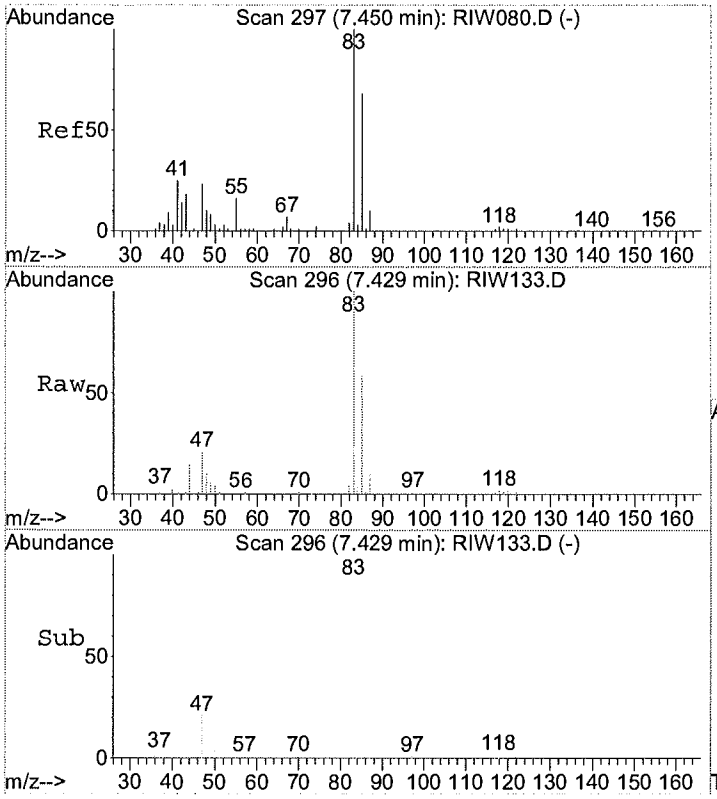
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW133.D Vial: 9
Acq On : 21 Sep 2024 11:10 am Operator: DHguye
Sample : 24I028-16 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:43 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

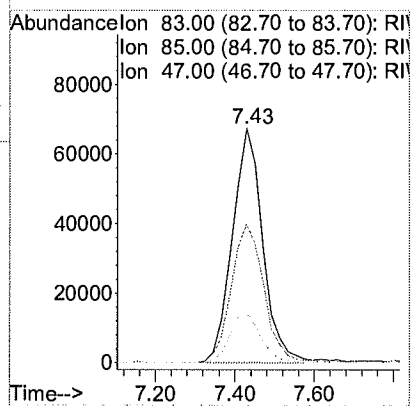


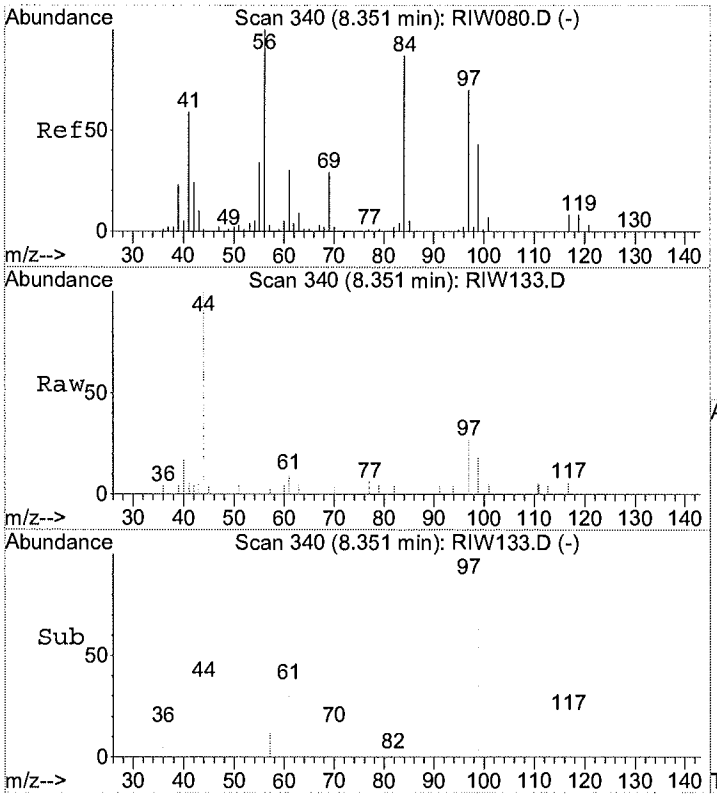


#31
Chloroform
Concen: 1.87 ug/l
RT: 7.43 min Scan# 296
Delta R.T. -0.02 min
Lab File: RIW133.D
Acq: 21 Sep 2024 11:10 am

Tgt Ion: 83 Resp: 358127

Ion	Ratio	Lower	Upper
83	100		
85	63.3	38.6	98.6
47	21.5	0.0	53.1

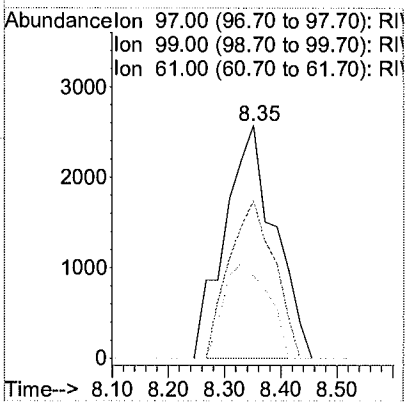


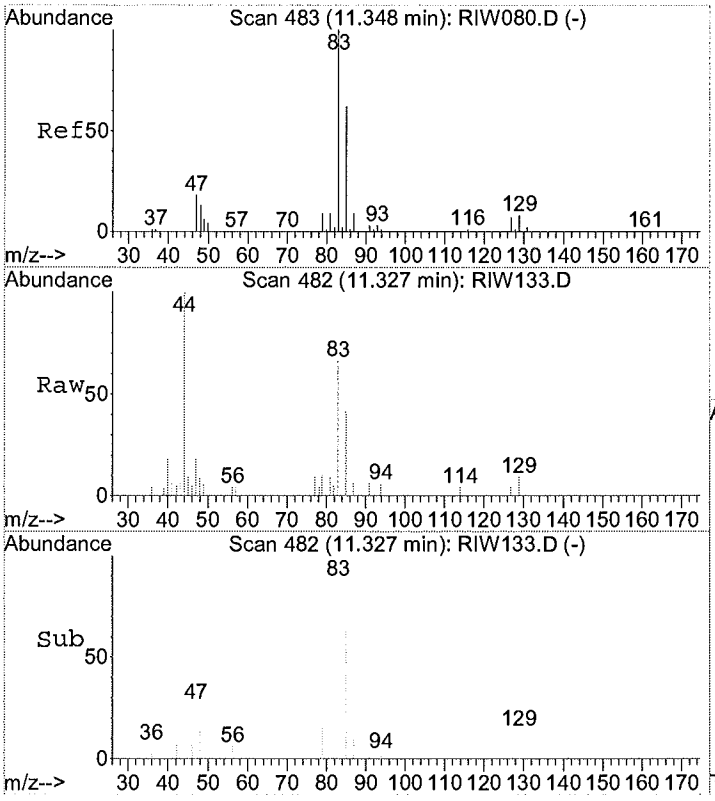


#36
1,1,1-Trichloroethane
Concen: 0.10 ug/l
RT: 8.35 min Scan# 340
Delta R.T. -0.00 min
Lab File: RIW133.D
Acq: 21 Sep 2024 11:10 am

Tgt Ion: 97 Resp: 15836

Ion	Ratio	Lower	Upper
97	100		
99	61.4	32.6	92.6
61	36.5	12.7	72.7

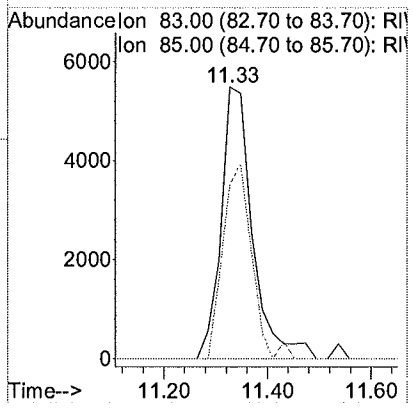


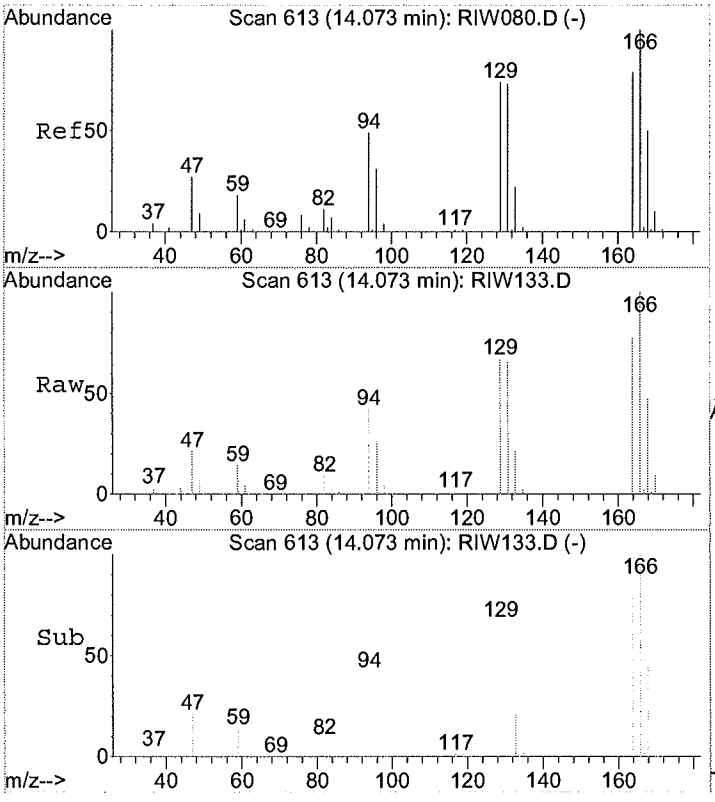


#49
Bromodichloromethane
Concen: 0.17 ug/l
RT: 11.33 min Scan# 482
Delta R.T. -0.02 min
Lab File: RIW133.D
Acq: 21 Sep 2024 11:10 am

Tgt Ion: 83 Resp: 23077

Ion	Ratio	Lower	Upper
83	100		
85	65.7	33.1	93.1

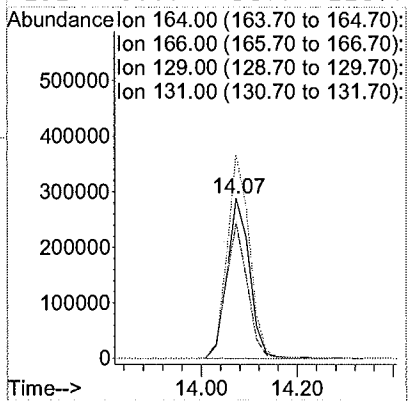




#62
Tetrachloroethene
Concen: 10.44 ug/l
RT: 14.07 min Scan# 613
Delta R.T. -0.00 min
Lab File: RIW133.D
Acq: 21 Sep 2024 11:10 am

Tgt Ion:164 Resp: 943848

Ion	Ratio	Lower	Upper
164	100		
166	126.6	100.5	160.5
129	83.7	57.4	117.4
131	80.7	54.7	114.7



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 16:40
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/21/24 11:37
Sample ID	: FB01-GW090724	Date Analyzed:	09/21/24 11:37
Lab Samp ID:	24I028-17	Dilution Factor:	1
Lab File ID:	RIW134	Matrix:	WATER
Ext Btch ID:	V006I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	8.98	10.0	90	70-130
Bromofluorobenzene	9.59	10.0	96	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.46	10.0	95	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DHguye
Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW134.D Vial: 10
Acq On : 21 Sep 2024 11:37 am Operator: DHguye
Sample : 24I028-17 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:48 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

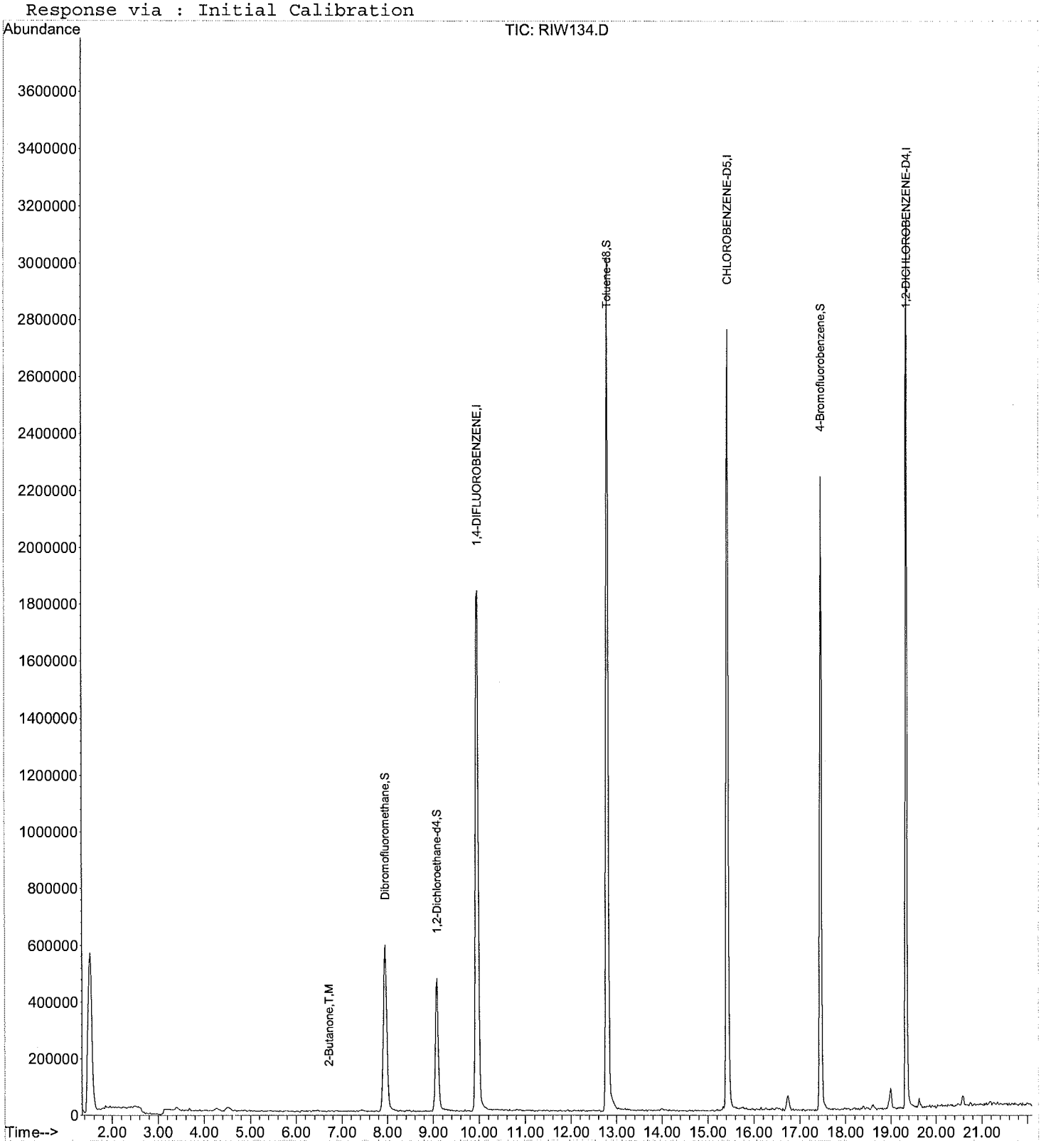
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3695332	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2922012	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1328810	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	988170	9.46	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.60%		
42) 1,2-Dichloroethane-d4	9.08	65	733885	8.98	ug/l	0.00
Spiked Amount 10.000			Recovery =	89.80%		
55) Toluene-d8	12.79	98	3890996	10.29	ug/l	-0.02
Spiked Amount 10.000			Recovery =	102.90%		
77) 4-Bromofluorobenzene	17.45	95	1422159	9.59	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.90%		
Target Compounds						Qvalue
28) 2-Butanone	6.71	43	6372	0.25	ug/l	73

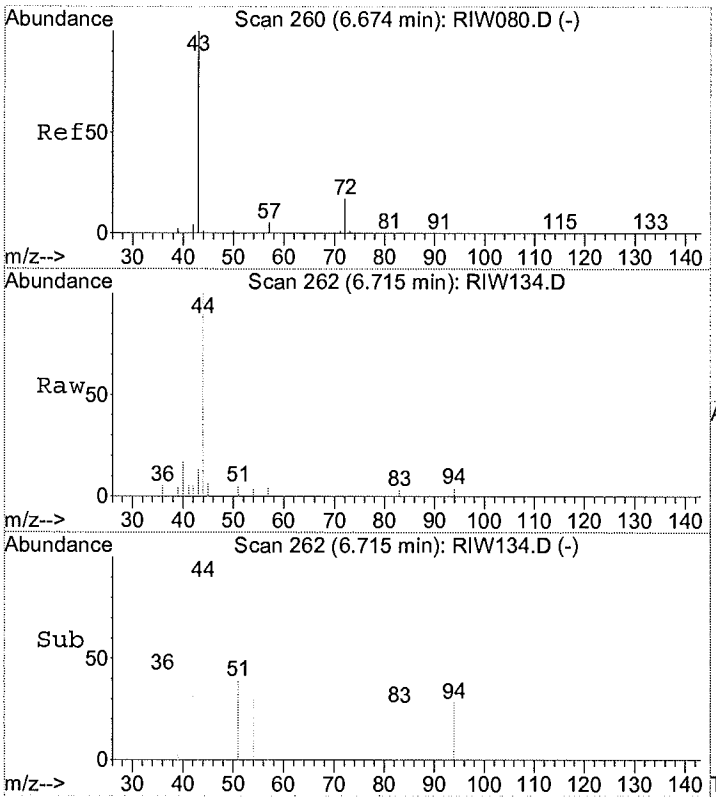
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW134.D Vial: 10
Acq On : 21 Sep 2024 11:37 am Operator: DHguye
Sample : 24I028-17 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:48 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

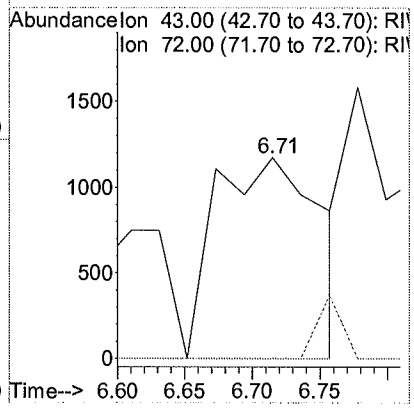




#28
2-Butanone
Concen: 0.25 ug/l
RT: 6.71 min Scan# 262
Delta R.T. 0.04 min
Lab File: RIW134.D
Acq: 21 Sep 2024 11:37 am

Tgt Ion: 43 Resp: 6372

Ion	Ratio	Lower	Upper
43	100		
72	7.3	0.0	49.5



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/07/24 16:35
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/21/24 12:03
Sample ID	: EB01-GW090724	Date Analyzed:	09/21/24 12:03
Lab Samp ID:	24I028-18	Dilution Factor:	1
Lab File ID:	RIW135	Matrix:	WATER
Ext Btch ID:	VOO6I06	% Moisture:	NA
Calib. Ref.:	RIW0B0	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	8.98	10.0	90	70-130
Bromofluorobenzene	9.32	10.0	93	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.27	10.0	93	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW135.D Vial: 11
Acq On : 21 Sep 2024 12:03 pm Operator: DHguye
Sample : 24I028-18 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:51 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

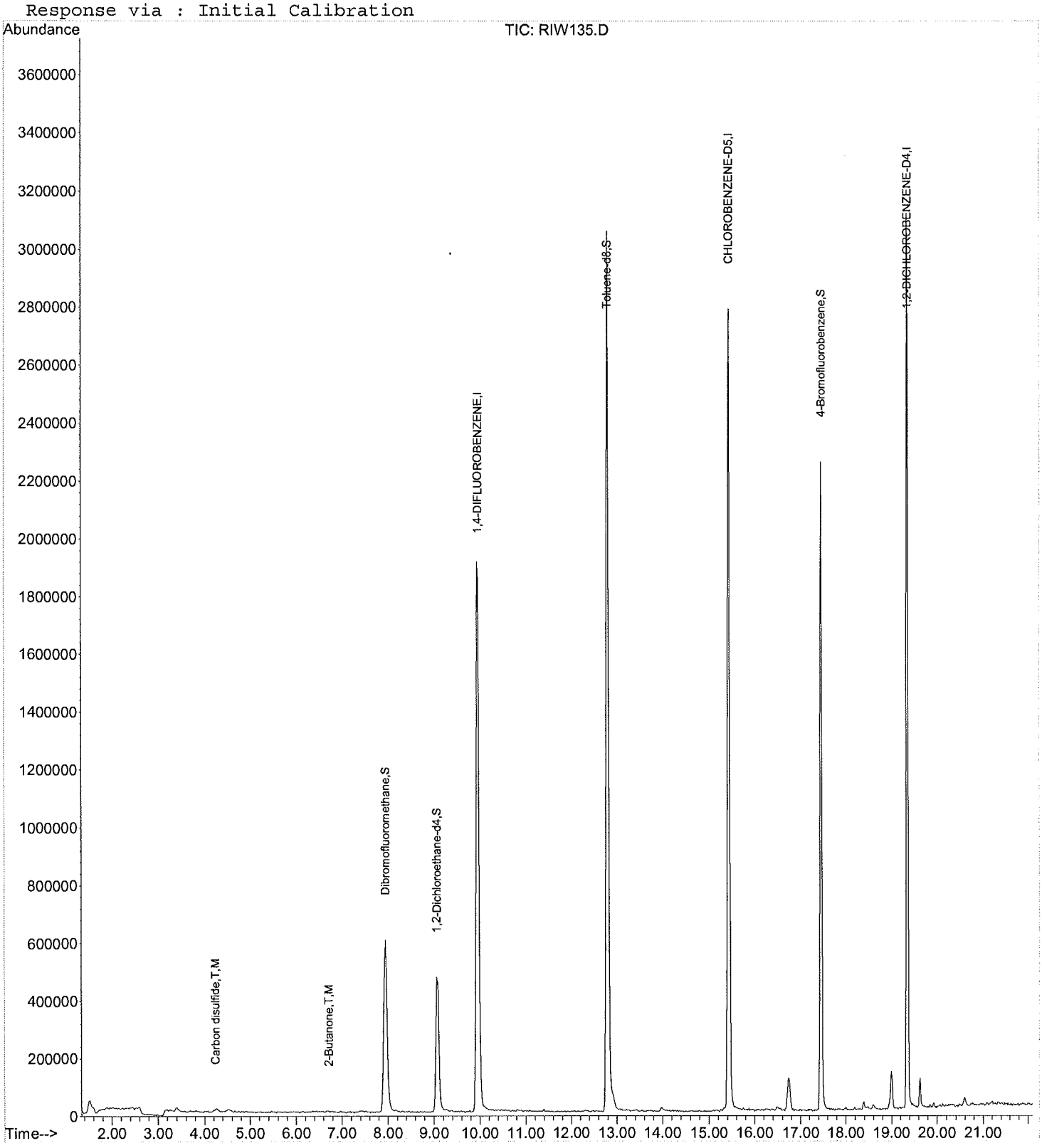
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3788571	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2968062	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1331427	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	991895	9.27	ug/l	-0.02
Spiked Amount 10.000			Recovery =	92.70%		
42) 1,2-Dichloroethane-d4	9.06	65	751843	8.98	ug/l	-0.02
Spiked Amount 10.000			Recovery =	89.80%		
55) Toluene-d8	12.79	98	3964770	10.32	ug/l	-0.02
Spiked Amount 10.000			Recovery =	103.20%		
77) 4-Bromofluorobenzene	17.45	95	1384742	9.32	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.20%		
Target Compounds						Qvalue
19) Carbon disulfide	4.24	76	11047	0.19	ug/l	73
28) 2-Butanone	6.72	43	14386	0.55	ug/l	86

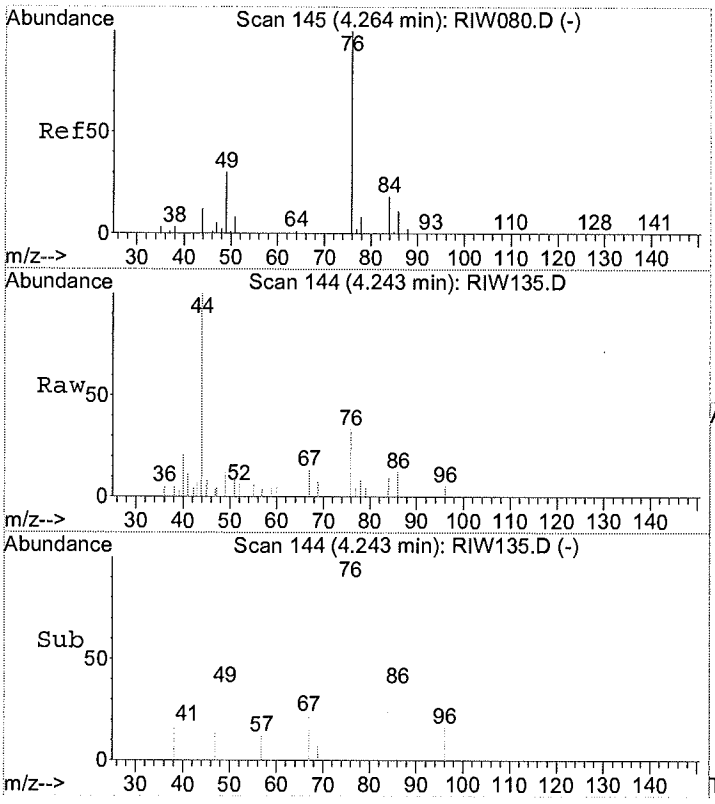
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW135.D Vial: 11
Acq On : 21 Sep 2024 12:03 pm Operator: DHguye
Sample : 24I028-18 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:51 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

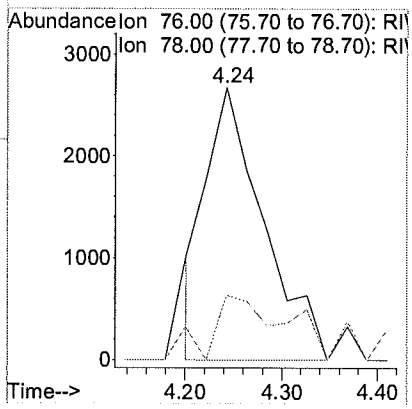


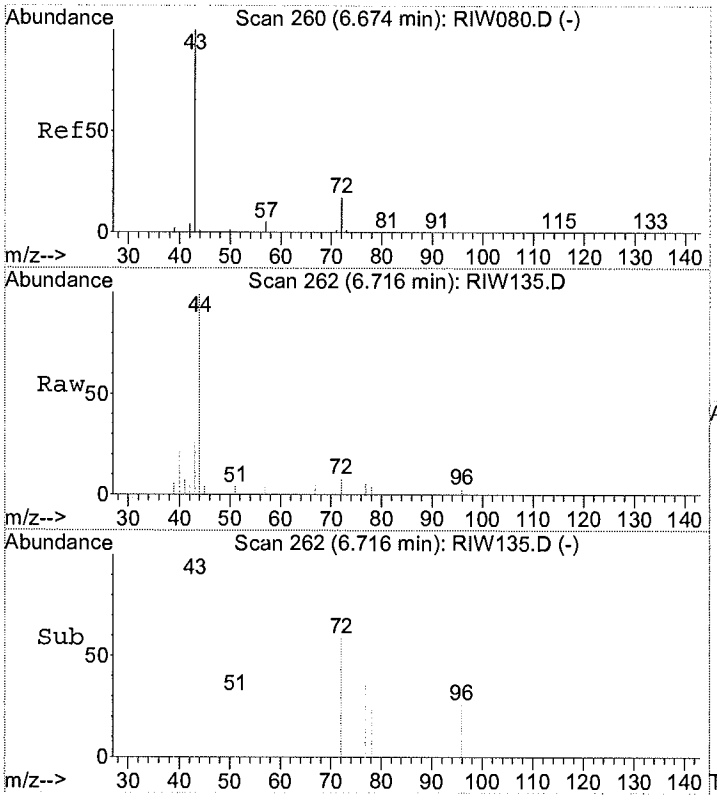


#19
Carbon disulfide
Concen: 0.19 ug/l
RT: 4.24 min Scan# 144
Delta R.T. -0.02 min
Lab File: RIW135.D
Acq: 21 Sep 2024 12:03 pm

Tgt Ion: 76 Resp: 11047

Ion	Ratio	Lower	Upper
76	100		
78	17.5	0.0	38.1

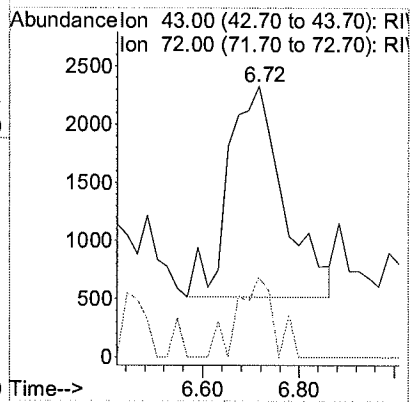




#28
2-Butanone
Concen: 0.55 ug/l
RT: 6.72 min Scan# 262
Delta R.T. 0.04 min
Lab File: RIW135.D
Acq: 21 Sep 2024 12:03 pm

Tgt Ion: 43 Resp: 14386

Ion	Ratio	Lower	Upper
43	100		
72	25.7	0.0	49.5



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/09/24 09:40
Project	: VA SALT LAKE CITY	Date Received:	09/10/24
Batch No.	: 24I028	Date Extracted:	09/21/24 10:18
Sample ID	: TB02-GW090924	Date Analyzed:	09/21/24 10:18
Lab Samp ID:	24I028-19	Dilution Factor:	1
Lab File ID:	RIW131	Matrix:	WATER
Ext Btch ID:	V006I06	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.26	10.0	93	70-130
Bromofluorobenzene	9.22	10.0	92	70-130
Toluene-dB	10.2	10.0	102	70-130
Dibromofluoromethane	9.26	10.0	93	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW131.D Vial: 7
Acq On : 21 Sep 2024 10:18 am Operator: DHguye
Sample : 24I028-19 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:53 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

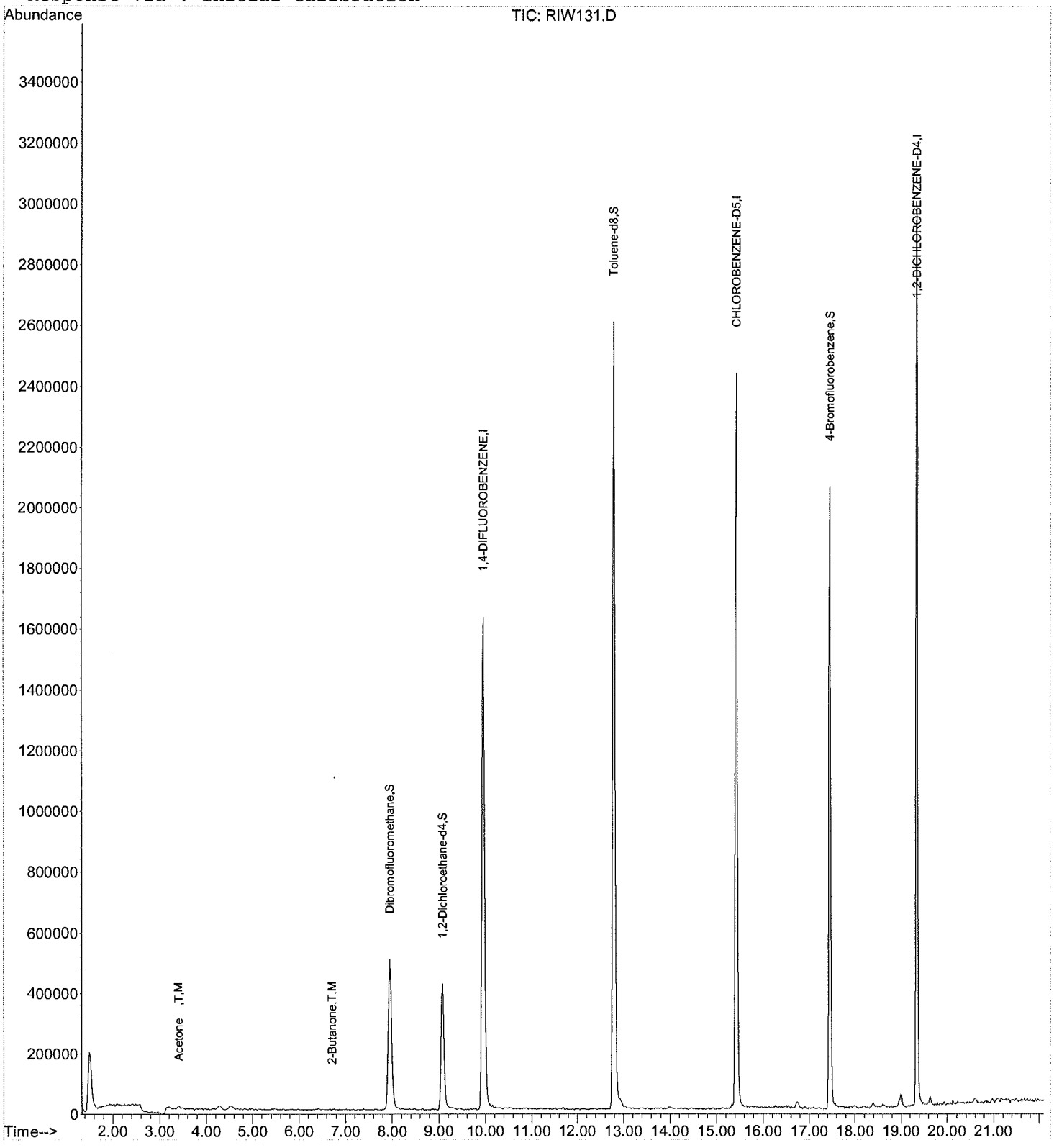
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3133958	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2576567	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1261586	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	820047	9.26	ug/l	-0.02
Spiked Amount 10.000			Recovery = 92.60%			
42) 1,2-Dichloroethane-d4	9.08	65	641769	9.26	ug/l	0.00
Spiked Amount 10.000			Recovery = 92.60%			
55) Toluene-d8	12.79	98	3390535	10.17	ug/l	-0.02
Spiked Amount 10.000			Recovery = 101.70%			
77) 4-Bromofluorobenzene	17.45	95	1298567	9.22	ug/l	0.00
Spiked Amount 10.000			Recovery = 92.20%			
Target Compounds						Qvalue
11) Acetone	3.40	43	22446	1.77	ug/l	67
28) 2-Butanone	6.72	43	7437	0.35	ug/l	90

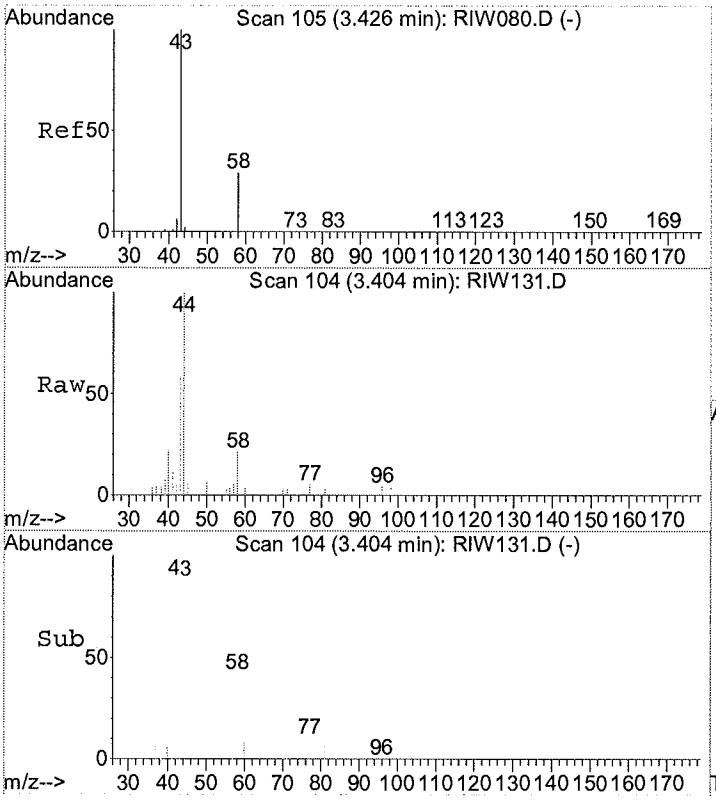
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW131.D Vial: 7
Acq On : 21 Sep 2024 10:18 am Operator: DHguye
Sample : 24I028-19 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:53 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

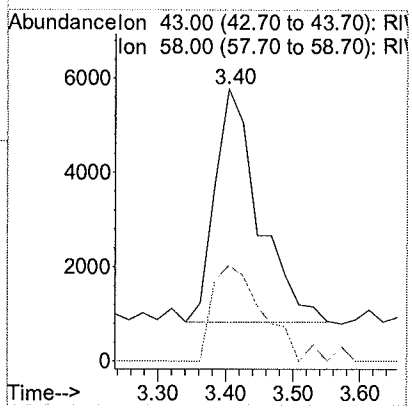


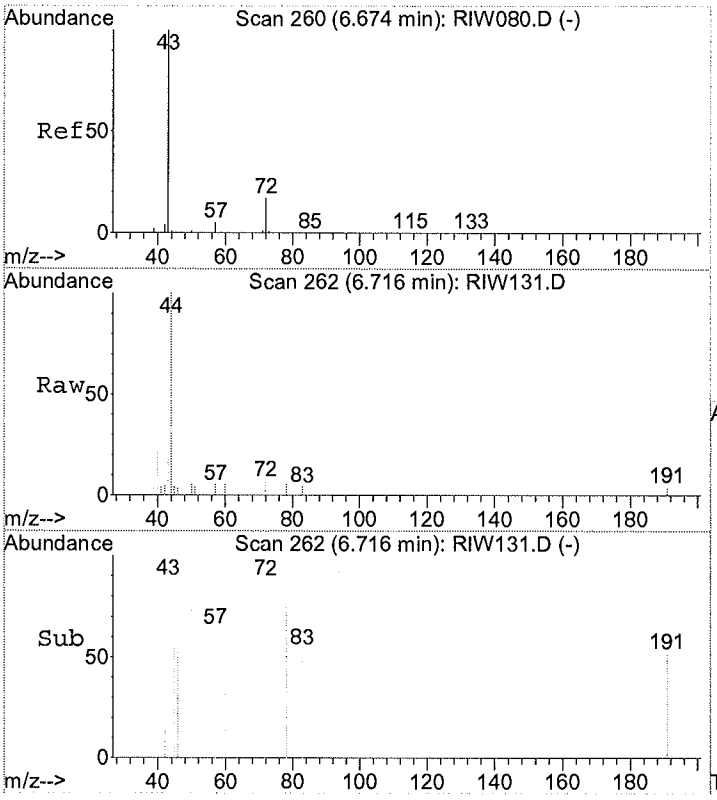


#11
Acetone
Concen: 1.77 ug/l
RT: 3.40 min Scan# 104
Delta R.T. -0.02 min
Lab File: RIW131.D
Acq: 21 Sep 2024 10:18 am

Tgt Ion: 43 Resp: 22446

Ion	Ratio	Lower	Upper
43	100		
58	48.2	0.4	60.4

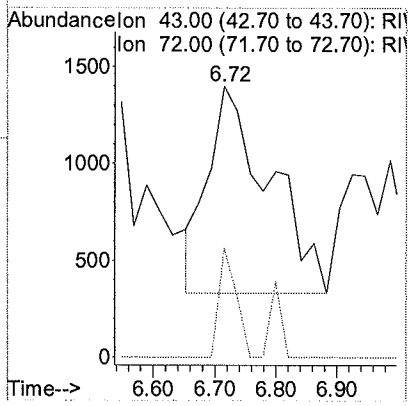




#28
2-Butanone
Concen: 0.35 ug/l
RT: 6.72 min Scan# 262
Delta R.T. 0.04 min
Lab File: RIW131.D
Acq: 21 Sep 2024 10:18 am

Tgt Ion: 43 Resp: 7437

Ion	Ratio	Lower	Upper
43	100		
72	14.9	0.0	49.5



QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/20/24 16:06
Project	: VA SALT LAKE CITY	Date Received:	09/20/24
Batch No.	: 24I028	Date Extracted:	09/20/24 16:06
Sample ID	: MBLK1W	Date Analyzed:	09/20/24 16:06
Lab Samp ID:	VO06I05B	Dilution Factor:	1
Lab File ID:	RIW099	Matrix:	WATER
Ext Btch ID:	VO06I05	% Moisture:	NA
Calib. Ref.:	RIW0B0	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.83	10.0	98	70-130
Bromofluorobenzene	9.29	10.0	93	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.41	10.0	94	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : PMai
Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I028
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VO06I058	VO06I05X	VO06I05Y
LAB FILE ID	: RIW099	RIW100	RIW101
DATE PREPARED	: 09/20/24 16:06	09/20/24 16:32	09/20/24 16:58
DATE ANALYZED	: 09/20/24 16:06	09/20/24 16:32	09/20/24 16:58
PREP BATCH	: VO06I05	VO06I05	VO06I05
CALIBRATION REF	: RIW080	RIW080	RIW080

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	8.91	89	10.0	9.03	90	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	8.13	81	10.0	8.78	88	8	71-121	20
1,1,2-Trichloroethane	ND	10.0	8.85	89	10.0	9.46	95	7	80-119	20
1,1-Dichloroethane	ND	10.0	8.29	83	10.0	8.62	86	4	77-125	20
1,1-Dichloroethene	ND	10.0	9.15	92	10.0	8.78	88	4	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	8.50	85	10.0	9.56	96	12	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	8.57	86	10.0	9.20	92	7	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.42	84	10.0	8.39	84	0	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	7.34	73	10.0	8.84	88	19	62-138	20
1,2-Dichlorobenzene	ND	10.0	8.86	89	10.0	9.12	91	3	80-119	20
1,2-Dichloroethane	ND	10.0	8.04	80	10.0	8.81	88	9	73-128	20
1,2-Dichloropropane	ND	10.0	8.25	83	10.0	8.64	86	5	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	8.78	88	10.0	8.83	88	1	75-124	20
1,3-Dichlorobenzene	ND	10.0	8.91	89	10.0	8.86	89	1	80-119	20
1,4-Dichlorobenzene	ND	10.0	8.63	86	10.0	8.81	88	2	79-118	20
2-Butanone	ND	50.0	37.1	74	50.0	42.0	84	12	56-143	20
2-Hexanone	ND	50.0	39.7	79	50.0	45.8	92	14	57-139	20
Acetone	ND	50.0	38.2	76	50.0	40.7	81	6	39-160	20
Benzene	ND	10.0	8.75	88	10.0	9.04	90	3	79-120	20
Bromochloromethane	ND	10.0	8.57	86	10.0	9.23	92	7	78-120	20
Bromodichloromethane	ND	10.0	8.19	82	10.0	8.62	86	5	79-125	20
Bromoform	ND	10.0	7.48	75	10.0	8.27	83	10	66-130	20
Bromomethane	ND	10.0	10.0	100	10.0	9.50	95	5	53-141	20
Carbon Disulfide	ND	10.0	8.74	87	10.0	7.90	79	10	64-133	20
Carbon Tetrachloride	ND	10.0	9.12	91	10.0	9.33	93	2	72-136	20
Chlorobenzene	ND	10.0	9.25	93	10.0	9.61	96	4	82-118	20
Chloroethane	ND	10.0	10.6	106	10.0	9.53	95	11	60-138	20
Chloroform	ND	10.0	8.16	82	10.0	8.53	85	4	79-124	20
Chloromethane	ND	10.0	9.17	92	10.0	8.85	89	4	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	8.29	83	10.0	8.61	86	4	78-123	20
Dibromochloromethane	ND	10.0	8.34	83	10.0	9.21	92	10	74-126	20
Dichlorodifluoromethane	ND	10.0	10.2	102	10.0	9.43	94	8	32-152	20
Ethylbenzene	ND	10.0	8.94	89	10.0	9.22	92	3	79-121	20
Isopropylbenzene	ND	10.0	8.87	89	10.0	9.23	92	4	72-131	20
m,p-Xylene	ND	20.0	17.7	89	20.0	18.2	91	3	80-121	20
4-Methyl-2-Pentanone	ND	50.0	39.7	79	50.0	45.2	90	13	67-130	20
Methylene Chloride	ND	10.0	7.74	77	10.0	7.94	79	3	74-124	20
tert-Butyl Methyl Ether	ND	10.0	8.36	84	10.0	9.28	93	10	71-124	20
o-Xylene	ND	10.0	9.09	91	10.0	9.31	93	2	78-122	20
Styrene	ND	10.0	8.99	90	10.0	9.37	94	4	78-123	20
Tetrachloroethene	ND	10.0	9.33	93	10.0	9.35	94	0	74-129	20
Toluene	ND	10.0	9.30	93	10.0	9.65	97	4	80-121	20
Trans-1,2-DCE	ND	10.0	8.56	86	10.0	8.66	87	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	8.45	85	10.0	8.90	89	5	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	8.68	87	10.0	9.38	94	8	73-127	20
TCE	ND	10.0	9.00	90	10.0	9.31	93	3	79-123	20
Trichlorofluoromethane	ND	10.0	10.9	109	10.0	9.99	100	9	65-141	20
Vinyl Chloride	ND	10.0	9.46	95	10.0	9.35	94	1	58-137	20
1,2-Dibromoethane	ND	10.0	8.43	84	10.0	9.31	93	10	77-121	20
Vinyl Acetate	ND	10.0	8.08	81	10.0	8.98	90	11	54-146	20
Trichlorotrifluoroethane	ND	10.0	10.3	103	10.0	9.04	90	13	70-136	20
Methyl Acetate	ND	10.0	9.30	93	10.0	8.12	81	14	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	9.02	90	10.0	9.62	96	70-130
Bromofluorobenzene	10.0	9.65	97	10.0	9.72	97	70-130
Toluene-d8	10.0	10.4	104	10.0	10.3	103	70-130
Dibromofluoromethane	10.0	9.35	94	10.0	9.69	97	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/21/24 09:51
Project	: VA SALT LAKE CITY	Date Received:	09/21/24
Batch No.	: 24I02B	Date Extracted:	09/21/24 09:51
Sample ID	: MBLK2W	Date Analyzed:	09/21/24 09:51
Lab Samp ID:	VO06I06B	Dilution Factor:	1
Lab File ID:	RIW130	Matrix:	WATER
Ext Btch ID:	VO06I06	% Moisture:	NA
Calib. Ref.:	RIW0B0	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.83	10.0	98	70-130
Bromofluorobenzene	9.41	10.0	94	70-130
Toluene-d8	10.0	10.0	100	70-130
Dibromofluoromethane	9.60	10.0	96	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHguye Analyzed by : DHguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
8ATCH NO. : 24I028
METHOD : SW50308/8260C

MATRIX : WATER
DILUTION FACTOR: 1 1 1
SAMPLE ID : M8LK2W LCS2W LCD2W
LAB SAMPLE ID : V006I068 V006I06L V006I06C
LAB FILE ID : RIW130 RIW127 RIW128
DATE PREPARED : 09/21/24 09:51 09/21/24 08:33 09/21/24 08:59
DATE ANALYZED : 09/21/24 09:51 09/21/24 08:33 09/21/24 08:59
PREP 8ATCH : V006I06 V006I06 V006I06
CALI8RATION REF: RIW080 RIW080 RIW080
% MOISTURE:NA

ACCESSION:

PARAMETERS	M8Result (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	9.38	94	10.0	9.26	93	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	8.54	85	10.0	8.76	88	3	71-121	20
1,1,2-Trichloroethane	ND	10.0	9.58	96	10.0	9.48	95	1	80-119	20
1,1-Dichloroethane	ND	10.0	8.95	90	10.0	8.77	88	2	77-125	20
1,1-Dichloroethene	ND	10.0	7.90	79	10.0	7.98	80	1	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	8.95	90	10.0	8.88	89	1	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.05	91	10.0	9.11	91	1	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.79	88	10.0	8.77	88	0	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	7.88	79	10.0	8.29	83	5	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.39	94	10.0	9.28	93	1	80-119	20
1,2-Dichloroethane	ND	10.0	8.54	85	10.0	8.57	86	0	73-128	20
1,2-Dichloropropane	ND	10.0	8.92	89	10.0	8.81	88	1	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	8.88	89	10.0	9.04	90	2	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.12	91	10.0	9.19	92	1	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.05	91	10.0	8.99	90	1	79-118	20
2-8utanone	ND	50.0	39.7	79	50.0	38.5	77	3	56-143	20
2-Hexanone	ND	50.0	43.3	87	50.0	43.0	86	1	57-139	20
Acetone	ND	50.0	37.7	75	50.0	37.3	75	1	39-160	20
8enzene	ND	10.0	9.41	94	10.0	9.21	92	2	79-120	20
8romochloromethane	ND	10.0	9.30	93	10.0	9.03	90	3	78-120	20
8romodichloromethane	ND	10.0	8.82	88	10.0	8.79	88	0	79-125	20
8romoform	ND	10.0	8.12	81	10.0	8.26	83	2	66-130	20
8romomethane	ND	10.0	7.62	76	10.0	8.78	88	14	53-141	20
Carbon Disulfide	ND	10.0	7.96	80	10.0	7.75	78	3	64-133	20
Carbon Tetrachloride	ND	10.0	9.47	95	10.0	9.44	94	0	72-136	20
Chlorobenzene	ND	10.0	10.1	101	10.0	9.94	99	2	82-118	20
Chloroethane	ND	10.0	6.56	66	10.0	8.26	83	23*	60-138	20
Chloroform	ND	10.0	8.88	89	10.0	8.61	86	3	79-124	20
Chloromethane	ND	10.0	8.44	84	10.0	8.86	89	5	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.04	90	10.0	8.78	88	3	78-123	20
Dibromochloromethane	ND	10.0	9.38	94	10.0	9.29	93	1	74-126	20
Dichlorodifluoromethane	ND	10.0	7.95	80	10.0	9.41	94	17	32-152	20
Ethylbenzene	ND	10.0	9.58	96	10.0	9.54	95	0	79-121	20
Isopropylbenzene	ND	10.0	9.61	96	10.0	9.64	96	0	72-131	20
m,p-Xylene	ND	20.0	18.9	95	20.0	19.0	95	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	41.8	84	50.0	42.7	85	2	67-130	20
Methylene Chloride	ND	10.0	7.60	76	10.0	7.56	76	1	74-124	20
tert-8utyl Methyl Ether	ND	10.0	8.99	90	10.0	9.07	91	1	71-124	20
o-Xylene	ND	10.0	9.64	96	10.0	9.80	98	2	78-122	20
Styrene	ND	10.0	9.93	99	10.0	9.85	99	1	78-123	20
Tetrachloroethene	ND	10.0	10.1	101	10.0	10.1	101	0	74-129	20
Toluene	ND	10.0	9.98	100	10.0	9.92	99	1	80-121	20
Trans-1,2-DCE	ND	10.0	9.01	90	10.0	8.74	87	3	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.04	90	10.0	8.84	88	2	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	9.22	92	10.0	9.22	92	0	73-127	20
TCE	ND	10.0	9.61	96	10.0	9.28	93	3	79-123	20
Trichlorofluoromethane	ND	10.0	8.14	81	10.0	9.35	94	14	65-141	20
Vinyl Chloride	ND	10.0	8.20	82	10.0	9.25	93	12	58-137	20
1,2-Dibromoethane	ND	10.0	9.34	93	10.0	9.14	91	2	77-121	20
Vinyl Acetate	ND	10.0	7.87	79	10.0	8.45	85	7	54-146	20
Trichlorotrifluoroethane	ND	10.0	7.25	73	10.0	8.18	82	12	70-136	20
Methyl Acetate	ND	10.0	8.63	86	10.0	8.76	88	1	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	9.28	93	10.0	9.17	92	70-130
8romofluorobenzene	10.0	9.24	92	10.0	9.31	93	70-130
Toluene-d8	10.0	10.4	104	10.0	10.3	103	70-130
Dibromofluoromethane	10.0	9.43	94	10.0	9.48	95	70-130

M8: Method 8lank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate
* Out of QC Limit

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I028
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MW13D-GW090724	MW13D-GW090724MS	MW13D-GW090724MSD
LAB SAMPLE ID	: 24I028-01	24I028-01M	24I028-01S
LAB FILE ID	: RIW102	RIW118	RIW119
DATE PREPARED	: 09/20/24 17:24	09/21/24 00:23	09/21/24 00:49
DATE ANALYZED	: 09/20/24 17:24	09/21/24 00:23	09/21/24 00:49
PREP BATCH	: VO06I05	VO06I05	VO06I05
CALIBRATION REF	: RIW080	RIW080	RIW080

ACCESSION:

PARAMETERS	PSResult (ug/L)	SpikeAmt (ug/L)	MSResult (ug/L)	MSRec (%)	SpikeAmt (ug/L)	MSDResult (ug/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	0.287J	10.0	9.41	91	10.0	9.40	91	0	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	8.87	89	10.0	9.02	90	2	71-121	20
1,1,2-Trichloroethane	ND	10.0	9.24	92	10.0	9.90	99	7	80-119	20
1,1-Dichloroethane	ND	10.0	8.82	88	10.0	8.74	87	1	77-125	20
1,1-Dichloroethene	0.119J	10.0	8.47	84	10.0	8.01	79	6	71-131	20
1,2,3-Trichlorobenzene	0.282J	10.0	8.91	86	10.0	9.12	88	2	69-129	20
1,2,4-Trichlorobenzene	0.196J	10.0	8.76	86	10.0	8.96	88	2	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.44	84	10.0	8.14	81	4	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	8.39	84	10.0	8.90	89	6	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.24	92	10.0	9.41	94	2	80-119	20
1,2-Dichloroethane	ND	10.0	8.94	89	10.0	9.18	92	3	73-128	20
1,2-Dichloropropane	ND	10.0	8.93	89	10.0	8.98	90	1	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	8.75	88	10.0	8.28	83	6	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.06	91	10.0	8.97	90	1	80-119	20
1,4-Dichlorobenzene	ND	10.0	8.90	89	10.0	8.74	87	2	79-118	20
2-Butanone	ND	50.0	39.1	78	50.0	40.9	82	5	56-143	20
2-Hexanone	ND	50.0	42.4	85	50.0	47.2	94	11	57-139	20
Acetone	ND	50.0	36.2	72	50.0	38.1	76	5	39-160	20
Benzene	ND	10.0	9.40	94	10.0	9.49	95	1	79-120	20
Bromochloromethane	ND	10.0	9.48	95	10.0	9.68	97	2	78-120	20
Bromodichloromethane	0.174J	10.0	9.05	89	10.0	9.19	90	2	79-125	20
Bromoform	ND	10.0	8.10	81	10.0	8.02	80	1	66-130	20
Bromomethane	ND	10.0	9.55	96	10.0	8.44	84	12	53-141	20
Carbon Disulfide	ND	10.0	7.30	73	10.0	8.24	82	12	64-133	20
Carbon Tetrachloride	ND	10.0	9.29	93	10.0	9.08	91	2	72-136	20
Chlorobenzene	ND	10.0	9.71	97	10.0	9.77	98	1	82-118	20
Chloroethane	ND	10.0	8.85	89	10.0	7.38	74	18	60-138	20
Chloroform	1.82	10.0	10.9	91	10.0	10.7	89	2	79-124	20
Chloromethane	ND	10.0	9.43	94	10.0	8.94	89	5	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.27	93	10.0	9.32	93	1	78-123	20
Dibromochloromethane	ND	10.0	9.13	91	10.0	9.48	95	4	74-126	20
Dichlorodifluoromethane	ND	10.0	9.20	92	10.0	8.54	85	7	32-152	20
Ethylbenzene	ND	10.0	9.22	92	10.0	9.35	94	1	79-121	20
Isopropylbenzene	ND	10.0	9.26	93	10.0	9.43	94	2	72-131	20
m,p-Xylene	ND	20.0	18.4	92	20.0	18.5	93	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	41.0	82	50.0	44.3	89	8	67-130	20
Methylene Chloride	ND	10.0	7.85	79	10.0	7.71	77	2	74-124	20
tert-Butyl Methyl Ether	ND	10.0	9.30	93	10.0	9.72	97	4	71-124	20
o-Xylene	ND	10.0	9.32	93	10.0	9.66	97	4	78-122	20
Styrene	ND	10.0	7.35	74*	10.0	7.23	72*	2	78-123	20
Tetrachloroethene	50.2	10.0	57.5	73*	10.0	57.4	72*	0	74-129	20
Toluene	ND	10.0	9.79	98	10.0	9.87	99	1	80-121	20
Trans-1,2-DCE	ND	10.0	8.88	89	10.0	8.81	88	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	8.94	89	10.0	9.15	92	2	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	8.79	88	10.0	9.24	92	5	73-127	20
TCE	ND	10.0	9.78	98	10.0	9.68	97	1	79-123	20
Trichlorofluoromethane	ND	10.0	9.59	96	10.0	8.65	87	10	65-141	20
Vinyl Chloride	ND	10.0	9.44	94	10.0	8.81	88	7	58-137	20
1,2-Dibromoethane	ND	10.0	9.25	93	10.0	10.1	101	9	77-121	20
Vinyl Acetate	ND	10.0	7.32	73	10.0	7.13	71	3	54-146	20
Trichlorotrifluoroethane	ND	10.0	8.74	87	10.0	7.77	78	12	70-136	20
Methyl Acetate	ND	10.0	7.45	75	10.0	7.82	78	5	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	MSResult (ug/L)	MSRec (%)	SpikeAmt (ug/L)	MSDResult (ug/L)	MSDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	9.63	96	10.0	9.84	98	70-130
Bromofluorobenzene	10.0	9.36	94	10.0	9.09	91	70-130
Toluene-d8	10.0	10.3	103	10.0	10.4	104	70-130
Dibromofluoromethane	10.0	9.54	95	10.0	9.55	96	70-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate
* Out of QC Limit

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I028
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MW28-GW090724	MW28-GW090724MS	MW28-GW090724MSD
LAB SAMPLE ID	: 24I028-15	24I028-15M	24I028-15S
LAB FILE ID	: RIW115	RIW116	RIW117
DATE PREPARED	: 09/20/24 23:04	09/20/24 23:31	09/20/24 23:57
DATE ANALYZED	: 09/20/24 23:04	09/20/24 23:31	09/20/24 23:57
PREP BATCH	: VO06I05	VO06I05	VO06I05
CALIBRATION REF	: RIW080	RIW080	RIW080

ACCESSION:

PARAMETERS	PSResult (ug/L)	SpikeAmt (ug/L)	MSResult (ug/L)	MSRec (%)	SpikeAmt (ug/L)	MSDResult (ug/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	9.67	97	10.0	9.53	95	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.51	95	10.0	8.87	89	7	71-121	20
1,1,2-Trichloroethane	ND	10.0	10.3	103	10.0	9.83	98	5	80-119	20
1,1-Dichloroethane	ND	10.0	9.32	93	10.0	9.02	90	3	77-125	20
1,1-Dichloroethene	ND	10.0	8.40	84	10.0	8.74	87	4	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	8.80	88	10.0	9.13	91	4	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	8.86	89	10.0	9.10	91	3	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.42	84	10.0	8.40	84	0	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	8.31	83	10.0	8.55	86	3	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.49	95	10.0	9.49	95	0	80-119	20
1,2-Dichloroethane	ND	10.0	9.59	96	10.0	9.19	92	4	73-128	20
1,2-Dichloropropane	ND	10.0	9.51	95	10.0	8.98	90	6	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	8.68	87	10.0	8.61	86	1	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.33	93	10.0	9.04	90	3	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.30	93	10.0	9.08	91	2	79-118	20
2-Butanone	ND	50.0	43.2	86	50.0	40.1	80	7	56-143	20
2-Hexanone	ND	50.0	47.9	96	50.0	46.0	92	4	57-139	20
Acetone	ND	50.0	41.1	82	50.0	37.8	76	8	39-160	20
Benzene	ND	10.0	9.91	99	10.0	9.51	95	4	79-120	20
Bromochloromethane	ND	10.0	10.2	102	10.0	9.78	98	4	78-120	20
Bromodichloromethane	0.235J	10.0	9.88	96	10.0	9.41	92	5	79-125	20
Bromoform	ND	10.0	8.53	85	10.0	8.22	82	4	66-130	20
Bromomethane	ND	10.0	9.95	100	10.0	12.2	122	20	53-141	20
Carbon Disulfide	ND	10.0	9.26	93	10.0	7.64	76	19	64-133	20
Carbon Tetrachloride	ND	10.0	9.72	97	10.0	9.70	97	0	72-136	20
Chlorobenzene	ND	10.0	10.4	104	10.0	10.1	101	3	82-118	20
Chloroethane	ND	10.0	8.57	86	10.0	11.7	117	31*	60-138	20
Chloroform	2.34	10.0	12.1	98	10.0	11.6	93	4	79-124	20
Chloromethane	ND	10.0	9.01	90	10.0	10.0	100	10	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.78	98	10.0	9.21	92	6	78-123	20
Dibromochloromethane	ND	10.0	10.0	100	10.0	9.39	94	6	74-126	20
Dichlorodifluoromethane	ND	10.0	9.39	94	10.0	11.1	111	17	32-152	20
Ethylbenzene	ND	10.0	9.98	100	10.0	9.67	97	3	79-121	20
Isopropylbenzene	ND	10.0	9.53	95	10.0	9.53	95	0	72-131	20
m,p-Xylene	ND	20.0	19.2	96	20.0	19.3	97	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	45.9	92	50.0	42.9	86	7	67-130	20
Methylene Chloride	ND	10.0	8.28	83	10.0	8.10	81	2	74-124	20
tert-Butyl Methyl Ether	ND	10.0	9.62	96	10.0	9.33	93	3	71-124	20
o-Xylene	ND	10.0	9.90	99	10.0	9.71	97	2	78-122	20
Styrene	ND	10.0	8.38	84	10.0	7.65	77*	9	78-123	20
Tetrachloroethene	ND	10.0	10.2	102	10.0	10.0	100	2	74-129	20
Toluene	ND	10.0	10.4	104	10.0	10.2	102	2	80-121	20
Trans-1,2-DCE	ND	10.0	9.32	93	10.0	9.10	91	2	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.76	98	10.0	8.95	90	9	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	9.96	100	10.0	9.31	93	7	73-127	20
TCE	ND	10.0	10.2	102	10.0	9.60	96	6	79-123	20
Trichlorofluoromethane	ND	10.0	9.92	99	10.0	11.5	115	15	65-141	20
Vinyl Chloride	ND	10.0	9.99	100	10.0	10.9	109	9	58-137	20
1,2-Dibromoethane	ND	10.0	10.2	102	10.0	9.85	99	3	77-121	20
Vinyl Acetate	ND	10.0	8.24	82	10.0	7.64	76	8	54-146	20
Trichlorotrifluoroethane	ND	10.0	8.33	83	10.0	11.4	114	31*	70-136	20
Methyl Acetate	ND	10.0	8.90	89	10.0	7.62	76	15	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	MSResult (ug/L)	MSRec (%)	SpikeAmt (ug/L)	MSDResult (ug/L)	MSDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	9.70	97	10.0	9.54	95	70-130
Bromofluorobenzene	10.0	9.20	92	10.0	9.13	91	70-130
Toluene-d8	10.0	10.5	105	10.0	10.5	105	70-130
Dibromofluoromethane	10.0	9.74	97	10.0	9.40	94	70-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate
* Out of QC Limit

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW099.D Vial: 6
Acq On : 20 Sep 2024 4:06 pm Operator: PMai
Sample : VO06I05B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:56 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

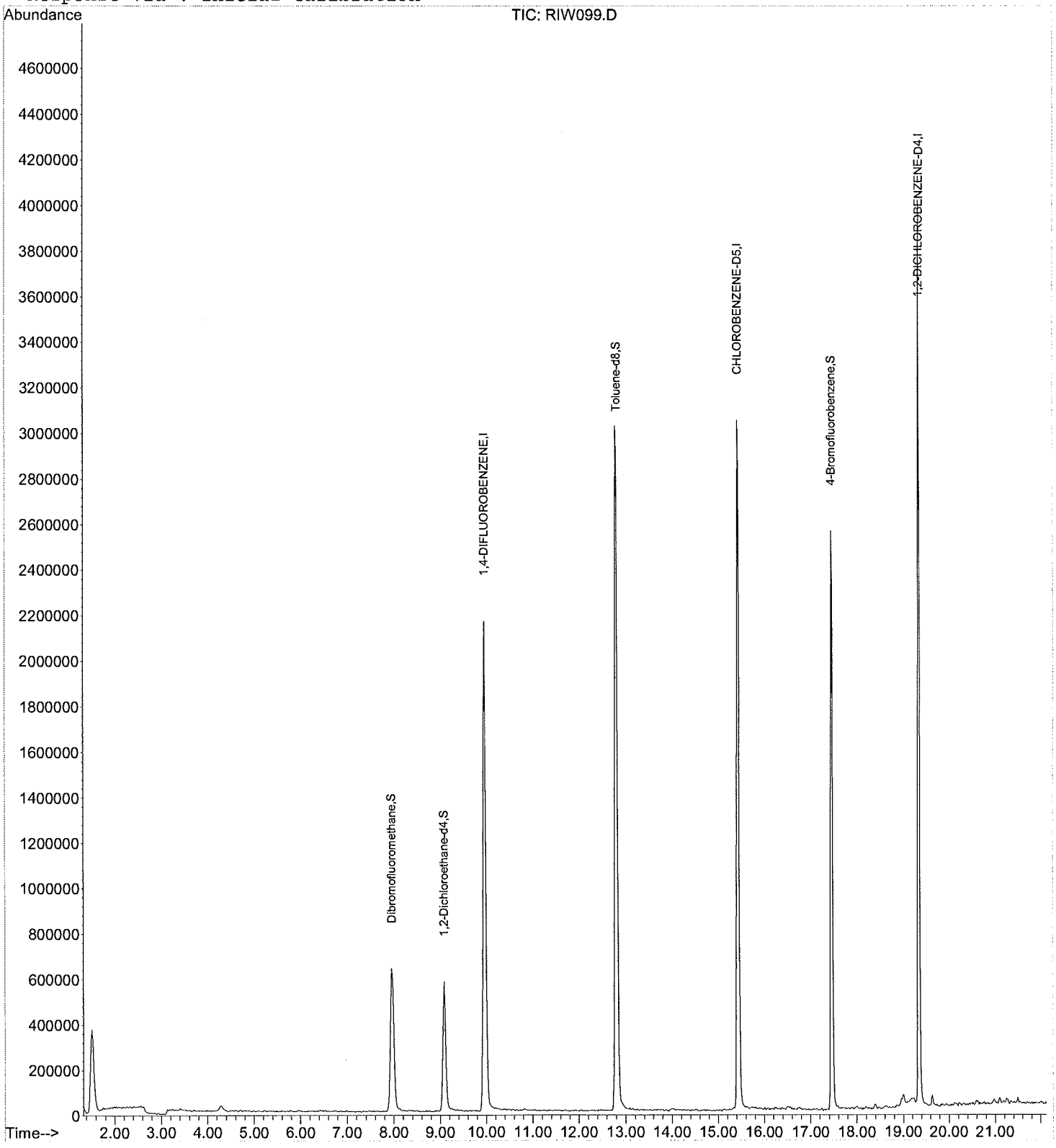
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	4050463	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	3252197	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1581164	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	1076874	9.41	ug/l	-0.02
Spiked Amount 10.000			Recovery = 94.10%			
42) 1,2-Dichloroethane-d4	9.08	65	880358	9.83	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.30%			
55) Toluene-d8	12.81	98	4319198	10.26	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.60%			
77) 4-Bromofluorobenzene	17.45	95	1639944	9.29	ug/l	0.00
Spiked Amount 10.000			Recovery = 92.90%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW099.D Vial: 6
Acq On : 20 Sep 2024 4:06 pm Operator: PMai
Sample : VO06I05B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:56 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW100.D Vial: 7
Acq On : 20 Sep 2024 4:32 pm Operator: PMai
Sample : VO06I05X Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:57 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.97	114	3650815	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2900538	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1314903	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	964050	9.35	ug/l	-0.02
Spiked Amount 10.000			Recovery =	93.50%		
42) 1,2-Dichloroethane-d4	9.08	65	727782	9.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.20%		
55) Toluene-d8	12.79	98	3907118	10.41	ug/l	-0.02
Spiked Amount 10.000			Recovery =	104.10%		
77) 4-Bromofluorobenzene	17.45	95	1416285	9.65	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.50%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1575970	10.22	ug/l	99
3) Chloromethane	1.89	50	1296246	9.17	ug/l	100
4) Vinyl chloride	1.99	62	1047090	9.46	ug/l	98
5) Bromomethane	2.43	94	914431	10.02	ug/l	99
6) Chloroethane	2.52	64	759813	10.61	ug/l	93
7) Dichlorofluoromethane	2.56	67	2714674	10.59	ug/l	99
8) Trichlorofluoromethane	2.80	101	1594476	10.95	ug/l	99
9) Acrolein	3.30	56	176470	34.41	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	1218601	10.29	ug/l	100
11) Acetone	3.38	43	562689	38.16	ug/l	97
12) 1,1-Dichloroethene	3.55	61	1766172	9.15	ug/l	97
13) tert-Butyl alcohol	3.70	59	895293	196.28	ug/l	100
15) Methyl acetate	4.08	74	73258	9.30	ug/l	74
16) Iodomethane	3.99	142	1672987	9.25	ug/l	98
17) Allyl chloride	4.10	76	514921	8.33	ug/l	97
18) Methylene chloride	4.29	49	1179760	7.74	ug/l	93
19) Carbon disulfide	4.26	76	1991927	8.74	ug/l	100
20) Acrylonitrile	4.52	53	734253	40.08	ug/l	100
21) tert-Butyl methyl ether (M	4.56	73	1547273	8.36	ug/l	99
22) trans-1,2-Dichloroethene	4.79	96	987698	8.56	ug/l	99
23) Isopropyl ether (DIPE)	5.46	45	3079413	8.07	ug/l	96
24) Vinyl acetate	5.69	43	1112997	8.08	ug/l	99
25) 1,1-Dichloroethane	5.63	63	1600099	8.29	ug/l	99
26) 2-Butanol	6.19	45	969844	188.99	ug/l	100
27) tert-Butyl ethyl ether (ET	6.38	59	2226035	8.05	ug/l	96
28) 2-Butanone	6.65	43	930628	37.14	ug/l	96
29) 2,2-Dichloropropane	6.91	77	1101581	9.15	ug/l	98
30) cis-1,2-Dichloroethene	7.03	96	987654	8.29	ug/l	99
31) Chloroform	7.43	83	1558411	8.16	ug/l	99
32) Bromochloromethane	7.81	130	442222	8.57	ug/l	97
33) Tetrahydrofuran	7.91	42	88167	6.57	ug/l	96
36) 1,1,1-Trichloroethane	8.35	97	1367388	8.91	ug/l	99
37) Cyclohexane	8.33	84	2132203	10.83	ug/l	98
39) 1,1-Dichloropropene	8.71	110	442098	8.53	ug/l	99
40) Carbon tetrachloride	8.88	119	1161003	9.12	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	1867423	8.25	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW100.D Vial: 7
Acq On : 20 Sep 2024 4:32 pm Operator: PMai
Sample : VO06I05X Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:57 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloroethane	9.27	62	772842	8.04 ug/l	99
44) Benzene	9.25	78	3662861	8.75 ug/l	99
45) Trichloroethene	10.55	130	980202	9.00 ug/l	99
46) Methylcyclohexane	10.61	83	2185759	10.55 ug/l	95
47) 1,2-Dichloropropane	10.91	63	853992	8.25 ug/l	97
48) 1,4-Dioxane	11.45	88	64613	133.34 ug/l	98
49) Bromodichloromethane	11.35	83	1099860	8.19 ug/l	98
50) Dibromomethane	11.41	93	403702	8.23 ug/l	99
51) 2-Chloroethyl vinyl ether	12.04	63	245534	7.54 ug/l	100
52) 4-Methyl-2-pentanone	12.08	43	2739002	39.66 ug/l	98
53) cis-1,3-Dichloropropene	12.40	75	1388651	8.45 ug/l	97
56) Toluene	12.94	91	4070731	9.30 ug/l	100
57) Ethyl methacrylate	13.38	69	742228	7.72 ug/l	96
58) trans-1,3-Dichloropropene	13.32	75	1067112	8.68 ug/l	92
59) 1,1,2-Trichloroethane	13.57	97	555865	8.84 ug/l	97
60) 2-Hexanone	13.65	43	1821080	39.69 ug/l	97
61) 1,3-Dichloropropane	14.03	76	995375	8.57 ug/l	98
62) Tetrachloroethene	14.07	164	840151	9.33 ug/l	98
63) Dibromochloromethane	14.43	129	645444	8.34 ug/l	99
65) 1,2-Dibromoethane	14.76	107	503441	8.43 ug/l	98
66) 1-Chlorohexane	15.12	91	1458089	7.82 ug/l	97
67) Chlorobenzene	15.49	112	2477773	9.25 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.58	131	810888	9.57 ug/l	99
69) Ethylbenzene	15.61	91	4820410	8.94 ug/l	100
70) m-Xylene & p-Xylene	15.74	91	7303316	17.72 ug/l	99
71) o-Xylene	16.47	91	3687259	9.09 ug/l	99
72) Styrene	16.53	104	2724328	8.99 ug/l	99
73) Isopropylbenzene	17.08	105	4669526	8.87 ug/l	99
75) Bromoform	17.06	173	302473	7.48 ug/l	98
76) 1,1,2,2-Tetrachloroethane	17.36	83	618269	8.13 ug/l	98
78) 1,2,3-Trichloropropane	17.57	110	161228	7.69 ug/l	97
79) trans-1,4-Dichloro-2-buten	17.69	53	158342	6.85 ug/l	100
80) n-Propylbenzene	17.67	91	6195155	8.54 ug/l	99
81) Bromobenzene	17.73	156	933279	8.98 ug/l	100
82) 1,3,5-Trimethylbenzene	17.89	105	3884708	8.78 ug/l	99
83) 2-Chlorotoluene	17.91	91	3932424	9.25 ug/l	92
84) 4-Chlorotoluene	17.97	91	3290981	8.45 ug/l	95
85) tert-Butylbenzene	18.35	134	895886	9.58 ug/l	98
86) 1,2,4-Trimethylbenzene	18.39	105	3864056	8.42 ug/l	99
87) sec-Butylbenzene	18.61	105	5463908	8.75 ug/l	99
88) p-Isopropyltoluene	18.76	119	4523204	8.52 ug/l	99
89) 1,3-Dichlorobenzene	18.87	146	2070147	8.91 ug/l	97
90) 1,2,3-Trimethylbenzene	18.95	105	3544605	8.54 ug/l	99
91) 1,4-Dichlorobenzene	18.98	146	1985281	8.63 ug/l	99
92) n-Butylbenzene	19.20	91	4825065	8.43 ug/l	99
93) 1,2-Dichlorobenzene	19.37	146	1703842	8.86 ug/l	100
94) 1,2-Dibromo-3-chloropropan	20.15	157	98625	7.34 ug/l	91
95) 1,2,4-Trichlorobenzene	20.97	180	1294572	8.57 ug/l	99
96) Hexachlorobutadiene	21.10	225	721243	8.83 ug/l	97
97) Naphthalene	21.24	128	1794431	8.82 ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW100.D Vial: 7
Acq On : 20 Sep 2024 4:32 pm Operator: PMai
Sample : VO06I05X Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:57 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

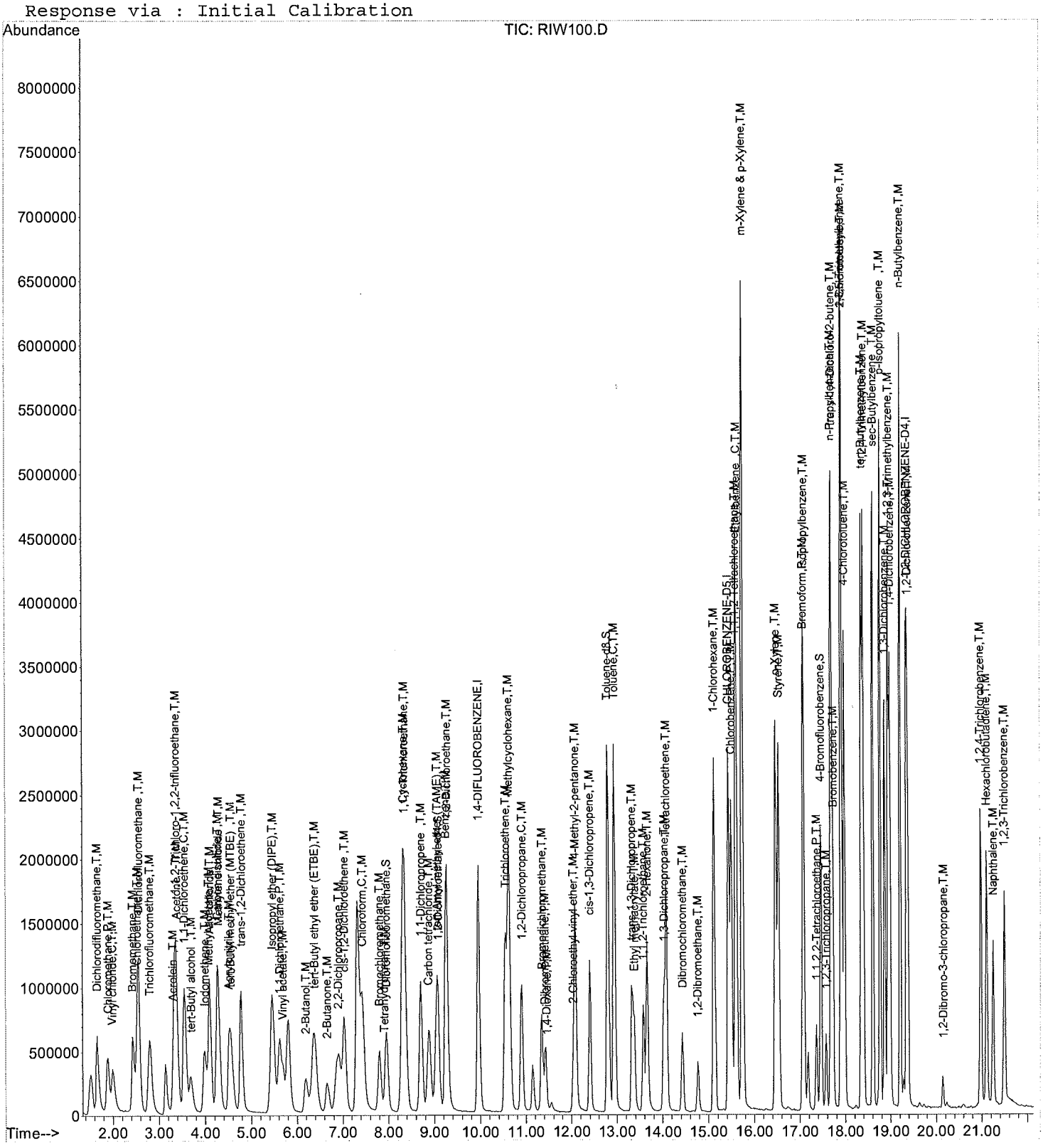
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	968562	8.50	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW100.D Vial: 7
Acq On : 20 Sep 2024 4:32 pm Operator: PMai
Sample : VO06I05X Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:57 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW101.D Vial: 8
Acq On : 20 Sep 2024 4:58 pm Operator: PMai
Sample : VO06I05Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:57 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3744497	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2984997	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1400283	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	1025680	9.69	ug/l	-0.02
Spiked Amount 10.000			Recovery = 96.90%			
42) 1,2-Dichloroethane-d4	9.08	65	796470	9.62	ug/l	0.00
Spiked Amount 10.000			Recovery = 96.20%			
55) Toluene-d8	12.79	98	3962054	10.26	ug/l	-0.02
Spiked Amount 10.000			Recovery = 102.60%			
77) 4-Bromofluorobenzene	17.45	95	1519560	9.72	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1492451	9.43	ug/l	97
3) Chloromethane	1.89	50	1283409	8.85	ug/l	99
4) Vinyl chloride	2.01	62	1062394	9.35	ug/l	100
5) Bromomethane	2.45	94	888551	9.50	ug/l	100
6) Chloroethane	2.52	64	700120	9.53	ug/l	95
7) Dichlorofluoromethane	2.56	67	2436099	9.21	ug/l	100
8) Trichlorofluoromethane	2.80	101	1492649	9.99	ug/l	99
9) Acrolein	3.30	56	223809	42.55	ug/l	91
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	1108286	9.04	ug/l	99
11) Acetone	3.40	43	615639	40.71	ug/l	95
12) 1,1-Dichloroethene	3.55	61	1739378	8.78	ug/l	97
13) tert-Butyl alcohol	3.70	59	1052411	224.95	ug/l	100
15) Methyl acetate	4.07	74	65662	8.12	ug/l	90
16) Iodomethane	3.99	142	1732928	9.34	ug/l	97
17) Allyl chloride	4.10	76	532197	8.39	ug/l	96
18) Methylene chloride	4.28	49	1240211	7.94	ug/l	93
19) Carbon disulfide	4.24	76	1843341	7.90	ug/l	100
20) Acrylonitrile	4.51	53	838917	44.65	ug/l	99
21) tert-Butyl methyl ether (M	4.58	73	1762179	9.28	ug/l	99
22) trans-1,2-Dichloroethene	4.79	96	1024640	8.66	ug/l	96
23) Isopropyl ether (DIPE)	5.46	45	3306581	8.45	ug/l	96
24) Vinyl acetate	5.71	43	1269416	8.98	ug/l	100
25) 1,1-Dichloroethane	5.63	63	1705496	8.62	ug/l	99
26) 2-Butanol	6.19	45	932538	177.63	ug/l	99
27) tert-Butyl ethyl ether (ET	6.36	59	2497575	8.80	ug/l	97
28) 2-Butanone	6.65	43	1078913	41.99	ug/l	98
29) 2,2-Dichloropropane	6.90	77	1122220	9.09	ug/l	99
30) cis-1,2-Dichloroethene	7.03	96	1052568	8.61	ug/l	100
31) Chloroform	7.43	83	1670293	8.53	ug/l	99
32) Bromochloromethane	7.81	130	488788	9.23	ug/l	99
33) Tetrahydrofuran	7.93	42	105851	7.69	ug/l	98
36) 1,1,1-Trichloroethane	8.35	97	1422170	9.03	ug/l	99
37) Cyclohexane	8.33	84	1732956	8.58	ug/l	97
39) 1,1-Dichloropropene	8.71	110	466753	8.78	ug/l	99
40) Carbon tetrachloride	8.89	119	1218469	9.33	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	2142759	9.23	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW101.D Vial: 8
Acq On : 20 Sep 2024 4:58 pm Operator: PMai
Sample : VO06I05Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:57 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.27	62	868328	8.81	ug/l	98
44)	Benzene	9.25	78	3880744	9.04	ug/l	99
45)	Trichloroethene	10.55	130	1040893	9.31	ug/l	98
46)	Methylcyclohexane	10.61	83	1760485	8.28	ug/l	96
47)	1,2-Dichloropropane	10.91	63	917310	8.64	ug/l	98
48)	1,4-Dioxane	11.45	88	67156	135.12	ug/l	95
49)	Bromodichloromethane	11.35	83	1187389	8.62	ug/l	99
50)	Dibromomethane	11.41	93	451721	8.98	ug/l	98
51)	2-Chloroethyl vinyl ether	12.04	63	264447	7.92	ug/l	94
52)	4-Methyl-2-pentanone	12.08	43	3203325	45.23	ug/l	97
53)	cis-1,3-Dichloropropene	12.40	75	1500177	8.90	ug/l	98
56)	Toluene	12.94	91	4347401	9.65	ug/l	100
57)	Ethyl methacrylate	13.38	69	859873	8.69	ug/l	95
58)	trans-1,3-Dichloropropene	13.32	75	1186493	9.38	ug/l	92
59)	1,1,2-Trichloroethane	13.59	97	612049	9.46	ug/l	98
60)	2-Hexanone	13.65	43	2161163	45.77	ug/l	98
61)	1,3-Dichloropropane	14.03	76	1102570	9.23	ug/l	98
62)	Tetrachloroethene	14.09	164	866577	9.35	ug/l	99
63)	Dibromochloromethane	14.43	129	733448	9.21	ug/l	98
65)	1,2-Dibromoethane	14.76	107	572082	9.31	ug/l	99
66)	1-Chlorohexane	15.12	91	1549622	8.08	ug/l	99
67)	Chlorobenzene	15.49	112	2649447	9.61	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.59	131	862518	9.89	ug/l	98
69)	Ethylbenzene	15.61	91	5116372	9.22	ug/l	99
70)	m-Xylene & p-Xylene	15.74	91	7705050	18.17	ug/l	99
71)	o-Xylene	16.47	91	3889570	9.31	ug/l	100
72)	Styrene	16.53	104	2924486	9.37	ug/l	100
73)	Isopropylbenzene	17.08	105	4999735	9.23	ug/l	98
75)	Bromoform	17.06	173	356837	8.27	ug/l	98
76)	1,1,2,2-Tetrachloroethane	17.36	83	710616	8.78	ug/l	99
78)	1,2,3-Trichloropropane	17.57	110	194859	8.73	ug/l	98
79)	trans-1,4-Dichloro-2-buten	17.69	53	172380	7.00	ug/l	94
80)	n-Propylbenzene	17.67	91	6447724	8.35	ug/l	99
81)	Bromobenzene	17.73	156	1023256	9.25	ug/l	97
82)	1,3,5-Trimethylbenzene	17.89	105	4159085	8.83	ug/l	99
83)	2-Chlorotoluene	17.91	91	4199453	9.28	ug/l	95
84)	4-Chlorotoluene	17.97	91	3488956	8.41	ug/l	94
85)	tert-Butylbenzene	18.35	134	927095	9.31	ug/l	99
86)	1,2,4-Trimethylbenzene	18.39	105	4099007	8.39	ug/l	100
87)	sec-Butylbenzene	18.61	105	5667982	8.52	ug/l	99
88)	p-Isopropyltoluene	18.76	119	4680705	8.28	ug/l	99
89)	1,3-Dichlorobenzene	18.87	146	2192795	8.86	ug/l	95
90)	1,2,3-Trimethylbenzene	18.95	105	3870919	8.75	ug/l	100
91)	1,4-Dichlorobenzene	18.98	146	2159570	8.81	ug/l	99
92)	n-Butylbenzene	19.21	91	5035578	8.27	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	1867161	9.12	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	126532	8.84	ug/l	99
95)	1,2,4-Trichlorobenzene	20.97	180	1479542	9.20	ug/l	99
96)	Hexachlorobutadiene	21.10	225	775914	8.92	ug/l	96
97)	Naphthalene	21.24	128	2164543	9.99	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW101.D Vial: 8
Acq On : 20 Sep 2024 4:58 pm Operator: PMai
Sample : VO06I05Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:57 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

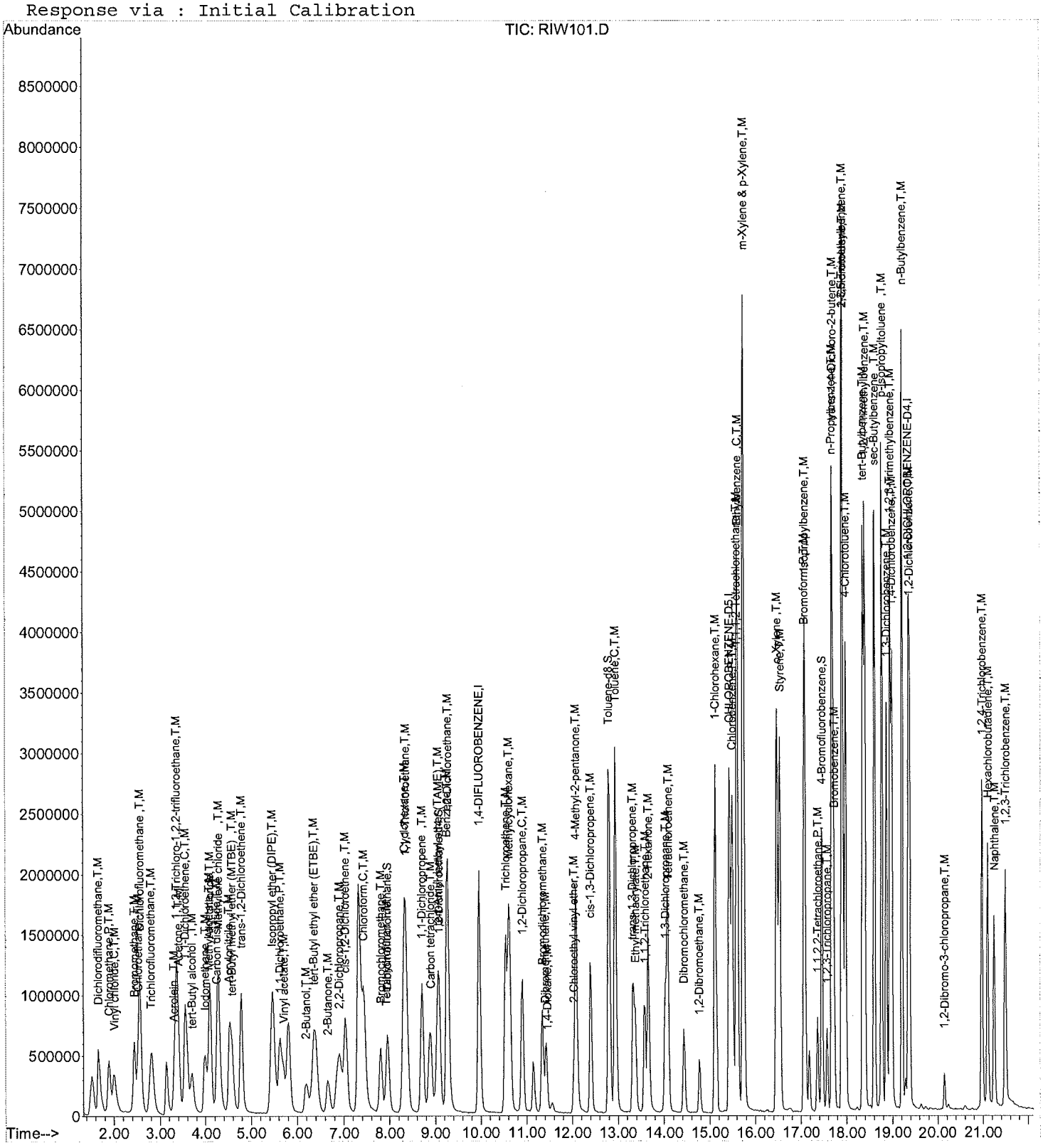
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1160920	9.56	ug/l	99

(#) = qualifier out of range (m) = manual integration
RIW101.D VO06I19B.M Mon Oct 14 08:58:06 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW101.D Vial: 8
Acq On : 20 Sep 2024 4:58 pm Operator: PMai
Sample : VO06I05Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:57 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW130.D Vial: 6
Acq On : 21 Sep 2024 9:51 am Operator: DHguye
Sample : VO06I06B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:59 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

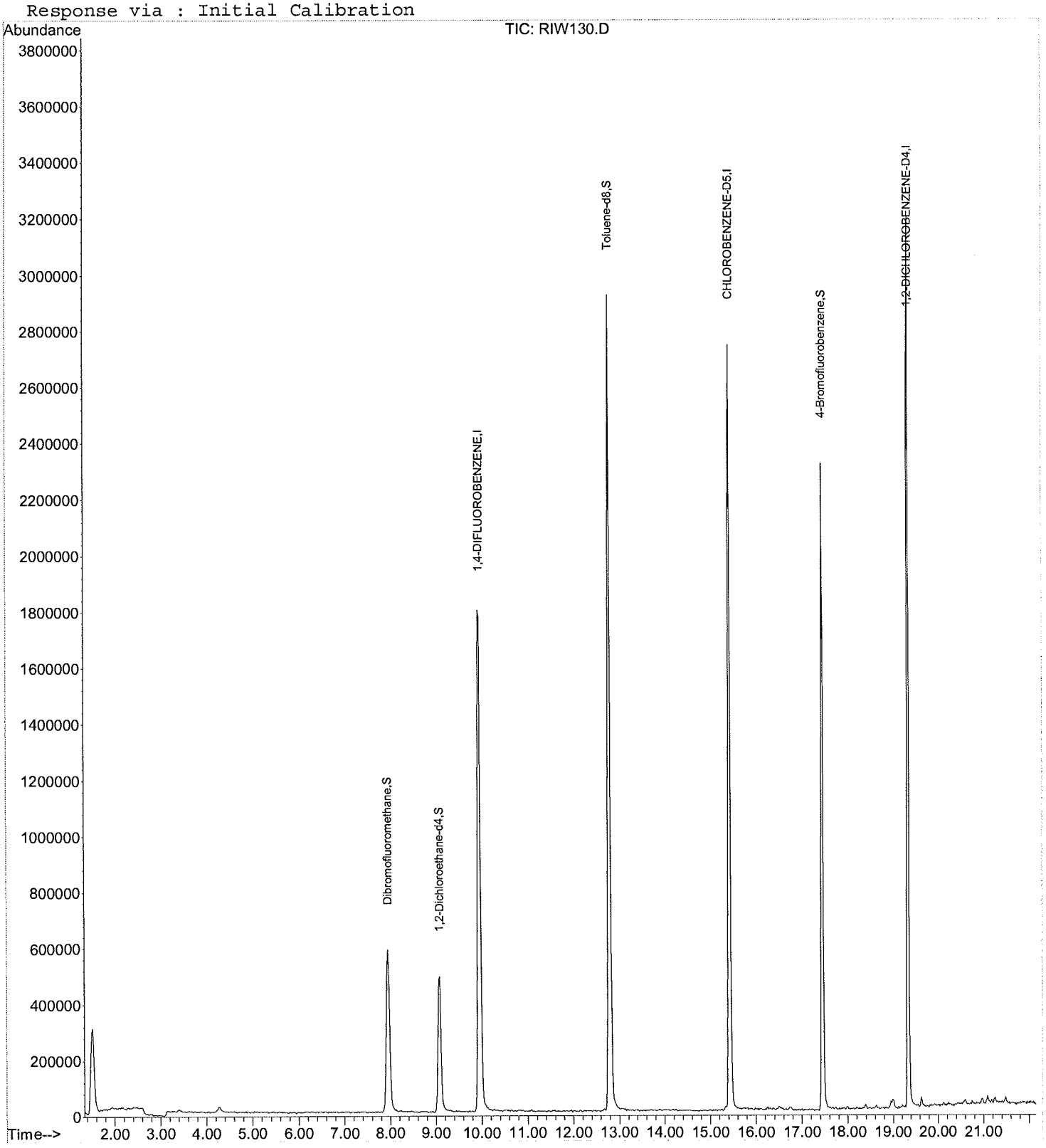
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3585929	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2935993	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1386567	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	973245	9.60	ug/l	-0.02
Spiked Amount 10.000			Recovery = 96.00%			
42) 1,2-Dichloroethane-d4	9.08	65	779348	9.83	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.30%			
55) Toluene-d8	12.79	98	3810050	10.03	ug/l	-0.02
Spiked Amount 10.000			Recovery = 100.30%			
77) 4-Bromofluorobenzene	17.45	95	1456104	9.41	ug/l	0.00
Spiked Amount 10.000			Recovery = 94.10%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
RIW130.D VO06I19B.M Mon Oct 14 08:59:49 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW130.D Vial: 6
Acq On : 21 Sep 2024 9:51 am Operator: DHguye
Sample : VO06I06B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:59 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW127.D Vial: 3
Acq On : 21 Sep 2024 8:33 am Operator: DHguye
Sample : VO06I06L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:00 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3599838	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2851913	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1372629	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	959400	9.43	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.30%		
42) 1,2-Dichloroethane-d4	9.08	65	738594	9.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.80%		
55) Toluene-d8	12.79	98	3837487	10.40	ug/l	-0.02
Spiked Amount 10.000			Recovery =	104.00%		
77) 4-Bromofluorobenzene	17.45	95	1415443	9.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.40%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1209507	7.95	ug/l	99
3) Chloromethane	1.87	50	1175780	8.44	ug/l	98
4) Vinyl chloride	1.99	62	895161	8.20	ug/l	100
5) Bromomethane	2.43	94	683095	7.62	ug/l	99
6) Chloroethane	2.51	64	464328	6.56	ug/l	97
7) Dichlorofluoromethane	2.55	67	1911356	7.46	ug/l	100
8) Trichlorofluoromethane	2.80	101	1169522	8.14	ug/l	99
9) Acrolein	3.32	56	186655	36.91	ug/l	98
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	864837	7.25	ug/l	100
11) Acetone	3.40	43	548076	37.70	ug/l	100
12) 1,1-Dichloroethene	3.55	61	1505249	7.90	ug/l	96
13) tert-Butyl alcohol	3.70	59	889873	197.85	ug/l	100
15) Methyl acetate	4.10	74	67057	8.63	ug/l	73
16) Iodomethane	3.99	142	1589148	8.91	ug/l	97
17) Allyl chloride	4.12	76	542269	8.90	ug/l	98
18) Methylene chloride	4.28	49	1144596	7.60	ug/l	91
19) Carbon disulfide	4.26	76	1784453	7.96	ug/l	100
20) Acrylonitrile	4.54	53	776704	43.00	ug/l	98
21) tert-Butyl methyl ether (M	4.58	73	1640370	8.99	ug/l	99
22) trans-1,2-Dichloroethene	4.79	96	1024590	9.01	ug/l	96
23) Isopropyl ether (DIPE)	5.46	45	3321321	8.83	ug/l	97
24) Vinyl acetate	5.71	43	1068824	7.87	ug/l	99
25) 1,1-Dichloroethane	5.63	63	1702415	8.95	ug/l	99
26) 2-Butanol	6.19	45	866628	171.96	ug/l	95
27) tert-Butyl ethyl ether (ET	6.38	59	2420667	8.87	ug/l	97
28) 2-Butanone	6.67	43	980823	39.70	ug/l	98
29) 2,2-Dichloropropane	6.93	77	1164918	9.81	ug/l	99
30) cis-1,2-Dichloroethene	7.05	96	1062497	9.04	ug/l	98
31) Chloroform	7.45	83	1671867	8.88	ug/l	99
32) Bromochloromethane	7.81	130	473558	9.30	ug/l	98
33) Tetrahydrofuran	7.93	42	90338	6.83	ug/l	89
36) 1,1,1-Trichloroethane	8.35	97	1419490	9.38	ug/l	98
37) Cyclohexane	8.33	84	1715802	8.84	ug/l	99
39) 1,1-Dichloropropene	8.71	110	467924	9.15	ug/l	98
40) Carbon tetrachloride	8.90	119	1188648	9.47	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	2022666	9.07	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I21\RIW127.D Vial: 3
Acq On : 21 Sep 2024 8:33 am Operator: DHguye
Sample : VO06I06L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:00 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.27	62	809176	8.54	ug/l	99
44)	Benzene	9.27	78	3884085	9.41	ug/l	98
45)	Trichloroethene	10.55	130	1032297	9.61	ug/l	100
46)	Methylcyclohexane	10.61	83	1786023	8.74	ug/l	95
47)	1,2-Dichloropropane	10.91	63	910776	8.92	ug/l	99
48)	1,4-Dioxane	11.45	88	74421	155.76	ug/l	95
49)	Bromodichloromethane	11.35	83	1168013	8.82	ug/l	99
50)	Dibromomethane	11.41	93	443061	9.17	ug/l	97
51)	2-Chloroethyl vinyl ether	12.04	63	265261	8.26	ug/l	98
52)	4-Methyl-2-pentanone	12.08	43	2843079	41.75	ug/l	96
53)	cis-1,3-Dichloropropene	12.40	75	1465614	9.04	ug/l	98
56)	Toluene	12.94	91	4291551	9.98	ug/l	100
57)	Ethyl methacrylate	13.38	69	828782	8.76	ug/l	93
58)	trans-1,3-Dichloropropene	13.32	75	1115213	9.22	ug/l	93
59)	1,1,2-Trichloroethane	13.57	97	592009	9.58	ug/l	97
60)	2-Hexanone	13.65	43	1951521	43.26	ug/l	98
61)	1,3-Dichloropropane	14.03	76	1065858	9.34	ug/l	99
62)	Tetrachloroethene	14.07	164	895013	10.11	ug/l	96
63)	Dibromochloromethane	14.43	129	713936	9.38	ug/l	98
65)	1,2-Dibromoethane	14.76	107	548571	9.34	ug/l	99
66)	1-Chlorohexane	15.12	91	1574332	8.59	ug/l	99
67)	Chlorobenzene	15.49	112	2655081	10.08	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.59	131	864482	10.38	ug/l	98
69)	Ethylbenzene	15.60	91	5080404	9.58	ug/l	100
70)	m-Xylene & p-Xylene	15.73	91	7674841	18.94	ug/l	100
71)	o-Xylene	16.45	91	3847901	9.64	ug/l	100
72)	Styrene	16.52	104	2959462	9.93	ug/l	99
73)	Isopropylbenzene	17.06	105	4974866	9.61	ug/l	99
75)	Bromoform	17.06	173	343284	8.12	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.35	83	678059	8.54	ug/l	99
78)	1,2,3-Trichloropropane	17.57	110	175668	8.03	ug/l	100
79)	trans-1,4-Dichloro-2-buten	17.67	53	179166	7.42	ug/l	100
80)	n-Propylbenzene	17.67	91	6559836	8.66	ug/l	99
81)	Bromobenzene	17.71	156	1025393	9.45	ug/l	97
82)	1,3,5-Trimethylbenzene	17.89	105	4102113	8.88	ug/l	98
83)	2-Chlorotoluene	17.91	91	3949496	8.90	ug/l	94
84)	4-Chlorotoluene	17.97	91	3738032	9.19	ug/l	95
85)	tert-Butylbenzene	18.35	134	929147	9.51	ug/l	99
86)	1,2,4-Trimethylbenzene	18.39	105	4209271	8.79	ug/l	98
87)	sec-Butylbenzene	18.60	105	5733910	8.79	ug/l	99
88)	p-Isopropyltoluene	18.76	119	4690115	8.46	ug/l	98
89)	1,3-Dichlorobenzene	18.86	146	2212486	9.12	ug/l	97
90)	1,2,3-Trimethylbenzene	18.93	105	3824599	8.82	ug/l	99
91)	1,4-Dichlorobenzene	18.98	146	2173391	9.05	ug/l	98
92)	n-Butylbenzene	19.21	91	5158336	8.64	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	1884008	9.39	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	110621	7.88	ug/l	88
95)	1,2,4-Trichlorobenzene	20.97	180	1427845	9.05	ug/l	100
96)	Hexachlorobutadiene	21.10	225	766051	8.99	ug/l	99
97)	Naphthalene	21.24	128	1951419	9.19	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW127.D Vial: 3
Acq On : 21 Sep 2024 8:33 am Operator: DHguye
Sample : VO06I06L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:00 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

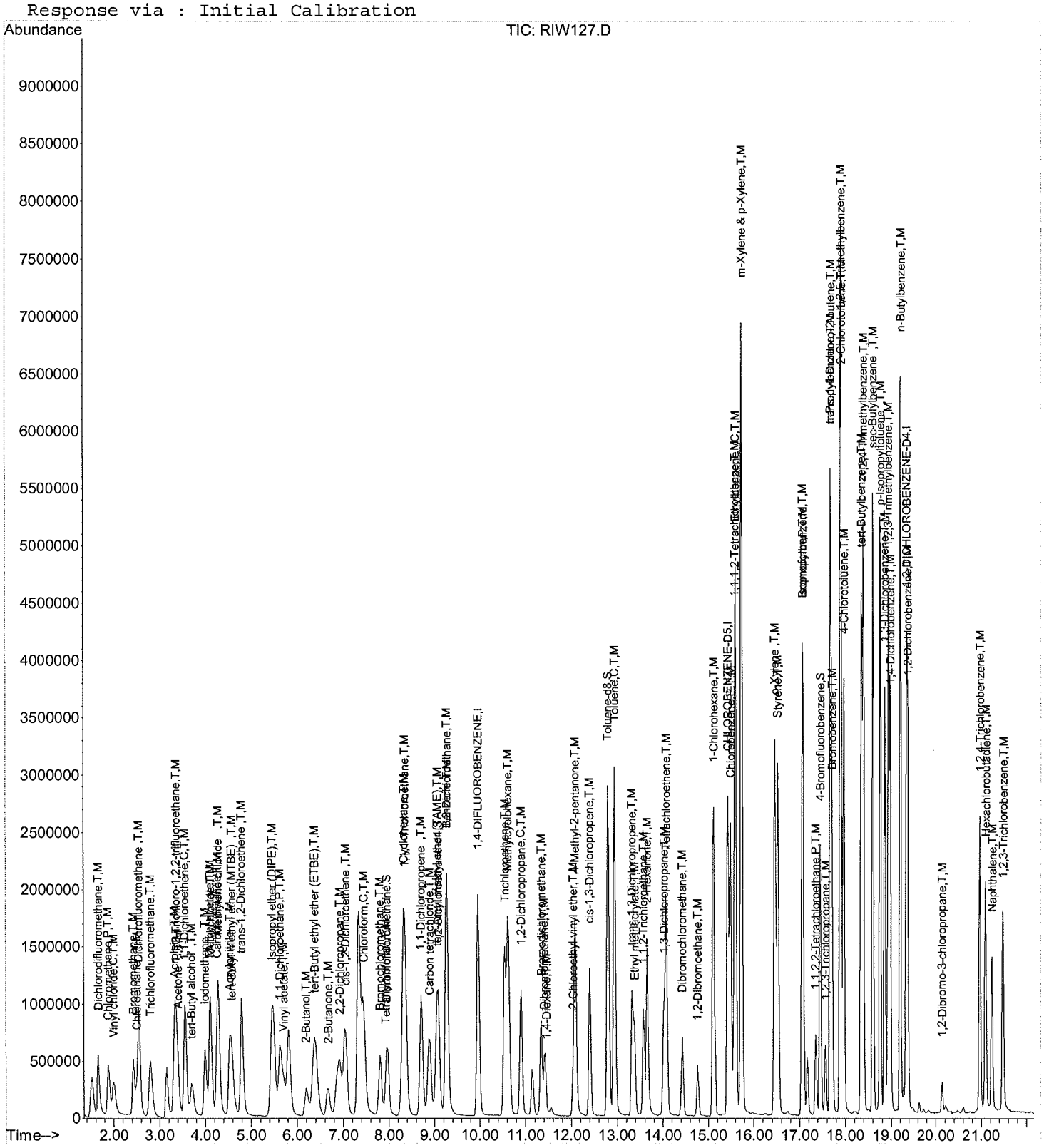
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	1064897	8.95	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW127.D Vial: 3
Acq On : 21 Sep 2024 8:33 am Operator: DHguye
Sample : VO06I06L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:00 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW128.D Vial: 4
Acq On : 21 Sep 2024 8:59 am Operator: DHguye
Sample : VO06I06C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:00 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3758345	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2942290	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1398011	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	1007359	9.48	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.80%		
42) 1,2-Dichloroethane-d4	9.08	65	762294	9.17	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.70%		
55) Toluene-d8	12.79	98	3938488	10.34	ug/l	-0.02
Spiked Amount 10.000			Recovery =	103.40%		
77) 4-Bromofluorobenzene	17.45	95	1452509	9.31	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.10%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1493733	9.41	ug/l	97
3) Chloromethane	1.87	50	1288974	8.86	ug/l	98
4) Vinyl chloride	1.99	62	1054123	9.25	ug/l	97
5) Bromomethane	2.43	94	823443	8.78	ug/l	99
6) Chloroethane	2.50	64	609763	8.26	ug/l	95
7) Dichlorofluoromethane	2.54	67	2215353	8.32	ug/l	100
8) Trichlorofluoromethane	2.80	101	1401996	9.35	ug/l	99
9) Acrolein	3.32	56	203815	38.61	ug/l	94
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	1012861	8.18	ug/l	100
11) Acetone	3.40	43	566447	37.32	ug/l	99
12) 1,1-Dichloroethene	3.55	61	1585933	7.98	ug/l	96
13) tert-Butyl alcohol	3.70	59	894721	190.54	ug/l	97
15) Methyl acetate	4.07	74	71077	8.76	ug/l	86
16) Iodomethane	3.99	142	1659442	8.91	ug/l	98
17) Allyl chloride	4.10	76	561531	8.82	ug/l	99
18) Methylene chloride	4.28	49	1188380	7.56	ug/l	93
19) Carbon disulfide	4.24	76	1812613	7.75	ug/l	100
20) Acrylonitrile	4.51	53	776254	41.16	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	1728187	9.07	ug/l	98
22) trans-1,2-Dichloroethene	4.79	96	1037681	8.74	ug/l	98
23) Isopropyl ether (DIPE)	5.46	45	3381780	8.61	ug/l	96
24) Vinyl acetate	5.71	43	1199308	8.45	ug/l	99
25) 1,1-Dichloroethane	5.63	63	1742289	8.77	ug/l	98
26) 2-Butanol	6.19	45	856529	163.18	ug/l	99
27) tert-Butyl ethyl ether (ET	6.38	59	2484534	8.72	ug/l	96
28) 2-Butanone	6.65	43	992902	38.50	ug/l	96
29) 2,2-Dichloropropane	6.90	77	1215432	9.81	ug/l	98
30) cis-1,2-Dichloroethene	7.03	96	1076551	8.78	ug/l	99
31) Chloroform	7.43	83	1692441	8.61	ug/l	99
32) Bromochloromethane	7.81	130	479765	9.03	ug/l	99
33) Tetrahydrofuran	7.93	42	102831	7.45	ug/l	97
36) 1,1,1-Trichloroethane	8.35	97	1463468	9.26	ug/l	99
37) Cyclohexane	8.33	84	1859236	9.17	ug/l	98
39) 1,1-Dichloropropene	8.71	110	480708	9.00	ug/l	99
40) Carbon tetrachloride	8.87	119	1236376	9.44	ug/l	98
41) tert-Amyl methyl ether (TA	9.06	73	2141137	9.19	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW128.D Vial: 4
Acq On : 21 Sep 2024 8:59 am Operator: DHguye
Sample : VO06I06C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:00 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.27	62	847171	8.57	ug/l	97
44)	Benzene	9.25	78	3966967	9.21	ug/l	99
45)	Trichloroethene	10.53	130	1041211	9.28	ug/l	99
46)	Methylcyclohexane	10.61	83	1868957	8.76	ug/l	96
47)	1,2-Dichloropropane	10.91	63	938377	8.81	ug/l	100
48)	1,4-Dioxane	11.45	88	70676	141.68	ug/l	94
49)	Bromodichloromethane	11.33	83	1215122	8.79	ug/l	98
50)	Dibromomethane	11.41	93	459396	9.10	ug/l	98
51)	2-Chloroethyl vinyl ether	12.04	63	268926	8.02	ug/l	100
52)	4-Methyl-2-pentanone	12.08	43	3038480	42.74	ug/l	96
53)	cis-1,3-Dichloropropene	12.40	75	1496281	8.84	ug/l	97
56)	Toluene	12.94	91	4404704	9.92	ug/l	100
57)	Ethyl methacrylate	13.38	69	840771	8.62	ug/l	94
58)	trans-1,3-Dichloropropene	13.32	75	1150589	9.22	ug/l	95
59)	1,1,2-Trichloroethane	13.57	97	604553	9.48	ug/l	98
60)	2-Hexanone	13.65	43	2001176	43.00	ug/l	96
61)	1,3-Dichloropropane	14.03	76	1105186	9.38	ug/l	99
62)	Tetrachloroethene	14.07	164	919892	10.07	ug/l	98
63)	Dibromochloromethane	14.43	129	729408	9.29	ug/l	97
65)	1,2-Dibromoethane	14.76	107	553902	9.14	ug/l	96
66)	1-Chlorohexane	15.12	91	1617521	8.56	ug/l	97
67)	Chlorobenzene	15.49	112	2700985	9.94	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.59	131	881580	10.26	ug/l	97
69)	Ethylbenzene	15.60	91	5217108	9.54	ug/l	99
70)	m-Xylene & p-Xylene	15.73	91	7961142	19.05	ug/l	100
71)	o-Xylene	16.45	91	4034277	9.80	ug/l	99
72)	Styrene	16.52	104	3030150	9.85	ug/l	99
73)	Isopropylbenzene	17.06	105	5145833	9.64	ug/l	99
75)	Bromoform	17.06	173	355506	8.26	ug/l	97
76)	1,1,2,2-Tetrachloroethane	17.35	83	708284	8.76	ug/l	99
78)	1,2,3-Trichloropropane	17.57	110	177316	7.96	ug/l	97
79)	trans-1,4-Dichloro-2-buten	17.67	53	182642	7.43	ug/l	100
80)	n-Propylbenzene	17.67	91	6685963	8.67	ug/l	99
81)	Bromobenzene	17.71	156	1047345	9.48	ug/l	96
82)	1,3,5-Trimethylbenzene	17.89	105	4251010	9.04	ug/l	99
83)	2-Chlorotoluene	17.89	91	4114420	9.10	ug/l	94
84)	4-Chlorotoluene	17.97	91	3813166	9.21	ug/l	95
85)	tert-Butylbenzene	18.35	134	961591	9.67	ug/l	98
86)	1,2,4-Trimethylbenzene	18.39	105	4276820	8.77	ug/l	99
87)	sec-Butylbenzene	18.60	105	5929721	8.93	ug/l	99
88)	p-Isopropyltoluene	18.76	119	4879114	8.64	ug/l	98
89)	1,3-Dichlorobenzene	18.86	146	2270676	9.19	ug/l	96
90)	1,2,3-Trimethylbenzene	18.93	105	3957589	8.97	ug/l	100
91)	1,4-Dichlorobenzene	18.98	146	2199892	8.99	ug/l	98
92)	n-Butylbenzene	19.21	91	5188859	8.53	ug/l	99
93)	1,2-Dichlorobenzene	19.37	146	1897029	9.28	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.14	157	118540	8.29	ug/l	96
95)	1,2,4-Trichlorobenzene	20.97	180	1462862	9.11	ug/l	99
96)	Hexachlorobutadiene	21.10	225	767849	8.85	ug/l	96
97)	Naphthalene	21.24	128	2046427	9.46	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW128.D Vial: 4
Acq On : 21 Sep 2024 8:59 am Operator: DHguye
Sample : VO06I06C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:00 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

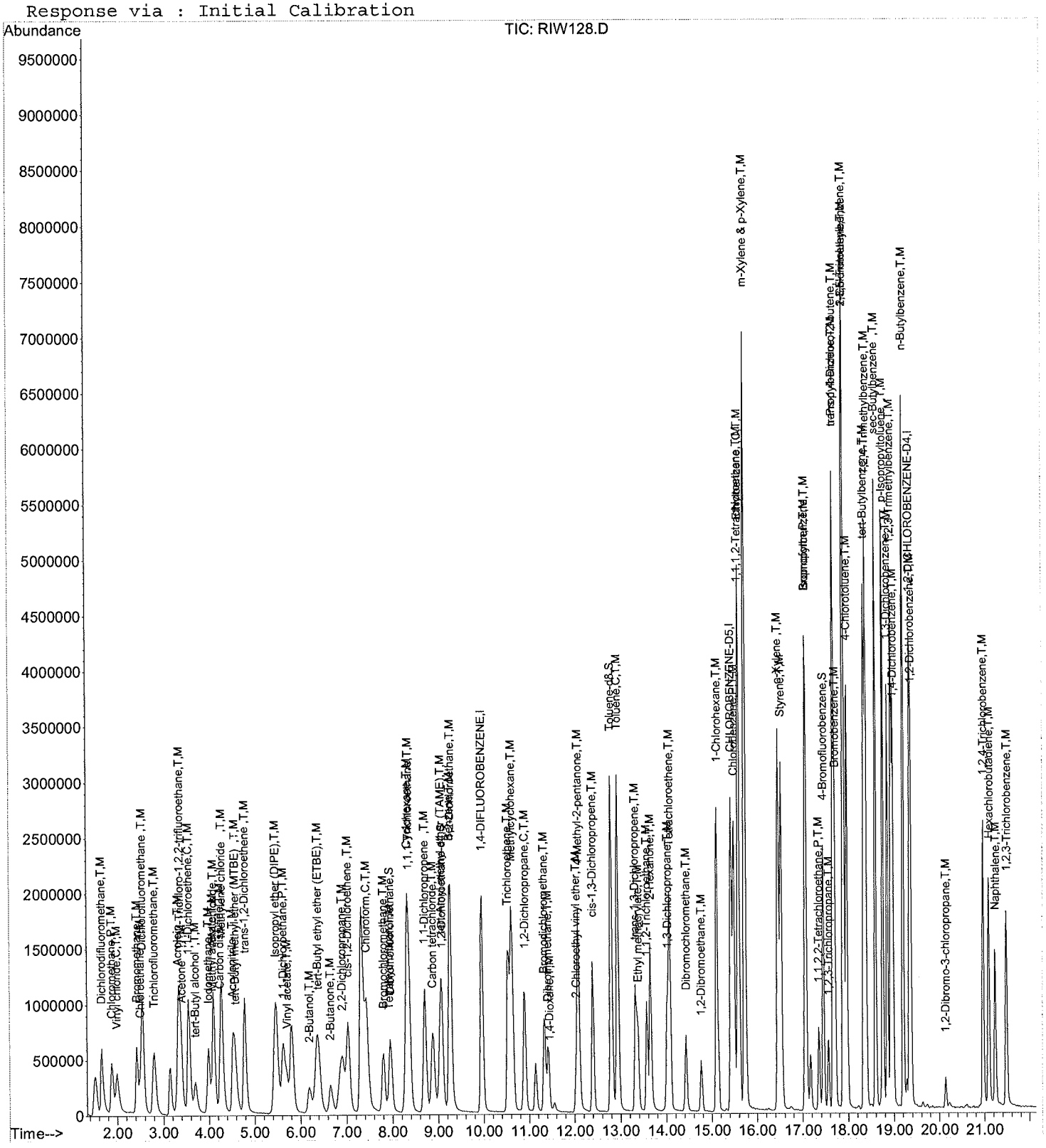
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	1076026	8.88	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW128.D Vial: 4
Acq On : 21 Sep 2024 8:59 am Operator: DHguye
Sample : VO06I06C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:00 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW118.D Vial: 25
Acq On : 21 Sep 2024 12:23 am Operator: PMai
Sample : 24I028-01M Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:52 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.97	114	3304655	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2703255	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1270611	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	891536	9.54	ug/l	-0.02
Spiked Amount 10.000			Recovery =	95.40%		
42) 1,2-Dichloroethane-d4	9.08	65	703497	9.63	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.30%		
55) Toluene-d8	12.79	98	3616934	10.34	ug/l	-0.02
Spiked Amount 10.000			Recovery =	103.40%		
77) 4-Bromofluorobenzene	17.45	95	1328378	9.36	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.60%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1283881	9.20	ug/l	99
3) Chloromethane	1.88	50	1207115	9.43	ug/l	99
4) Vinyl chloride	2.00	62	946127	9.44	ug/l	99
5) Bromomethane	2.43	94	788266	9.55	ug/l	99
6) Chloroethane	2.51	64	574532	8.85	ug/l	95
7) Dichlorofluoromethane	2.55	67	2110939	9.04	ug/l	99
8) Trichlorofluoromethane	2.80	101	1263556	9.59	ug/l	99
9) Acrolein	3.32	56	184819	39.82	ug/l	86
10) 1,1,2-Trichloro-1,2,2-trif	3.34	151	947273	8.74	ug/l	99
11) Acetone	3.40	43	483013	36.19	ug/l	99
12) 1,1-Dichloroethene	3.55	61	1481339	8.47	ug/l	96
13) tert-Butyl alcohol	3.70	59	828167	200.58	ug/l	98
15) Methyl acetate	4.08	74	53136	7.45	ug/l	92
16) Iodomethane	3.99	142	1510757	9.22	ug/l	98
17) Allyl chloride	4.12	76	481701	8.61	ug/l	96
18) Methylene chloride	4.29	49	1082243	7.85	ug/l	94
19) Carbon disulfide	4.26	76	1499244	7.30	ug/l	100
20) Acrylonitrile	4.52	53	713975	43.06	ug/l	99
21) tert-Butyl methyl ether (M	4.58	73	1558716	9.30	ug/l	99
22) trans-1,2-Dichloroethene	4.79	96	927358	8.88	ug/l	99
23) Isopropyl ether (DIPE)	5.46	45	3019751	8.74	ug/l	96
24) Vinyl acetate	5.71	43	913568	7.32	ug/l	99
25) 1,1-Dichloroethane	5.63	63	1539699	8.82	ug/l	98
26) 2-Butanol	6.19	45	724215	157.20	ug/l	96
27) tert-Butyl ethyl ether (ET	6.38	59	2340972	9.35	ug/l	100
28) 2-Butanone	6.67	43	886722	39.10	ug/l	96
29) 2,2-Dichloropropane	6.93	77	911246	8.36	ug/l	97
30) cis-1,2-Dichloroethene	7.03	96	999981	9.27	ug/l	99
31) Chloroform	7.43	83	1878639	10.87	ug/l	99
32) Bromochloromethane	7.81	130	442761	9.48	ug/l	99
33) Tetrahydrofuran	7.93	42	94897	7.82	ug/l	98
36) 1,1,1-Trichloroethane	8.35	97	1308284	9.41	ug/l	98
37) Cyclohexane	8.33	84	1406936	7.90	ug/l	98
39) 1,1-Dichloropropene	8.71	110	410810	8.75	ug/l	99
40) Carbon tetrachloride	8.90	119	1070627	9.29	ug/l	98
41) tert-Amyl methyl ether (TA	9.06	73	1907162	9.31	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW118.D Vial: 25
Acq On : 21 Sep 2024 12:23 am Operator: PMai
Sample : 24I028-01M Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:52 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	1,2-Dichloroethane	9.29	62	777818	8.94	ug/l		99
44)	Benzene	9.27	78	3560299	9.40	ug/l		99
45)	Trichloroethene	10.55	130	964095	9.78	ug/l		99
46)	Methylcyclohexane	10.61	83	1374898	7.33	ug/l		95
47)	1,2-Dichloropropane	10.91	63	836537	8.93	ug/l		98
48)	1,4-Dioxane	11.45	88	65552	149.45	ug/l		98
49)	Bromodichloromethane	11.35	83	1099782	9.05	ug/l		100
50)	Dibromomethane	11.41	93	407376	9.18	ug/l		98
51)	2-Chloroethyl vinyl ether	12.08	63	6605	0.22	ug/l	#	1
52)	4-Methyl-2-pentanone	12.08	43	2561102	40.97	ug/l		94
53)	cis-1,3-Dichloropropene	12.40	75	1329917	8.94	ug/l		98
56)	Toluene	12.94	91	3991944	9.79	ug/l		100
57)	Ethyl methacrylate	13.38	69	786214	8.77	ug/l		95
58)	trans-1,3-Dichloropropene	13.32	75	1006868	8.79	ug/l		96
59)	1,1,2-Trichloroethane	13.57	97	541349	9.24	ug/l		98
60)	2-Hexanone	13.65	43	1811670	42.37	ug/l		97
61)	1,3-Dichloropropane	14.03	76	1007180	9.31	ug/l		100
62)	Tetrachloroethene	14.07	164	4826255	57.51	ug/l		98
63)	Dibromochloromethane	14.43	129	658671	9.13	ug/l		100
65)	1,2-Dibromoethane	14.76	107	514829	9.25	ug/l		99
66)	1-Chlorohexane	15.12	91	1422836	8.19	ug/l		99
67)	Chlorobenzene	15.49	112	2425539	9.71	ug/l		100
68)	1,1,1,2-Tetrachloroethane	15.59	131	797790	10.11	ug/l		96
69)	Ethylbenzene	15.61	91	4631978	9.22	ug/l		100
70)	m-Xylene & p-Xylene	15.74	91	7055295	18.37	ug/l		99
71)	o-Xylene	16.47	91	3526062	9.32	ug/l		100
72)	Styrene	16.53	104	2076910	7.35	ug/l		98
73)	Isopropylbenzene	17.08	105	4544503	9.26	ug/l		99
75)	Bromoform	17.06	173	317105	8.10	ug/l		99
76)	1,1,2,2-Tetrachloroethane	17.36	83	651422	8.87	ug/l		99
78)	1,2,3-Trichloropropane	17.57	110	172650	8.53	ug/l		100
79)	trans-1,4-Dichloro-2-buten	17.67	53	150216	6.72	ug/l		97
80)	n-Propylbenzene	17.67	91	6001792	8.56	ug/l		99
81)	Bromobenzene	17.71	156	953530	9.50	ug/l		97
82)	1,3,5-Trimethylbenzene	17.89	105	3742980	8.75	ug/l		98
83)	2-Chlorotoluene	17.91	91	3577134	8.71	ug/l		99
84)	4-Chlorotoluene	17.97	91	3431058	9.11	ug/l		99
85)	tert-Butylbenzene	18.35	134	842630	9.32	ug/l		96
86)	1,2,4-Trimethylbenzene	18.39	105	3740958	8.44	ug/l		100
87)	sec-Butylbenzene	18.60	105	5198250	8.61	ug/l		99
88)	p-Isopropyltoluene	18.76	119	4337086	8.45	ug/l		99
89)	1,3-Dichlorobenzene	18.87	146	2034622	9.06	ug/l		97
90)	1,2,3-Trimethylbenzene	18.95	105	3498914	8.72	ug/l		100
91)	1,4-Dichlorobenzene	18.98	146	1977895	8.90	ug/l		98
92)	n-Butylbenzene	19.21	91	4616310	8.35	ug/l		100
93)	1,2-Dichlorobenzene	19.37	146	1716594	9.24	ug/l		99
94)	1,2-Dibromo-3-chloropropan	20.14	157	108978	8.39	ug/l		98
95)	1,2,4-Trichlorobenzene	20.97	180	1278369	8.76	ug/l		99
96)	Hexachlorobutadiene	21.10	225	672730	8.53	ug/l		96
97)	Naphthalene	21.24	128	1863612	9.48	ug/l		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW118.D Vial: 25
Acq On : 21 Sep 2024 12:23 am Operator: PMai
Sample : 24I028-01M Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:52 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

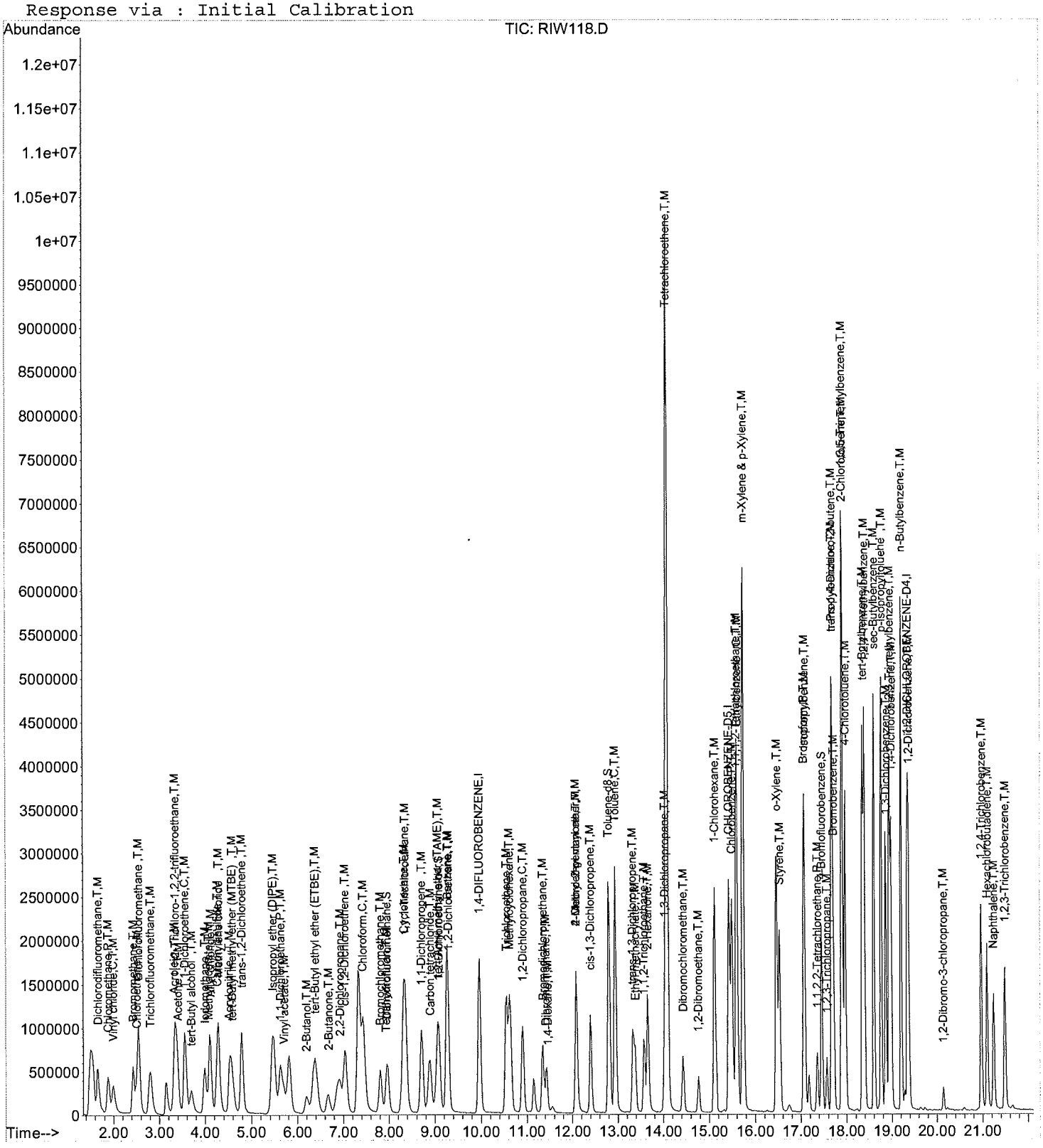
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	981470	8.91	ug/l	98

(#) = qualifier out of range (m) = manual integration
RIW118.D VO06I19B.M Mon Oct 14 07:52:31 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW118.D Vial: 25
Acq On : 21 Sep 2024 12:23 am Operator: PMai
Sample : 24I028-01M Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:52 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW119.D Vial: 26
Acq On : 21 Sep 2024 12:49 am Operator: PMai
Sample : 24I028-01S Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:52 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3248621	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2626720	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1309886	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	877203	9.55	ug/l	-0.02
Spiked Amount 10.000			Recovery =	95.50%		
42) 1,2-Dichloroethane-d4	9.08	65	706901	9.84	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.40%		
55) Toluene-d8	12.79	98	3537697	10.41	ug/l	-0.02
Spiked Amount 10.000			Recovery =	104.10%		
77) 4-Bromofluorobenzene	17.45	95	1329123	9.09	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.90%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1171991	8.54	ug/l	98
3) Chloromethane	1.87	50	1125095	8.94	ug/l	99
4) Vinyl chloride	1.99	62	868251	8.81	ug/l	97
5) Bromomethane	2.43	94	683916	8.44	ug/l	97
6) Chloroethane	2.50	64	471220	7.38	ug/l	96
7) Dichlorofluoromethane	2.54	67	1879410	8.16	ug/l	100
8) Trichlorofluoromethane	2.80	101	1121316	8.65	ug/l	98
9) Acrolein	3.32	56	173842	38.10	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	833206	7.77	ug/l	99
11) Acetone	3.40	43	500330	38.13	ug/l	100
12) 1,1-Dichloroethene	3.55	61	1376623	8.01	ug/l	96
13) tert-Butyl alcohol	3.70	59	903428	222.58	ug/l	99
15) Methyl acetate	4.10	74	54807	7.82	ug/l	85
16) Iodomethane	3.99	142	1442104	8.96	ug/l	98
17) Allyl chloride	4.12	76	469488	8.53	ug/l	100
18) Methylene chloride	4.28	49	1045862	7.71	ug/l	91
19) Carbon disulfide	4.26	76	1667600	8.24	ug/l	100
20) Acrylonitrile	4.51	53	729308	44.74	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	1600634	9.72	ug/l	100
22) trans-1,2-Dichloroethene	4.79	96	904335	8.81	ug/l	98
23) Isopropyl ether (DIPE)	5.46	45	3017936	8.89	ug/l	96
24) Vinyl acetate	5.71	43	873699	7.13	ug/l	99
25) 1,1-Dichloroethane	5.63	63	1499977	8.74	ug/l	98
26) 2-Butanol	6.19	45	767459	168.88	ug/l	93
27) tert-Butyl ethyl ether (ET	6.38	59	2246876	9.13	ug/l	94
28) 2-Butanone	6.65	43	912768	40.94	ug/l	95
29) 2,2-Dichloropropane	6.93	77	872915	8.15	ug/l	98
30) cis-1,2-Dichloroethene	7.03	96	988645	9.32	ug/l	98
31) Chloroform	7.43	83	1824397	10.74	ug/l	99
32) Bromochloromethane	7.81	130	444631	9.68	ug/l	96
33) Tetrahydrofuran	7.91	42	99978	8.38	ug/l	98
36) 1,1,1-Trichloroethane	8.35	97	1283862	9.40	ug/l	98
37) Cyclohexane	8.33	84	1298182	7.41	ug/l	97
39) 1,1-Dichloropropene	8.71	110	402417	8.72	ug/l	98
40) Carbon tetrachloride	8.87	119	1027774	9.08	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	1965574	9.76	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW119.D Vial: 26
Acq On : 21 Sep 2024 12:49 am Operator: PMai
Sample : 24I028-01S Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:52 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	1,2-Dichloroethane	9.27	62	785040	9.18	ug/l		96
44)	Benzene	9.27	78	3532581	9.49	ug/l		98
45)	Trichloroethene	10.55	130	938454	9.68	ug/l		99
46)	Methylcyclohexane	10.61	83	1262348	6.85	ug/l		96
47)	1,2-Dichloropropane	10.91	63	826808	8.98	ug/l		99
48)	1,4-Dioxane	11.45	88	74849	173.59	ug/l		95
49)	Bromodichloromethane	11.35	83	1098562	9.19	ug/l		100
50)	Dibromomethane	11.41	93	423949	9.72	ug/l		97
51)	2-Chloroethyl vinyl ether	12.06	63	5181	0.18	ug/l	#	1
52)	4-Methyl-2-pentanone	12.08	43	2721121	44.28	ug/l		94
53)	cis-1,3-Dichloropropene	12.40	75	1338122	9.15	ug/l		97
56)	Toluene	12.94	91	3912575	9.87	ug/l		100
57)	Ethyl methacrylate	13.38	69	842610	9.67	ug/l		91
58)	trans-1,3-Dichloropropene	13.32	75	1028896	9.24	ug/l		96
59)	1,1,2-Trichloroethane	13.57	97	563248	9.90	ug/l		98
60)	2-Hexanone	13.65	43	1959971	47.18	ug/l		96
61)	1,3-Dichloropropane	14.03	76	1011373	9.62	ug/l		98
62)	Tetrachloroethene	14.07	164	4680041	57.39	ug/l		98
63)	Dibromochloromethane	14.43	129	664599	9.48	ug/l		100
65)	1,2-Dibromoethane	14.76	107	545446	10.08	ug/l		98
66)	1-Chlorohexane	15.12	91	1513738	8.97	ug/l		98
67)	Chlorobenzene	15.49	112	2369815	9.77	ug/l		99
68)	1,1,1,2-Tetrachloroethane	15.59	131	801936	10.45	ug/l		100
69)	Ethylbenzene	15.60	91	4564901	9.35	ug/l		100
70)	m-Xylene & p-Xylene	15.74	91	6919829	18.54	ug/l		98
71)	o-Xylene	16.47	91	3549795	9.66	ug/l		99
72)	Styrene	16.53	104	1984043	7.23	ug/l		97
73)	Isopropylbenzene	17.08	105	4493758	9.43	ug/l		98
75)	Bromoform	17.06	173	323350	8.02	ug/l		99
76)	1,1,2,2-Tetrachloroethane	17.36	83	682962	9.02	ug/l		98
78)	1,2,3-Trichloropropane	17.57	110	179253	8.59	ug/l		96
79)	trans-1,4-Dichloro-2-buten	17.67	53	165176	7.17	ug/l		95
80)	n-Propylbenzene	17.67	91	5903942	8.17	ug/l		100
81)	Bromobenzene	17.71	156	968513	9.36	ug/l		97
82)	1,3,5-Trimethylbenzene	17.90	105	3647981	8.28	ug/l		99
83)	2-Chlorotoluene	17.91	91	3596373	8.49	ug/l		99
84)	4-Chlorotoluene	17.97	91	3441034	8.87	ug/l		100
85)	tert-Butylbenzene	18.35	134	840171	9.02	ug/l		98
86)	1,2,4-Trimethylbenzene	18.39	105	3718598	8.14	ug/l		100
87)	sec-Butylbenzene	18.60	105	5135635	8.25	ug/l		99
88)	p-Isopropyltoluene	18.76	119	4317750	8.16	ug/l		99
89)	1,3-Dichlorobenzene	18.86	146	2075847	8.97	ug/l		97
90)	1,2,3-Trimethylbenzene	18.95	105	3551483	8.59	ug/l		100
91)	1,4-Dichlorobenzene	18.99	146	2003965	8.74	ug/l		99
92)	n-Butylbenzene	19.21	91	4548300	7.98	ug/l		98
93)	1,2-Dichlorobenzene	19.37	146	1801774	9.41	ug/l		100
94)	1,2-Dibromo-3-chloropropan	20.14	157	119167	8.90	ug/l		93
95)	1,2,4-Trichlorobenzene	20.97	180	1348011	8.96	ug/l		100
96)	Hexachlorobutadiene	21.10	225	704850	8.67	ug/l		99
97)	Naphthalene	21.24	128	2091281	10.32	ug/l		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW119.D Vial: 26
Acq On : 21 Sep 2024 12:49 am Operator: PMai
Sample : 24I028-01S Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:52 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

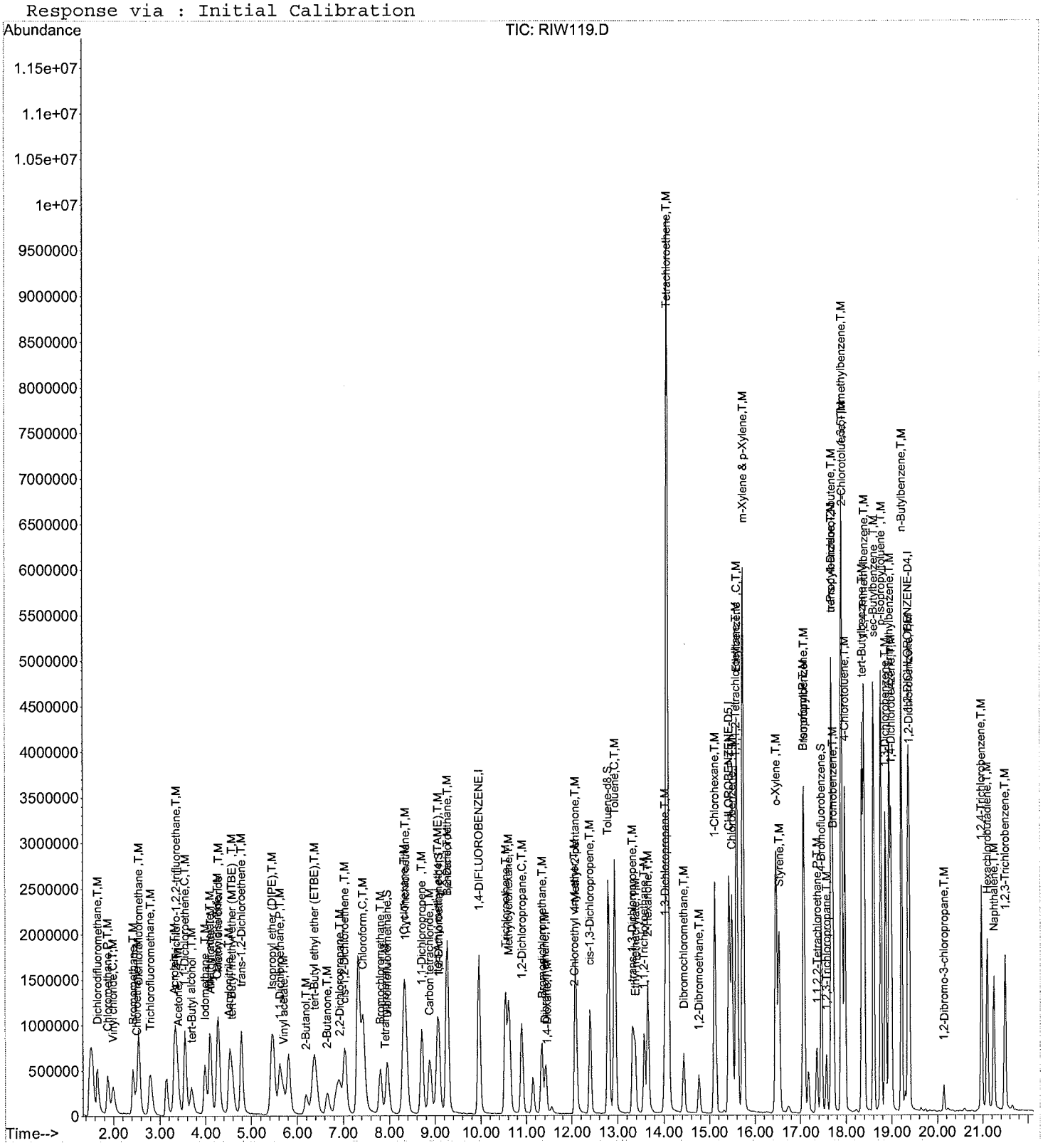
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1035528	9.12	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW119.D Vial: 26
Acq On : 21 Sep 2024 12:49 am Operator: PMai
Sample : 24I028-01S Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 7:52 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW116.D Vial: 23
Acq On : 20 Sep 2024 11:31 pm Operator: PMai
Sample : 24I028-15M Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:39 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3211635	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2609408	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1264303	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	884984	9.74	ug/l	-0.02
Spiked Amount 10.000			Recovery =	97.40%		
42) 1,2-Dichloroethane-d4	9.08	65	688713	9.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.00%		
55) Toluene-d8	12.79	98	3529293	10.45	ug/l	-0.02
Spiked Amount 10.000			Recovery =	104.50%		
77) 4-Bromofluorobenzene	17.45	95	1298736	9.20	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.00%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1273553	9.39	ug/l	99
3) Chloromethane	1.87	50	1120160	9.01	ug/l	99
4) Vinyl chloride	1.99	62	973246	9.99	ug/l	97
5) Bromomethane	2.43	94	798980	9.95	ug/l	99
6) Chloroethane	2.50	64	540191	8.57	ug/l	96
7) Dichlorofluoromethane	2.54	67	2004488	8.83	ug/l	99
8) Trichlorofluoromethane	2.80	101	1270663	9.92	ug/l	99
9) Acrolein	3.32	56	185721	41.17	ug/l	94
10) 1,1,2-Trichloro-1,2,2-trif	3.34	151	880129	8.33	ug/l	100
11) Acetone	3.40	43	532979	41.09	ug/l	100
12) 1,1-Dichloroethene	3.55	61	1426681	8.40	ug/l	97
13) tert-Butyl alcohol	3.70	59	841802	209.79	ug/l	100
15) Methyl acetate	4.10	74	61698	8.90	ug/l	91
16) Iodomethane	3.99	142	1507966	9.47	ug/l	98
17) Allyl chloride	4.12	76	489527	9.00	ug/l	97
18) Methylene chloride	4.28	49	1105648	8.28	ug/l	93
19) Carbon disulfide	4.26	76	1857300	9.26	ug/l	100
20) Acrylonitrile	4.52	53	755542	46.89	ug/l	99
21) tert-Butyl methyl ether (M	4.58	73	1566317	9.62	ug/l	98
22) trans-1,2-Dichloroethene	4.79	96	945605	9.32	ug/l	97
23) Isopropyl ether (DIPE)	5.46	45	3070904	9.15	ug/l	96
24) Vinyl acetate	5.71	43	998289	8.24	ug/l	99
25) 1,1-Dichloroethane	5.63	63	1582369	9.32	ug/l	98
26) 2-Butanol	6.19	45	876382	193.93	ug/l	99
27) tert-Butyl ethyl ether (ET	6.38	59	2277536	9.36	ug/l	97
28) 2-Butanone	6.65	43	953069	43.24	ug/l	98
29) 2,2-Dichloropropane	6.93	77	939119	8.87	ug/l	98
30) cis-1,2-Dichloroethene	7.05	96	1025655	9.78	ug/l	99
31) Chloroform	7.43	83	2023464	12.05	ug/l	100
32) Bromochloromethane	7.81	130	463245	10.20	ug/l	99
33) Tetrahydrofuran	7.93	42	92269	7.82	ug/l	93
36) 1,1,1-Trichloroethane	8.35	97	1306349	9.67	ug/l	99
37) Cyclohexane	8.33	84	1717167	9.92	ug/l	97
39) 1,1-Dichloropropene	8.71	110	426388	9.35	ug/l	100
40) Carbon tetrachloride	8.90	119	1088411	9.72	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	1940202	9.75	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW116.D Vial: 23
Acq On : 20 Sep 2024 11:31 pm Operator: PMai
Sample : 24I028-15M Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:39 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	1,2-Dichloroethane	9.29	62	810273	9.59	ug/l		96
44)	Benzene	9.27	78	3646191	9.91	ug/l		99
45)	Trichloroethene	10.55	130	974317	10.16	ug/l		98
46)	Methylcyclohexane	10.64	83	1823572	10.00	ug/l		95
47)	1,2-Dichloropropane	10.91	63	865473	9.51	ug/l		98
48)	1,4-Dioxane	11.45	88	64920	152.30	ug/l		98
49)	Bromodichloromethane	11.35	83	1167606	9.88	ug/l		99
50)	Dibromomethane	11.41	93	439979	10.20	ug/l		98
51)	2-Chloroethyl vinyl ether	12.10	63	2964	0.10	ug/l	#	1
52)	4-Methyl-2-pentanone	12.08	43	2787984	45.89	ug/l		93
53)	cis-1,3-Dichloropropene	12.40	75	1410715	9.76	ug/l		98
56)	Toluene	12.94	91	4099168	10.41	ug/l		100
57)	Ethyl methacrylate	13.38	69	833558	9.63	ug/l		94
58)	trans-1,3-Dichloropropene	13.32	75	1102376	9.96	ug/l		93
59)	1,1,2-Trichloroethane	13.59	97	581993	10.29	ug/l		99
60)	2-Hexanone	13.65	43	1977968	47.92	ug/l		96
61)	1,3-Dichloropropane	14.03	76	1088064	10.42	ug/l		98
62)	Tetrachloroethene	14.07	164	827598	10.22	ug/l		99
63)	Dibromochloromethane	14.43	129	699264	10.04	ug/l		99
65)	1,2-Dibromoethane	14.76	107	549478	10.23	ug/l		100
66)	1-Chlorohexane	15.12	91	1586723	9.46	ug/l		93
67)	Chlorobenzene	15.50	112	2499889	10.37	ug/l		100
68)	1,1,1,2-Tetrachloroethane	15.59	131	794754	10.43	ug/l		98
69)	Ethylbenzene	15.61	91	4841461	9.98	ug/l		99
70)	m-Xylene & p-Xylene	15.74	91	7133662	19.24	ug/l		100
71)	o-Xylene	16.47	91	3612124	9.90	ug/l		100
72)	Styrene	16.53	104	2286379	8.38	ug/l		99
73)	Isopropylbenzene	17.08	105	4514154	9.53	ug/l		98
75)	Bromoform	17.07	173	332296	8.53	ug/l		100
76)	1,1,2,2-Tetrachloroethane	17.36	83	695453	9.51	ug/l		98
78)	1,2,3-Trichloropropane	17.57	110	179476	8.91	ug/l		100
79)	trans-1,4-Dichloro-2-buten	17.68	53	175477	7.89	ug/l		98
80)	n-Propylbenzene	17.68	91	6007358	8.61	ug/l		99
81)	Bromobenzene	17.71	156	983205	9.84	ug/l		97
82)	1,3,5-Trimethylbenzene	17.90	105	3692326	8.68	ug/l		99
83)	2-Chlorotoluene	17.91	91	3659720	8.95	ug/l		93
84)	4-Chlorotoluene	17.97	91	3561594	9.51	ug/l		96
85)	tert-Butylbenzene	18.35	134	815223	9.06	ug/l		99
86)	1,2,4-Trimethylbenzene	18.39	105	3714020	8.42	ug/l		99
87)	sec-Butylbenzene	18.60	105	5120781	8.53	ug/l		99
88)	p-Isopropyltoluene	18.77	119	4227946	8.28	ug/l		99
89)	1,3-Dichlorobenzene	18.86	146	2083061	9.33	ug/l		97
90)	1,2,3-Trimethylbenzene	18.95	105	3461796	8.67	ug/l		100
91)	1,4-Dichlorobenzene	18.99	146	2058630	9.30	ug/l		100
92)	n-Butylbenzene	19.21	91	4521516	8.22	ug/l		100
93)	1,2-Dichlorobenzene	19.37	146	1754093	9.49	ug/l		98
94)	1,2-Dibromo-3-chloropropan	20.14	157	107441	8.31	ug/l		95
95)	1,2,4-Trichlorobenzene	20.97	180	1287268	8.86	ug/l		98
96)	Hexachlorobutadiene	21.10	225	652487	8.31	ug/l		100
97)	Naphthalene	21.24	128	1855291	9.48	ug/l		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW116.D Vial: 23
Acq On : 20 Sep 2024 11:31 pm Operator: PMai
Sample : 24I028-15M Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:39 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

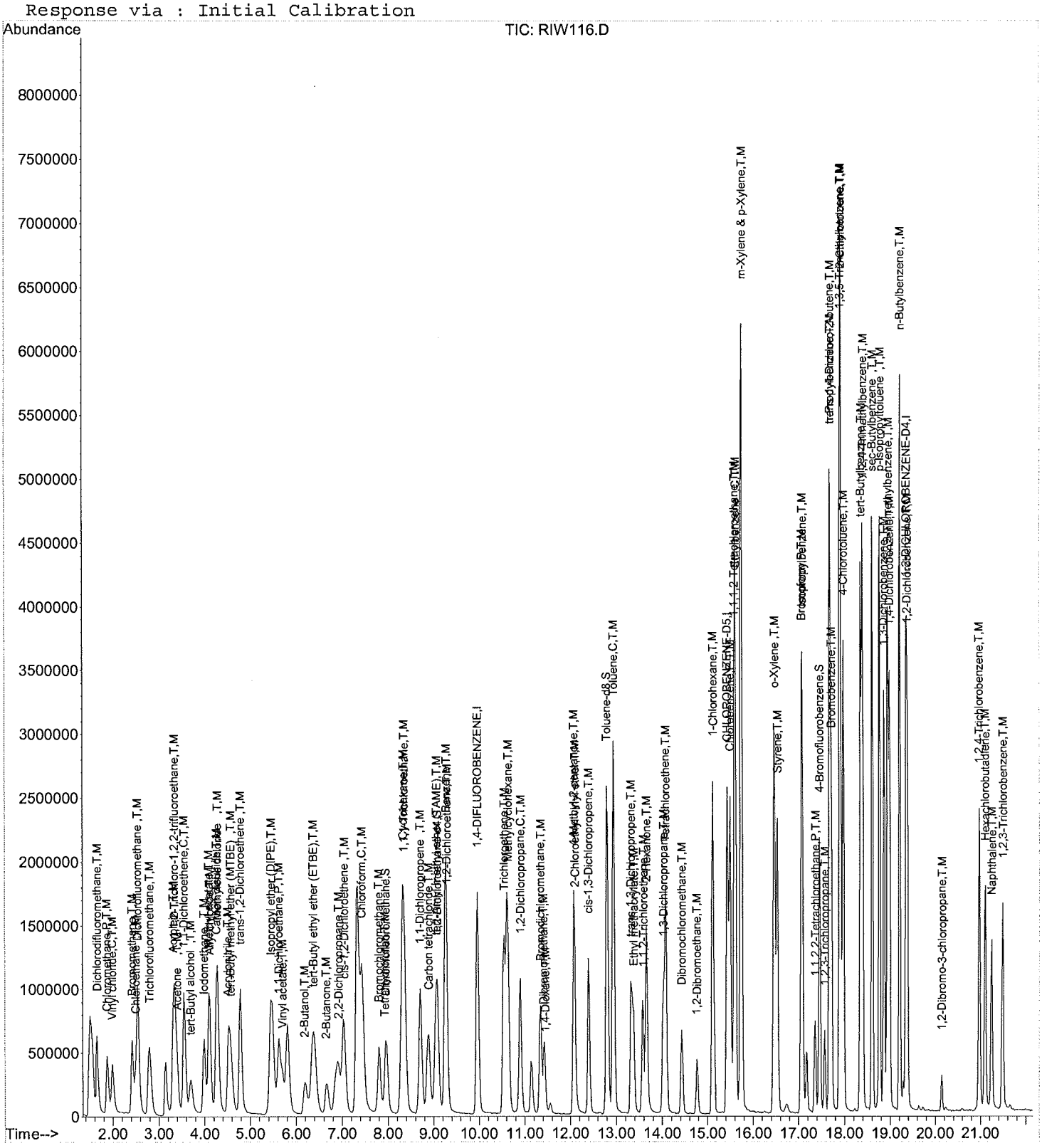
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	964211	8.80	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW116.D Vial: 23
Acq On : 20 Sep 2024 11:31 pm Operator: PMai
Sample : 24I028-15M Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:39 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW117.D Vial: 24
Acq On : 20 Sep 2024 11:57 pm Operator: PMai
Sample : 24I028-15S Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3243786	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2557185	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1240185	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	862004	9.40	ug/l	-0.02
Spiked Amount 10.000			Recovery = 94.00%			
42) 1,2-Dichloroethane-d4	9.08	65	683908	9.54	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.40%			
55) Toluene-d8	12.79	98	3474312	10.50	ug/l	0.02
Spiked Amount 10.000			Recovery = 105.00%			
77) 4-Bromofluorobenzene	17.45	95	1264085	9.13	ug/l	0.00
Spiked Amount 10.000			Recovery = 91.30%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.64	85	1522391	11.11	ug/l	97
3) Chloromethane	1.87	50	1261139	10.04	ug/l	99
4) Vinyl chloride	1.99	62	1068280	10.86	ug/l	99
5) Bromomethane	2.43	94	987275	12.16	ug/l	100
6) Chloroethane	2.50	64	743753	11.69	ug/l	93
7) Dichlorofluoromethane	2.54	67	2567202	11.30	ug/l	98
8) Trichlorofluoromethane	2.78	101	1490216	11.52	ug/l	100
9) Acrolein	3.30	56	182628	40.08	ug/l	95
10) 1,1,2-Trichloro-1,2,2-trif	3.34	151	1187368	11.37	ug/l	99
11) Acetone	3.38	43	495324	37.81	ug/l	98
12) 1,1-Dichloroethene	3.55	61	1500192	8.74	ug/l	97
13) tert-Butyl alcohol	3.70	59	819470	202.20	ug/l	96
15) Methyl acetate	4.07	74	53335	7.62	ug/l	80
16) Iodomethane	3.97	142	1562795	9.72	ug/l	99
17) Allyl chloride	4.10	76	489032	8.90	ug/l	96
18) Methylene chloride	4.26	49	1094678	8.10	ug/l	94
19) Carbon disulfide	4.24	76	1543210	7.64	ug/l	99
20) Acrylonitrile	4.51	53	716852	44.04	ug/l	99
21) tert-Butyl methyl ether (M	4.56	73	1535091	9.33	ug/l	98
22) trans-1,2-Dichloroethene	4.77	96	933117	9.10	ug/l	100
23) Isopropyl ether (DIPE)	5.46	45	2992473	8.83	ug/l	96
24) Vinyl acetate	5.69	43	935009	7.64	ug/l	100
25) 1,1-Dichloroethane	5.63	63	1545598	9.02	ug/l	98
26) 2-Butanol	6.19	45	813178	178.76	ug/l	97
27) tert-Butyl ethyl ether (ET	6.38	59	2165938	8.81	ug/l	93
28) 2-Butanone	6.65	43	892838	40.11	ug/l	97
29) 2,2-Dichloropropane	6.90	77	927666	8.67	ug/l	96
30) cis-1,2-Dichloroethene	7.03	96	974888	9.21	ug/l	100
31) Chloroform	7.43	83	1968065	11.60	ug/l	99
32) Bromochloromethane	7.81	130	448686	9.78	ug/l	100
33) Tetrahydrofuran	7.91	42	85321	7.16	ug/l	91
36) 1,1,1-Trichloroethane	8.35	97	1299784	9.53	ug/l	98
37) Cyclohexane	8.33	84	1693066	9.68	ug/l	98
39) 1,1-Dichloropropene	8.71	110	413308	8.97	ug/l	99
40) Carbon tetrachloride	8.87	119	1096845	9.70	ug/l	99
41) tert-Amyl methyl ether (TA	9.04	73	1899715	9.45	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW117.D Vial: 24
Acq On : 20 Sep 2024 11:57 pm Operator: PMai
Sample : 24I028-15S Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	1,2-Dichloroethane	9.27	62	784103	9.19	ug/l		99
44)	Benzene	9.25	78	3534737	9.51	ug/l		99
45)	Trichloroethene	10.55	130	929778	9.60	ug/l		98
46)	Methylcyclohexane	10.61	83	1549890	8.42	ug/l		95
47)	1,2-Dichloropropane	10.91	63	826154	8.98	ug/l		99
48)	1,4-Dioxane	11.45	88	59724	138.72	ug/l		91
49)	Bromodichloromethane	11.35	83	1122287	9.41	ug/l		100
50)	Dibromomethane	11.41	93	407269	9.35	ug/l		98
51)	2-Chloroethyl vinyl ether	12.08	63	5494	0.19	ug/l	#	1
52)	4-Methyl-2-pentanone	12.08	43	2631990	42.90	ug/l		94
53)	cis-1,3-Dichloropropene	12.40	75	1306358	8.95	ug/l		97
56)	Toluene	12.94	91	3953355	10.25	ug/l		99
57)	Ethyl methacrylate	13.38	69	767550	9.05	ug/l		96
58)	trans-1,3-Dichloropropene	13.32	75	1009605	9.31	ug/l		95
59)	1,1,2-Trichloroethane	13.57	97	544895	9.83	ug/l		98
60)	2-Hexanone	13.65	43	1862134	46.04	ug/l		98
61)	1,3-Dichloropropane	14.03	76	1029137	10.06	ug/l		99
62)	Tetrachloroethene	14.07	164	794582	10.01	ug/l		99
63)	Dibromochloromethane	14.43	129	640850	9.39	ug/l		99
65)	1,2-Dibromoethane	14.76	107	518775	9.85	ug/l		100
66)	1-Chlorohexane	15.12	91	1415044	8.61	ug/l		96
67)	Chlorobenzene	15.49	112	2393889	10.13	ug/l		99
68)	1,1,1,2-Tetrachloroethane	15.59	131	776271	10.39	ug/l		98
69)	Ethylbenzene	15.61	91	4594912	9.67	ug/l		98
70)	m-Xylene & p-Xylene	15.73	91	6993073	19.25	ug/l		99
71)	o-Xylene	16.45	91	3473032	9.71	ug/l		100
72)	Styrene	16.53	104	2044956	7.65	ug/l		98
73)	Isopropylbenzene	17.08	105	4423721	9.53	ug/l		99
75)	Bromoform	17.06	173	314126	8.22	ug/l		98
76)	1,1,2,2-Tetrachloroethane	17.36	83	636192	8.87	ug/l		98
78)	1,2,3-Trichloropropane	17.57	110	171956	8.70	ug/l		99
79)	trans-1,4-Dichloro-2-buten	17.67	53	160136	7.34	ug/l		97
80)	n-Propylbenzene	17.67	91	5861423	8.57	ug/l		99
81)	Bromobenzene	17.71	156	928571	9.47	ug/l		99
82)	1,3,5-Trimethylbenzene	17.90	105	3591662	8.61	ug/l		99
83)	2-Chlorotoluene	17.91	91	3524826	8.79	ug/l		99
84)	4-Chlorotoluene	17.97	91	3458584	9.41	ug/l		99
85)	tert-Butylbenzene	18.35	134	823435	9.33	ug/l		98
86)	1,2,4-Trimethylbenzene	18.39	105	3632708	8.40	ug/l		99
87)	sec-Butylbenzene	18.60	105	5066929	8.60	ug/l		98
88)	p-Isopropyltoluene	18.76	119	4152652	8.29	ug/l		99
89)	1,3-Dichlorobenzene	18.87	146	1979597	9.04	ug/l		97
90)	1,2,3-Trimethylbenzene	18.95	105	3437171	8.78	ug/l		100
91)	1,4-Dichlorobenzene	18.99	146	1970795	9.08	ug/l		99
92)	n-Butylbenzene	19.21	91	4565093	8.46	ug/l		100
93)	1,2-Dichlorobenzene	19.37	146	1720601	9.49	ug/l		100
94)	1,2-Dibromo-3-chloropropan	20.14	157	108434	8.55	ug/l		99
95)	1,2,4-Trichlorobenzene	20.97	180	1296252	9.10	ug/l		100
96)	Hexachlorobutadiene	21.10	225	688035	8.94	ug/l		99
97)	Naphthalene	21.24	128	1891527	9.86	ug/l		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW117.D Vial: 24
Acq On : 20 Sep 2024 11:57 pm Operator: PMai
Sample : 24I028-15S Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

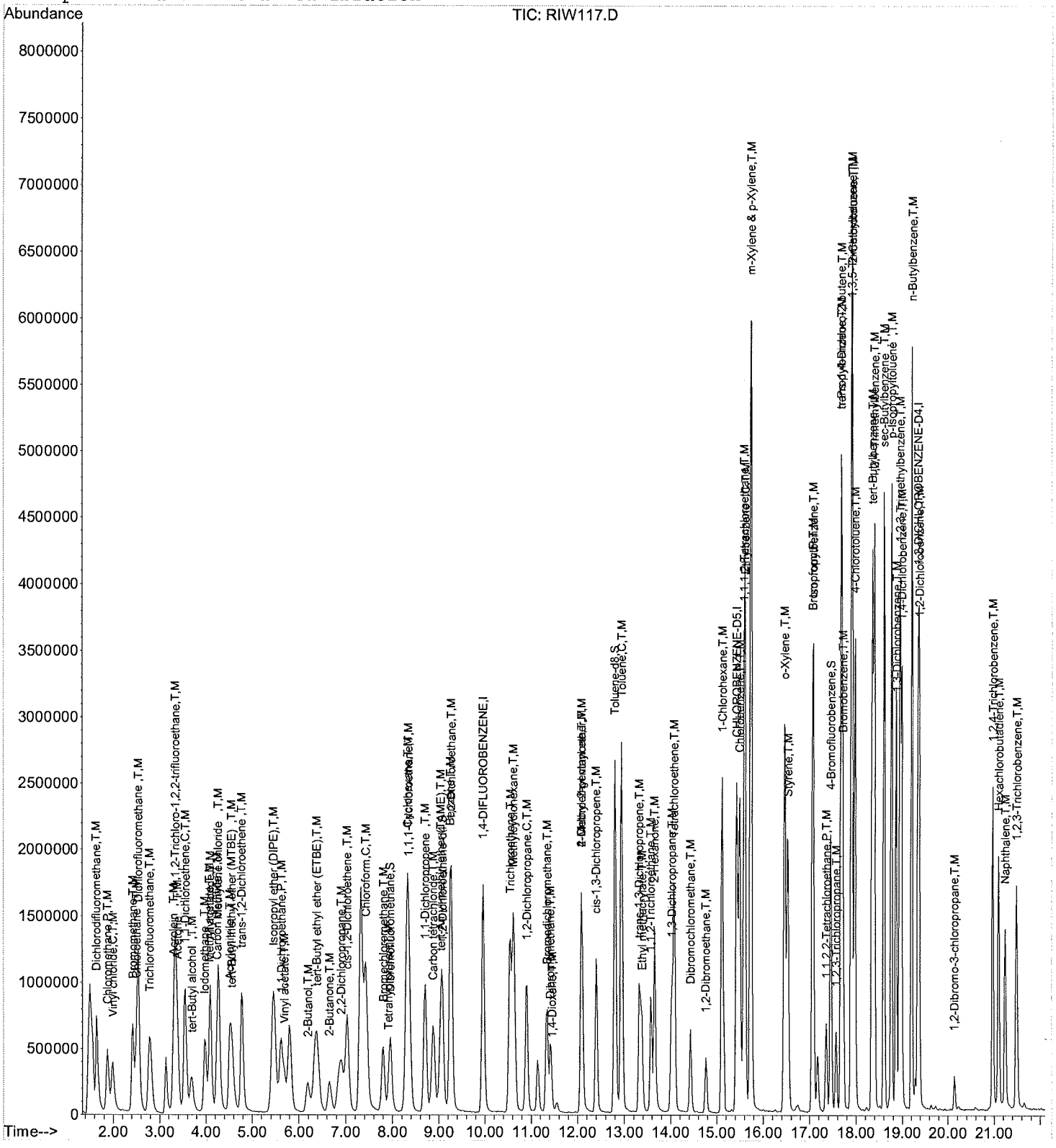
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	982040	9.13	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW117.D Vial: 24
Acq On : 20 Sep 2024 11:57 pm Operator: PMai
Sample : 24I028-15S Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 8:40 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



INITIAL CALIBRATION(S)

FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RIW074 BFB Injection Date: 09/19/24

Instrument ID: 06 BFB Injection Time: 09:28

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	16.136
75	30 - 60% of mass 95	44.663
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.924
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	71.255
175	5 - 9% of mass 174	4.438(6.23)1
176	95 - 101% % of mass 174	71.759(100.71)1
177	5 - 9% % of mass 176	3.986(5.55)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	VO06I191	RIW075	09/19/24	11:07
2	VSTD0.5	VO06I192	RIW076	09/19/24	11:33
3	VSTD1	VO06I193	RIW077	09/19/24	11:59
4	VSTD2	VO06I194	RIW078	09/19/24	12:25
5	VSTD5	VO06I195	RIW079	09/19/24	12:51
6	VSTD10	VO06I196	RIW080	09/19/24	13:18
7	VSTD20	VO06I197	RIW081	09/19/24	13:44
8	VSTD30	VO06I198	RIW082	09/19/24	14:10
9	VSTD50	VO06I199	RIW083	09/19/24	14:36
10	VSTD100	VO06I1910	RIW084	09/19/24	15:02
11	VSTD10	IVO06I1901	RIW087	09/19/24	16:20
12	VSTD10	IVO06I1902	RIW093	09/19/24	19:59

SC 10/14/24

Instrument ID :06
Beginning DateTime :09/19/24 11:07
Spike Units :PPB
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B

M	IDX	Parameters	.3 11:07 RIW075	.5 11:33 RIW076	1 11:59 RIW077	2 12:25 RIW078	5 12:51 RIW079	10 13:18 RIW080	20 13:44 RIW081	30 14:10 RIW082	50 14:36 RIW083	100 15:02 RIW084	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	9.9664
	2	Dichlorodifluoromethane	------	0.407	0.465	0.489	0.405	0.358	0.432	0.483	0.321	0.444	0.422	13.33	1.6611
	3	Chloromethane	------	0.343	0.422	0.430	0.370	0.346	0.397	0.469	0.306	0.402	0.387	13.07	1.8826
	4	Vinyl chloride	------	0.297	0.362	0.351	0.308	0.242	0.266	0.297	------	------	0.303	14.03	1.9928
	5	Bromomethane	------	0.174	0.263	0.284	0.225	0.212	0.251	0.264	------	------	0.239	15.81	2.4327
	6	Chloroethane	0.285	0.157	0.180	0.258	0.171	0.173	0.198	0.204	------	------	0.203	22.40	2.5109
	7	Dichlorofluoromethane	------	0.646	0.696	1.049	0.692	0.664	0.672	0.660	------	------	0.725	19.79	2.5568
	8	Trichlorofluoromethane	0.421	0.306	0.381	0.455	0.387	0.355	0.442	0.452	0.339	0.450	0.399	13.35	2.8035
5	9	Acrolein	------	------	0.017	0.016	0.012	0.012	0.015	0.014	0.013	0.013	0.014	13.03	3.3178
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.303	0.273	0.288	0.469	0.299	0.289	0.304	0.296	0.222	------	0.305	21.85	3.3599
5	11	Acetone	------	------	0.044	0.040	0.040	0.039	0.043	0.041	0.040	0.036	0.040	5.70	3.4121
	12	1,1-Dichloroethene	0.504	0.424	0.481	0.681	0.548	0.535	0.569	0.529	0.463	0.555	0.529	13.18	3.5593
25	13	tert-Butyl alcohol	0.013	0.010	0.011	0.012	0.012	0.014	0.015	0.014	0.013	0.011	0.012	12.15	3.7081
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	------	0.018	0.022	0.021	0.024	0.023	0.022	------	------	0.022	9.28	4.0924
	16	Iodomethane	0.485	0.408	0.483	0.580	0.513	0.494	0.529	0.503	0.443	0.518	0.496	9.49	3.9973
	17	Allyl chloride	0.189	0.146	0.149	0.171	0.167	0.175	0.188	0.167	0.170	0.170	0.169	8.27	4.1126
	18	Methylene chloride	------	------	0.569	0.524	0.433	0.403	0.420	0.387	------	------	0.456	16.08	4.2915
	19	Carbon disulfide	0.434	0.392	0.401	0.685	0.578	0.637	0.672	0.604	------	------	0.550	22.27	4.2609
5	20	Acrylonitrile	0.052	0.037	0.044	0.050	0.051	0.051	0.057	0.055	0.054	0.051	0.050	11.25	4.5318
	21	tert-Butyl methyl ether (MTBE)	0.526	0.412	0.470	0.523	0.526	0.550	0.576	0.529	0.500	0.458	0.507	9.55	4.5779
	22	trans-1,2-Dichloroethene	0.366	0.263	0.304	0.333	0.327	0.320	0.343	0.308	0.297	0.300	0.316	9.01	4.7958
	23	Isopropyl ether (DIPE)	1.045	0.834	0.958	1.105	1.135	1.115	1.181	1.072	1.029	0.976	1.045	9.74	5.4728
	24	Vinyl acetate	------	------	0.301	0.335	0.373	0.361	0.438	0.414	0.407	0.392	0.377	11.84	5.7071
	25	1,1-Dichloroethane	0.535	0.417	0.512	0.568	0.565	0.544	0.587	0.524	0.518	0.514	0.528	8.85	5.6321
25	26	2-Butanol	0.009	0.006	0.007	0.009	0.011	0.015	0.015	0.015	------	------	0.011	34.89	6.2179
	27	tert-Butyl ethyl ether (ETBE)	0.724	0.599	0.744	0.803	0.839	0.814	0.856	0.764	0.751	0.683	0.758	10.20	6.3866
5	28	2-Butanone	------	------	0.059	0.063	0.067	0.069	0.077	0.074	0.073	0.067	0.069	8.30	6.6712
	29	2,2-Dichloropropane	0.362	0.290	0.318	0.363	0.343	0.346	0.381	0.321	0.302	0.271	0.330	10.70	6.9211
	30	cis-1,2-Dichloroethene	0.344	0.297	0.313	0.342	0.339	0.329	0.352	0.317	0.317	0.314	0.326	5.38	7.0405
	31	Chloroform	0.591	0.445	0.529	0.550	0.547	0.525	0.561	0.498	0.498	0.485	0.523	8.09	7.4387
	32	Bromochloromethane	0.136	0.114	0.129	0.137	0.149	0.149	0.157	0.148	0.150	0.147	0.141	8.96	7.8160
	33	Tetrahydrofuran	------	------	0.032	0.041	0.037	0.035	0.038	0.035	0.039	0.037	0.037	7.29	7.9287
5	34	tert-Amyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	35	Dibromofluoromethane	0.143	0.182	0.161	0.232	0.259	0.287	0.311	0.275	------	------	0.231	27.01	7.9680
	36	1,1,1-Trichloroethane	0.436	0.364	0.395	0.442	0.446	0.437	0.469	0.426	0.400	0.391	0.421	7.56	8.3546
	37	Cyclohexane	------	------	0.435	0.556	0.517	0.572	0.602	0.552	------	------	0.539	10.75	8.3366
	38	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	39	1,1-Dichloropropene	0.137	0.128	0.136	0.153	0.147	0.144	0.155	0.141	0.140	0.140	0.142	5.75	8.7130
	40	Carbon tetrachloride	0.321	0.289	0.315	0.368	0.370	0.367	0.395	0.366	0.338	0.357	0.349	9.23	8.8912
	41	tert-Amyl methyl ether (TAME)	0.601	0.532	0.602	0.647	0.659	0.669	0.704	0.638	0.603	0.544	0.620	8.76	9.0672
	42	1,2-Dichloroethane-d4	------	------	------	0.183	0.214	0.236	0.247	0.226	------	------	0.221	11.06	9.0842
	43	1,2-Dichloroethane	0.221	0.205	0.259	0.277	0.287	0.281	0.300	0.272	0.269	0.262	0.263	11.07	9.2873
	44	Benzene	1.107	0.949	1.163	1.265	1.275	1.220	1.273	1.150	1.095	0.965	1.146	10.43	9.2705
	45	Trichloroethene	0.267	0.254	0.286	0.304	0.324	0.318	0.340	0.304	0.296	0.291	0.298	8.68	10.5511
	46	Methylcyclohexane	------	------	0.438	0.550	0.549	0.629	0.656	0.585	------	------	0.568	13.50	10.6211
	47	1,2-Dichloropropane	0.292	0.229	0.270	0.294	0.302	0.292	0.320	0.287	0.277	0.272	0.284	8.52	10.9074
20	48	1,4-Dioxane	------	------	0.001	0.001	0.001	0.002	0.002	0.001	0.001	------	0.001	11.21	11.4583
	49	Bromodichloromethane	0.407	0.320	0.333	0.378	0.386	0.375	0.401	0.370	0.358	0.349	0.368	7.61	11.3476
	50	Dibromomethane	0.126	0.106	0.128	0.135	0.143	0.139	0.152	0.143	0.138	0.134	0.134	9.25	11.4167
	51	2-Chloroethyl vinyl ether	------	0.078	0.082	0.077	0.087	0.090	0.100	0.096	0.098	0.095	0.089	9.82	12.0415
5	52	4-Methyl-2-pentanone	0.177	0.149	0.184	0.208	0.202	0.205	0.215	0.203	0.193	0.157	0.189	11.78	12.0874
	53	cis-1,3-Dichloropropene	0.457	0.352	0.435	0.471	0.484	0.475	0.499	0.462	0.445	0.421	0.450	9.21	12.3976
	54	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.4323
	55	Toluene-d8	------	------	------	1.190	1.327	1.342	1.395	1.218	------	------	1.294	6.71	12.8023
	56	Toluene	1.381	1.344	1.595	1.769	1.757	1.605	1.671	1.462	1.381	1.119	1.509	13.73	12.9404
	57	Ethyl methacrylate	0.361	0.297	0.317	0.338	0.345	0.334	0.355	0.318	0.334	0.317	0.332	5.91	13.3805
	58	trans-1,3-Dichloropropene	0.391	0.346	0.378	0.440	0.469	0.435	0.477	0.427	0.434	0.440	0.424	9.58	13.3261
	59	1,1,2-Trichloroethane	0.213	0.164	0.197	0.229	0.238	0.224	0.240	0.215	0.224	0.222	0.217	10.21	13.5797
5	60	2-Hexanone	------	0.136	0.147	0.173	0.169	0.163	0.169	0.160	0.163	0.144	0.158	8.03	13.6576
	61	1,3-Dichloropropane	0.346	0.350	0.383	0.421	0.459	0.413	0.443	0.392	0.402	0.394	0.400	9.06	14 0303
	62	Tetrachloroethene	0.276	0.281	0.308	0.347	0.340	0.320	0.342	0.300	0.296	0.293	0.310	8.33	14.0827
	63	Dibromochloromethane	0.268	0.234	0.234	0.269	0.280	0.271	0.292	0.268	0.278	0.275	0.267	7.03	14.4285
	64	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	65	1,2-Dibromoethane	0.176	0.170	0.186	0.219	0.222	0.214	0.229	0.212	0.218	0.213	0.206	10.05	14.7659
	66	1-Chlorohexane	------	0.641	0.620	0.760	0.633	0.592	0.610	------	------	------	0.643	9.33	15.1201
	67	Chlorobenzene	0.849	0.820	0.923	1.040	1.038	0.964	1.006	0.922	0.874	0.801	0.924	9.47	15.4972
	68	1,1,1,2-Tetrachloroethane	0.257	0.241	0.271	0.321	0.327	0.322	0.334	0.301	0.281	0.266	0.292	11.30	15.5893
	69	Ethylbenzene	1.650	1.724	1.902	2.066	2.033	1.874	1.925	1.699	------	------	1.859	8.30	15.6082
2	70	m-Xylene & p-Xylene	1.341	1.292	1.463	1.590	1.567	1.409	1.452	1.251	------	------	1.421	8.61	15.7412
	71	o-Xylene	1.413	1.286	1.373	1.581	1.515	1.453	1.500	1.315	1.154	------	1.399	9.46	16.4663
	72	Styrene	0.984	1.005	1.075	1.175	1.158	1.095	1.136	1.026	0.952	0.847	1.045	9.82	16.5326
	73	Isopropylbenzene	1.881	1.582	1.794	2.049	1.926	1.838	1.865	1.584	------	------	1.815	8.91	17.0776
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.3480
	75	Bromoform	0.254	0.192	0.263	0.307	0.299	0.297	0.339	0.316	0.353	0.285	0.290	15.86	17.0684
	76	1,1,2,2-Tetrachloroethane	------	0.441	0.544	0.582	0.643	0.604	0.643	0.598	0.624	0.527	0.578	11.29	17.3601
	77	4-Bromofluorobenzene	------	------	------	1.005	1.120	1.130	1.233	1.094	------	------	1.116	7.32	17.4541
	78	1,2,3-Trichloropropane	0.157	0.132	0.144	0.156	0.164	0.160	0.185	0.160	0.183	0.154	0.159	9.99	17.5731
	79	trans-1,4-Dichloro-2-butene	------	0.163	0.191	0.180	0.175	0.167	0.178	0.176	0.193	0.160	0.176	6.51	17.6830
	80	n-Propylbenzene	4.844	5.107	5.823	6.285	6.097	5.416	5.776	4.788	------	------	5.517	10.27	17.6761
	81	Bromobenzene	0.689	0.605	0.743	0.887	0.902	0.827	0.915	0.816	0.838	0.681	0.790	13.37	17.7223
	82	1,3,5-Trimethylbenzene	3.012	2.925	3.549	3.847	3.670	3.417	3.559	2.944	------	------	3.365	10.62	17.8950
	83	2-Chlorotoluene	2.806	2.762	3.264	3.620	3.604	3.215	3.719	3.205	2.902	------	3.233	11.15	17.9080
	84	4-Chlorotoluene	2.324	2.689	3.095	3.530	3.458	3.137	3.139	2.711	2.582	------	2.963	13.81	17.9728
	85	tert-Butylbenzene	0.651	0.708	0.718	0.824	0.798	0.753	0.810	0.650	0.620	0.584	0.711	11.84	18.3503
	86	1,2,4-Trimethylbenzene	3.338	3.123	3.575	3.960	3.789	3.472	3.637	3.019	------	------	3.489	9.18	18.3880
	87	sec-Butylbenzene	4.627	4.566	4.864	5.399	5.107	4.702	4.857	3.885	------	------	4.751	9.32	18.6005
	88	p-Isopropyltoluene	4.040	3.859	4.153	4.530	4.264	4.045	4.116	3.293	------	------	4.038	8.88	18.7643
	89	1,3-Dichlorobenzene	1.448	1.517	1.841	1.997	1.962	1.838	1.943	1.696	1.656	------	1.767	11.22	18.8666
	90	1,2,3-Trimethylbenzene	3.034	2.834	3.239	3.600	3.383	3.200	3.276	2.696	------	------	3.158	9.29	18.9459
	91	1,4-Dichlorobenzene	1.550	1.444	1.777	2.069	1.922	1.793	1.888	1.670	1.636	------	1.750	11.18	18.9848
	92	n-Butylbenzene	4.540	4.326	4.418	4.956	4.527	4.231	4.271	3.536	------	------	4.351	9.21	19.2054
	93	1,2-Dichlorobenzene	1.364	1.245	1.472	1.700	1.615	1.551	1.619	1.440	1.365	1.252	1.462	10.78	19.3740
	94	1,2-Dibromo-3-chloropropane	------	------	0.096	0.102	0.098	0.102	0.107	0.101	0.105	0.107	0.102	3.78	20.1412
	95	1,2,4-Trichlorobenzene	1.423	1.073	1.099	1.268	1.198	1.192	1.165	1.062	0.998	1.013	1.149	11.27	20.9699
	96	Hexachlorobutadiene	0.721	0.589	0.605	0.710	0.621	0.677	0.652	0.566	0.513	0.554	0.621	11.09	21.0996
	97	Naphthalene	------	1.343	1.452	1.731	1.639	1.649	1.625	1.502	1.464	1.523	1.548	7.87	21.2424
	98	1,2,3-Trichlorobenzene	1.147	0.750	0.832	0.983	0.876	0.901	0.855	0.785	0.743	0.799	0.867	14.10	21.4888

Spike Amount = Nominal Amount * M
Ave_%RSD : 11 Max_%RSD : 34.9

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
5	Bromomethane	-0.00236	0.25228	0.9963
6	Chloroethane	0.00085	0.19539	0.9954

SC 10/14/24

7	Dichlorofluoromethane	0.01051	0.66716	0.9949*
10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00499	0.26465	0.9850*
18	Methylene chloride	0.02079	0.39077	0.9991
19	Carbon disulfide	-0.00935	0.63461	0.9977
26	2-Butanol	-0.01079	0.01463	0.9959
35	Dibromofluoromethane	-0.00646	0.28948	0.9975
75	Bromoform	-0.00294	0.31161	0.9955

Use Quadratic Regression of inv conc w.f. for comps of linear reg of inv conc w.f. with CCF < .995
Resp_Ratio = xo + x1 * Amt_Ratio + x2 * Amt_Ratio * Amt_Ratio

IDX	Parameter	x0	x1	x2	CCF2
7	Dichlorofluoromethane	0.00466	0.72295	-0.02386	0.9954
10	1,1,2-Trichloro-1,2,2-trifluoroethane	-0.00177	0.35171	-0.02477	0.9955

SM
10/14/24

PROGRAM: ICALMAX

Input: R:\cal\8260\2024\vo06i19b\riw080.ICL Output: R:\cal\8260\2024\vo06i19b\riw080.MAX

IDX	Parameter	x0	x1	x2	CCF2	MaxMinAmtRatio	MaxMinRespRatio	MaxMinRRF	MaxMinConc
7	Dichlorofluoromethane	0.00466	0.72295	-0.02386	0.9954	15.14983	5.48095	0.36178	151.5
10	1,1,2-Trichloro-1,2,2-trifluoroethane	-0.00177	0.35171	-0.02477	0.9955	7.09952	1.24672	0.17561	71.0

SG
10/14/24

Instrument ID :06
Beginning DateTime :09/19/24 11:07
Spike Units :PPB
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B

M	IDX	Parameters	.3 11:07 RIW075	.5 11:33 RIW076	1 11:59 RIW077	2 12:25 RIW078	5 12:51 RIW079	10 13:18 RIW080	20 13:44 RIW081	30 14:10 RIW082	50 14:36 RIW083	100 15:02 RIW084	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	9.9664
	2	Dichlorodifluoromethane	------	96	110	116	96	85	102	114	76	105	10.5	13.33	1.6611
	3	Chloromethane	------	89	109	111	96	89	103	121	79	104	10.6	13.07	1.8826
	4	Vinyl chloride	------	98	119	116	102	80	88	98	------	------	10.5	14.03	1.9928
	5	Bromomethane	------	88	114	118	91	85	100	105	------	------	12.7	15.81	2.4327
	6	Chloroethane	130	72	88	130	86	88	101	104	------	------	16.9	22.40	2.5109
	7	Dichlorofluoromethane	------	76	90	143	96	94	99	101	------	------	12.7	19.79	2.5568
	8	Trichlorofluoromethane	106	77	95	114	97	89	111	113	85	113	11.3	13.35	2.8035
5	9	Acrolein	------	------	121	114	86	86	107	100	93	93	10.7	13.03	3.3178
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	99	90	94	154	98	95	100	97	73	------	12	21.85	3.3599
5	11	Acetone	------	------	110	100	100	98	108	102	100	90	4.1	5.70	3.4121
	12	1,1-Dichloroethene	95	80	91	129	104	101	108	100	88	105	9.2	13.18	3.5593
25	13	tert-Butyl alcohol	108	83	92	100	100	117	125	117	108	92	10.8	12.15	3.7081
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	------	82	100	95	109	105	100	------	------	6.1	9.28	4.0924
	16	Iodomethane	98	82	97	117	103	100	107	101	89	104	6.7	9.49	3.9973
	17	Allyl chloride	112	86	88	101	99	104	111	99	101	101	5.7	8.27	4.1126
	18	Methylene chloride	------	------	93	108	100	98	105	97	------	------	13.2	16.08	4.2915
	19	Carbon disulfide	117	92	76	116	94	102	107	96	------	------	19.3	22.27	4.2609
5	20	Acrylonitrile	104	74	88	100	102	102	114	110	108	102	8	11.25	4.5318
	21	tert-Butyl methyl ether (MTBE)	104	81	93	103	104	108	114	104	99	90	7.4	9.55	4.5779
	22	trans-1,2-Dichloroethene	116	83	96	105	103	101	109	97	94	95	6.9	9.01	4.7958
	23	Isopropyl ether (DIPE)	100	80	92	106	109	107	113	103	98	93	7.3	9.74	5.4728
	24	Vinyl acetate	------	------	80	89	99	96	116	110	108	104	9.3	11.84	5.7071
	25	1,1-Dichloroethane	101	79	97	108	107	103	111	99	98	97	5.9	8.85	5.6321
25	26	2-Butanol	158	97	76	79	81	104	105	100	------	------	28.4	34.89	6.2179
	27	tert-Butyl ethyl ether (ETBE)	96	79	98	106	111	107	113	101	99	90	7.6	10.20	6.3866
5	28	2-Butanone	------	------	86	91	97	100	112	107	106	97	6.7	8.30	6.6712
	29	2,2-Dichloropropane	110	88	96	110	104	105	115	97	92	82	8.9	10.70	6.9211
	30	cis-1,2-Dichloroethene	106	91	96	105	104	101	108	97	97	96	4.5	5.38	7.0405
	31	Chloroform	113	85	101	105	105	100	107	95	95	93	6.3	8.09	7.4387
	32	Bromochloromethane	96	81	91	97	106	106	111	105	106	104	7.2	8.96	7.8160
	33	Tetrahydrofuran	------	------	86	111	100	95	103	95	105	100	5.4	7.29	7.9287
5	34	tert-Amyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	35	Dibromofluoromethane	123	108	78	92	94	101	109	96	------	------	22.5	27.01	7.9680
	36	1,1,1-Trichloroethane	104	86	94	105	106	104	111	101	95	93	6.3	7.56	8.3546
	37	Cyclohexane	------	------	81	103	96	106	112	102	------	------	7.8	10.75	8.3366
	38	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	39	1,1-Dichloropropene	96	90	96	108	104	101	109	99	99	99	4.3	5.75	8.7130
	40	Carbon tetrachloride	92	83	90	105	106	105	113	105	97	102	7.5	9.23	8.8912
	41	tert-Amyl methyl ether (TAME)	97	86	97	104	106	108	114	103	97	88	7	8.76	9.0672
	42	1,2-Dichloroethane-d4	------	------	------	83	97	107	112	102	------	------	8.2	11.06	9.0842
	43	1,2-Dichloroethane	84	78	98	105	109	107	114	103	102	100	8.1	11.07	9.2873
	44	Benzene	97	83	101	110	111	106	111	100	96	84	8.2	10.43	9.2705
	45	Trichloroethene	90	85	96	102	109	107	114	102	99	98	6.6	8.68	10.5511
	46	Methylcyclohexane	------	------	77	97	97	111	115	103	------	------	9.8	13.50	10.6211
	47	1,2-Dichloropropane	103	81	95	104	106	103	113	101	98	96	6	8.52	10.9074
20	48	1,4-Dioxane	------	------	83	92	101	114	113	95	101	------	28.6	11.21	11.4583
	49	Bromodichloromethane	111	87	90	103	105	102	109	101	97	95	6	7.61	11.3476
	50	Dibromomethane	94	79	96	101	107	104	113	107	103	100	6.6	9.25	11.4167
	51	2-Chloroethyl vinyl ether	------	88	92	87	98	101	112	108	110	107	8.2	9.82	12.0415
5	52	4-Methyl-2-pentanone	94	79	97	110	107	108	114	107	102	83	9.6	11.78	12.0874
	53	cis-1,3-Dichloropropene	102	78	97	105	108	106	111	103	99	94	6.6	9.21	12.3976
	54	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.4323
	55	Toluene-d8	------	------	------	92	103	104	108	94	------	------	5.6	6.71	12.8023
	56	Toluene	92	89	106	117	116	106	111	97	92	74	11.3	13.73	12.9404
	57	Ethyl methacrylate	109	89	95	102	104	101	107	96	101	95	4.6	5.91	13.3805
	58	trans-1,3-Dichloropropene	92	82	89	104	111	103	112	101	102	104	7.3	9.58	13.3261
	59	1,1,2-Trichloroethane	98	76	91	106	110	103	111	99	103	102	7.1	10.21	13.5797
5	60	2-Hexanone	------	86	93	109	107	103	107	101	103	91	6.8	8.03	13.6576
	61	1,3-Dichloropropane	86	88	96	105	115	103	111	98	100	98	6.8	9.06	14.0303
	62	Tetrachloroethene	89	91	99	112	110	103	110	97	95	95	6.9	8.33	14.0827
	63	Dibromochloromethane	100	88	88	101	105	101	109	100	104	103	4.9	7.03	14.4285
	64	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	65	1,2-Dibromoethane	85	83	90	106	108	104	111	103	106	103	8.3	10.05	14.7659
	66	1-Chlorohexane	------	100	96	118	98	92	95	------	------	------	6.1	9.33	15.1201
	67	Chlorobenzene	92	89	100	113	112	104	109	100	95	87	7.7	9.47	15.4972
	68	1,1,1,2-Tetrachloroethane	88	83	93	110	112	110	114	103	96	91	9.9	11.30	15.5893
	69	Ethylbenzene	89	93	102	111	109	101	104	91	------	------	6.8	8.30	15.6082
2	70	m-Xylene & p-Xylene	94	91	103	112	110	99	102	88	------	------	6.9	8.61	15.7412
	71	o-Xylene	101	92	98	113	108	104	107	94	82	------	7.4	9.46	16.4663
	72	Styrene	94	96	103	112	111	105	109	98	91	81	7.9	9.82	16.5326
	73	Isopropylbenzene	104	87	99	113	106	101	103	87	------	------	6.7	8.91	17.0776
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.3480
	75	Bromoform	113	80	94	103	98	96	109	102	113	92	11.6	15.86	17.0684
	76	1,1,2,2-Tetrachloroethane	------	76	94	101	111	104	111	103	108	91	8.6	11.29	17.3601
	77	4-Bromofluorobenzene	------	------	------	90	100	101	110	98	------	------	4.8	7.32	17.4541
	78	1,2,3-Trichloropropane	99	83	91	98	103	101	116	101	115	97	6.9	9.99	17.5731
	79	trans-1,4-Dichloro-2-butene	------	93	109	102	99	95	101	100	110	91	4.9	6.51	17.6830
	80	n-Propylbenzene	88	93	106	114	111	98	105	87	------	------	8.7	10.27	17.6761
	81	Bromobenzene	87	77	94	112	114	105	116	103	106	86	11.2	13.37	17.7223
	82	1,3,5-Trimethylbenzene	90	87	105	114	109	102	106	87	------	------	9	10.62	17.8950
	83	2-Chlorotoluene	87	85	101	112	111	99	115	99	90	------	8.8	11.15	17.9080
	84	4-Chlorotoluene	78	91	104	119	117	106	106	91	87	------	11.6	13.81	17.9728
	85	tert-Butylbenzene	92	100	101	116	112	106	114	91	87	82	9.7	11.84	18.3503
	86	1,2,4-Trimethylbenzene	96	90	102	113	109	100	104	87	------	------	7.2	9.18	18.3880
	87	sec-Butylbenzene	97	96	102	114	107	99	102	82	------	------	6.4	9.32	18.6005
	88	p-Isopropyltoluene	100	96	103	112	106	100	102	82	------	------	5.7	8.88	18.7643
	89	1,3-Dichlorobenzene	82	86	104	113	111	104	110	96	94	------	9.4	11.22	18.8666
	90	1,2,3-Trimethylbenzene	96	90	103	114	107	101	104	85	------	------	7.2	9.29	18.9459
	91	1,4-Dichlorobenzene	89	83	102	118	110	102	108	95	93	------	8.9	11.18	18.9848
	92	n-Butylbenzene	104	99	102	114	104	97	98	81	------	------	6	9.21	19.2054
	93	1,2-Dichlorobenzene	93	85	101	116	110	106	111	98	93	86	8.8	10.78	19.3740
	94	1,2-Dibromo-3-chloropropane	------	------	94	100	96	100	105	99	103	105	2.9	3.78	20.1412
	95	1,2,4-Trichlorobenzene	124	93	96	110	104	104	101	92	87	88	8.7	11.27	20.9699
	96	Hexachlorobutadiene	116	95	97	114	100	109	105	91	83	89	8.9	11.09	21.0996
	97	Naphthalene	------	87	94	112	106	107	105	97	95	98	6.5	7.87	21.2424
	98	1,2,3-Trichlorobenzene	132	87	96	113	101	104	99	91	86	92	10.1	14.10	21.4888

For 8260 C
SW 10/14/24

Compound List Report 06

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
Total Cpnds : 98

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-DIFLUOROBENZENE	114	9.96	1.000	A	1	A	B
2	T	Dichlorodifluoromethane	85	1.68	0.168	A	1	A	B
3	T	Chloromethane	50	1.89	0.190	A	1	A	B
4	T	Vinyl chloride	62	2.01	0.202	A	1	A	B
5	T	Bromomethane	94	2.45	0.245	L	1	A	B
6	T	Chloroethane	64	2.52	0.253	L	1	A	B
7	T	Dichlorofluoromethane	67	2.56	0.257	Q	1	A	B
8	T	Trichlorofluoromethane	101	2.82	0.283	A	1	A	B
9	T	Acrolein	56	3.32	0.333	A	1	A	B
10	T	1,1,2-Trichloro-1,2,2-trifluor	151	3.36	0.337	Q	1	A	B
11	T	Acetone	43	3.43	0.344	A	1	A	B
12	T	1,1-Dichloroethene	61	3.57	0.358	A	2	A	B
13	T	tert-Butyl alcohol	59	3.72	0.373	A	1	A	B
14	T	Acetonitrile	41	0.00	0.000	A	2	A	B
15	T	Methyl acetate	74	4.10	0.411	A	1	A	B
16	T	Iodomethane	142	4.01	0.403	A	1	A	B
17	T	Allyl chloride	76	4.12	0.413	A	1	A	B
18	T	Methylene chloride	49	4.31	0.432	L	2	A	B
19	T	Carbon disulfide	76	4.26	0.428	L	1	A	B
20	T	Acrylonitrile	53	4.54	0.455	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	4.58	0.459	A	1	A	B
22	T	trans-1,2-Dichloroethene	96	4.81	0.483	A	1	A	B
23	T	Isopropyl ether (DIPE)	45	5.48	0.550	A	1	A	B
24	T	Vinyl acetate	43	5.71	0.573	A	1	A	B
25	T	1,1-Dichloroethane	63	5.65	0.567	A	2	A	B
26	T	2-Butanol	45	6.21	0.624	L	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.38	0.640	A	1	A	B
28	T	2-Butanone	43	6.67	0.670	A	1	A	B
29	T	2,2-Dichloropropane	77	6.93	0.695	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	7.05	0.708	A	1	A	B
31	T	Chloroform	83	7.45	0.748	A	2	A	B
32	T	Bromochloromethane	130	7.83	0.785	A	1	A	B
33	T	Tetrahydrofuran	42	7.93	0.796	A	2	A	B
34	T	tert-Amyl alcohol	59	8.12	0.815	A	1	A	B
35	S	Dibromofluoromethane	111	7.97	0.800	L	1	A	B
36	T	1,1,1-Trichloroethane	97	8.35	0.838	A	2	A	B
37	T	Cyclohexane	84	8.35	0.838	A	1	A	B
38	T	2,2,4-Trimethylpentane	57	8.69	0.872	A	1	A	B
39	T	1,1-Dichloropropene	110	8.73	0.876	A	1	A	B
40	T	Carbon tetrachloride	119	8.90	0.893	A	1	A	B
41	T	tert-Amyl methyl ether (TAME)	73	9.06	0.910	A	2	A	B
42	S	1,2-Dichloroethane-d4	65	9.08	0.912	A	1	A	B
43	T	1,2-Dichloroethane	62	9.29	0.933	A	1	A	B
44	T	Benzene	78	9.27	0.931	A	2	A	B
45	T	Trichloroethene	130	10.55	1.059	A	3	A	B
46	T	Methylcyclohexane	83	10.64	1.067	A	2	A	B
47	T	1,2-Dichloropropane	63	10.91	1.095	A	1	A	B
48	T	1,4-Dioxane	88	11.45	1.149	A	1	A	B
49	T	Bromodichloromethane	83	11.35	1.139	A	1	A	B
50	T	Dibromomethane	93	11.41	1.145	A	2	A	B
51	T	2-Chloroethyl vinyl ether	63	12.04	1.208	A	1	A	B
52	T	4-Methyl-2-pentanone	43	12.08	1.212	A	3	A	B
53	T	cis-1,3-Dichloropropene	75	12.40	1.244	A	3	A	B
54	I	CHLOROBENZENE-D5	117	15.43	1.000	A	2	A	B
55	S	Toluene-d8	98	12.82	0.831	A	1	A	B
56	T	Toluene	91	12.94	0.839	A	1	A	B
57	T	Ethyl methacrylate	69	13.38	0.867	A	1	A	B
58	T	trans-1,3-Dichloropropene	75	13.32	0.863	A	1	A	B
59	T	1,1,2-Trichloroethane	97	13.57	0.879	A	2	A	B
60	T	2-Hexanone	43	13.65	0.885	A	1	A	B
61	T	1,3-Dichloropropane	76	14.03	0.909	A	1	A	B

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62	T	Tetrachloroethene	164	14.07	0.912	A	3	A	B
63	T	Dibromochloromethane	129	14.43	0.935	A	1	A	B
64	T	2-Ethyl-1-butanol	43	0.00	0.000	A	3	A	B
65	T	1,2-Dibromoethane	107	14.76	0.957	A	1	A	B
66	T	1-Chlorohexane	91	15.12	0.980	A	1	A	B
67	T	Chlorobenzene	112	15.50	1.004	A	1	A	B
68	T	1,1,1,2-Tetrachloroethane	131	15.59	1.010	A	1	A	B
69	T	Ethylbenzene	91	15.60	1.011	A	1	A	B
70	T	m-Xylene & p-Xylene	91	15.74	1.020	A	1	A	B
71	T	o-Xylene	91	16.47	1.067	A	1	A	B
72	T	Styrene	104	16.53	1.071	A	2	A	B
73	T	Isopropylbenzene	105	17.08	1.107	A	3	A	B
74	I	1,2-DICHLOROBENZENE-D4	152	19.35	1.000	A	1	A	B
75	T	Bromoform	173	17.07	0.882	L	2	A	B
76	T	1,1,2,2-Tetrachloroethane	83	17.36	0.897	A	1	A	B
77	S	4-Bromofluorobenzene	95	17.45	0.902	A	2	A	B
78	T	1,2,3-Trichloropropane	110	17.57	0.908	A	1	A	B
79	T	trans-1,4-Dichloro-2-butene	53	17.68	0.913	A	1	A	B
80	T	n-Propylbenzene	91	17.68	0.913	A	2	A	B
81	T	Bromobenzene	156	17.71	0.916	A	1	A	B
82	T	1,3,5-Trimethylbenzene	105	17.90	0.925	A	2	A	B
83	T	2-Chlorotoluene	91	17.91	0.926	A	1	A	B
84	T	4-Chlorotoluene	91	17.97	0.929	A	1	A	B
85	T	tert-Butylbenzene	134	18.35	0.948	A	1	A	B
86	T	1,2,4-Trimethylbenzene	105	18.39	0.950	A	1	A	B
87	T	sec-Butylbenzene	105	18.60	0.961	A	1	A	B
88	T	p-Isopropyltoluene	119	18.76	0.970	A	2	A	B
89	T	1,3-Dichlorobenzene	146	18.87	0.975	A	2	A	B
90	T	1,2,3-Trimethylbenzene	105	18.95	0.979	A	2	A	B
91	T	1,4-Dichlorobenzene	146	18.99	0.981	A	2	A	B
92	T	n-Butylbenzene	91	19.21	0.993	A	2	A	B
93	T	1,2-Dichlorobenzene	146	19.37	1.001	A	1	A	B
94	T	1,2-Dibromo-3-chloropropane	157	20.14	1.041	A	1	A	B
95	T	1,2,4-Trichlorobenzene	180	20.97	1.084	A	2	A	B
96	T	Hexachlorobutadiene	225	21.10	1.091	A	2	A	B
97	T	Naphthalene	128	21.24	1.098	A	1	A	B
98	T	1,2,3-Trichlorobenzene	180	21.49	1.111	A	2	A	B

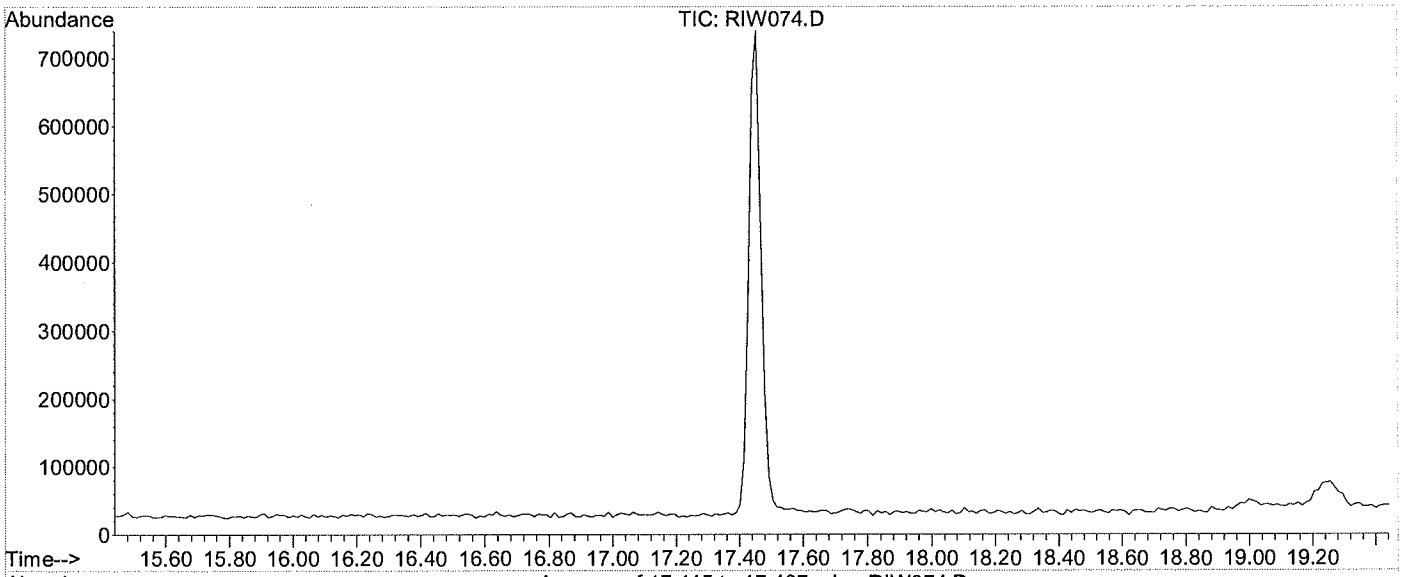
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

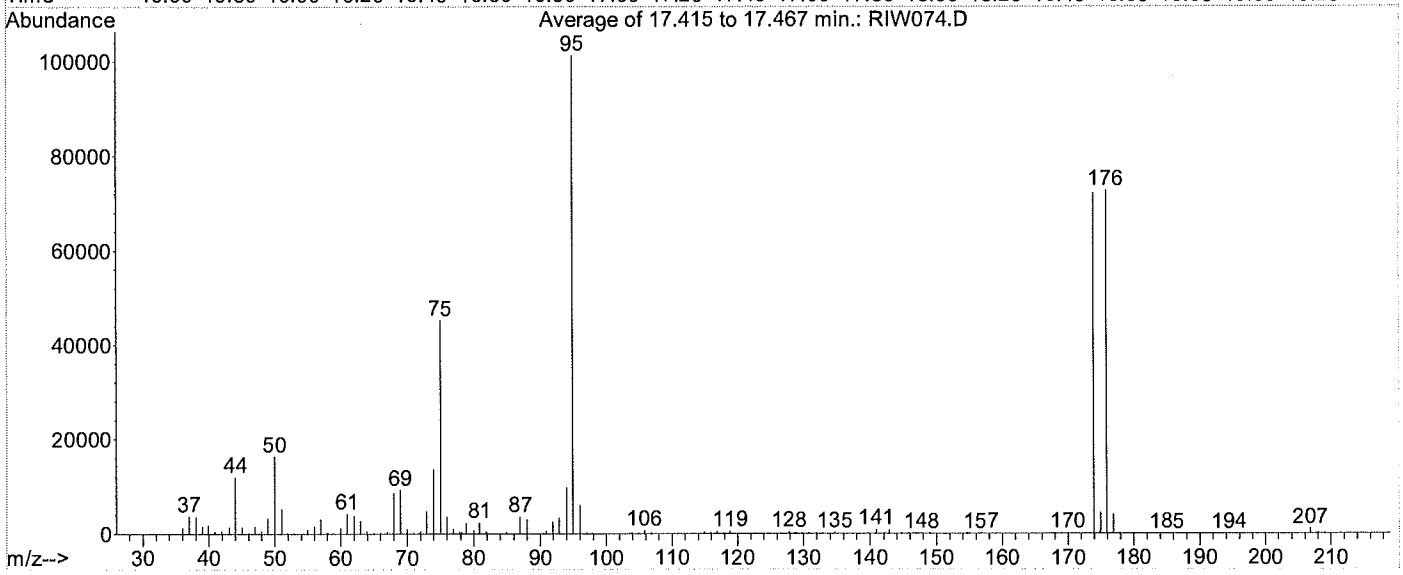
VO06I19B.M Fri Oct 11 17:22:24 2024

SC 10/19/24

BFB

Data File : D:\HPCHEM\1\DATA\24I19\RIW074.D Vial: 1
Acq On : 19 Sep 2024 9:28 am Operator: PMai
Sample : BFB06I04 Inst : 06
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260





Spectrum Information: Average of 17.415 to 17.467 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.1	16345	PASS
75	95	30	60	44.7	45243	PASS
95	95	100	100	100.0	101298	PASS
96	95	5	9	5.9	6001	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	71.3	72180	PASS
175	174	5	9	6.2	4496	PASS
176	174	95	101	100.7	72690	PASS
177	176	5	9	5.6	4038	PASS

SV 10/14/24

RIW074.D VO06I19B.M Mon Oct 14 12:30:43 2024

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW075.D Vial: 2
Acq On : 19 Sep 2024 11:07 am Operator: PMai
Sample : VO06I191 0.03/0.15uL Inst : 06
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:38 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2702801	10.00	ug/l		0.00
54) CHLOROBENZENE-D5	15.43	117	2093254	10.00	ug/l		0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1084478	10.00	ug/l		0.00
System Monitoring Compounds							
35) Dibromofluoromethane	7.97	111	11581	0.37	ug/l		0.00
Spiked Amount 10.000			Recovery = 3.70%				
42) 1,2-Dichloroethane-d4	9.08	65	10878	0.18	ug/l		0.00
Spiked Amount 10.000			Recovery = 1.80%				
55) Toluene-d8	12.82	98	43813	0.16	ug/l		0.00
Spiked Amount 10.000			Recovery = 1.60%				
77) 4-Bromofluorobenzene	17.47	95	18275	0.15	ug/l		0.01
Spiked Amount 10.000			Recovery = 1.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.66	85	47039	0.41	ug/l		88
3) Chloromethane	1.89	50	43921	0.42	ug/l		97
4) Vinyl chloride	1.99	62	34689	0.42	ug/l		99
5) Bromomethane	2.45	94	42067	0.71	ug/l	#	49
6) Chloroethane	2.51	64	23145	0.39	ug/l		94
7) Dichlorofluoromethane	2.56	67	55363	0.22	ug/l		64
8) Trichlorofluoromethane	2.80	101	34141	0.32	ug/l		97
9) Acrolein	3.32	56	10132	2.67	ug/l		87
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	24584	0.31	ug/l		97
11) Acetone	3.43	43	72895	6.68	ug/l	#	1
12) 1,1-Dichloroethene	3.57	61	40889	0.29	ug/l		88
13) tert-Butyl alcohol	3.72	59	27238	8.07	ug/l		83
15) Methyl acetate	4.12	74	1643	0.28	ug/l	#	41
16) Iodomethane	3.99	142	39307	0.29	ug/l		98
17) Allyl chloride	4.12	76	15359	0.34	ug/l		74
19) Carbon disulfide	4.26	76	35181	0.35	ug/l		82
20) Acrylonitrile	4.56	53	20968	1.55	ug/l		95
21) tert-Butyl methyl ether (M	4.60	73	42665	0.31	ug/l		90
22) trans-1,2-Dichloroethene	4.81	96	29653	0.35	ug/l		86
23) Isopropyl ether (DIPE)	5.48	45	84725	0.30	ug/l		97
24) Vinyl acetate	5.75	43	18073	0.18	ug/l		88
25) 1,1-Dichloroethane	5.65	63	43369	0.30	ug/l		87
26) 2-Butanol	6.26	45	17738	11.86	ug/l	#	62
27) tert-Butyl ethyl ether (ET	6.40	59	58690	0.29	ug/l		86
28) 2-Butanone	6.70	43	47417	2.56	ug/l		100
29) 2,2-Dichloropropane	6.93	77	29376	0.33	ug/l		74
30) cis-1,2-Dichloroethene	7.07	96	27910	0.32	ug/l		90
31) Chloroform	7.45	83	47910	0.34	ug/l		99
32) Bromochloromethane	7.83	130	10992	0.29	ug/l		78
33) Tetrahydrofuran	7.97	42	8124	0.82	ug/l		63
36) 1,1,1-Trichloroethane	8.37	97	35378	0.31	ug/l		97
37) Cyclohexane	8.35	84	32156	0.22	ug/l		68
39) 1,1-Dichloropropene	8.71	110	11101	0.29	ug/l		100
40) Carbon tetrachloride	8.90	119	25992	0.28	ug/l		96
41) tert-Amyl methyl ether (TA	9.08	73	48708	0.29	ug/l		92
43) 1,2-Dichloroethane	9.29	62	17895	0.25	ug/l		72

(#) = qualifier out of range (m) = manual integration

SV 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW075.D Vial: 2
Acq On : 19 Sep 2024 11:07 am Operator: PMai
Sample : VO06I191 0.03/0.15uL Inst : 06
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:38 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44)	Benzene	9.27	78	89786	0.29	ug/l	98
45)	Trichloroethene	10.55	130	21639	0.27	ug/l	86
46)	Methylcyclohexane	10.64	83	35601	0.23	ug/l	94
47)	1,2-Dichloropropane	10.91	63	23664	0.31	ug/l	90
48)	1,4-Dioxane	11.47	88	3700	10.31	ug/l	93
49)	Bromodichloromethane	11.35	83	33039	0.33	ug/l	91
50)	Dibromomethane	11.41	93	10206	0.28	ug/l	91
52)	4-Methyl-2-pentanone	12.10	43	71762	1.40	ug/l	94
53)	cis-1,3-Dichloropropene	12.40	75	37064	0.30	ug/l	89
56)	Toluene	12.94	91	86740	0.27	ug/l	98
57)	Ethyl methacrylate	13.38	69	22660	0.33	ug/l	87
58)	trans-1,3-Dichloropropene	13.34	75	24584	0.28	ug/l	83
59)	1,1,2-Trichloroethane	13.57	97	13356	0.29	ug/l	97
60)	2-Hexanone	13.67	43	72192	2.18	ug/l	99
61)	1,3-Dichloropropane	14.03	76	21698	0.26	ug/l	71
62)	Tetrachloroethene	14.07	164	17314	0.27	ug/l	94
63)	Dibromochloromethane	14.43	129	16812	0.30	ug/l	96
65)	1,2-Dibromoethane	14.76	107	11034	0.26	ug/l	95
66)	1-Chlorohexane	15.12	91	58798	0.44	ug/l	92
67)	Chlorobenzene	15.49	112	53305	0.28	ug/l	98
68)	1,1,1,2-Tetrachloroethane	15.60	131	16152	0.26	ug/l	74
69)	Ethylbenzene	15.61	91	103629	0.27	ug/l	99
70)	m-Xylene & p-Xylene	15.74	91	168443	0.57	ug/l	94
71)	o-Xylene	16.47	91	88715	0.30	ug/l	98
72)	Styrene	16.53	104	61796	0.28	ug/l	88
73)	Isopropylbenzene	17.08	105	118148	0.31	ug/l	97
75)	Bromoform	17.06	173	8255	0.34	ug/l	79
76)	1,1,2,2-Tetrachloroethane	17.36	83	16690	0.27	ug/l	91
78)	1,2,3-Trichloropropane	17.58	110	5121	0.30	ug/l	81
79)	trans-1,4-Dichloro-2-buten	17.67	53	8361	0.44	ug/l	70
80)	n-Propylbenzene	17.69	91	157605	0.26	ug/l	96
81)	Bromobenzene	17.73	156	22415	0.26	ug/l	86
82)	1,3,5-Trimethylbenzene	17.89	105	98000	0.27	ug/l	99
83)	2-Chlorotoluene	17.91	91	91285	0.26	ug/l	92
84)	4-Chlorotoluene	17.97	91	75596	0.24	ug/l	96
85)	tert-Butylbenzene	18.35	134	21167	0.27	ug/l	76
86)	1,2,4-Trimethylbenzene	18.39	105	108593	0.29	ug/l	96
87)	sec-Butylbenzene	18.61	105	150523	0.29	ug/l	94
88)	p-Isopropyltoluene	18.76	119	131428	0.30	ug/l	97
89)	1,3-Dichlorobenzene	18.87	146	47096	0.25	ug/l	90
90)	1,2,3-Trimethylbenzene	18.95	105	98697	0.29	ug/l	95
91)	1,4-Dichlorobenzene	18.98	146	50419	0.27	ug/l	90
92)	n-Butylbenzene	19.20	91	147712	0.31	ug/l	98
93)	1,2-Dichlorobenzene	19.37	146	44367	0.28	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	4806	0.43	ug/l	74
95)	1,2,4-Trichlorobenzene	20.97	180	46289	0.37	ug/l	98
96)	Hexachlorobutadiene	21.10	225	23464	0.35	ug/l	87
97)	Naphthalene	21.24	128	70434	0.42	ug/l	96
98)	1,2,3-Trichlorobenzene	21.49	180	37303	0.40	ug/l	97

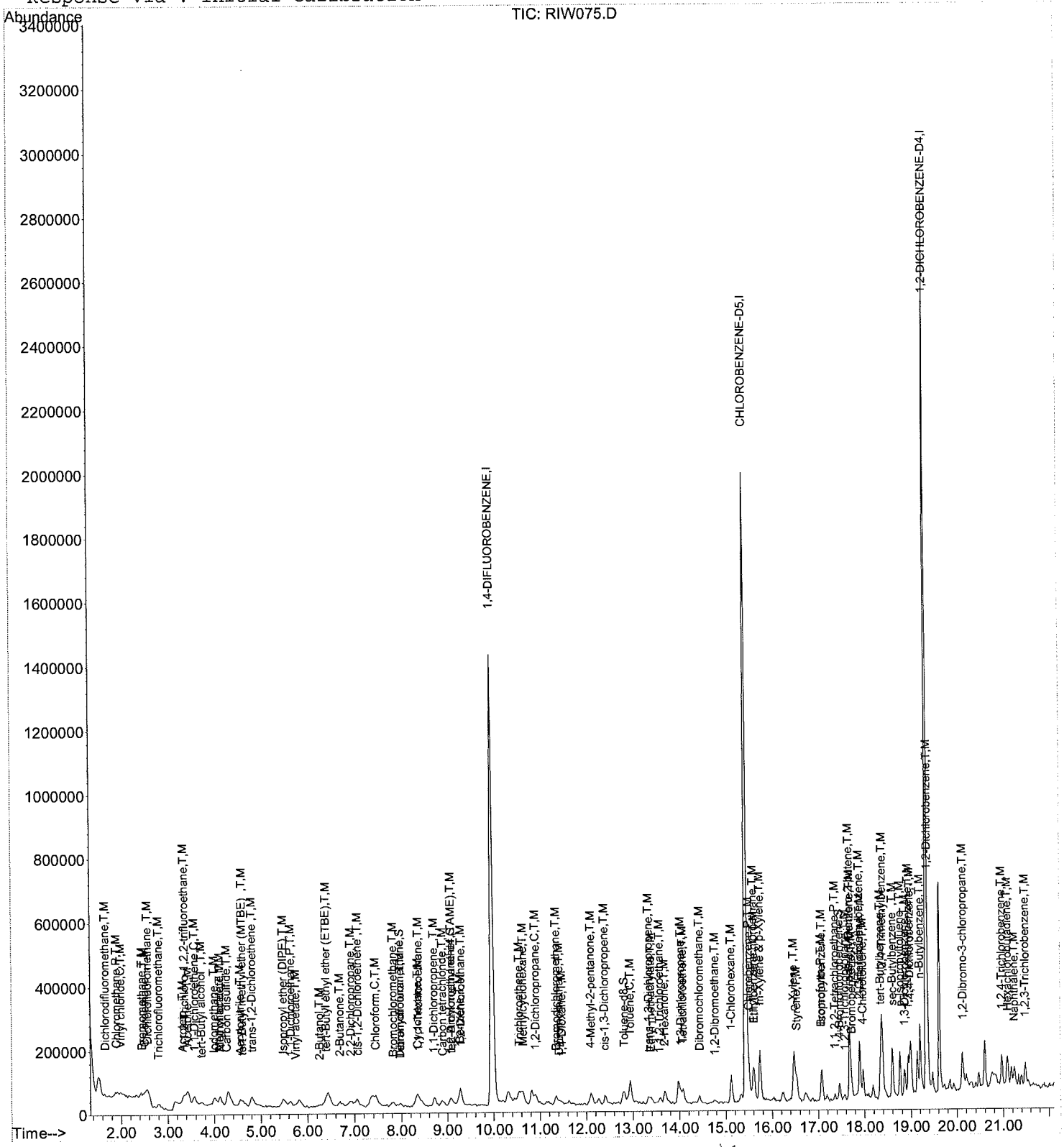
SC 10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW075.D Vial: 2
Acq On : 19 Sep 2024 11:07 am Operator: PMai
Sample : VO06I191 0.03/0.15uL Inst : 06
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:38 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SM 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3602052	10.00	ug/l		0.00
54) CHLOROBENZENE-D5	15.43	117	2932021	10.00	ug/l		0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1368492	10.00	ug/l		0.00
System Monitoring Compounds							
35) Dibromofluoromethane	7.97	111	32709	0.54	ug/l		0.00
Spiked Amount 10.000			Recovery =	5.40%			
42) 1,2-Dichloroethane-d4	9.08	65	27417	0.34	ug/l		0.00
Spiked Amount 10.000			Recovery =	3.40%			
55) Toluene-d8	12.81	98	130588	0.34	ug/l		0.00
Spiked Amount 10.000			Recovery =	3.40%			
77) 4-Bromofluorobenzene	17.45	95	52440	0.34	ug/l		0.00
Spiked Amount 10.000			Recovery =	3.40%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.66	85	73258	0.48	ug/l		96
3) Chloromethane	1.87	50	61771	0.44	ug/l		80
4) Vinyl chloride	1.99	62	53540	0.49	ug/l		89
5) Bromomethane	2.43	94	31280	0.44	ug/l		100
6) Chloroethane	2.50	64	28196	0.36	ug/l		95
7) Dichlorofluoromethane	2.56	67	116363	0.38	ug/l		93
8) Trichlorofluoromethane	2.80	101	55054	0.38	ug/l		99
9) Acrolein	3.32	56	12175	2.41	ug/l		70
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	49153	0.44	ug/l		98
11) Acetone	3.40	43	52946	3.64	ug/l		75
12) 1,1-Dichloroethene	3.55	61	76442	0.40	ug/l		90
13) tert-Butyl alcohol	3.72	59	45320	10.07	ug/l		84
15) Methyl acetate	4.09	74	1425	0.18	ug/l	#	1
16) Iodomethane	3.99	142	73427	0.41	ug/l		94
17) Allyl chloride	4.09	76	26224	0.43	ug/l		92
18) Methylene chloride	4.28	49	104262	0.21	ug/l		99
19) Carbon disulfide	4.26	76	70559	0.46	ug/l		95
20) Acrylonitrile	4.54	53	33642	1.86	ug/l		96
21) tert-Butyl methyl ether (M	4.58	73	74136	0.41	ug/l		99
22) trans-1,2-Dichloroethene	4.79	96	47316	0.42	ug/l		97
23) Isopropyl ether (DIPE)	5.48	45	150121	0.40	ug/l		95
24) Vinyl acetate	5.73	43	35113	0.26	ug/l		92
25) 1,1-Dichloroethane	5.62	63	75099	0.39	ug/l		87
26) 2-Butanol	6.23	45	25013	12.12	ug/l	#	62
27) tert-Butyl ethyl ether (ET	6.40	59	107914	0.40	ug/l		94
28) 2-Butanone	6.69	43	52378	2.12	ug/l		94
29) 2,2-Dichloropropane	6.92	77	52180	0.44	ug/l		94
30) cis-1,2-Dichloroethene	7.03	96	53525	0.46	ug/l		92
31) Chloroform	7.43	83	80220	0.43	ug/l		97
32) Bromochloromethane	7.80	130	20585	0.40	ug/l		89
33) Tetrahydrofuran	7.95	42	6668	0.50	ug/l		79
36) 1,1,1-Trichloroethane	8.35	97	65591	0.43	ug/l		96
37) Cyclohexane	8.33	84	53943	0.28	ug/l		85
39) 1,1-Dichloropropene	8.71	110	22965	0.45	ug/l		95
40) Carbon tetrachloride	8.87	119	52082	0.41	ug/l		99
41) tert-Amyl methyl ether (TA	9.08	73	95840	0.43	ug/l		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	1,2-Dichloroethane	9.27	62	36987	0.39 ug/l	77
44)	Benzene	9.27	78	170834	0.41 ug/l	95
45)	Trichloroethene	10.55	130	45725	0.43 ug/l	97
46)	Methylcyclohexane	10.61	83	51792	0.25 ug/l	97
47)	1,2-Dichloropropane	10.91	63	41267	0.40 ug/l	91
48)	1,4-Dioxane	11.45	88	5989	12.53 ug/l	99
49)	Bromodichloromethane	11.35	83	57691	0.44 ug/l	93
50)	Dibromomethane	11.41	93	19132	0.40 ug/l	97
51)	2-Chloroethyl vinyl ether	12.06	63	13987	0.44 ug/l	96
52)	4-Methyl-2-pentanone	12.10	43	133804	1.96 ug/l	97
53)	cis-1,3-Dichloropropene	12.39	75	63396	0.39 ug/l	93
56)	Toluene	12.94	91	197036	0.45 ug/l	98
57)	Ethyl methacrylate	13.38	69	43487	0.45 ug/l	98
58)	trans-1,3-Dichloropropene	13.34	75	50744	0.41 ug/l	100
59)	1,1,2-Trichloroethane	13.57	97	24112	0.38 ug/l	94
60)	2-Hexanone	13.67	43	99771	2.15 ug/l	97
61)	1,3-Dichloropropane	14.03	76	51286	0.44 ug/l	85
62)	Tetrachloroethene	14.09	164	41220	0.45 ug/l	93
63)	Dibromochloromethane	14.43	129	34335	0.44 ug/l	94
65)	1,2-Dibromoethane	14.76	107	24902	0.41 ug/l	94
66)	1-Chlorohexane	15.12	91	93959	0.50 ug/l	100
67)	Chlorobenzene	15.49	112	120143	0.44 ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.59	131	35392	0.41 ug/l	98
69)	Ethylbenzene	15.61	91	252802	0.46 ug/l	94
70)	m-Xylene & p-Xylene	15.74	91	378852	0.91 ug/l	96
71)	o-Xylene	16.47	91	188549	0.46 ug/l	99
72)	Styrene	16.53	104	147292	0.48 ug/l	92
73)	Isopropylbenzene	17.08	105	231853	0.44 ug/l	97
75)	Bromoform	17.08	173	13128	0.40 ug/l	97
76)	1,1,2,2-Tetrachloroethane	17.36	83	30166	0.38 ug/l	98
78)	1,2,3-Trichloropropane	17.57	110	9018	0.41 ug/l	91
79)	trans-1,4-Dichloro-2-buten	17.69	53	11147	0.46 ug/l	91
80)	n-Propylbenzene	17.67	91	349467	0.46 ug/l	95
81)	Bromobenzene	17.73	156	41407	0.38 ug/l	96
82)	1,3,5-Trimethylbenzene	17.89	105	200111	0.43 ug/l	99
83)	2-Chlorotoluene	17.91	91	188970	0.43 ug/l	91
84)	4-Chlorotoluene	17.97	91	184018	0.45 ug/l	97
85)	tert-Butylbenzene	18.35	134	48411	0.50 ug/l	96
86)	1,2,4-Trimethylbenzene	18.39	105	213722	0.45 ug/l	98
87)	sec-Butylbenzene	18.60	105	312446	0.48 ug/l	93
88)	p-Isopropyltoluene	18.76	119	264036	0.48 ug/l	95
89)	1,3-Dichlorobenzene	18.87	146	103794	0.43 ug/l	93
90)	1,2,3-Trimethylbenzene	18.95	105	193889	0.45 ug/l	97
91)	1,4-Dichlorobenzene	18.98	146	98791	0.41 ug/l	94
92)	n-Butylbenzene	19.21	91	296003	0.50 ug/l	93
93)	1,2-Dichlorobenzene	19.37	146	85207	0.43 ug/l	94
94)	1,2-Dibromo-3-chloropropan	20.14	157	7430	0.53 ug/l	96
95)	1,2,4-Trichlorobenzene	20.97	180	73400	0.47 ug/l	93
96)	Hexachlorobutadiene	21.10	225	40297	0.47 ug/l	99
97)	Naphthalene	21.24	128	91896	0.43 ug/l	82

(#) = qualifier out of range (m) = manual integration SA 10/14/24
RIW076.D VO06I19B.M Fri Oct 11 17:36:14 2024

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	51351	0.43	ug/l	89

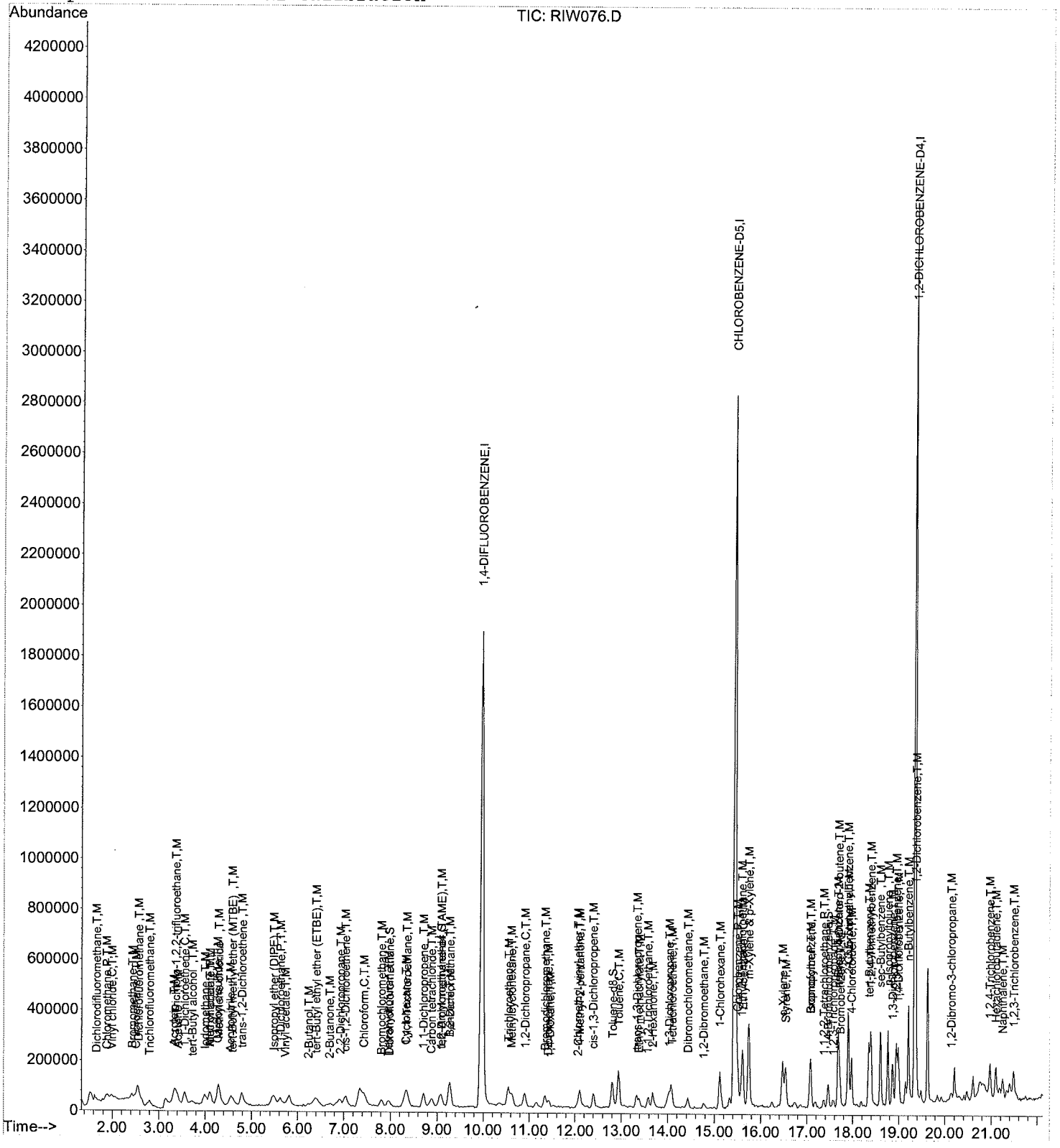
SA 10/14/24

(#) = qualifier out of range (m) = manual integration
RIW076.D VO06I19B.M Fri Oct 11 17:36:15 2024

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3122913	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2588859	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1139628	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	50378	0.78	ug/l	0.00
Spiked Amount 10.000			Recovery =	7.80%		
42) 1,2-Dichloroethane-d4	9.08	65	45903	0.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	6.60%		
55) Toluene-d8	12.79	98	213396	0.64	ug/l	-0.02
Spiked Amount 10.000			Recovery =	6.40%		
77) 4-Bromofluorobenzene	17.45	95	83199	0.65	ug/l	0.00
Spiked Amount 10.000			Recovery =	6.50%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	145071	1.10	ug/l	99
3) Chloromethane	1.87	50	131927	1.09	ug/l	84
4) Vinyl chloride	1.99	62	113028	1.19	ug/l	96
5) Bromomethane	2.43	94	82236	1.14	ug/l	76
6) Chloroethane	2.50	64	56065	0.88	ug/l	98
7) Dichlorofluoromethane	2.54	67	217462	0.90	ug/l	99
8) Trichlorofluoromethane	2.80	101	119139	0.96	ug/l	98
9) Acrolein	3.32	56	26374	6.01	ug/l	84
10) 1,1,2-Trichloro-1,2,2-trif	3.34	151	90044	0.88	ug/l	94
11) Acetone	3.40	43	68261	5.41	ug/l	71
12) 1,1-Dichloroethene	3.55	61	150316	0.91	ug/l	93
13) tert-Butyl alcohol	3.70	59	87780	22.50	ug/l	89
15) Methyl acetate	4.12	74	5582	0.83	ug/l	73
16) Iodomethane	3.99	142	150918	0.97	ug/l	96
17) Allyl chloride	4.12	76	46620	0.88	ug/l	79
18) Methylene chloride	4.28	49	177833	0.93	ug/l	97
19) Carbon disulfide	4.24	76	125207	0.78	ug/l	98
20) Acrylonitrile	4.54	53	68440	4.37	ug/l	93
21) tert-Butyl methyl ether (M	4.58	73	146668	0.93	ug/l	97
22) trans-1,2-Dichloroethene	4.79	96	95056	0.96	ug/l	97
23) Isopropyl ether (DIPE)	5.46	45	299087	0.92	ug/l	97
24) Vinyl acetate	5.71	43	93894	0.80	ug/l	99
25) 1,1-Dichloroethane	5.63	63	159907	0.97	ug/l	92
26) 2-Butanol	6.21	45	52791	18.93	ug/l	99
27) tert-Butyl ethyl ether (ET	6.38	59	232212	0.98	ug/l	99
28) 2-Butanone	6.69	43	92234	4.30	ug/l	98
29) 2,2-Dichloropropane	6.90	77	99220	0.96	ug/l	89
30) cis-1,2-Dichloroethene	7.03	96	97646	0.96	ug/l	92
31) Chloroform	7.43	83	165058	1.01	ug/l	95
32) Bromochloromethane	7.80	130	40199	0.91	ug/l	97
33) Tetrahydrofuran	7.93	42	10008	0.87	ug/l	79
36) 1,1,1-Trichloroethane	8.35	97	123421	0.94	ug/l	98
37) Cyclohexane	8.33	84	135999	0.81	ug/l	91
39) 1,1-Dichloropropene	8.71	110	42529	0.96	ug/l	94
40) Carbon tetrachloride	8.89	119	98289	0.90	ug/l	96
41) tert-Amyl methyl ether (TA	9.06	73	188039	0.97	ug/l	94

(#) = qualifier out of range (m) = manual integration
RIW077.D VO06I19B.M Fri Oct 11 17:40:16 2024 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloroethane	9.27	62	80979	0.99 ug/l	93
44) Benzene	9.27	78	363157	1.01 ug/l	98
45) Trichloroethene	10.55	130	89264	0.96 ug/l	98
46) Methylcyclohexane	10.61	83	136668	0.77 ug/l	96
47) 1,2-Dichloropropane	10.91	63	84382	0.95 ug/l	99
48) 1,4-Dioxane	11.47	88	6883	16.61 ug/l	80
49) Bromodichloromethane	11.35	83	104110	0.91 ug/l	90
50) Dibromomethane	11.43	93	39826	0.95 ug/l	99
51) 2-Chloroethyl vinyl ether	12.04	63	25675	0.92 ug/l	90
52) 4-Methyl-2-pentanone	12.10	43	287486	4.87 ug/l	98
53) cis-1,3-Dichloropropene	12.39	75	135990	0.97 ug/l	98
56) Toluene	12.94	91	412836	1.06 ug/l	98
57) Ethyl methacrylate	13.38	69	82013	0.96 ug/l	99
58) trans-1,3-Dichloropropene	13.34	75	97979	0.89 ug/l	97
59) 1,1,2-Trichloroethane	13.59	97	51122	0.91 ug/l	97
60) 2-Hexanone	13.67	43	190175	4.64 ug/l	97
61) 1,3-Dichloropropane	14.03	76	99252	0.96 ug/l	96
62) Tetrachloroethene	14.07	164	79681	0.99 ug/l	98
63) Dibromochloromethane	14.43	129	60557	0.88 ug/l	99
65) 1,2-Dibromoethane	14.76	107	48235	0.90 ug/l	98
66) 1-Chlorohexane	15.12	91	160457	0.96 ug/l	96
67) Chlorobenzene	15.49	112	239026	1.00 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.59	131	70104	0.93 ug/l	94
69) Ethylbenzene	15.61	91	492334	1.02 ug/l	97
70) m-Xylene & p-Xylene	15.74	91	757677	2.06 ug/l	97
71) o-Xylene	16.45	91	355552	0.98 ug/l	99
72) Styrene	16.53	104	278207	1.03 ug/l	98
73) Isopropylbenzene	17.08	105	464469	0.99 ug/l	97
75) Bromoform	17.06	173	29978	0.94 ug/l	96
76) 1,1,2,2-Tetrachloroethane	17.35	83	61947	0.94 ug/l	98
78) 1,2,3-Trichloropropane	17.57	110	16378	0.90 ug/l	75
79) trans-1,4-Dichloro-2-buten	17.69	53	21718	1.08 ug/l	94
80) n-Propylbenzene	17.67	91	663586	1.06 ug/l	98
81) Bromobenzene	17.73	156	84669	0.94 ug/l	95
82) 1,3,5-Trimethylbenzene	17.89	105	404481	1.05 ug/l	96
83) 2-Chlorotoluene	17.91	91	371994	1.01 ug/l	94
84) 4-Chlorotoluene	17.97	91	352700	1.04 ug/l	100
85) tert-Butylbenzene	18.35	134	81866	1.01 ug/l	99
86) 1,2,4-Trimethylbenzene	18.39	105	407450	1.02 ug/l	94
87) sec-Butylbenzene	18.60	105	554309	1.02 ug/l	96
88) p-Isopropyltoluene	18.76	119	473312	1.03 ug/l	99
89) 1,3-Dichlorobenzene	18.87	146	209858	1.04 ug/l	99
90) 1,2,3-Trimethylbenzene	18.95	105	369080	1.03 ug/l	98
91) 1,4-Dichlorobenzene	18.98	146	202545	1.02 ug/l	100
92) n-Butylbenzene	19.21	91	503441	1.02 ug/l	99
93) 1,2-Dichlorobenzene	19.37	146	167764	1.01 ug/l	100
94) 1,2-Dibromo-3-chloropropan	20.14	157	10992	0.94 ug/l	100
95) 1,2,4-Trichlorobenzene	20.97	180	125247	0.96 ug/l	98
96) Hexachlorobutadiene	21.10	225	68906	0.97 ug/l	96
97) Naphthalene	21.24	128	165484	0.94 ug/l	93

(#) = qualifier out of range (m) = manual integration
RIW077.D VO06I19B.M Fri Oct 11 17:40:17 2024 SR 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	94769	0.96	ug/l	99

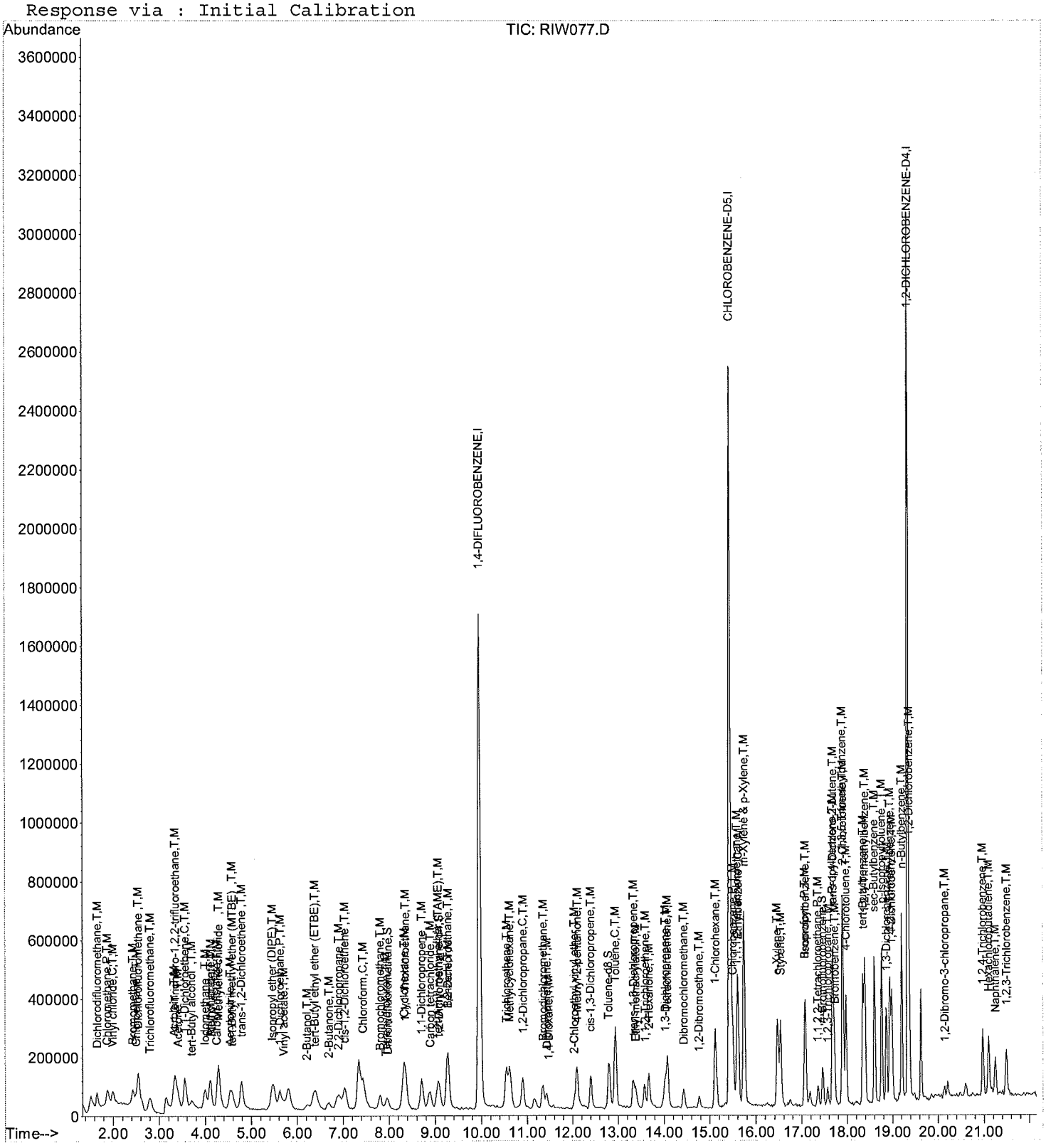
SG 10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D Vial: 5
Acq On : 19 Sep 2024 12:25 pm Operator: PMai
Sample : VO06I194 0.20/1.00uL Inst : 06
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2977226	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2452751	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1072692	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	138141	1.83	ug/l	-0.02
Spiked Amount 10.000			Recovery = 18.30%			
42) 1,2-Dichloroethane-d4	9.08	65	109084	1.66	ug/l	0.00
Spiked Amount 10.000			Recovery = 16.60%			
55) Toluene-d8	12.79	98	583826	1.84	ug/l	-0.02
Spiked Amount 10.000			Recovery = 18.40%			
77) 4-Bromofluorobenzene	17.45	95	215651	1.80	ug/l	0.00
Spiked Amount 10.000			Recovery = 18.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	290951	2.31	ug/l	97
3) Chloromethane	1.89	50	255930	2.22	ug/l	91
4) Vinyl chloride	1.99	62	208812	2.31	ug/l	94
5) Bromomethane	2.43	94	169214	2.35	ug/l	93
6) Chloroethane	2.50	64	153383	2.59	ug/l	97
7) Dichlorofluoromethane	2.56	67	624367	2.86	ug/l	97
8) Trichlorofluoromethane	2.80	101	270779	2.28	ug/l	98
9) Acrolein	3.32	56	48203	11.53	ug/l	73
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	279180	2.77	ug/l	94
11) Acetone	3.40	43	119311	9.92	ug/l	85
12) 1,1-Dichloroethene	3.55	61	405243	2.57	ug/l	99
13) tert-Butyl alcohol	3.70	59	176997	47.58	ug/l	86
15) Methyl acetate	4.07	74	12895	2.01	ug/l	87
16) Iodomethane	3.99	142	345559	2.34	ug/l	99
17) Allyl chloride	4.12	76	102068	2.02	ug/l	94
18) Methylene chloride	4.28	49	311940	2.15	ug/l	98
19) Carbon disulfide	4.26	76	407778	2.31	ug/l	99
20) Acrylonitrile	4.51	53	149523	10.01	ug/l	98
21) tert-Butyl methyl ether (M	4.56	73	311390	2.06	ug/l	99
22) trans-1,2-Dichloroethene	4.79	96	198170	2.11	ug/l	99
23) Isopropyl ether (DIPE)	5.48	45	658163	2.12	ug/l	100
24) Vinyl acetate	5.71	43	199658	1.78	ug/l	99
25) 1,1-Dichloroethane	5.63	63	338005	2.15	ug/l	98
26) 2-Butanol	6.21	45	140481	39.63	ug/l #	62
27) tert-Butyl ethyl ether (ET	6.38	59	478439	2.12	ug/l	98
28) 2-Butanone	6.67	43	188844	9.24	ug/l	91
29) 2,2-Dichloropropane	6.90	77	216431	2.20	ug/l	98
30) cis-1,2-Dichloroethene	7.03	96	203848	2.10	ug/l	95
31) Chloroform	7.43	83	327346	2.10	ug/l	99
32) Bromochloromethane	7.80	130	81369	1.93	ug/l	93
33) Tetrahydrofuran	7.93	42	24208	2.21	ug/l	91
36) 1,1,1-Trichloroethane	8.35	97	263274	2.10	ug/l	99
37) Cyclohexane	8.33	84	331183	2.06	ug/l	99
39) 1,1-Dichloropropene	8.71	110	91016	2.15	ug/l	93
40) Carbon tetrachloride	8.87	119	219297	2.11	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	385225	2.09	ug/l	98

(#) = qualifier out of range (m) = manual integration

Sa 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D
Acq On : 19 Sep 2024 12:25 pm
Sample : VO06I194 0.20/1.00uL
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024

Vial: 5
Operator: PMai
Inst : 06
Multiplr: 1.00

Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloroethane	9.27	62	164764	2.10 ug/l	92
44) Benzene	9.25	78	753488	2.21 ug/l	100
45) Trichloroethene	10.55	130	181232	2.04 ug/l	92
46) Methylcyclohexane	10.61	83	327215	1.94 ug/l	98
47) 1,2-Dichloropropane	10.91	63	174985	2.07 ug/l	99
48) 1,4-Dioxane	11.47	88	14536	36.79 ug/l	84
49) Bromodichloromethane	11.35	83	224915	2.05 ug/l	98
50) Dibromomethane	11.41	93	80523	2.01 ug/l	96
51) 2-Chloroethyl vinyl ether	12.04	63	45681	1.72 ug/l	78
52) 4-Methyl-2-pentanone	12.08	43	618458	10.98 ug/l	99
53) cis-1,3-Dichloropropene	12.39	75	280174	2.09 ug/l	98
56) Toluene	12.94	91	867931	2.35 ug/l	98
57) Ethyl methacrylate	13.38	69	165988	2.04 ug/l	93
58) trans-1,3-Dichloropropene	13.32	75	215945	2.08 ug/l	98
59) 1,1,2-Trichloroethane	13.57	97	112160	2.11 ug/l	97
60) 2-Hexanone	13.65	43	423881	10.93 ug/l	96
61) 1,3-Dichloropropane	14.03	76	206334	2.10 ug/l	98
62) Tetrachloroethene	14.07	164	170395	2.24 ug/l	98
63) Dibromochloromethane	14.43	129	132138	2.02 ug/l	96
65) 1,2-Dibromoethane	14.76	107	107636	2.13 ug/l	96
66) 1-Chlorohexane	15.12	91	372758	2.37 ug/l	95
67) Chlorobenzene	15.50	112	510278	2.25 ug/l	100
68) 1,1,1,2-Tetrachloroethane	15.59	131	157371	2.20 ug/l	97
69) Ethylbenzene	15.60	91	1013329	2.22 ug/l	96
70) m-Xylene & p-Xylene	15.74	91	1559495	4.48 ug/l	98
71) o-Xylene	16.47	91	775527	2.26 ug/l	96
72) Styrene	16.53	104	576362	2.25 ug/l	90
73) Isopropylbenzene	17.08	105	1005342	2.26 ug/l	96
75) Bromoform	17.06	173	65813	2.06 ug/l	91
76) 1,1,2,2-Tetrachloroethane	17.35	83	124870	2.01 ug/l	93
78) 1,2,3-Trichloropropane	17.57	110	33433	1.96 ug/l	87
79) trans-1,4-Dichloro-2-buten	17.67	53	38690	2.05 ug/l	95
80) n-Propylbenzene	17.67	91	1348423	2.28 ug/l	98
81) Bromobenzene	17.71	156	190356	2.25 ug/l	97
82) 1,3,5-Trimethylbenzene	17.90	105	825276	2.29 ug/l	98
83) 2-Chlorotoluene	17.91	91	776573	2.24 ug/l	97
84) 4-Chlorotoluene	17.97	91	757409	2.38 ug/l	99
85) tert-Butylbenzene	18.35	134	176756	2.32 ug/l	97
86) 1,2,4-Trimethylbenzene	18.39	105	849501	2.27 ug/l	96
87) sec-Butylbenzene	18.60	105	1158259	2.27 ug/l	95
88) p-Isopropyltoluene	18.76	119	971849	2.24 ug/l	99
89) 1,3-Dichlorobenzene	18.86	146	428370	2.26 ug/l	97
90) 1,2,3-Trimethylbenzene	18.95	105	772297	2.28 ug/l	99
91) 1,4-Dichlorobenzene	18.99	146	443854	2.36 ug/l	97
92) n-Butylbenzene	19.21	91	1063245	2.28 ug/l	98
93) 1,2-Dichlorobenzene	19.37	146	364780	2.33 ug/l	96
94) 1,2-Dibromo-3-chloropropan	20.14	157	21865	1.99 ug/l	89
95) 1,2,4-Trichlorobenzene	20.97	180	271937	2.21 ug/l	99
96) Hexachlorobutadiene	21.10	225	152423	2.29 ug/l	96
97) Naphthalene	21.24	128	371339	2.24 ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D Vial: 5
Acq On : 19 Sep 2024 12:25 pm Operator: PMai
Sample : VO06I194 0.20/1.00uL Inst : 06
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	210803	2.27	ug/l	99

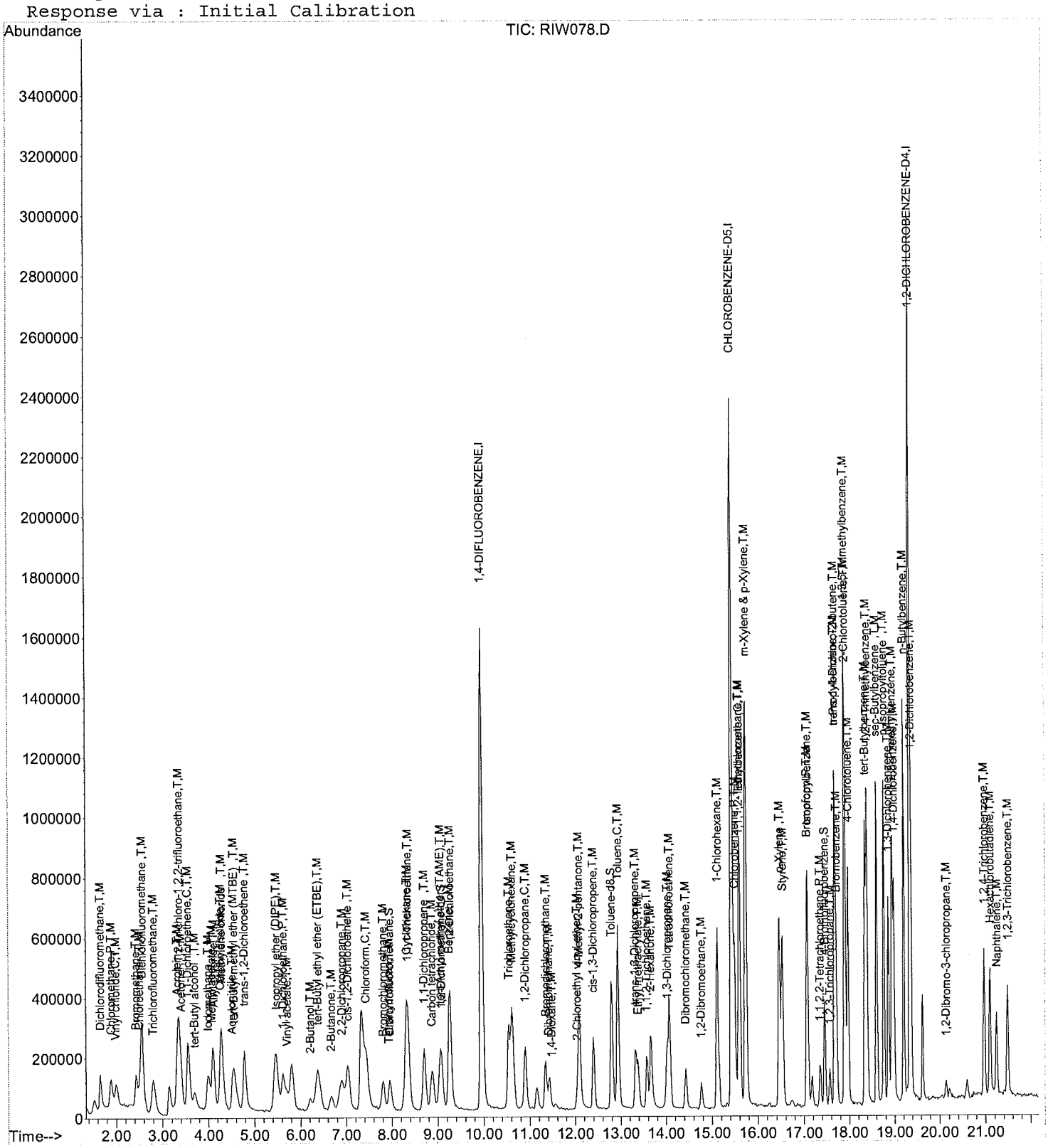
SL
10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D Vial: 5
Acq On : 19 Sep 2024 12:25 pm Operator: PMai
Sample : VO06I194 0.20/1.00uL Inst : 06
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.97	114	3487068	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2802782	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1201206	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	452215	4.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	47.00%		
42) 1,2-Dichloroethane-d4	9.08	65	372812	4.84	ug/l	0.00
Spiked Amount 10.000			Recovery =	48.40%		
55) Toluene-d8	12.79	98	1860263	5.13	ug/l	-0.02
Spiked Amount 10.000			Recovery =	51.30%		
77) 4-Bromofluorobenzene	17.45	95	672635	5.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	50.20%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	705323	4.79	ug/l	98
3) Chloromethane	1.88	50	645720	4.78	ug/l	99
4) Vinyl chloride	2.00	62	536336	5.07	ug/l	96
5) Bromomethane	2.43	94	392664	4.56	ug/l	99
6) Chloroethane	2.51	64	297391	4.32	ug/l	98
7) Dichlorofluoromethane	2.55	67	1206364	4.80	ug/l	100
8) Trichlorofluoromethane	2.81	101	674943	4.85	ug/l	98
9) Acrolein	3.32	56	105766	21.59	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	520488	4.43	ug/l	97
11) Acetone	3.41	43	344671	24.47	ug/l	97
12) 1,1-Dichloroethene	3.55	61	955223	5.18	ug/l	99
13) tert-Butyl alcohol	3.70	59	527311	121.03	ug/l	92
15) Methyl acetate	4.10	74	37300	4.96	ug/l	90
16) Iodomethane	3.99	142	893864	5.17	ug/l	100
17) Allyl chloride	4.12	76	291842	4.94	ug/l	94
18) Methylene chloride	4.29	49	754258	5.00	ug/l	99
19) Carbon disulfide	4.26	76	1006892	4.70	ug/l	98
20) Acrylonitrile	4.54	53	447157	25.56	ug/l	98
21) tert-Butyl methyl ether (M	4.58	73	917670	5.19	ug/l	100
22) trans-1,2-Dichloroethene	4.79	96	569783	5.17	ug/l	99
23) Isopropyl ether (DIPE)	5.48	45	1978503	5.43	ug/l	99
24) Vinyl acetate	5.71	43	650720	4.94	ug/l	99
25) 1,1-Dichloroethane	5.63	63	985792	5.35	ug/l	99
26) 2-Butanol	6.21	45	477745	101.04	ug/l	93
27) tert-Butyl ethyl ether (ET	6.38	59	1463594	5.54	ug/l	98
28) 2-Butanone	6.67	43	586459	24.51	ug/l	99
29) 2,2-Dichloropropane	6.93	77	597793	5.20	ug/l	98
30) cis-1,2-Dichloroethene	7.03	96	590518	5.19	ug/l	99
31) Chloroform	7.43	83	954073	5.23	ug/l	100
32) Bromochloromethane	7.83	130	259616	5.27	ug/l	98
33) Tetrahydrofuran	7.93	42	63795	4.98	ug/l	97
36) 1,1,1-Trichloroethane	8.35	97	777033	5.30	ug/l	99
37) Cyclohexane	8.33	84	900707	4.79	ug/l	99
39) 1,1-Dichloropropene	8.71	110	255523	5.16	ug/l	99
40) Carbon tetrachloride	8.90	119	645340	5.31	ug/l	98
41) tert-Amyl methyl ether (TA	9.06	73	1149031	5.32	ug/l	99

(#) = qualifier out of range (m) = manual integration

RIW079.D VO06I19B.M Fri Oct 11 17:42:10 2024

SR 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	499694	5.45 ug/l	98
44)	Benzene	9.27	78	2222758	5.56 ug/l	99
45)	Trichloroethene	10.55	130	565474	5.43 ug/l	97
46)	Methylcyclohexane	10.61	83	957335	4.84 ug/l	98
47)	1,2-Dichloropropane	10.91	63	526844	5.33 ug/l	96
48)	1,4-Dioxane	11.45	88	46867	101.26 ug/l	97
49)	Bromodichloromethane	11.35	83	672807	5.25 ug/l	100
50)	Dibromomethane	11.41	93	248905	5.32 ug/l	97
51)	2-Chloroethyl vinyl ether	12.04	63	152451	4.90 ug/l	97
52)	4-Methyl-2-pentanone	12.08	43	1759557	26.68 ug/l	99
53)	cis-1,3-Dichloropropene	12.40	75	844563	5.38 ug/l	99
56)	Toluene	12.94	91	2462675	5.82 ug/l	99
57)	Ethyl methacrylate	13.38	69	482886	5.20 ug/l	99
58)	trans-1,3-Dichloropropene	13.32	75	657703	5.53 ug/l	99
59)	1,1,2-Trichloroethane	13.57	97	333735	5.50 ug/l	99
60)	2-Hexanone	13.65	43	1182712	26.68 ug/l	100
61)	1,3-Dichloropropane	14.03	76	643788	5.74 ug/l	98
62)	Tetrachloroethene	14.07	164	476520	5.48 ug/l	99
63)	Dibromochloromethane	14.43	129	392171	5.24 ug/l	99
65)	1,2-Dibromoethane	14.76	107	311792	5.40 ug/l	98
66)	1-Chlorohexane	15.12	91	886729	4.92 ug/l	100
67)	Chlorobenzene	15.50	112	1454079	5.62 ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.59	131	457578	5.59 ug/l	96
69)	Ethylbenzene	15.61	91	2848987	5.47 ug/l	100
70)	m-Xylene & p-Xylene	15.74	91	4392415	11.03 ug/l	99
71)	o-Xylene	16.47	91	2123490	5.42 ug/l	99
72)	Styrene	16.53	104	1623289	5.54 ug/l	98
73)	Isopropylbenzene	17.08	105	2699729	5.31 ug/l	98
75)	Bromoform	17.07	173	179345	4.89 ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.36	83	385919	5.56 ug/l	100
78)	1,2,3-Trichloropropane	17.57	110	98375	5.14 ug/l	94
79)	trans-1,4-Dichloro-2-buten	17.68	53	105050	4.97 ug/l	96
80)	n-Propylbenzene	17.68	91	3661988	5.53 ug/l	99
81)	Bromobenzene	17.71	156	541620	5.71 ug/l	97
82)	1,3,5-Trimethylbenzene	17.90	105	2204256	5.45 ug/l	99
83)	2-Chlorotoluene	17.91	91	2164604	5.57 ug/l	97
84)	4-Chlorotoluene	17.97	91	2077155	5.84 ug/l	99
85)	tert-Butylbenzene	18.35	134	479046	5.61 ug/l	98
86)	1,2,4-Trimethylbenzene	18.39	105	2275431	5.43 ug/l	98
87)	sec-Butylbenzene	18.60	105	3067129	5.37 ug/l	96
88)	p-Isopropyltoluene	18.77	119	2561125	5.28 ug/l	98
89)	1,3-Dichlorobenzene	18.87	146	1178641	5.55 ug/l	96
90)	1,2,3-Trimethylbenzene	18.95	105	2031695	5.36 ug/l	99
91)	1,4-Dichlorobenzene	18.99	146	1154468	5.49 ug/l	99
92)	n-Butylbenzene	19.21	91	2719202	5.20 ug/l	98
93)	1,2-Dichlorobenzene	19.37	146	970120	5.52 ug/l	97
94)	1,2-Dibromo-3-chloropropan	20.14	157	58638	4.78 ug/l	89
95)	1,2,4-Trichlorobenzene	20.97	180	719485	5.21 ug/l	98
96)	Hexachlorobutadiene	21.10	225	373228	5.00 ug/l	98
97)	Naphthalene	21.24	128	984317	5.29 ug/l	99

(#) = qualifier out of range (m) = manual integration SA 10/14/24
RIW079.D VO06I19B.M Fri Oct 11 17:42:11 2024

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	526222	5.05	ug/l	98

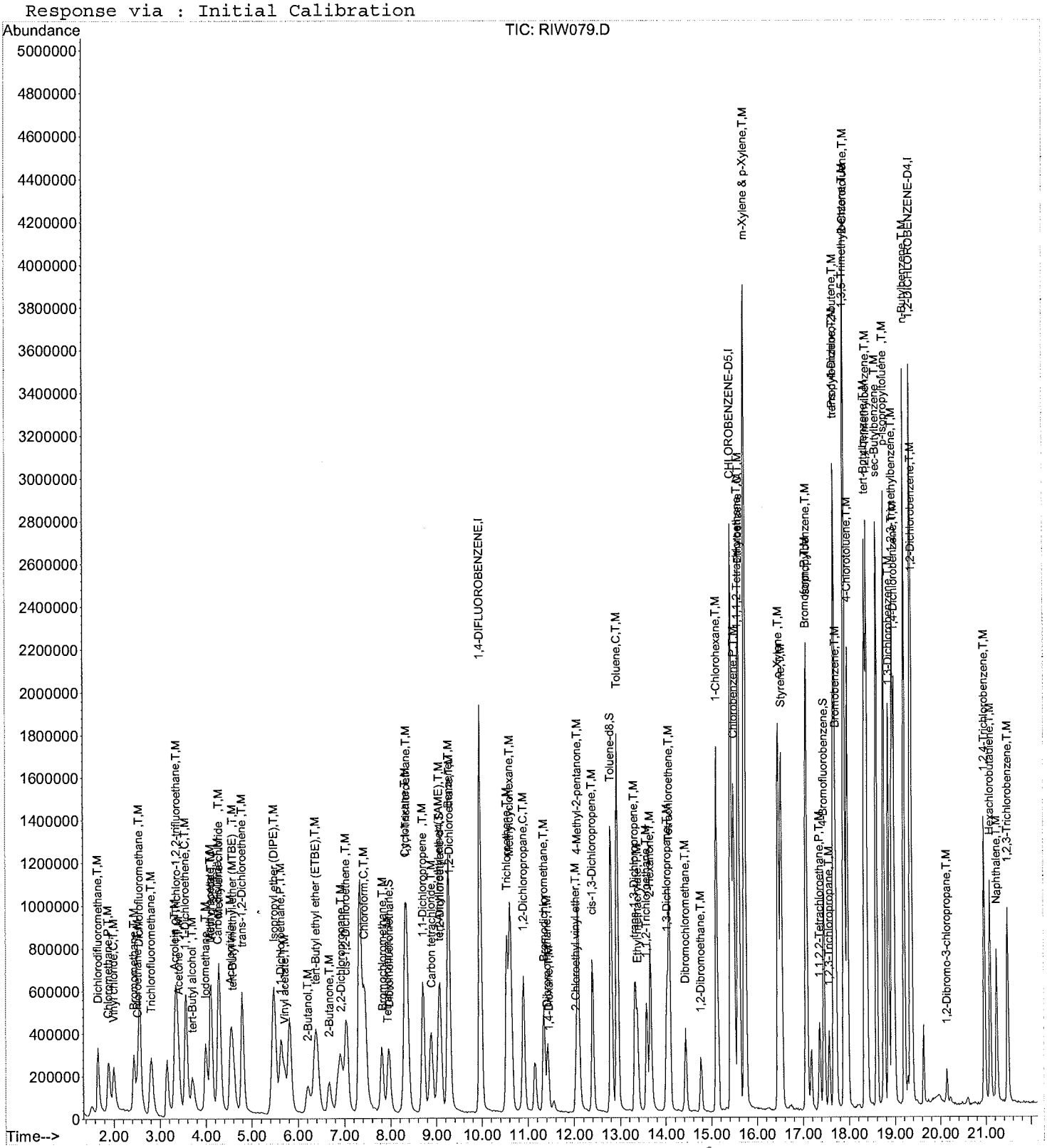
(#) = qualifier out of range (m) = manual integration
RIW079.D VO06I19B.M Fri Oct 11 17:42:11 2024 Page 3

SU 10/14/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3477436	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2910329	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1285376	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	996942	10.13	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.30%			
42) 1,2-Dichloroethane-d4	9.08	65	820553	10.67	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.70%			
55) Toluene-d8	12.82	98	3904240	10.37	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.70%			
77) 4-Bromofluorobenzene	17.45	95	1452227	10.12	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.68	85	1244191	8.47	ug/l	100
3) Chloromethane	1.89	50	1201881	8.93	ug/l	100
4) Vinyl chloride	2.01	62	842844	7.99	ug/l	100
5) Bromomethane	2.45	94	738453	8.51	ug/l	100
6) Chloroethane	2.52	64	600895	8.80	ug/l	100
7) Dichlorofluoromethane	2.56	67	2309931	9.42	ug/l	100
8) Trichlorofluoromethane	2.82	101	1234378	8.90	ug/l	100
9) Acrolein	3.32	56	208289	42.64	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	1005367	8.82	ug/l	100
11) Acetone	3.43	43	685177	48.78	ug/l	100
12) 1,1-Dichloroethene	3.57	61	1860392	10.11	ug/l	100
13) tert-Butyl alcohol	3.72	59	1210429	278.60	ug/l	100
15) Methyl acetate	4.10	74	81794	10.90	ug/l	100
16) Iodomethane	4.01	142	1717915	9.97	ug/l	100
17) Allyl chloride	4.12	76	609108	10.34	ug/l	100
18) Methylene chloride	4.31	49	1402141	9.79	ug/l	100
19) Carbon disulfide	4.26	76	2215273	10.19	ug/l	100
20) Acrylonitrile	4.54	53	894199	51.25	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	1914184	10.86	ug/l	100
22) trans-1,2-Dichloroethene	4.81	96	1113536	10.13	ug/l	100
23) Isopropyl ether (DIPE)	5.48	45	3878239	10.67	ug/l	100
24) Vinyl acetate	5.71	43	1253638	9.55	ug/l	100
25) 1,1-Dichloroethane	5.65	63	1890375	10.29	ug/l	100
26) 2-Butanol	6.21	45	1282863	259.58	ug/l	100
27) tert-Butyl ethyl ether (ET	6.38	59	2830606	10.74	ug/l	100
28) 2-Butanone	6.67	43	1196383	50.13	ug/l	100
29) 2,2-Dichloropropane	6.93	77	1204191	10.50	ug/l	100
30) cis-1,2-Dichloroethene	7.05	96	1144335	10.08	ug/l	100
31) Chloroform	7.45	83	1825674	10.04	ug/l	100
32) Bromochloromethane	7.83	130	516536	10.51	ug/l	100
33) Tetrahydrofuran	7.93	42	121438	9.50	ug/l	100
36) 1,1,1-Trichloroethane	8.35	97	1518593	10.38	ug/l	100
37) Cyclohexane	8.35	84	1990061	10.61	ug/l	100
39) 1,1-Dichloropropene	8.73	110	500876	10.14	ug/l	100
40) Carbon tetrachloride	8.90	119	1275832	10.52	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	2324869	10.79	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	975945	10.66	ug/l	100
44)	Benzene	9.27	78	4242252	10.64	ug/l	100
45)	Trichloroethene	10.55	130	1107094	10.67	ug/l	100
46)	Methylcyclohexane	10.64	83	2187565	11.08	ug/l	100
47)	1,2-Dichloropropane	10.91	63	1016617	10.31	ug/l	100
48)	1,4-Dioxane	11.45	88	105136	227.79	ug/l	100
49)	Bromodichloromethane	11.35	83	1304302	10.20	ug/l	100
50)	Dibromomethane	11.41	93	483310	10.35	ug/l	100
51)	2-Chloroethyl vinyl ether	12.04	63	312874	10.09	ug/l	100
52)	4-Methyl-2-pentanone	12.08	43	3562279	54.16	ug/l	100
53)	cis-1,3-Dichloropropene	12.40	75	1651593	10.55	ug/l	100
56)	Toluene	12.94	91	4671479	10.64	ug/l	100
57)	Ethyl methacrylate	13.38	69	971870	10.07	ug/l	100
58)	trans-1,3-Dichloropropene	13.32	75	1266634	10.27	ug/l	100
59)	1,1,2-Trichloroethane	13.57	97	650537	10.32	ug/l	100
60)	2-Hexanone	13.65	43	2373340	51.56	ug/l	100
61)	1,3-Dichloropropane	14.03	76	1202925	10.33	ug/l	100
62)	Tetrachloroethene	14.07	164	932030	10.32	ug/l	100
63)	Dibromochloromethane	14.43	129	787869	10.14	ug/l	100
65)	1,2-Dibromoethane	14.76	107	621498	10.37	ug/l	100
66)	1-Chlorohexane	15.12	91	1723656	9.22	ug/l	100
67)	Chlorobenzene	15.50	112	2806780	10.44	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.59	131	938184	11.04	ug/l	100
69)	Ethylbenzene	15.60	91	5454069	10.08	ug/l	100
70)	m-Xylene & p-Xylene	15.74	91	8198654	19.83	ug/l	100
71)	o-Xylene	16.47	91	4227945	10.38	ug/l	100
72)	Styrene	16.53	104	3186076	10.47	ug/l	100
73)	Isopropylbenzene	17.08	105	5348931	10.13	ug/l	100
75)	Bromoform	17.07	173	381371	9.62	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.36	83	775935	10.44	ug/l	100
78)	1,2,3-Trichloropropane	17.57	110	205069	10.01	ug/l	100
79)	trans-1,4-Dichloro-2-buten	17.68	53	214711	9.50	ug/l	100
80)	n-Propylbenzene	17.68	91	6962101	9.82	ug/l	100
81)	Bromobenzene	17.71	156	1062944	10.46	ug/l	100
82)	1,3,5-Trimethylbenzene	17.90	105	4392289	10.15	ug/l	100
83)	2-Chlorotoluene	17.91	91	4132029	9.94	ug/l	100
84)	4-Chlorotoluene	17.97	91	4032123	10.59	ug/l	100
85)	tert-Butylbenzene	18.35	134	967924	10.58	ug/l	100
86)	1,2,4-Trimethylbenzene	18.39	105	4463438	9.95	ug/l	100
87)	sec-Butylbenzene	18.60	105	6044348	9.90	ug/l	100
88)	p-Isopropyltoluene	18.76	119	5199036	10.02	ug/l	100
89)	1,3-Dichlorobenzene	18.87	146	2363059	10.41	ug/l	97
90)	1,2,3-Trimethylbenzene	18.95	105	4113818	10.14	ug/l	100
91)	1,4-Dichlorobenzene	18.99	146	2305203	10.25	ug/l	100
92)	n-Butylbenzene	19.21	91	5438391	9.72	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	1993209	10.61	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	130796	9.95	ug/l	100
95)	1,2,4-Trichlorobenzene	20.97	180	1532298	10.38	ug/l	100
96)	Hexachlorobutadiene	21.10	225	869897	10.90	ug/l	100
97)	Naphthalene	21.24	128	2119779	10.66	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1157581	10.39	ug/l	100

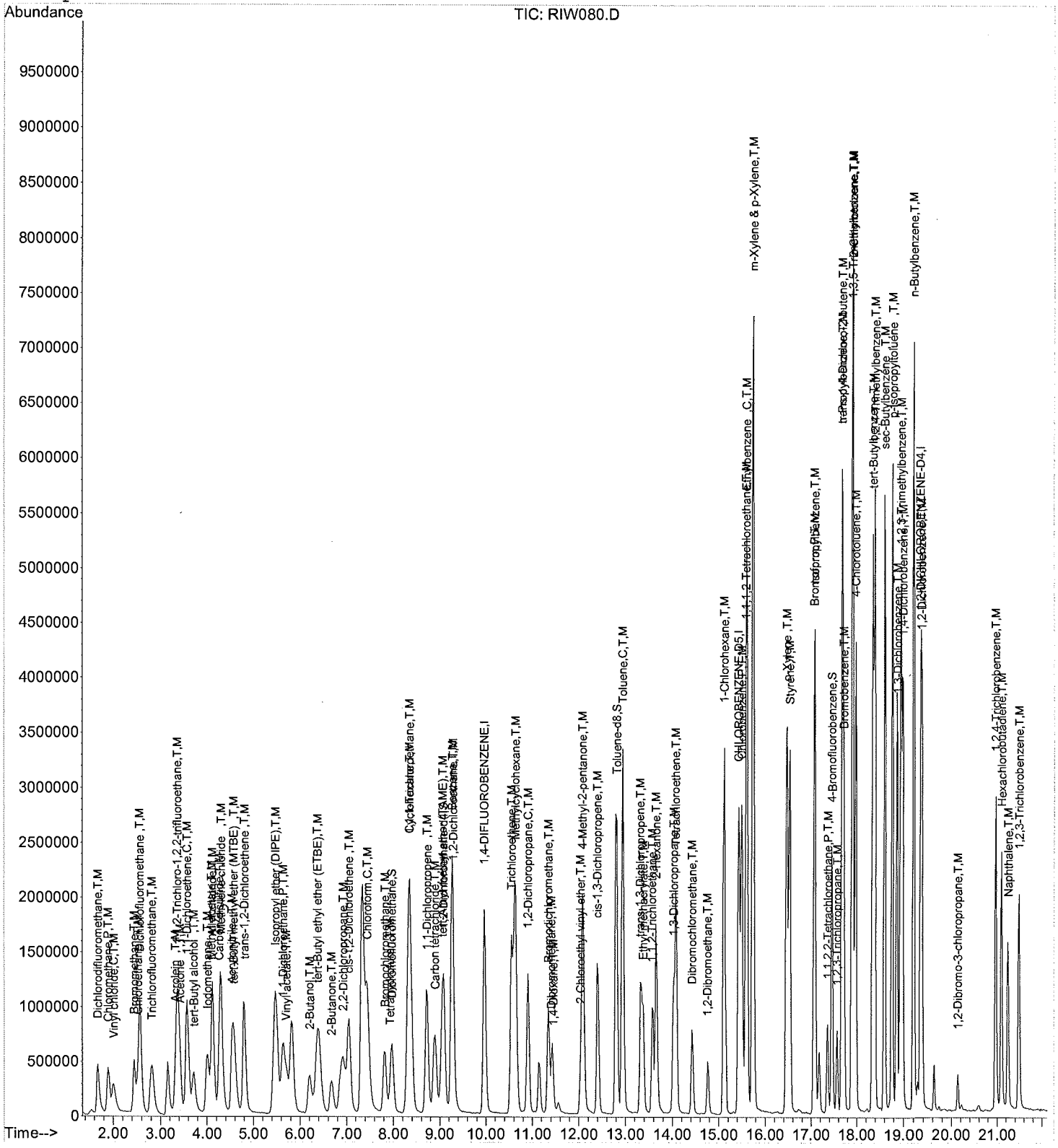
SA 10/14/24

(#) = qualifier out of range (m) = manual integration
RIW080.D VO06I19B.M Fri Oct 11 17:42:30 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3259946	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2727598	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1145684	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	2026440	21.70	ug/l	0.00
Spiked Amount 10.000			Recovery = 217.00%			
42) 1,2-Dichloroethane-d4	9.08	65	1608726	22.32	ug/l	0.00
Spiked Amount 10.000			Recovery = 223.20%			
55) Toluene-d8	12.82	98	7608294	21.55	ug/l	0.00
Spiked Amount 10.000			Recovery = 215.50%			
77) 4-Bromofluorobenzene	17.45	95	2825717	22.09	ug/l	0.00
Spiked Amount 10.000			Recovery = 220.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.68	85	2814273	20.43	ug/l	100
3) Chloromethane	1.89	50	2586862	20.49	ug/l	100
4) Vinyl chloride	1.99	62	1735839	17.55	ug/l	98
5) Bromomethane	2.45	94	1639634	20.03	ug/l	99
6) Chloroethane	2.52	64	1291787	20.24	ug/l	95
7) Dichlorofluoromethane	2.56	67	4378680	19.81	ug/l	100
8) Trichlorofluoromethane	2.80	101	2882610	22.17	ug/l	97
9) Acrolein	3.32	56	481504	105.15	ug/l	89
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	1980661	20.20	ug/l	100
11) Acetone	3.43	43	1410991	107.16	ug/l	94
12) 1,1-Dichloroethene	3.57	61	3710554	21.52	ug/l	100
13) tert-Butyl alcohol	3.72	59	2397266	588.57	ug/l	99
15) Methyl acetate	4.10	74	150749	21.43	ug/l	87
16) Iodomethane	4.01	142	3450750	21.36	ug/l	98
17) Allyl chloride	4.12	76	1225111	22.19	ug/l	98
18) Methylene chloride	4.31	49	2740308	20.98	ug/l	99
19) Carbon disulfide	4.26	76	4382421	21.33	ug/l	99
20) Acrylonitrile	4.54	53	1852792	113.27	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	3757839	22.73	ug/l	99
22) trans-1,2-Dichloroethene	4.81	96	2236452	21.71	ug/l	97
23) Isopropyl ether (DIPE)	5.48	45	7699041	22.60	ug/l	99
24) Vinyl acetate	5.71	43	2853220	23.19	ug/l	97
25) 1,1-Dichloroethane	5.63	63	3829282	22.23	ug/l	98
26) 2-Butanol	6.21	45	2467800	524.91	ug/l	98
27) tert-Butyl ethyl ether (ET	6.38	59	5583711	22.60	ug/l	99
28) 2-Butanone	6.67	43	2494992	111.52	ug/l	99
29) 2,2-Dichloropropane	6.93	77	2480859	23.08	ug/l	98
30) cis-1,2-Dichloroethene	7.05	96	2296690	21.58	ug/l	99
31) Chloroform	7.45	83	3655957	21.45	ug/l	99
32) Bromochloromethane	7.83	130	1025107	22.24	ug/l	99
33) Tetrahydrofuran	7.93	42	247680	20.68	ug/l	95
36) 1,1,1-Trichloroethane	8.35	97	3057587	22.30	ug/l	99
37) Cyclohexane	8.35	84	3927189	22.34	ug/l	100
39) 1,1-Dichloropropene	8.73	110	1012955	21.87	ug/l	100
40) Carbon tetrachloride	8.90	119	2576962	22.68	ug/l	98
41) tert-Amyl methyl ether (TA	9.06	73	4590846	22.72	ug/l	98

(#) = qualifier out of range (m) = manual integration
RIW081.D VO06I19B.M Fri Oct 11 17:43:41 2024 Su 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	1953475	22.77 ug/l	98
44)	Benzene	9.27	78	8297255	22.21 ug/l	99
45)	Trichloroethene	10.55	130	2214903	22.77 ug/l	98
46)	Methylcyclohexane	10.64	83	4274185	23.10 ug/l	99
47)	1,2-Dichloropropane	10.91	63	2085605	22.57 ug/l	100
48)	1,4-Dioxane	11.45	88	196251	453.57 ug/l	100
49)	Bromodichloromethane	11.35	83	2616755	21.82 ug/l	99
50)	Dibromomethane	11.43	93	989518	22.60 ug/l	99
51)	2-Chloroethyl vinyl ether	12.04	63	653430	22.47 ug/l	100
52)	4-Methyl-2-pentanone	12.08	43	6996398	113.46 ug/l	99
53)	cis-1,3-Dichloropropene	12.40	75	3252609	22.16 ug/l	98
56)	Toluene	12.94	91	9114710	22.15 ug/l	98
57)	Ethyl methacrylate	13.38	69	1936324	21.41 ug/l	99
58)	trans-1,3-Dichloropropene	13.32	75	2603367	22.51 ug/l	98
59)	1,1,2-Trichloroethane	13.59	97	1309355	22.16 ug/l	98
60)	2-Hexanone	13.65	43	4598630	106.59 ug/l	99
61)	1,3-Dichloropropane	14.03	76	2415904	22.13 ug/l	98
62)	Tetrachloroethene	14.09	164	1867253	22.05 ug/l	99
63)	Dibromochloromethane	14.43	129	1594038	21.90 ug/l	98
65)	1,2-Dibromoethane	14.76	107	1246516	22.19 ug/l	98
66)	1-Chlorohexane	15.12	91	3327490	18.98 ug/l	98
67)	Chlorobenzene	15.49	112	5487858	21.78 ug/l	98
68)	1,1,1,2-Tetrachloroethane	15.58	131	1819533	22.84 ug/l	97
69)	Ethylbenzene	15.61	91	10498672	20.70 ug/l	99
70)	m-Xylene & p-Xylene	15.74	91	15843624	40.89 ug/l	99
71)	o-Xylene	16.47	91	8180389	21.44 ug/l	100
72)	Styrene	16.53	104	6197208	21.74 ug/l	98
73)	Isopropylbenzene	17.08	105	10172431	20.55 ug/l	99
75)	Bromoform	17.06	173	775699	21.82 ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.36	83	1472547	22.22 ug/l	97
78)	1,2,3-Trichloropropane	17.57	110	423916	23.21 ug/l	95
79)	trans-1,4-Dichloro-2-buten	17.69	53	408435	20.27 ug/l	96
80)	n-Propylbenzene	17.67	91	13234493	20.94 ug/l	99
81)	Bromobenzene	17.73	156	2096833	23.16 ug/l	99
82)	1,3,5-Trimethylbenzene	17.89	105	8155548	21.15 ug/l	99
83)	2-Chlorotoluene	17.91	91	8521424	23.01 ug/l	95
84)	4-Chlorotoluene	17.97	91	7193174	21.19 ug/l	94
85)	tert-Butylbenzene	18.35	134	1856605	22.78 ug/l	98
86)	1,2,4-Trimethylbenzene	18.39	105	8332998	20.85 ug/l	100
87)	sec-Butylbenzene	18.61	105	11128130	20.45 ug/l	99
88)	p-Isopropyltoluene	18.76	119	9432368	20.39 ug/l	99
89)	1,3-Dichlorobenzene	18.87	146	4452930	22.00 ug/l	95
90)	1,2,3-Trimethylbenzene	18.94	105	7506191	20.75 ug/l	99
91)	1,4-Dichlorobenzene	18.98	146	4325382	21.57 ug/l	98
92)	n-Butylbenzene	19.20	91	9786813	19.63 ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	3708693	22.14 ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.14	157	244382	20.87 ug/l	94
95)	1,2,4-Trichlorobenzene	20.97	180	2669858	20.28 ug/l	99
96)	Hexachlorobutadiene	21.10	225	1494990	21.02 ug/l	99
97)	Naphthalene	21.24	128	3722562	20.99 ug/l	100

(#) = qualifier out of range (m) = manual integration

SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1960125	19.73	ug/l	100

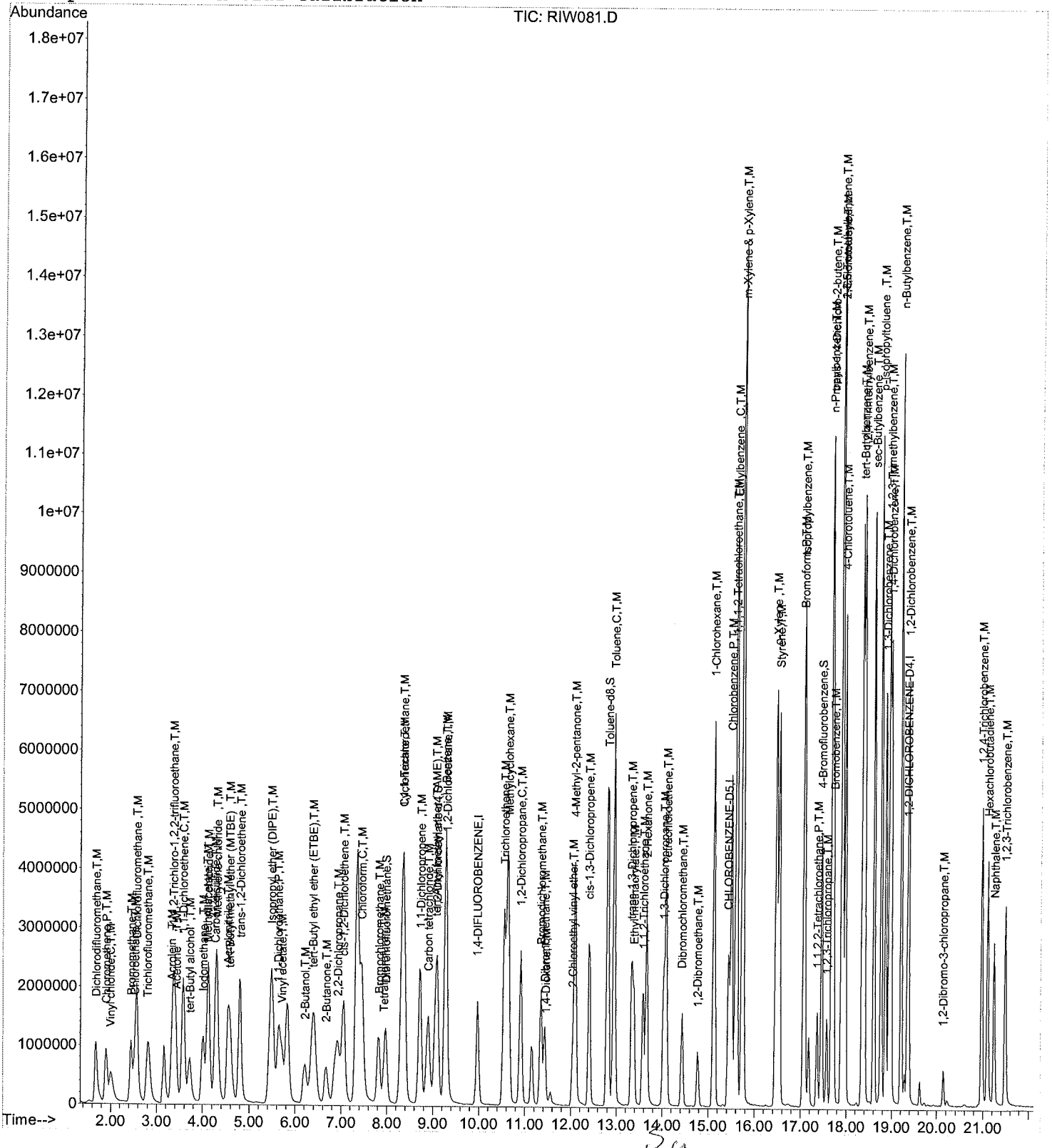
(#) = qualifier out of range (m) = manual integration

SL 10/14/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



RIW081.D VO06I19B.M Fri Oct 11 17:43:45 2024 Page 4

10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2996590	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2593955	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1106357	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	2475444	28.76	ug/l	-0.02
Spiked Amount 10.000			Recovery = 287.60%			
42) 1,2-Dichloroethane-d4	9.08	65	2029791	30.64	ug/l	0.00
Spiked Amount 10.000			Recovery = 306.40%			
55) Toluene-d8	12.79	98	9474484	28.22	ug/l	-0.02
Spiked Amount 10.000			Recovery = 282.20%			
77) 4-Bromofluorobenzene	17.45	95	3632219	29.40	ug/l	0.00
Spiked Amount 10.000			Recovery = 294.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.64	85	4343299	34.31	ug/l	100
3) Chloromethane	1.88	50	4213115	36.31	ug/l	99
4) Vinyl chloride	1.98	62	2671691	29.39	ug/l	98
5) Bromomethane	2.43	94	2372767	31.48	ug/l	100
6) Chloroethane	2.51	64	1830393	31.22	ug/l	95
7) Dichlorofluoromethane	2.55	67	5929070	30.34	ug/l	98
8) Trichlorofluoromethane	2.79	101	4066672	34.02	ug/l	99
9) Acrolein	3.32	56	643849	152.96	ug/l	90
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	2664263	33.00	ug/l	100
11) Acetone	3.40	43	1823308	150.65	ug/l	97
12) 1,1-Dichloroethene	3.55	61	4759473	30.03	ug/l	99
13) tert-Butyl alcohol	3.70	59	3102130	828.57	ug/l	99
15) Methyl acetate	4.07	74	197181	30.49	ug/l	82
16) Iodomethane	3.99	142	4526140	30.47	ug/l	100
17) Allyl chloride	4.12	76	1499684	29.55	ug/l	96
18) Methylene chloride	4.28	49	3476444	29.16	ug/l	98
19) Carbon disulfide	4.26	76	5428429	28.69	ug/l	99
20) Acrylonitrile	4.51	53	2455163	163.29	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	4757117	31.31	ug/l	97
22) trans-1,2-Dichloroethene	4.79	96	2764398	29.20	ug/l	98
23) Isopropyl ether (DIPE)	5.46	45	9637058	30.78	ug/l	98
24) Vinyl acetate	5.71	43	3718693	32.88	ug/l	98
25) 1,1-Dichloroethane	5.63	63	4709963	29.75	ug/l	97
26) 2-Butanol	6.19	45	3263498	751.93	ug/l	92
27) tert-Butyl ethyl ether (ET	6.38	59	6868003	30.24	ug/l	98
28) 2-Butanone	6.65	43	3307044	160.81	ug/l	99
29) 2,2-Dichloropropane	6.93	77	2888967	29.24	ug/l	99
30) cis-1,2-Dichloroethene	7.03	96	2847278	29.11	ug/l	98
31) Chloroform	7.43	83	4474111	28.56	ug/l	98
32) Bromochloromethane	7.81	130	1328838	31.36	ug/l	100
33) Tetrahydrofuran	7.93	42	317590	28.85	ug/l	97
36) 1,1,1-Trichloroethane	8.35	97	3828686	30.38	ug/l	99
37) Cyclohexane	8.33	84	4965871	30.73	ug/l	98
39) 1,1-Dichloropropene	8.71	110	1267382	29.77	ug/l	99
40) Carbon tetrachloride	8.90	119	3286825	31.47	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	5733032	30.87	ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloroethane	9.29	62	2447233	31.03 ug/l	97
44) Benzene	9.27	78	10336717	30.10 ug/l	99
45) Trichloroethene	10.55	130	2733613	30.57 ug/l	98
46) Methylcyclohexane	10.61	83	5256309	30.90 ug/l	99
47) 1,2-Dichloropropane	10.91	63	2579347	30.36 ug/l	100
48) 1,4-Dioxane	11.45	88	226753	570.12 ug/l	100
49) Bromodichloromethane	11.35	83	3321819	30.14 ug/l	99
50) Dibromomethane	11.41	93	1282993	31.88 ug/l	97
51) 2-Chloroethyl vinyl ether	12.04	63	864724	32.35 ug/l	98
52) 4-Methyl-2-pentanone	12.08	43	9111280	160.75 ug/l	98
53) cis-1,3-Dichloropropene	12.40	75	4151190	30.77 ug/l	98
56) Toluene	12.94	91	11380108	29.08 ug/l	99
57) Ethyl methacrylate	13.38	69	2477183	28.80 ug/l	100
58) trans-1,3-Dichloropropene	13.32	75	3326453	30.25 ug/l	100
59) 1,1,2-Trichloroethane	13.59	97	1672406	29.76 ug/l	98
60) 2-Hexanone	13.65	43	6207786	151.31 ug/l	99
61) 1,3-Dichloropropane	14.03	76	3050247	29.38 ug/l	97
62) Tetrachloroethene	14.09	164	2337859	29.03 ug/l	100
63) Dibromochloromethane	14.43	129	2088544	30.17 ug/l	100
65) 1,2-Dibromoethane	14.76	107	1650966	30.91 ug/l	99
66) 1-Chlorohexane	15.12	91	4031468	24.19 ug/l	100
67) Chlorobenzene	15.50	112	7171112	29.93 ug/l	99
68) 1,1,1,2-Tetrachloroethane	15.59	131	2345975	30.97 ug/l	98
69) Ethylbenzene	15.61	91	13217589	27.41 ug/l	99
70) m-Xylene & p-Xylene	15.74	91	19467041	52.83 ug/l	98
71) o-Xylene	16.47	91	10236315	28.21 ug/l	99
72) Styrene	16.53	104	7984911	29.45 ug/l	98
73) Isopropylbenzene	17.08	105	12324935	26.18 ug/l	99
75) Bromoform	17.07	173	1048187	30.50 ug/l	98
76) 1,1,2,2-Tetrachloroethane	17.36	83	1984883	31.02 ug/l	97
78) 1,2,3-Trichloropropane	17.57	110	531594	30.15 ug/l	98
79) trans-1,4-Dichloro-2-buten	17.69	53	582680	29.94 ug/l	99
80) n-Propylbenzene	17.67	91	15892073	26.04 ug/l	98
81) Bromobenzene	17.73	156	2706883	30.96 ug/l	98
82) 1,3,5-Trimethylbenzene	17.90	105	9772572	26.25 ug/l	100
83) 2-Chlorotoluene	17.91	91	10639210	29.75 ug/l	95
84) 4-Chlorotoluene	17.97	91	8998085	27.45 ug/l	92
85) tert-Butylbenzene	18.35	134	2156275	27.40 ug/l	96
86) 1,2,4-Trimethylbenzene	18.39	105	10021249	25.96 ug/l	100
87) sec-Butylbenzene	18.61	105	12894661	24.53 ug/l	100
88) p-Isopropyltoluene	18.76	119	10930698	24.47 ug/l	99
89) 1,3-Dichlorobenzene	18.87	146	5629520	28.80 ug/l	95
90) 1,2,3-Trimethylbenzene	18.95	105	8947950	25.61 ug/l	99
91) 1,4-Dichlorobenzene	18.99	146	5542485	28.63 ug/l	99
92) n-Butylbenzene	19.21	91	11735065	24.38 ug/l	99
93) 1,2-Dichlorobenzene	19.37	146	4777836	29.53 ug/l	100
94) 1,2-Dibromo-3-chloropropan	20.14	157	336882	29.79 ug/l	96
95) 1,2,4-Trichlorobenzene	20.97	180	3523968	27.72 ug/l	100
96) Hexachlorobutadiene	21.10	225	1877895	27.34 ug/l	96
97) Naphthalene	21.24	128	4985329	29.12 ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

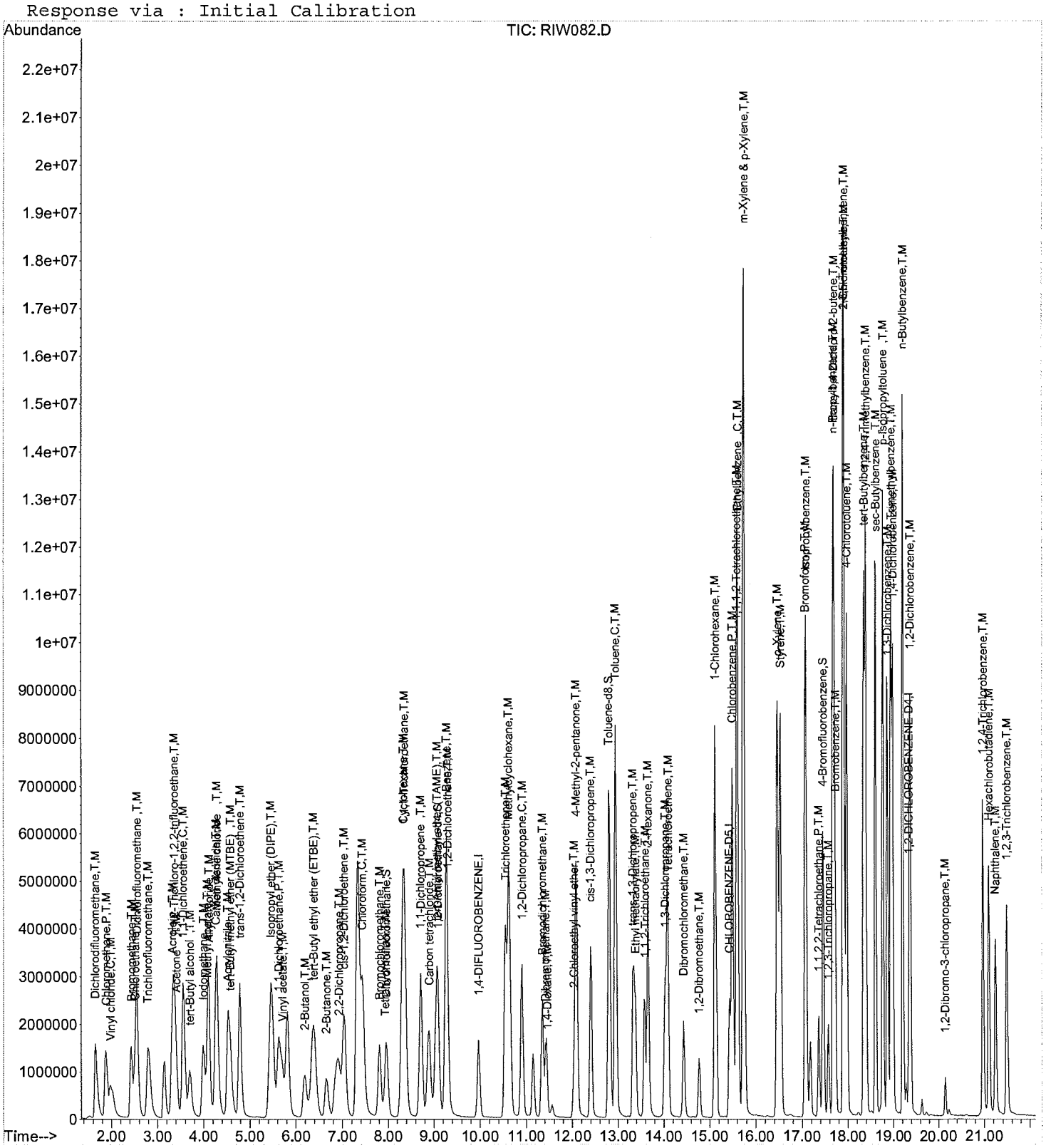
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	2604808	27.15	ug/l	99

(#) = qualifier out of range (m) = manual integration
RIW082.D VO06I19B.M Fri Oct 11 17:43:58 2024 SU 10/14/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SG 10/14/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW083.D Vial: 10
Acq On : 19 Sep 2024 2:36 pm Operator: PMai
Sample : VO06I199 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:19 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.98	114	4206183	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.44	117	3395951	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1267473	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	2150	0.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.40%		
42) 1,2-Dichloroethane-d4	9.08	65	13988	0.15	ug/l	0.00
Spiked Amount 10.000			Recovery =	1.50%		
55) Toluene-d8	12.81	98	16417	0.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.40%		
77) 4-Bromofluorobenzene	17.47	95	23003	0.16	ug/l	0.01
Spiked Amount 10.000			Recovery =	1.60%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.67	85	6754956	38.01	ug/l	99
3) Chloromethane	1.89	50	6445667	39.58	ug/l	98
4) Vinyl chloride	1.99	62	3515513	27.55	ug/l	97
5) Bromomethane	2.44	94	3970742	37.51	ug/l	100
6) Chloroethane	2.52	64	2965042	36.04	ug/l	98
7) Dichlorofluoromethane	2.56	67	10112600	37.94	ug/l	97
8) Trichlorofluoromethane	2.82	101	7139355	42.55	ug/l	100
9) Acrolein	3.32	56	1406709	238.09	ug/l	98
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	4662942	47.37	ug/l	98
11) Acetone	3.42	43	4217841	248.27	ug/l	97
12) 1,1-Dichloroethene	3.57	61	9740642	43.78	ug/l	98
13) tert-Butyl alcohol	3.72	59	6835306	1300.66	ug/l	99
16) Iodomethane	4.01	142	9321990	44.71	ug/l	99
17) Allyl chloride	4.12	76	3578200	50.23	ug/l	97
18) Methylene chloride	4.30	49	7567524	45.51	ug/l	98
20) Acrylonitrile	4.54	53	5653483	267.88	ug/l	99
21) tert-Butyl methyl ether (M	4.60	73	10516211	49.30	ug/l	97
22) trans-1,2-Dichloroethene	4.81	96	6242469	46.97	ug/l	95
23) Isopropyl ether (DIPE)	5.48	45	21645712	49.25	ug/l	98
24) Vinyl acetate	5.71	43	8556935	53.90	ug/l	99
25) 1,1-Dichloroethane	5.65	63	10895440	49.02	ug/l	96
27) tert-Butyl ethyl ether (ET	6.40	59	15789414	49.54	ug/l	98
28) 2-Butanone	6.67	43	7666590	265.60	ug/l	98
29) 2,2-Dichloropropane	6.92	77	6348535	45.77	ug/l	98
30) cis-1,2-Dichloroethene	7.05	96	6666481	48.56	ug/l	99
31) Chloroform	7.45	83	10469209	47.61	ug/l	98
32) Bromochloromethane	7.83	130	3145842	52.90	ug/l	97
33) Tetrahydrofuran	7.93	42	823075	53.26	ug/l	92
36) 1,1,1-Trichloroethane	8.37	97	8404301	47.51	ug/l	98
39) 1,1-Dichloropropene	8.73	110	2938897	49.19	ug/l	100
40) Carbon tetrachloride	8.89	119	7104046	48.45	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	12687032	48.66	ug/l	97
43) 1,2-Dichloroethane	9.29	62	5648982	51.03	ug/l	95
44) Benzene	9.27	78	23027133	47.77	ug/l	97
45) Trichloroethene	10.55	130	6227092	49.61	ug/l	99
47) 1,2-Dichloropropane	10.91	63	5818578	48.79	ug/l	98

(#) = qualifier out of range (m) = manual integration

10/14/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW083.D Vial: 10
Acq On : 19 Sep 2024 2:36 pm Operator: PMai
Sample : VO06I199 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:19 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
48) 1,4-Dioxane	11.45	88	566310	1014.39 ug/l	98
49) Bromodichloromethane	11.35	83	7539332	48.73 ug/l	97
50) Dibromomethane	11.43	93	2901431	51.37 ug/l	98
51) 2-Chloroethyl vinyl ether	12.04	63	2051335	54.67 ug/l	99
52) 4-Methyl-2-pentanone	12.08	43	20321326	255.42 ug/l	97
53) cis-1,3-Dichloropropene	12.42	75	9368979	49.48 ug/l	96
56) Toluene	12.94	91	23446877	45.77 ug/l	94
57) Ethyl methacrylate	13.38	69	5674935	50.40 ug/l	99
58) trans-1,3-Dichloropropene	13.34	75	7374646	51.22 ug/l	97
59) 1,1,2-Trichloroethane	13.59	97	3809137	51.77 ug/l	98
60) 2-Hexanone	13.65	43	13855803	257.96 ug/l	98
61) 1,3-Dichloropropane	14.03	76	6819196	50.17 ug/l	97
62) Tetrachloroethene	14.09	164	5033292	47.74 ug/l	99
63) Dibromochloromethane	14.43	129	4717008	52.04 ug/l	99
65) 1,2-Dibromoethane	14.78	107	3694760	52.84 ug/l	100
66) 1-Chlorohexane	15.12	91	8067645	36.97 ug/l	99
67) Chlorobenzene	15.51	112	14846965	47.33 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.60	131	4766403	48.06 ug/l	97
69) Ethylbenzene	15.61	91	23453413	37.15 ug/l	91
70) m-Xylene & p-Xylene	15.74	91	28404866	58.88 ug/l	72
71) o-Xylene	16.47	91	19600374	41.26 ug/l	97
72) Styrene	16.53	104	16164162	45.54 ug/l	98
73) Isopropylbenzene	17.08	105	21351804	34.64 ug/l	96
75) Bromoform	17.08	173	2236173	56.71 ug/l	98
76) 1,1,2,2-Tetrachloroethane	17.36	83	3954685	53.95 ug/l	96
78) 1,2,3-Trichloropropane	17.57	110	1158755	57.36 ug/l	100
79) trans-1,4-Dichloro-2-buten	17.69	53	1225932	54.99 ug/l	98
80) n-Propylbenzene	17.69	91	22799005	32.60 ug/l	86
81) Bromobenzene	17.73	156	5310135	53.01 ug/l	99
82) 1,3,5-Trimethylbenzene	17.89	105	16646536	39.02 ug/l	97
83) 2-Chlorotoluene	17.91	91	18389880	44.88 ug/l	97
84) 4-Chlorotoluene	17.97	91	16360928	43.57 ug/l	88
85) tert-Butylbenzene	18.35	134	3928334	43.56 ug/l	94
86) 1,2,4-Trimethylbenzene	18.40	105	16666415	37.69 ug/l	92
87) sec-Butylbenzene	18.61	105	18886826	31.37 ug/l	91
88) p-Isopropyltoluene	18.76	119	17527627	34.25 ug/l	91
89) 1,3-Dichlorobenzene	18.87	146	10495959	46.88 ug/l	93
90) 1,2,3-Trimethylbenzene	18.95	105	15252661	38.11 ug/l	94
91) 1,4-Dichlorobenzene	18.98	146	10370135	46.76 ug/l	97
92) n-Butylbenzene	19.21	91	17919160	32.50 ug/l	85
93) 1,2-Dichlorobenzene	19.37	146	8649707	46.67 ug/l	98
94) 1,2-Dibromo-3-chloropropan	20.14	157	665681	51.37 ug/l	96
95) 1,2,4-Trichlorobenzene	20.97	180	6323418	43.42 ug/l	100
96) Hexachlorobutadiene	21.10	225	3248765	41.28 ug/l	96
97) Naphthalene	21.24	128	9280937	47.31 ug/l	98
98) 1,2,3-Trichlorobenzene	21.49	180	4707593	42.84 ug/l	98

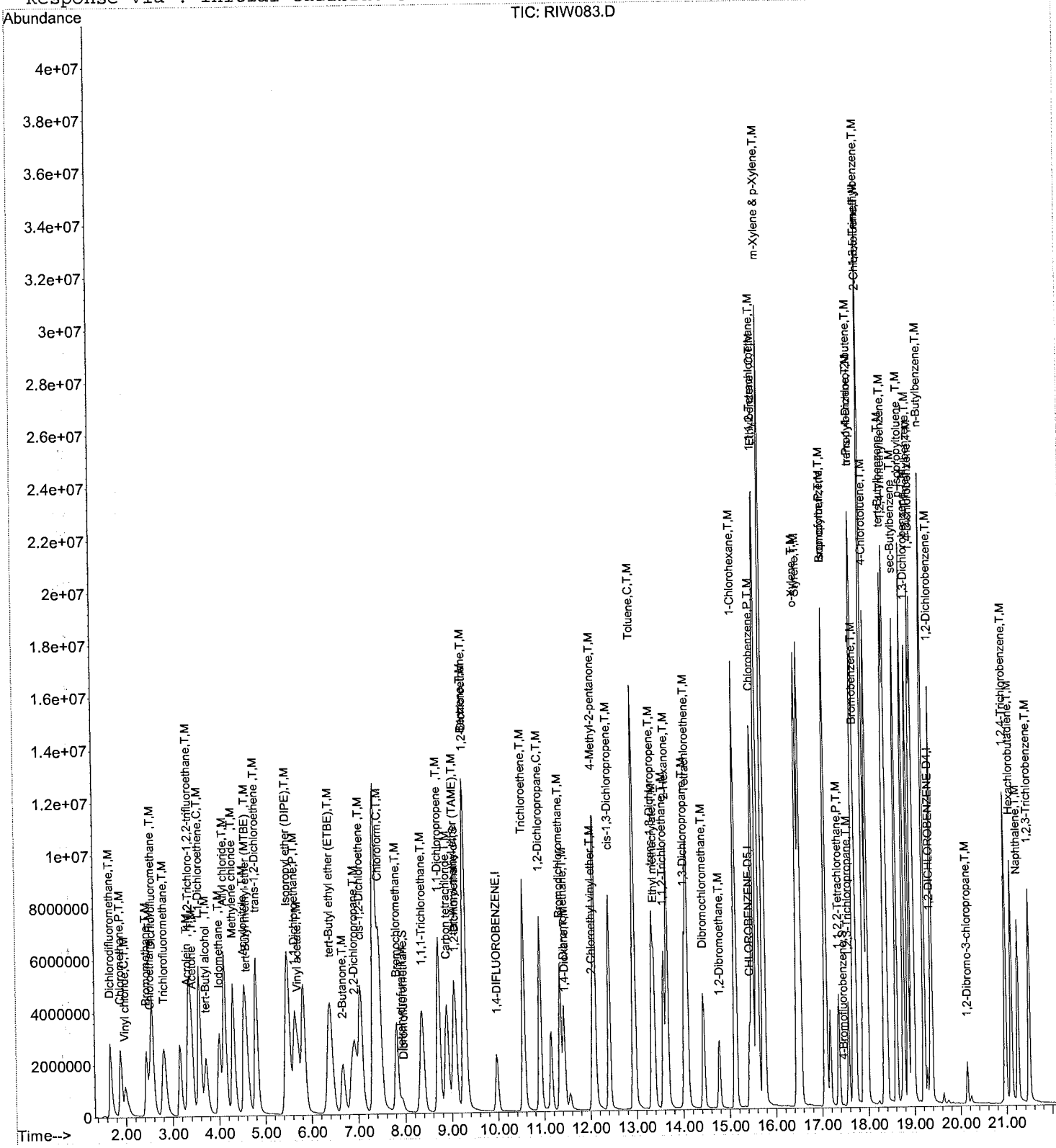
SC 10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW083.D Vial: 10
Acq On : 19 Sep 2024 2:36 pm Operator: PMai
Sample : VO06I199 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:19 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW084.D Vial: 11
Acq On : 19 Sep 2024 3:02 pm Operator: PMai
Sample : VO06I1910 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:22 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3637958	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.44	117	2768644	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1265533	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	1625	0.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.40%		
42) 1,2-Dichloroethane-d4	9.06	65	22232	0.28	ug/l	-0.02
Spiked Amount 10.000			Recovery =	2.80%		
55) Toluene-d8	12.82	98	10286	0.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.30%		
77) 4-Bromofluorobenzene	17.36	95	985993	6.98	ug/l	-0.09
Spiked Amount 10.000			Recovery =	69.80%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.65	85	16148328	105.07	ug/l	97
3) Chloromethane	1.87	50	14612117	103.73	ug/l	96
4) Vinyl chloride	1.99	62	8824260	79.97	ug/l	95
5) Bromomethane	2.42	94	9945559	108.46	ug/l	99
6) Chloroethane	2.50	64	7683261	108.05	ug/l	100
8) Trichlorofluoromethane	2.80	101	16365848	112.78	ug/l	99
9) Acrolein	3.30	56	2311513	452.34	ug/l	99
11) Acetone	3.40	43	6625917	450.94	ug/l	98
12) 1,1-Dichloroethene	3.55	61	20172568	104.83	ug/l	97
13) tert-Butyl alcohol	3.70	59	9798742	2155.79	ug/l	100
16) Iodomethane	3.99	142	18843913	104.50	ug/l	98
17) Allyl chloride	4.10	76	6196143	100.58	ug/l	96
18) Methylene chloride	4.29	49	14002938	97.97	ug/l	97
20) Acrylonitrile	4.52	53	9218905	505.05	ug/l	99
21) tert-Butyl methyl ether (M	4.56	73	16666283	90.34	ug/l	96
22) trans-1,2-Dichloroethene	4.79	96	10906587	94.88	ug/l	95
23) Isopropyl ether (DIPE)	5.46	45	35507486	93.40	ug/l	96
24) Vinyl acetate	5.69	43	14250810	103.78	ug/l	100
25) 1,1-Dichloroethane	5.63	63	18709340	97.33	ug/l	95
27) tert-Butyl ethyl ether (ET	6.38	59	24858794	90.17	ug/l	98
28) 2-Butanone	6.65	43	12262250	491.16	ug/l	97
29) 2,2-Dichloropropane	6.93	77	9875821	82.32	ug/l	97
30) cis-1,2-Dichloroethene	7.03	96	11419506	96.17	ug/l	98
31) Chloroform	7.45	83	17652598	92.81	ug/l	97
32) Bromochloromethane	7.81	130	5332114	103.66	ug/l	99
33) Tetrahydrofuran	7.91	42	1355631	101.42	ug/l	94
36) 1,1,1-Trichloroethane	8.35	97	14233825	93.02	ug/l	97
39) 1,1-Dichloropropene	8.71	110	5105574	98.80	ug/l	99
40) Carbon tetrachloride	8.90	119	13004055	102.54	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	19774924	87.70	ug/l	96
43) 1,2-Dichloroethane	9.29	62	9529457	99.53	ug/l	95
44) Benzene	9.27	78	35095883	84.17	ug/l	92
45) Trichloroethene	10.55	130	10584429	97.49	ug/l	99
47) 1,2-Dichloropropane	10.91	63	9897446	95.96	ug/l	97
48) 1,4-Dioxane	11.45	88	674602	1397.11	ug/l	100
49) Bromodichloromethane	11.35	83	12697231	94.89	ug/l	97

(#) = qualifier out of range (m) = manual integration
RIW084.D VO06I19B.M Mon Oct 14 14:22:31 2024

SC 10/14/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW084.D Vial: 11
Acq On : 19 Sep 2024 3:02 pm Operator: PMai
Sample : VO06I1910 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:22 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Dibromomethane	11.41	93	4869988	99.68	ug/l	99
51) 2-Chloroethyl vinyl ether	12.04	63	3453726	106.42	ug/l	99
52) 4-Methyl-2-pentanone	12.08	43	28518293	414.44	ug/l	94
53) cis-1,3-Dichloropropene	12.40	75	15322464	93.56	ug/l	95
56) Toluene	12.94	91	30993514	74.21	ug/l	77
57) Ethyl methacrylate	13.38	69	8778547	95.63	ug/l	97
58) trans-1,3-Dichloropropene	13.32	75	12179497	103.76	ug/l	98
59) 1,1,2-Trichloroethane	13.59	97	6159591	102.68	ug/l	97
60) 2-Hexanone	13.65	43	19993828	456.57	ug/l	95
61) 1,3-Dichloropropane	14.03	76	10905182	98.41	ug/l	96
62) Tetrachloroethene	14.09	164	8110952	94.37	ug/l	99
63) Dibromochloromethane	14.43	129	7608400	102.96	ug/l	100
65) 1,2-Dibromoethane	14.76	107	5909656	103.66	ug/l	100
66) 1-Chlorohexane	15.12	91	12432614	69.88	ug/l	99
67) Chlorobenzene	15.51	112	22182109	86.74	ug/l	94
68) 1,1,1,2-Tetrachloroethane	15.60	131	7353439	90.94	ug/l	99
69) Ethylbenzene	15.61	91	29012419	56.37	ug/l	74
70) m-Xylene & p-Xylene	15.74	91	33785553	85.90	ug/l	59
71) o-Xylene	16.47	91	26138674	67.49	ug/l	84
72) Styrene	16.53	104	23457621	81.06	ug/l	90
73) Isopropylbenzene	17.08	105	27993271	55.71	ug/l	84
75) Bromoform	17.08	173	3605522	91.52	ug/l	99
76) 1,1,2,2-Tetrachloroethane	17.36	83	6675080	91.20	ug/l	97
78) 1,2,3-Trichloropropane	17.58	110	1946195	96.48	ug/l	98
79) trans-1,4-Dichloro-2-buten	17.69	53	2025472	90.99	ug/l	99
80) n-Propylbenzene	17.67	91	27098555	38.81	ug/l	63
81) Bromobenzene	17.73	156	8617954	86.17	ug/l	99
82) 1,3,5-Trimethylbenzene	17.91	105	23512433	55.21	ug/l	76
83) 2-Chlorotoluene	17.91	91	24174119	59.09	ug/l	90
85) tert-Butylbenzene	18.36	134	7385473	82.03	ug/l	89
86) 1,2,4-Trimethylbenzene	18.40	105	22219874	50.32	ug/l	60
87) sec-Butylbenzene	18.59	105	24895570	41.41	ug/l	64
88) p-Isopropyltoluene	18.76	119	23545361	46.08	ug/l	62
89) 1,3-Dichlorobenzene	18.87	146	17456839	78.08	ug/l	86
90) 1,2,3-Trimethylbenzene	18.95	105	21405952	53.57	ug/l	65
91) 1,4-Dichlorobenzene	18.98	146	17091668	77.18	ug/l	86
92) n-Butylbenzene	19.20	91	23352113	42.41	ug/l	67
93) 1,2-Dichlorobenzene	19.37	146	15839316	85.60	ug/l	94
94) 1,2-Dibromo-3-chloropropan	20.15	157	1352744	104.56	ug/l	94
95) 1,2,4-Trichlorobenzene	20.97	180	12816606	88.14	ug/l	99
96) Hexachlorobutadiene	21.10	225	7015618	89.29	ug/l	96
97) Naphthalene	21.24	128	19279030	98.43	ug/l	96
98) 1,2,3-Trichlorobenzene	21.49	180	10114903	92.18	ug/l	97

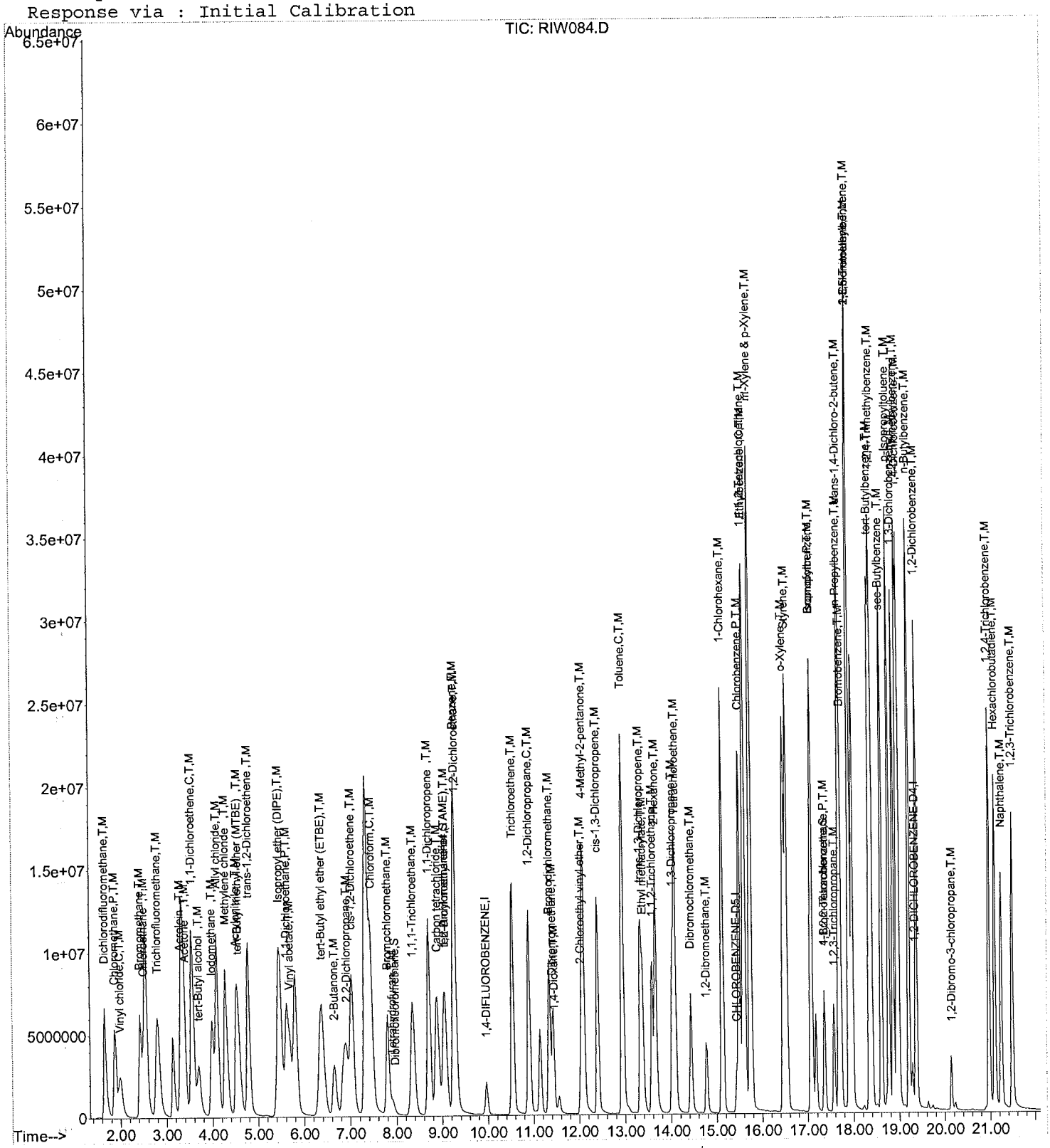
SU 10/14/24

(#) = qualifier out of range (m) = manual integration
RIW084.D VO06I19B.M Mon Oct 14 14:22:31 2024

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW084.D Vial: 11
Acq On : 19 Sep 2024 3:02 pm Operator: PMai
Sample : VO06I1910 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:22 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SU 10/14/24

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :06
IC_Beginning DateTime :09/19/24 11:07
Spike Amount :10 PPB
CC/CV File :RIW087
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
IC_Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B
Date_Time :09/19/24 16:20

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	3818306	1	1	9.965	9.966	0				
	2	Dichlorodifluoromethane	8.173	-18.3	1318386	0.345	0.422	1.676	1.661	13.33				
	3	Chloromethane	9.284	-7.2	1372699	0.360	0.387	1.893	1.883	13.07				
	4	Vinyl chloride	8.915	-10.9	1032595	0.270	0.303	2.012	1.993	14.03				
	5	Bromomethane	8.747	-12.5	833581	0.218	0.239	2.446	2.433	15.81	-0.0024	0.2523		0.9963
	6	Chloroethane	8.517	-14.8	638699	0.167	0.203	2.525	2.511	22.40	0.0009	0.1954		0.9954
	7	Dichlorofluoromethane	7.718	-22.8	2094253	0.548	0.725	2.565	2.557	19.79	0.0047	0.7229	-0.0239	0.9954
	8	Trichlorofluoromethane	9.175	-8.2	1397459	0.366	0.399	2.821	2.803	13.35				
5	9	Acrolein	45.514	-9.0	244115	0.013	0.014	3.321	3.318	13.03				
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	6.721	-32.8	853126	0.223	0.305	3.363	3.360	21.85	-0.0018	0.3517	-0.0248	0.9955
5	11	Acetone	46.243	-7.5	713175	0.037	0.040	3.426	3.412	5.70				
	12	1,1-Dichloroethene	9.129	-8.7	1843846	0.483	0.529	3.573	3.559	13.18				
25	13	tert-Butyl alcohol	245.553	-1.8	1171446	0.012	0.012	3.719	3.708	12.15				
	14	Acetonitrile												
	15	Methyl acetate	11.114	11.1	91600	0.024	0.022	4.097	4.092	9.28				
	16	Iodomethane	9.402	-6.0	1779527	0.466	0.496	4.013	3.997	9.49				
	17	Allyl chloride	9.917	-0.8	641278	0.168	0.169	4.117	4.113	8.27				
	18	Methylene chloride	9.084	-9.2	1434804	0.376	0.456	4.306	4.292	16.08	0.0208	0.3908		0.9991
	19	Carbon disulfide	8.431	-15.7	2007412	0.526	0.550	4.264	4.261	22.27	-0.0093	0.6346		0.9977
5	20	Acrylonitrile	49.089	-1.8	940474	0.049	0.050	4.537	4.532	11.25				
	21	tert-Butyl methyl ether (MTBE)	9.920	-0.8	1920764	0.503	0.507	4.579	4.578	9.55				
	22	trans-1,2-Dichloroethene	10.066	0.7	1214526	0.318	0.316	4.809	4.796	9.01				
	23	Isopropyl ether (DIPE)	10.318	3.2	4116889	1.078	1.045	5.480	5.473	9.74				
	24	Vinyl acetate	11.001	10.0	1585507	0.415	0.377	5.731	5.707	11.84				
	25	1,1-Dichloroethane	10.047	0.5	2027215	0.531	0.528	5.648	5.632	8.85				
25	26	2-Butanol	241.534	-3.4	1307812	0.014	0.011	6.213	6.218	34.89	-0.0108	0.0146		0.9959
	27	tert-Butyl ethyl ether (ETBE)	10.198	2.0	2950819	0.773	0.758	6.402	6.387	10.20				
5	28	2-Butanone	46.704	-6.6	1223832	0.064	0.069	6.674	6.671	8.30				
	29	2,2-Dichloropropane	10.802	8.0	1360181	0.356	0.330	6.926	6.921	10.70				
	30	cis-1,2-Dichloroethene	9.968	-0.3	1242418	0.325	0.326	7.052	7.041	5.38				
	31	Chloroform	9.678	-3.2	1932134	0.506	0.523	7.450	7.439	8.09				
	32	Bromochloromethane	10.087	0.9	544578	0.143	0.141	7.827	7.816	8.96				
	33	Tetrahydrofuran	8.878	-11.2	124557	0.033	0.037	7.953	7.929	7.29				
5	34	tert-Amyl alcohol												
	35	Dibromofluoromethane	10.515	5.2	1137646	0.298	0.231	7.974	7.968	27.01	-0.0065	0.2895		0.9975
	36	1,1,1-Trichloroethane	10.055	0.6	1614830	0.423	0.421	8.372	8.355	7.56				
	37	Cyclohexane	9.753	-2.5	2008066	0.526	0.539	8.351	8.337	10.75				
	38	2,2,4-Trimethylpentane												
	39	1,1-Dichloropropene	9.739	-2.6	528272	0.138	0.142	8.729	8.713	5.75				
	40	Carbon tetrachloride	10.124	1.2	1347587	0.353	0.349	8.896	8.891	9.23				
	41	tert-Amyl methyl ether (TAME)	10.157	1.6	2404011	0.630	0.620	9.064	9.067	8.76				
	42	1,2-Dichloroethane-d4	10.339	3.4	872922	0.229	0.221	9.106	9.084	11.06				
	43	1,2-Dichloroethane	10.152	1.5	1020146	0.267	0.263	9.294	9.287	11.07				
	44	Benzene	10.295	3.0	4505632	1.180	1.146	9.273	9.271	10.43				
	45	Trichloroethene	10.383	3.8	1183254	0.310	0.298	10.552	10.551	8.68				
	46	Methylcyclohexane	10.310	3.1	2234441	0.585	0.568	10.636	10.621	13.50				
	47	1,2-Dichloropropane	10.108	1.1	1094292	0.287	0.284	10.908	10.907	8.52				
20	48	1,4-Dioxane	207.747	3.9	105285	0.001	0.001	11.453	11.458	11.21				
	49	Bromodichloromethane	9.672	-3.3	1358411	0.356	0.368	11.348	11.348	7.61				
	50	Dibromomethane	9.722	-2.8	498553	0.131	0.134	11.432	11.417	9.25				
	51	2-Chloroethyl vinyl ether	9.360	-6.4	318858	0.084	0.089	12.040	12.042	9.82				
5	52	4-Methyl-2-pentanone	49.956	-0.1	3608051	0.189	0.189	12.082	12.087	11.78				
	53	cis-1,3-Dichloropropene	9.954	-0.5	1711128	0.448	0.450	12.417	12.398	9.21				
	54	CHLOROBENZENE-D5	10.000	0	3098667	1	1	15.442	15.432	0				
	55	Toluene-d8	11.006	10.1	4414110	1.425	1.294	12.815	12.802	6.71				
	56	Toluene	10.716	7.2	5009219	1.617	1.509	12.941	12.940	13.73				
	57	Ethyl methacrylate	9.549	-4.5	981122	0.317	0.332	13.381	13.380	5.91				
	58	trans-1,3-Dichloropropene	10.259	2.6	1347799	0.435	0.424	13.339	13.326	9.58				
	59	1,1,2-Trichloroethane	9.967	-0.3	669166	0.216	0.217	13.591	13.580	10.21				
5	60	2-Hexanone	48.622	-2.8	2383054	0.154	0.158	13.654	13.658	8.03				
	61	1,3-Dichloropropane	9.971	-0.3	1236711	0.399	0.400	14.031	14.030	9.06				
	62	Tetrachloroethene	10.301	3.0	990939	0.320	0.310	14.094	14.083	8.33				
	63	Dibromochloromethane	9.992	-0.1	826369	0.267	0.267	14.429	14.429	7.03				
	64	2-Ethyl-1-butanol												
	65	1,2-Dibromoethane	9.889	-1.1	631008	0.204	0.206	14.786	14.766	10.05				
	66	1-Chlorohexane	9.103	-9.0	1812595	0.585	0.643	15.121	15.120	9.33				
	67	Chlorobenzene	10.365	3.6	2966933	0.957	0.924	15.507	15.497	9.47				
	68	1,1,1,2-Tetrachloroethane	10.802	8.0	977595	0.315	0.292	15.597	15.589	11.30				
	69	Ethylbenzene	10.030	0.3	5777806	1.865	1.859	15.610	15.608	8.30				
2	70	m-Xylene & p-Xylene	19.978	-0.1	8794452	1.419	1.421	15.740	15.741	8.61				
	71	o-Xylene	10.024	0.2	4345475	1.402	1.399	16.467	16.466	9.46				
	72	Styrene	10.204	2.0	3305187	1.067	1.045	16.532	16.533	9.82				
	73	Isopropylbenzene	9.877	-1.2	5555064	1.793	1.815	17.077	17.078	8.91				
	74	1,2-DICHLOROBENZENE-D4	10.000	0	1315965	1	1	19.347	19.348	0				
	75	Bromoform	9.207	-7.9	373678	0.284	0.290	17.077	17.068	15.86	-0.0029	0.3116		0.9955
	76	1,1,2,2-Tetrachloroethane	9.945	-0.6	756918	0.575	0.578	17.362	17.360	11.29				
	77	4-Bromofluorobenzene	10.758	7.6	1580640	1.201	1.116	17.466	17.454	7.32				
	78	1,2,3-Trichloropropane	9.515	-4.8	199584	0.152	0.159	17.583	17.573	9.99				
	79	trans-1,4-Dichloro-2-butene	9.461	-5.4	219018	0.166	0.176	17.686	17.683	6.51				
	80	n-Propylbenzene	10.009	0.1	7267387	5.522	5.517	17.686	17.676	10.27				
	81	Bromobenzene	10.604	6.0	1102805	0.838	0.790	17.725	17.722	13.37				
	82	1,3,5-Trimethylbenzene	10.309	3.1	4565969	3.470	3.365	17.894	17.895	10.62				
	83	2-Chlorotoluene	10.658	6.6	4534547	3.446	3.233	17.907	17.908	11.15				
	84	4-Chlorotoluene	10.275	2.7	4006499	3.045	2.963	17.972	17.973	13.81				
	85	tert-Butylbenzene	10.939	9.4	1024187	0.778	0.711	18.348	18.350	11.84				
	86	1,2,4-Trimethylbenzene	10.018	0.2	4600062	3.496	3.489	18.400	18.388	9.18				
	87	sec-Butylbenzene	9.989	-0.1	6245391	4.746	4.751	18.608	18.601	9.32				
	88	p-Isopropyltoluene	10.055	0.6	5342599	4.060	4.038	18.763	18.764	8.88				
	89	1,3-Dichlorobenzene	10.248	2.5	2382410	1.810	1.767	18.867	18.867	11.22				
	90	1,2,3-Trimethylbenzene	9.955	-0.5	4136599	3.143	3.158	18.945	18.946	9.29				
	91	1,4-Dichlorobenzene	10.290	2.9	2369782	1.801	1.750	18.984	18.985	11.18				
	92	n-Butylbenzene	9.726	-2.7	5568496	4.231	4.351	19.204	19.205	9.21				
	93	1,2-Dichlorobenzene	10.443	4.4	2009595	1.527	1.462	19.373	19.374	10.78				
	94	1,2-Dibromo-3-chloropropane	8.919	-10.8	120000	0.091	0.102	20.152	20.141	3.78				
	95	1,2,4-Trichlorobenzene	10.120	1.2	1530251	1.163	1.149	20.982	20.970	11.27				
	96	Hexachlorobutadiene	10.742	7.4	877702	0.667	0.621	21.099	21.100	11.09				
	97	Naphthalene	10.212	2.1	2079964	1.581	1.548	21.241	21.242	7.87				
	98	1,2,3-Trichlorobenzene	10.484	4.8	1196302	0.909	0.867	21.488	21.489	14.10				

Spike Amount = Nominal Amount * M

SM 10/14/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	110	0.00
2	T,M	Dichlorodifluoromethane	10.000	8.173	18.3	106	0.00
3	P,T,M	Chloromethane	10.000	9.285	7.1	114	0.00
4	C,T,M	Vinyl chloride	10.000	8.915	10.9	123	0.00
5	T,M	Bromomethane	10.000	8.747	12.5	113	0.00
6	T,M	Chloroethane	10.000	8.518	14.8	106	0.00
7	T,M	Dichlorofluoromethane **	10.000	7.719	22.8#	91	0.00
8	T,M	Trichlorofluoromethane	10.000	9.175	8.2	113	0.00
9	T,M	Acrolein	50.000	45.515	9.0	117	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl**	10.000	6.721	32.8#	85	0.00
11	T,M	Acetone	50.000	46.244	7.5	104	0.00
12	C,T,M	1,1-Dichloroethene	10.000	9.129	8.7	99	0.00
13	T,M	tert-Butyl alcohol	250.000	245.553	1.8	97	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	11.115	-11.2	112	0.00
16	T,M	Iodomethane	10.000	9.402	6.0	104	0.00
17	T,M	Allyl chloride	10.000	9.917	0.8	105	0.00
18	T,M	Methylene chloride	10.000	9.084	9.2	102	0.00
19	T,M	Carbon disulfide	10.000	8.432	15.7	91	0.00
20	T,M	Acrylonitrile	50.000	49.089	1.8	105	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	9.920	0.8	100	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.067	-0.7	109	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.318	-3.2	106	0.00
24	T,M	Vinyl acetate	10.000	11.001	-10.0	126	0.02
25	P,T,M	1,1-Dichloroethane	10.000	10.047	-0.5	107	0.00
26	T,M	2-Butanol	250.000	241.534	3.4	102	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.198	-2.0	104	0.02
28	T,M	2-Butanone	50.000	46.705	6.6	102	0.00
29	T,M	2,2-Dichloropropane	10.000	10.803	-8.0	113	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	9.969	0.3	109	0.00
31	C,T,M	Chloroform	10.000	9.679	3.2	106	0.00
32	T,M	Bromochloromethane	10.000	10.087	-0.9	105	0.00
33	T,M	Tetrahydrofuran	10.000	8.879	11.2	103	0.02
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-0.06
35	S	Dibromofluoromethane	10.000	10.515	-5.2	114	0.00
36	T,M	1,1,1-Trichloroethane	10.000	10.055	-0.5	106	0.02
37	T,M	Cyclohexane	10.000	9.753	2.5	101	0.00
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.08
39	T,M	1,1-Dichloropropene	10.000	9.740	2.6	105	0.00
40	T,M	Carbon tetrachloride	10.000	10.124	-1.2	106	0.00
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.158	-1.6	103	0.00
42	S	1,2-Dichloroethane-d4	10.000	10.340	-3.4	106	0.02
43	T,M	1,2-Dichloroethane	10.000	10.152	-1.5	105	0.00
44	T,M	Benzene	10.000	10.296	-3.0	106	0.00
45	T,M	Trichloroethene	10.000	10.383	-3.8	107	0.00
46	T,M	Methylcyclohexane	10.000	10.310	-3.1	102	0.00
47	C,T,M	1,2-Dichloropropane	10.000	10.109	-1.1	108	0.00
48	T,M	1,4-Dioxane	200.000	207.748	-3.9	100	0.00
49	T,M	Bromodichloromethane	10.000	9.672	3.3	104	0.00
50	T,M	Dibromomethane	10.000	9.723	2.8	103	0.02

(#) = Out of Range

Sa 10/14/24

** to be evaluated from IVO06I1902 (File ID: RIW093)

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	10.000	9.361	6.4	102	0.00
52	T,M	4-Methyl-2-pentanone	50.000	49.957	0.1	101	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	9.955	0.4	104	0.02
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	106	0.01
55	S	Toluene-d8	10.000	11.006	-10.1	113	0.00
56	C,T,M	Toluene	10.000	10.716	-7.2	107	0.00
57	T,M	Ethyl methacrylate	10.000	9.549	4.5	101	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	10.259	-2.6	106	0.02
59	T,M	1,1,2-Trichloroethane	10.000	9.967	0.3	103	0.02
60	T,M	2-Hexanone	50.000	48.623	2.8	100	0.00
61	T,M	1,3-Dichloropropane	10.000	9.972	0.3	103	0.00
62	T,M	Tetrachloroethene	10.000	10.301	-3.0	106	0.02
63	T,M	Dibromochloromethane	10.000	9.992	0.1	105	0.00
64	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
65	T,M	1,2-Dibromoethane	10.000	9.890	1.1	102	0.02
66	T,M	1-Chlorohexane	10.000	9.103	9.0	105	0.00
67	P,T,M	Chlorobenzene	10.000	10.366	-3.7	106	0.01
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.803	-8.0	104	0.01
69	C,T,M	Ethylbenzene	10.000	10.030	-0.3	106	0.01
70	T,M	m-Xylene & p-Xylene	20.000	19.978	0.1	107	0.00
71	T,M	o-Xylene	10.000	10.024	-0.2	103	0.00
72	T,M	Styrene	10.000	10.204	-2.0	104	0.00
73	T,M	Isopropylbenzene	10.000	9.878	1.2	104	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	102	0.00
75	P,T,M	Bromoform	10.000	9.207	7.9	98	0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.946	0.5	98	0.00
77	S	4-Bromofluorobenzene	10.000	10.758	-7.6	109	0.01
78	T,M	1,2,3-Trichloropropane	10.000	9.515	4.8	97	0.01
79	T,M	trans-1,4-Dichloro-2-butene	10.000	9.462	5.4	102	0.01
80	T,M	n-Propylbenzene	10.000	10.010	-0.1	104	0.01
81	T,M	Bromobenzene	10.000	10.604	-6.0	104	0.01
82	T,M	1,3,5-Trimethylbenzene	10.000	10.310	-3.1	104	0.00
83	T,M	2-Chlorotoluene	10.000	10.658	-6.6	110	0.00
84	T,M	4-Chlorotoluene	10.000	10.276	-2.8	99	0.00
85	T,M	tert-Butylbenzene	10.000	10.940	-9.4	106	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	10.018	-0.2	103	0.01
87	T,M	sec-Butylbenzene	10.000	9.990	0.1	103	0.01
88	T,M	p-Isopropyltoluene	10.000	10.055	-0.5	103	0.00
89	T,M	1,3-Dichlorobenzene	10.000	10.248	-2.5	101	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	9.955	0.4	101	0.00
91	T,M	1,4-Dichlorobenzene	10.000	10.291	-2.9	103	0.00
92	T,M	n-Butylbenzene	10.000	9.726	2.7	102	0.00
93	T,M	1,2-Dichlorobenzene	10.000	10.444	-4.4	101	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	8.920	10.8	92	0.01
95	T,M	1,2,4-Trichlorobenzene	10.000	10.121	-1.2	100	0.01
96	T,M	Hexachlorobutadiene	10.000	10.742	-7.4	101	0.00
97	T,M	Naphthalene	10.000	10.213	-2.1	98	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	10.485	-4.8	103	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

SU 10/14/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	110	0.00
2	T,M	Dichlorodifluoromethane	0.422	0.345	18.2	106	0.00
3	P,T,M	Chloromethane	0.387	0.360	7.0	114	0.00
4	C,T,M	Vinyl chloride	0.303	0.270	10.9	123	0.00
5	T,M	Bromomethane	0.239	0.218	8.8	113	0.00
6	T,M	Chloroethane	0.203	0.167	17.7	106	0.00
7	T,M	Dichlorofluoromethane	0.725	0.548	24.4#	91	0.00
8	T,M	Trichlorofluoromethane	0.399	0.366	8.3	113	0.00
9	T,M	Acrolein	0.014	0.013	7.1	117	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.305	0.223	26.9#	85	0.00
11	T,M	Acetone	0.040	0.037	7.5	104	0.00
12	C,T,M	1,1-Dichloroethene	0.529	0.483	8.7	99	0.00
13	T,M	tert-Butyl alcohol	0.012	0.012	0.0	97	0.00
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.022	0.024	-9.1	112	0.00
16	T,M	Iodomethane	0.496	0.466	6.0	104	0.00
17	T,M	Allyl chloride	0.169	0.168	0.6	105	0.00
18	T,M	Methylene chloride	0.456	0.376	17.5	102	0.00
19	T,M	Carbon disulfide	0.550	0.526	4.4	91	0.00
20	T,M	Acrylonitrile	0.050	0.049	2.0	105	0.00
21	T,M	tert-Butyl methyl ether (MT	0.507	0.503	0.8	100	0.00
22	T,M	trans-1,2-Dichloroethene	0.316	0.318	-0.6	109	0.00
23	T,M	Isopropyl ether (DIPE)	1.045	1.078	-3.2	106	0.00
24	T,M	Vinyl acetate	0.377	0.415	-10.1	126	0.02
25	P,T,M	1,1-Dichloroethane	0.528	0.531	-0.6	107	0.00
26	T,M	2-Butanol	0.011	0.014	-27.3#	102	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.758	0.773	-2.0	104	0.02
28	T,M	2-Butanone	0.069	0.064	7.2	102	0.00
29	T,M	2,2-Dichloropropane	0.330	0.356	-7.9	113	0.00
30	T,M	cis-1,2-Dichloroethene	0.326	0.325	0.3	109	0.00
31	C,T,M	Chloroform	0.523	0.506	3.3	106	0.00
32	T,M	Bromochloromethane	0.141	0.143	-1.4	105	0.00
33	T,M	Tetrahydrofuran	0.037	0.033	10.8	103	0.02
34	T,M	tert-Amyl alcohol	0.000	0.000	0.0	0#	-0.06
35	S	Dibromofluoromethane	0.231	0.298	-29.0#	114	0.00
36	T,M	1,1,1-Trichloroethane	0.421	0.423	-0.5	106	0.02
37	T,M	Cyclohexane	0.539	0.526	2.4	101	0.00
38	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	0.08
39	T,M	1,1-Dichloropropene	0.142	0.138	2.8	105	0.00
40	T,M	Carbon tetrachloride	0.349	0.353	-1.1	106	0.00
41	T,M	tert-Amyl methyl ether (TAM	0.620	0.630	-1.6	103	0.00
42	S	1,2-Dichloroethane-d4	0.221	0.229	-3.6	106	0.02
43	T,M	1,2-Dichloroethane	0.263	0.267	-1.5	105	0.00
44	T,M	Benzene	1.146	1.180	-3.0	106	0.00
45	T,M	Trichloroethene	0.298	0.310	-4.0	107	0.00
46	T,M	Methylcyclohexane	0.568	0.585	-3.0	102	0.00
47	C,T,M	1,2-Dichloropropane	0.284	0.287	-1.1	108	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	100	0.00
49	T,M	Bromodichloromethane	0.368	0.356	3.3	104	0.00
50	T,M	Dibromomethane	0.134	0.131	2.2	103	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	0.089	0.084	5.6	102	0.00
52	T,M	4-Methyl-2-pentanone	0.189	0.189	0.0	101	0.00
53	T,M	cis-1,3-Dichloropropene	0.450	0.448	0.4	104	0.02
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	106	0.01
55	S	Toluene-d8	1.294	1.425	-10.1	113	0.00
56	C,T,M	Toluene	1.509	1.617	-7.2	107	0.00
57	T,M	Ethyl methacrylate	0.332	0.317	4.5	101	0.00
58	T,M	trans-1,3-Dichloropropene	0.424	0.435	-2.6	106	0.02
59	T,M	1,1,2-Trichloroethane	0.217	0.216	0.5	103	0.02
60	T,M	2-Hexanone	0.158	0.154	2.5	100	0.00
61	T,M	1,3-Dichloropropane	0.400	0.399	0.3	103	0.00
62	T,M	Tetrachloroethene	0.310	0.320	-3.2	106	0.02
63	T,M	Dibromochloromethane	0.267	0.267	0.0	105	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.206	0.204	1.0	102	0.02
66	T,M	1-Chlorohexane	0.643	0.585	9.0	105	0.00
67	P,T,M	Chlorobenzene	0.924	0.957	-3.6	106	0.01
68	T,M	1,1,1,2-Tetrachloroethane	0.292	0.315	-7.9	104	0.01
69	C,T,M	Ethylbenzene	1.859	1.865	-0.3	106	0.01
70	T,M	m-Xylene & p-Xylene	1.421	1.419	0.1	107	0.00
71	T,M	o-Xylene	1.399	1.402	-0.2	103	0.00
72	T,M	Styrene	1.045	1.067	-2.1	104	0.00
73	T,M	Isopropylbenzene	1.815	1.793	1.2	104	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	102	0.00
75	P,T,M	Bromoform	0.290	0.284	2.1	98	0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	0.578	0.575	0.5	98	0.00
77	S	4-Bromofluorobenzene	1.116	1.201	-7.6	109	0.01
78	T,M	1,2,3-Trichloropropane	0.159	0.152	4.4	97	0.01
79	T,M	trans-1,4-Dichloro-2-butene	0.176	0.166	5.7	102	0.01
80	T,M	n-Propylbenzene	5.517	5.522	-0.1	104	0.01
81	T,M	Bromobenzene	0.790	0.838	-6.1	104	0.01
82	T,M	1,3,5-Trimethylbenzene	3.365	3.470	-3.1	104	0.00
83	T,M	2-Chlorotoluene	3.233	3.446	-6.6	110	0.00
84	T,M	4-Chlorotoluene	2.963	3.045	-2.8	99	0.00
85	T,M	tert-Butylbenzene	0.711	0.778	-9.4	106	0.00
86	T,M	1,2,4-Trimethylbenzene	3.489	3.496	-0.2	103	0.01
87	T,M	sec-Butylbenzene	4.751	4.746	0.1	103	0.01
88	T,M	p-Isopropyltoluene	4.038	4.060	-0.5	103	0.00
89	T,M	1,3-Dichlorobenzene	1.767	1.810	-2.4	101	0.00
90	T,M	1,2,3-Trimethylbenzene	3.158	3.143	0.5	101	0.00
91	T,M	1,4-Dichlorobenzene	1.750	1.801	-2.9	103	0.00
92	T,M	n-Butylbenzene	4.351	4.231	2.8	102	0.00
93	T,M	1,2-Dichlorobenzene	1.462	1.527	-4.4	101	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.102	0.091	10.8	92	0.01
95	T,M	1,2,4-Trichlorobenzene	1.149	1.163	-1.2	100	0.01
96	T,M	Hexachlorobutadiene	0.621	0.667	-7.4	101	0.00
97	T,M	Naphthalene	1.548	1.581	-2.1	98	0.00
98	T,M	1,2,3-Trichlorobenzene	0.867	0.909	-4.8	103	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.97	114	3818306	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.44	117	3098667	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1315965	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	1137646	10.52	ug/l	0.00
Spiked Amount 10.000			Recovery = 105.20%			
42) 1,2-Dichloroethane-d4	9.11	65	872922	10.34	ug/l	0.02
Spiked Amount 10.000			Recovery = 103.40%			
55) Toluene-d8	12.82	98	4414110	11.01	ug/l	0.00
Spiked Amount 10.000			Recovery = 110.10%			
77) 4-Bromofluorobenzene	17.47	95	1580640	10.76	ug/l	0.01
Spiked Amount 10.000			Recovery = 107.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.68	85	1318386	8.17	ug/l	99
3) Chloromethane	1.89	50	1372699	9.28	ug/l	98
4) Vinyl chloride	2.01	62	1032595	8.92	ug/l	99
5) Bromomethane	2.45	94	833581	8.75	ug/l	99
6) Chloroethane	2.53	64	638699	8.52	ug/l	95
7) Dichlorofluoromethane **	2.56	67	2094253	7.72	ug/l	99
8) Trichlorofluoromethane	2.82	101	1397459	9.18	ug/l	98
9) Acrolein	3.32	56	244115	45.51	ug/l	95
10) 1,1,2-Trichloro-1,2,2-trif **	3.36	151	853126	6.72	ug/l	99
11) Acetone	3.43	43	713175	46.24	ug/l	96
12) 1,1-Dichloroethene	3.57	61	1843846	9.13	ug/l	99
13) tert-Butyl alcohol	3.72	59	1171446	245.55	ug/l	99
15) Methyl acetate	4.10	74	91600	11.11	ug/l	82
16) Iodomethane	4.01	142	1779527	9.40	ug/l	99
17) Allyl chloride	4.12	76	641278	9.92	ug/l	100
18) Methylene chloride	4.31	49	1434804	9.08	ug/l	99
19) Carbon disulfide	4.26	76	2007412	8.43	ug/l	100
20) Acrylonitrile	4.54	53	940474	49.09	ug/l	99
21) tert-Butyl methyl ether (M	4.58	73	1920764	9.92	ug/l	98
22) trans-1,2-Dichloroethene	4.81	96	1214526	10.07	ug/l	99
23) Isopropyl ether (DIPE)	5.48	45	4116889	10.32	ug/l	99
24) Vinyl acetate	5.73	43	1585507	11.00	ug/l	97
25) 1,1-Dichloroethane	5.65	63	2027215	10.05	ug/l	99
26) 2-Butanol	6.21	45	1307812	241.53	ug/l	99
27) tert-Butyl ethyl ether (ET	6.40	59	2950819	10.20	ug/l	100
28) 2-Butanone	6.67	43	1223832	46.70	ug/l	99
29) 2,2-Dichloropropane	6.93	77	1360181	10.80	ug/l	99
30) cis-1,2-Dichloroethene	7.05	96	1242418	9.97	ug/l	100
31) Chloroform	7.45	83	1932134	9.68	ug/l	99
32) Bromochloromethane	7.83	130	544578	10.09	ug/l	98
33) Tetrahydrofuran	7.95	42	124557	8.88	ug/l	98
36) 1,1,1-Trichloroethane	8.37	97	1614830	10.06	ug/l	99
37) Cyclohexane	8.35	84	2008066	9.75	ug/l	99
39) 1,1-Dichloropropene	8.73	110	528272	9.74	ug/l	100
40) Carbon tetrachloride	8.90	119	1347587	10.12	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	2404011	10.16	ug/l	99

(#) = qualifier out of range (m) = manual integration

RIW087.D VO06I19B.M Mon Oct 14 13:39:26 2024 Su 10/14/24 Page 1

** Evaluated from IVO06I1902 (File ID: RIW093)

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	1020146	10.15	ug/l	99
44)	Benzene	9.27	78	4505632	10.30	ug/l	99
45)	Trichloroethene	10.55	130	1183254	10.38	ug/l	99
46)	Methylcyclohexane	10.64	83	2234441	10.31	ug/l	99
47)	1,2-Dichloropropane	10.91	63	1094292	10.11	ug/l	98
48)	1,4-Dioxane	11.45	88	105285	207.75	ug/l	95
49)	Bromodichloromethane	11.35	83	1358411	9.67	ug/l	100
50)	Dibromomethane	11.43	93	498553	9.72	ug/l	98
51)	2-Chloroethyl vinyl ether	12.04	63	318858	9.36	ug/l	99
52)	4-Methyl-2-pentanone	12.08	43	3608051	49.96	ug/l	99
53)	cis-1,3-Dichloropropene	12.42	75	1711128	9.95	ug/l	99
56)	Toluene	12.94	91	5009219	10.72	ug/l	100
57)	Ethyl methacrylate	13.38	69	981122	9.55	ug/l	98
58)	trans-1,3-Dichloropropene	13.34	75	1347799	10.26	ug/l	99
59)	1,1,2-Trichloroethane	13.59	97	669166	9.97	ug/l	99
60)	2-Hexanone	13.65	43	2383054	48.62	ug/l	99
61)	1,3-Dichloropropane	14.03	76	1236711	9.97	ug/l	99
62)	Tetrachloroethene	14.09	164	990939	10.30	ug/l	99
63)	Dibromochloromethane	14.43	129	826369	9.99	ug/l	99
65)	1,2-Dibromoethane	14.79	107	631008	9.89	ug/l	99
66)	1-Chlorohexane	15.12	91	1812595	9.10	ug/l	99
67)	Chlorobenzene	15.51	112	2966933	10.37	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.60	131	977595	10.80	ug/l	99
69)	Ethylbenzene	15.61	91	5777806	10.03	ug/l	100
70)	m-Xylene & p-Xylene	15.74	91	8794452	19.98	ug/l	100
71)	o-Xylene	16.47	91	4345475	10.02	ug/l	99
72)	Styrene	16.53	104	3305187	10.20	ug/l	99
73)	Isopropylbenzene	17.08	105	5555064	9.88	ug/l	99
75)	Bromoform	17.08	173	373678	9.21	ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.36	83	756918	9.95	ug/l	98
78)	1,2,3-Trichloropropane	17.58	110	199584	9.52	ug/l	96
79)	trans-1,4-Dichloro-2-buten	17.69	53	219018	9.46	ug/l	95
80)	n-Propylbenzene	17.69	91	7267387	10.01	ug/l	100
81)	Bromobenzene	17.73	156	1102805	10.60	ug/l	98
82)	1,3,5-Trimethylbenzene	17.89	105	4565969	10.31	ug/l	100
83)	2-Chlorotoluene	17.91	91	4534547	10.66	ug/l	93
84)	4-Chlorotoluene	17.97	91	4006499	10.28	ug/l	95
85)	tert-Butylbenzene	18.35	134	1024187	10.94	ug/l	99
86)	1,2,4-Trimethylbenzene	18.40	105	4600062	10.02	ug/l	99
87)	sec-Butylbenzene	18.61	105	6245391	9.99	ug/l	98
88)	p-Isopropyltoluene	18.76	119	5342599	10.06	ug/l	99
89)	1,3-Dichlorobenzene	18.87	146	2382410	10.25	ug/l	96
90)	1,2,3-Trimethylbenzene	18.94	105	4136599	9.96	ug/l	100
91)	1,4-Dichlorobenzene	18.98	146	2369782	10.29	ug/l	100
92)	n-Butylbenzene	19.20	91	5568496	9.73	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	2009595	10.44	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.15	157	120000	8.92	ug/l	93
95)	1,2,4-Trichlorobenzene	20.98	180	1530251	10.12	ug/l	99
96)	Hexachlorobutadiene	21.10	225	877702	10.74	ug/l	98
97)	Naphthalene	21.24	128	2079964	10.21	ug/l	100

(#) = qualifier out of range (m) = manual integration

SU 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

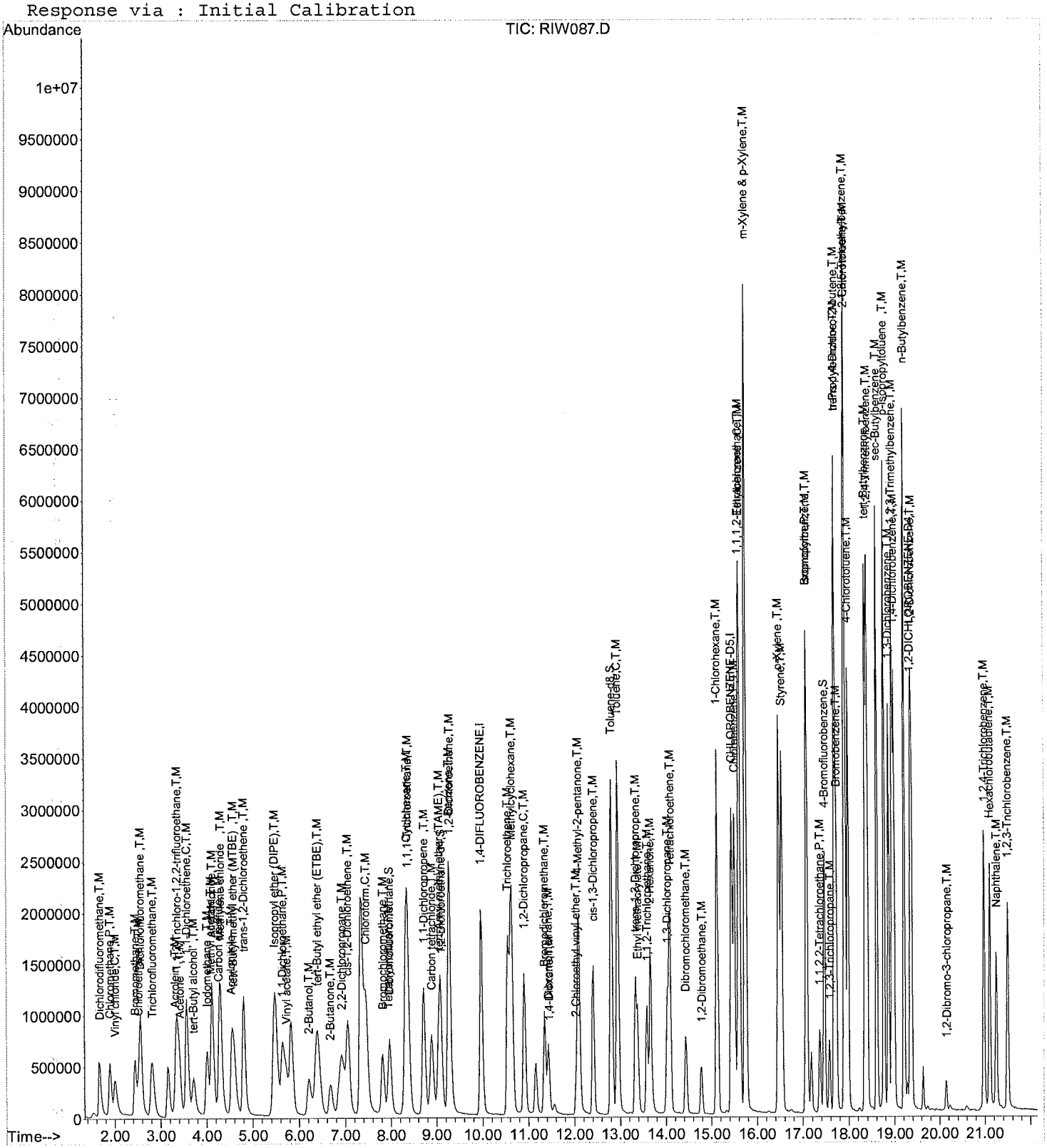
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1196302	10.48	ug/l	99

(#) = qualifier out of range (m) = manual integration
RIW087.D VO06I19B.M Mon Oct 14 13:39:27 2024 SU 10/14/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :06
IC_Beginning DateTime :09/19/24 11:07
Spike Amount :10 PPB
CC/CV File :RIW093
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
IC_Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B
Date_Time :09/19/24 19:59

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	2935645	1	1	9.985	9.966	0				
	2	Dichlorodifluoromethane												
	3	Chloromethane												
	4	Vinyl chloride												
	5	Bromomethane												
	6	Chloroethane												
	7	Dichlorofluoromethane	11.370	13.7	2336339	0.796	0.725	2.564	2.557	19.79	0.0047	0.7229	-0.0239	0.9954
	8	Trichlorofluoromethane												
5	9	Acrolein												
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	11.027	10.3	1044991	0.356	0.305	3.383	3.360	21.85	-0.0018	0.3517	-0.0248	0.9955
5	11	Acetone												
	12	1,1-Dichloroethene												
25	13	tert-Butyl alcohol												
	14	Acetonitrile												
	15	Methyl acetate												
	16	Iodomethane												
	17	Allyl chloride												
	18	Methylene chloride												
	19	Carbon disulfide												
5	20	Acrylonitrile												
	21	tert-Butyl methyl ether (MTBE)												
	22	trans-1,2-Dichloroethene												
	23	Isopropyl ether (DIPE)												
	24	Vinyl acetate												
	25	1,1-Dichloroethane												
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)												
5	28	2-Butanone												
	29	2,2-Dichloropropane												
	30	cis-1,2-Dichloroethene												
	31	Chloroform												
	32	Bromochloromethane												
	33	Tetrahydrofuran												
5	34	tert-Amyl alcohol												
	35	Dibromofluoromethane	10.508	5.1	874088	0.298	0.231	7.973	7.968	27.01	-0.0065	0.2895		0.9975
	36	1,1,1-Trichloroethane												
	37	Cyclohexane												
	38	2,2,4-Trimethylpentane												
	39	1,1-Dichloropropene												
	40	Carbon tetrachloride												
	41	tert-Amyl methyl ether (TAME)												
	42	1,2-Dichloroethane-d4	10.349	3.5	671780	0.229	0.221	9.105	9.084	11.06				
	43	1,2-Dichloroethane												
	44	Benzene												
	45	Trichloroethene												
	46	Methylcyclohexane												
	47	1,2-Dichloropropane												
20	48	1,4-Dioxane												
	49	Bromodichloromethane												
	50	Dibromomethane												
	51	2-Chloroethyl vinyl ether												
5	52	4-Methyl-2-pentanone												
	53	cis-1,3-Dichloropropene												
	54	CHLOROBENZENE-D5	10.000	0	2248957	1	1	15.442	15.432	0				
	55	Toluene-d8	11.363	13.6	3307626	1.471	1.294	12.815	12.802	6.71				
	56	Toluene												
	57	Ethyl methacrylate												
	58	trans-1,3-Dichloropropene												
	59	1,1,2-Trichloroethane												
5	60	2-Hexanone												
	61	1,3-Dichloropropane												
	62	Tetrachloroethene												
	63	Dibromochloromethane												
	64	2-Ethyl-1-butanol												
	65	1,2-Dibromoethane												
	66	1-Chlorohexane												
	67	Chlorobenzene												
	68	1,1,1,2-Tetrachloroethane												
	69	Ethylbenzene												
2	70	m-Xylene & p-Xylene												
	71	o-Xylene												
	72	Styrene												
	73	Isopropylbenzene												
	74	1,2-DICHLOROBENZENE-D4	10.000	0	1030195	1	1	19.347	19.348	0				
	75	Bromoform												
	76	1,1,2,2-Tetrachloroethane												
	77	4-Bromofluorobenzene	9.718	-2.8	1117852	1.085	1.116	17.453	17.454	7.32				
	78	1,2,3-Trichloropropane												
	79	trans-1,4-Dichloro-2-butene												
	80	n-Propylbenzene												
	81	Bromobenzene												
	82	1,3,5-Trimethylbenzene												
	83	2-Chlorotoluene												
	84	4-Chlorotoluene												
	85	tert-Butylbenzene												
	86	1,2,4-Trimethylbenzene												
	87	sec-Butylbenzene												
	88	p-Isopropyltoluene												
	89	1,3-Dichlorobenzene												
	90	1,2,3-Trimethylbenzene												
	91	1,4-Dichlorobenzene												
	92	n-Butylbenzene												
	93	1,2-Dichlorobenzene												
	94	1,2-Dibromo-3-chloropropane												
	95	1,2,4-Trichlorobenzene												
	96	Hexachlorobutadiene												
	97	Naphthalene												
	98	1,2,3-Trichlorobenzene												

Spike Amount = Nominal Amount * M

SM 10/14/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	84	0.02
2	T,M	Dichlorodifluoromethane	10.000	0.000	100.0#	0	-1.68#
3	P,T,M	Chloromethane	10.000	0.000	100.0#	0	-1.89#
4	C,T,M	Vinyl chloride	10.000	0.000	100.0#	0	-2.01#
5	T,M	Bromomethane	10.000	0.094	99.1#	0	-2.45#
6	T,M	Chloroethane	10.000	-0.043	100.4#	0	-2.52#
7	T,M	Dichlorofluoromethane	10.000	11.371	-13.7	101	0.00
8	T,M	Trichlorofluoromethane	10.000	0.000	100.0#	0	-2.82#
9	T,M	Acrolein	50.000	0.000	100.0#	0	-3.32#
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.028	-10.3	104	0.02
11	T,M	Acetone	50.000	0.000	100.0#	0	-3.43#
12	C,T,M	1,1-Dichloroethene	10.000	0.000	100.0#	0	-3.57#
13	T,M	tert-Butyl alcohol	250.000	0.000	100.0#	0	-3.72#
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	0.000	100.0#	0	-4.10#
16	T,M	Iodomethane	10.000	0.000	100.0#	0	-4.01#
17	T,M	Allyl chloride	10.000	0.000	100.0#	0	-4.12#
18	T,M	Methylene chloride	10.000	-0.532	105.3#	0	-4.31#
19	T,M	Carbon disulfide	10.000	0.147	98.5#	0	-4.26#
20	T,M	Acrylonitrile	50.000	0.000	100.0#	0	-4.54#
21	T,M	tert-Butyl methyl ether (MT	10.000	0.000	100.0#	0	-4.58#
22	T,M	trans-1,2-Dichloroethene	10.000	0.000	100.0#	0	-4.81#
23	T,M	Isopropyl ether (DIPE)	10.000	0.000	100.0#	0	-5.48#
24	T,M	Vinyl acetate	10.000	0.000	100.0#	0	-5.71#
25	P,T,M	1,1-Dichloroethane	10.000	0.000	100.0#	0	-5.65#
26	T,M	2-Butanol	250.000	7.374	97.1#	0	-6.21#
27	T,M	tert-Butyl ethyl ether (ETB	10.000	0.000	100.0#	0	-6.38#
28	T,M	2-Butanone	50.000	0.000	100.0#	0	-6.67#
29	T,M	2,2-Dichloropropane	10.000	0.000	100.0#	0	-6.93#
30	T,M	cis-1,2-Dichloroethene	10.000	0.000	100.0#	0	-7.05#
31	C,T,M	Chloroform	10.000	0.000	100.0#	0	-7.45#
32	T,M	Bromochloromethane	10.000	0.000	100.0#	0	-7.83#
33	T,M	Tetrahydrofuran	10.000	0.000	100.0#	0	-7.93#
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-8.12#
35	S	Dibromofluoromethane	10.000	10.509	-5.1	88	0.00
36	T,M	1,1,1-Trichloroethane	10.000	0.000	100.0#	0	-8.35#
37	T,M	Cyclohexane	10.000	0.000	100.0#	0	-8.35#
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-8.69#
39	T,M	1,1-Dichloropropene	10.000	0.000	100.0#	0	-8.73#
40	T,M	Carbon tetrachloride	10.000	0.000	100.0#	0	-8.90#
41	T,M	tert-Amyl methyl ether (TAM	10.000	0.000	100.0#	0	-9.06#
42	S	1,2-Dichloroethane-d4	10.000	10.350	-3.5	82	0.02
43	T,M	1,2-Dichloroethane	10.000	0.000	100.0#	0	-9.29#
44	T,M	Benzene	10.000	0.000	100.0#	0	-9.27#
45	T,M	Trichloroethene	10.000	0.000	100.0#	0	-10.55#
46	T,M	Methylcyclohexane	10.000	0.000	100.0#	0	-10.64#
47	C,T,M	1,2-Dichloropropane	10.000	0.000	100.0#	0	-10.91#
48	T,M	1,4-Dioxane	200.000	0.000	100.0#	0	-11.45#
49	T,M	Bromodichloromethane	10.000	0.000	100.0#	0	-11.35#
50	T,M	Dibromomethane	10.000	0.000	100.0#	0	-11.41#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	10.000	0.000	100.0#	0	-12.04#
52	T,M	4-Methyl-2-pentanone	50.000	0.000	100.0#	0	-12.08#
53	T,M	cis-1,3-Dichloropropene	10.000	0.000	100.0#	0	-12.40#
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	77	0.01
55	S	Toluene-d8	10.000	11.364	-13.6	85	0.00
56	C,T,M	Toluene	10.000	0.000	100.0#	0	-12.94#
57	T,M	Ethyl methacrylate	10.000	0.000	100.0#	0	-13.38#
58	T,M	trans-1,3-Dichloropropene	10.000	0.000	100.0#	0	-13.32#
59	T,M	1,1,2-Trichloroethane	10.000	0.000	100.0#	0	-13.57#
60	T,M	2-Hexanone	50.000	0.000	100.0#	0	-13.65#
61	T,M	1,3-Dichloropropane	10.000	0.000	100.0#	0	-14.03#
62	T,M	Tetrachloroethene	10.000	0.000	100.0#	0	-14.07#
63	T,M	Dibromochloromethane	10.000	0.000	100.0#	0	-14.43#
64	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
65	T,M	1,2-Dibromoethane	10.000	0.000	100.0#	0	-14.76#
66	T,M	1-Chlorohexane	10.000	0.000	100.0#	0	-15.12#
67	P,T,M	Chlorobenzene	10.000	0.000	100.0#	0	-15.50#
68	T,M	1,1,1,2-Tetrachloroethane	10.000	0.000	100.0#	0	-15.59#
69	C,T,M	Ethylbenzene	10.000	0.000	100.0#	0	-15.60#
70	T,M	m-Xylene & p-Xylene	20.000	0.000	100.0#	0	-15.74#
71	T,M	o-Xylene	10.000	0.000	100.0#	0	-16.47#
72	T,M	Styrene	10.000	0.000	100.0#	0	-16.53#
73	T,M	Isopropylbenzene	10.000	0.000	100.0#	0	-17.08#
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	80	0.00
75	P,T,M	Bromoform	10.000	0.094	99.1#	0	-17.07#
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	0.000	100.0#	0	-17.36#
77	S	4-Bromofluorobenzene	10.000	9.719	2.8	77	0.00
78	T,M	1,2,3-Trichloropropane	10.000	0.000	100.0#	0	-17.57#
79	T,M	trans-1,4-Dichloro-2-butene	10.000	0.000	100.0#	0	-17.68#
80	T,M	n-Propylbenzene	10.000	0.000	100.0#	0	-17.68#
81	T,M	Bromobenzene	10.000	0.000	100.0#	0	-17.71#
82	T,M	1,3,5-Trimethylbenzene	10.000	0.000	100.0#	0	-17.90#
83	T,M	2-Chlorotoluene	10.000	0.000	100.0#	0	-17.91#
84	T,M	4-Chlorotoluene	10.000	0.000	100.0#	0	-17.97#
85	T,M	tert-Butylbenzene	10.000	0.000	100.0#	0	-18.35#
86	T,M	1,2,4-Trimethylbenzene	10.000	0.000	100.0#	0	-18.39#
87	T,M	sec-Butylbenzene	10.000	0.000	100.0#	0	-18.60#
88	T,M	p-Isopropyltoluene	10.000	0.000	100.0#	0	-18.76#
89	T,M	1,3-Dichlorobenzene	10.000	0.000	100.0#	0	-18.87#
90	T,M	1,2,3-Trimethylbenzene	10.000	0.000	100.0#	0	-18.95#
91	T,M	1,4-Dichlorobenzene	10.000	0.000	100.0#	0	-18.99#
92	T,M	n-Butylbenzene	10.000	0.000	100.0#	0	-19.21#
93	T,M	1,2-Dichlorobenzene	10.000	0.000	100.0#	0	-19.37#
94	T,M	1,2-Dibromo-3-chloropropane	10.000	0.000	100.0#	0	-20.14#
95	T,M	1,2,4-Trichlorobenzene	10.000	0.000	100.0#	0	-20.97#
96	T,M	Hexachlorobutadiene	10.000	0.000	100.0#	0	-21.10#
97	T,M	Naphthalene	10.000	0.000	100.0#	0	-21.24#
98	T,M	1,2,3-Trichlorobenzene	10.000	0.000	100.0#	0	-21.49#

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	84	0.02
2	T,M	Dichlorodifluoromethane	0.422	0.000	100.0#	0#	-1.68#
3	P,T,M	Chloromethane	0.387	0.000#	100.0#	0#	-1.89#
4	C,T,M	Vinyl chloride	0.303	0.000	100.0#	0#	-2.01#
5	T,M	Bromomethane	0.239	0.000	100.0#	0#	-2.45#
6	T,M	Chloroethane	0.203	0.000	100.0#	0#	-2.52#
7	T,M	Dichlorofluoromethane	0.725	0.796	-9.8	101	0.00
8	T,M	Trichlorofluoromethane	0.399	0.000	100.0#	0#	-2.82#
9	T,M	Acrolein	0.014	0.000	100.0#	0#	-3.32#
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.305	0.356	-16.7	104	0.02
11	T,M	Acetone	0.040	0.000	100.0#	0#	-3.43#
12	C,T,M	1,1-Dichloroethene	0.529	0.000	100.0#	0#	-3.57#
13	T,M	tert-Butyl alcohol	0.012	0.000	100.0#	0#	-3.72#
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.022	0.000	100.0#	0#	-4.10#
16	T,M	Iodomethane	0.496	0.000	100.0#	0#	-4.01#
17	T,M	Allyl chloride	0.169	0.000	100.0#	0#	-4.12#
18	T,M	Methylene chloride	0.456	0.000	100.0#	0#	-4.31#
19	T,M	Carbon disulfide	0.550	0.000	100.0#	0#	-4.26#
20	T,M	Acrylonitrile	0.050	0.000	100.0#	0#	-4.54#
21	T,M	tert-Butyl methyl ether (MT	0.507	0.000	100.0#	0#	-4.58#
22	T,M	trans-1,2-Dichloroethene	0.316	0.000	100.0#	0#	-4.81#
23	T,M	Isopropyl ether (DIPE)	1.045	0.000	100.0#	0#	-5.48#
24	T,M	Vinyl acetate	0.377	0.000	100.0#	0#	-5.71#
25	P,T,M	1,1-Dichloroethane	0.528	0.000#	100.0#	0#	-5.65#
26	T,M	2-Butanol	0.011	0.000	100.0#	0#	-6.21#
27	T,M	tert-Butyl ethyl ether (ETB	0.758	0.000	100.0#	0#	-6.38#
28	T,M	2-Butanone	0.069	0.000	100.0#	0#	-6.67#
29	T,M	2,2-Dichloropropane	0.330	0.000	100.0#	0#	-6.93#
30	T,M	cis-1,2-Dichloroethene	0.326	0.000	100.0#	0#	-7.05#
31	C,T,M	Chloroform	0.523	0.000	100.0#	0#	-7.45#
32	T,M	Bromochloromethane	0.141	0.000	100.0#	0#	-7.83#
33	T,M	Tetrahydrofuran	0.037	0.000	100.0#	0#	-7.93#
34	T,M	tert-Amyl alcohol	0.000	0.000	0.0	0#	-8.12#
35	S	Dibromofluoromethane	0.231	0.298	-29.0#	88	0.00
36	T,M	1,1,1-Trichloroethane	0.421	0.000	100.0#	0#	-8.35#
37	T,M	Cyclohexane	0.539	0.000	100.0#	0#	-8.35#
38	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	-8.69#
39	T,M	1,1-Dichloropropene	0.142	0.000	100.0#	0#	-8.73#
40	T,M	Carbon tetrachloride	0.349	0.000	100.0#	0#	-8.90#
41	T,M	tert-Amyl methyl ether (TAM	0.620	0.000	100.0#	0#	-9.06#
42	S	1,2-Dichloroethane-d4	0.221	0.229	-3.6	82	0.02
43	T,M	1,2-Dichloroethane	0.263	0.000	100.0#	0#	-9.29#
44	T,M	Benzene	1.146	0.000	100.0#	0#	-9.27#
45	T,M	Trichloroethene	0.298	0.000	100.0#	0#	-10.55#
46	T,M	Methylcyclohexane	0.568	0.000	100.0#	0#	-10.64#
47	C,T,M	1,2-Dichloropropane	0.284	0.000	100.0#	0#	-10.91#
48	T,M	1,4-Dioxane	0.001	0.000	100.0#	0#	-11.45#
49	T,M	Bromodichloromethane	0.368	0.000	100.0#	0#	-11.35#
50	T,M	Dibromomethane	0.134	0.000	100.0#	0#	-11.41#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	0.089	0.000	100.0#	0#	-12.04#
52	T,M	4-Methyl-2-pentanone	0.189	0.000	100.0#	0#	-12.08#
53	T,M	cis-1,3-Dichloropropene	0.450	0.000	100.0#	0#	-12.40#
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	77	0.01
55	S	Toluene-d8	1.294	1.471	-13.7	85	0.00
56	C,T,M	Toluene	1.509	0.000	100.0#	0#	-12.94#
57	T,M	Ethyl methacrylate	0.332	0.000	100.0#	0#	-13.38#
58	T,M	trans-1,3-Dichloropropene	0.424	0.000	100.0#	0#	-13.32#
59	T,M	1,1,2-Trichloroethane	0.217	0.000	100.0#	0#	-13.57#
60	T,M	2-Hexanone	0.158	0.000	100.0#	0#	-13.65#
61	T,M	1,3-Dichloropropane	0.400	0.000	100.0#	0#	-14.03#
62	T,M	Tetrachloroethene	0.310	0.000	100.0#	0#	-14.07#
63	T,M	Dibromochloromethane	0.267	0.000	100.0#	0#	-14.43#
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.206	0.000	100.0#	0#	-14.76#
66	T,M	1-Chlorohexane	0.643	0.000	100.0#	0#	-15.12#
67	P,T,M	Chlorobenzene	0.924	0.000#	100.0#	0#	-15.50#
68	T,M	1,1,1,2-Tetrachloroethane	0.292	0.000	100.0#	0#	-15.59#
69	C,T,M	Ethylbenzene	1.859	0.000	100.0#	0#	-15.60#
70	T,M	m-Xylene & p-Xylene	1.421	0.000	100.0#	0#	-15.74#
71	T,M	o-Xylene	1.399	0.000	100.0#	0#	-16.47#
72	T,M	Styrene	1.045	0.000	100.0#	0#	-16.53#
73	T,M	Isopropylbenzene	1.815	0.000	100.0#	0#	-17.08#
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	80	0.00
75	P,T,M	Bromoform	0.290	0.000#	100.0#	0#	-17.07#
76	P,T,M	1,1,2,2-Tetrachloroethane	0.578	0.000#	100.0#	0#	-17.36#
77	S	4-Bromofluorobenzene	1.116	1.085	2.8	77	0.00
78	T,M	1,2,3-Trichloropropane	0.159	0.000	100.0#	0#	-17.57#
79	T,M	trans-1,4-Dichloro-2-butene	0.176	0.000	100.0#	0#	-17.68#
80	T,M	n-Propylbenzene	5.517	0.000	100.0#	0#	-17.68#
81	T,M	Bromobenzene	0.790	0.000	100.0#	0#	-17.71#
82	T,M	1,3,5-Trimethylbenzene	3.365	0.000	100.0#	0#	-17.90#
83	T,M	2-Chlorotoluene	3.233	0.000	100.0#	0#	-17.91#
84	T,M	4-Chlorotoluene	2.963	0.000	100.0#	0#	-17.97#
85	T,M	tert-Butylbenzene	0.711	0.000	100.0#	0#	-18.35#
86	T,M	1,2,4-Trimethylbenzene	3.489	0.000	100.0#	0#	-18.39#
87	T,M	sec-Butylbenzene	4.751	0.000	100.0#	0#	-18.60#
88	T,M	p-Isopropyltoluene	4.038	0.000	100.0#	0#	-18.76#
89	T,M	1,3-Dichlorobenzene	1.767	0.000	100.0#	0#	-18.87#
90	T,M	1,2,3-Trimethylbenzene	3.158	0.000	100.0#	0#	-18.95#
91	T,M	1,4-Dichlorobenzene	1.750	0.000	100.0#	0#	-18.99#
92	T,M	n-Butylbenzene	4.351	0.000	100.0#	0#	-19.21#
93	T,M	1,2-Dichlorobenzene	1.462	0.000	100.0#	0#	-19.37#
94	T,M	1,2-Dibromo-3-chloropropane	0.102	0.000	100.0#	0#	-20.14#
95	T,M	1,2,4-Trichlorobenzene	1.149	0.000	100.0#	0#	-20.97#
96	T,M	Hexachlorobutadiene	0.621	0.000	100.0#	0#	-21.10#
97	T,M	Naphthalene	1.548	0.000	100.0#	0#	-21.24#
98	T,M	1,2,3-Trichlorobenzene	0.867	0.000	100.0#	0#	-21.49#

(#) = Out of Range SPCC's out = 5 CCC's out = 6

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 13:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.99	114	2935645	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.44	117	2248957	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1030195	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	874088	10.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.10%		
42) 1,2-Dichloroethane-d4	9.11	65	671780	10.35	ug/l	0.02
Spiked Amount 10.000			Recovery =	103.50%		
55) Toluene-d8	12.81	98	3307626	11.36	ug/l	0.00
Spiked Amount 10.000			Recovery =	113.60%		
77) 4-Bromofluorobenzene	17.45	95	1117852	9.72	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.20%		
Target Compounds						Qvalue
7) Dichlorofluoromethane	2.56	67	2336339	11.37	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	1044991	11.03	ug/l	99

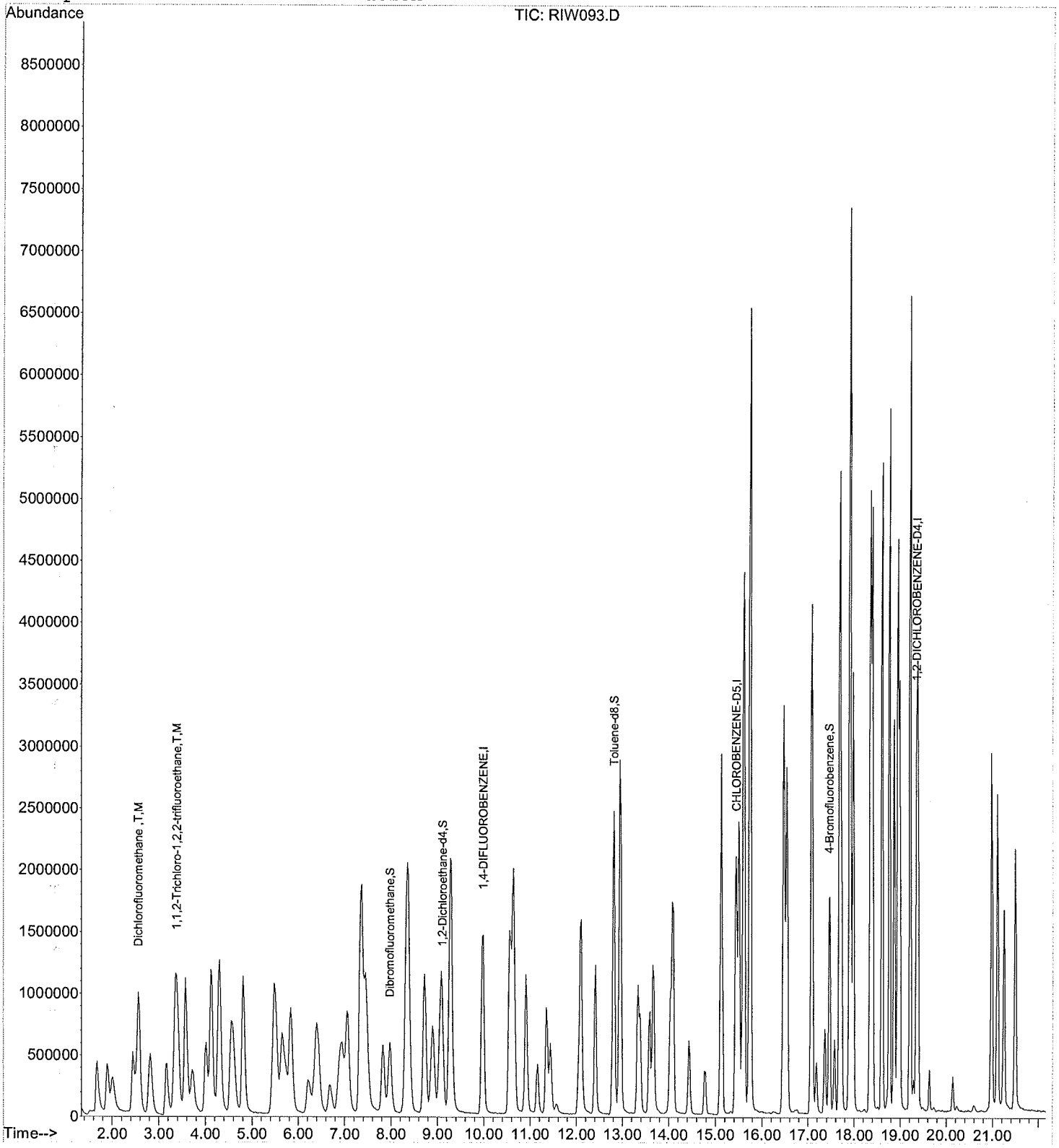
SM 10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 13:43 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



RIW093.D VO06I19B.M Mon Oct 14 13:43:47 2024 SA 10/14/24 Page 2

DAILY CALIBRATION(S)

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SDG No : 24I028
Lab File ID: RIW094 BFB Injection Date: 09/20/24
Instrument ID: 06 BFB Injection Time: 13:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	15.327
75	30 - 60% of mass 95	42.110
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.676
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	73.597
175	5 - 9% of mass 174	4.831(6.56)1
176	95 - 101% % of mass 174	72.988(99.17)1
177	5 - 9% % of mass 176	4.460(6.11)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CV006I191	RIW095	09/20/24	13:56
2	MBLK1W	V006I05B	RIW099	09/20/24	16:06
3	LCS1W	V006I05X	RIW100	09/20/24	16:32
4	LCD1W	V006I05Y	RIW101	09/20/24	16:58
5	MW13D-GW090724	24I028-01	RIW102	09/20/24	17:24
6	MW13L-GW090724	24I028-02	RIW103	09/20/24	17:50
7	MW13S-GW090724	24I028-03	RIW104	09/20/24	18:17
8	MW18-GW090724	24I028-04	RIW105	09/20/24	18:43
9	FD03-GW090724	24I028-05	RIW106	09/20/24	19:09
10	MW19-GW090724	24I028-06	RIW107	09/20/24	19:35
11	MW20D-GW090724	24I028-07	RIW108	09/20/24	20:01
12	FD05-GW090724	24I028-08	RIW109	09/20/24	20:27
13	FD06-GW090724	24I028-09	RIW110	09/20/24	20:53
14	MW20S-GW090724	24I02B-10	RIW111	09/20/24	21:19
15	MW25A-GW090724	24I028-11	RIW112	09/20/24	21:45
16	MW25B-GW090724	24I028-12	RIW113	09/20/24	22:11
17	MW25C-GW090724	24I028-13	RIW114	09/20/24	22:38
18	MW28-GW090724	24I028-15	RIW115	09/20/24	23:04
19	MW28-GW090724MS	24I028-15M	RIW116	09/20/24	23:31
20	MW28-GW090724MSD	24I028-15S	RIW117	09/20/24	23:57
21	MW13D-GW090724MS	24I02B-01M	RIW118	09/21/24	00:23
22	MW13D-GW090724MSD	24I028-01S	RIW119	09/21/24	00:49
23	MW26C-GW090724	24I028-14	RIW120	09/21/24	01:16

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

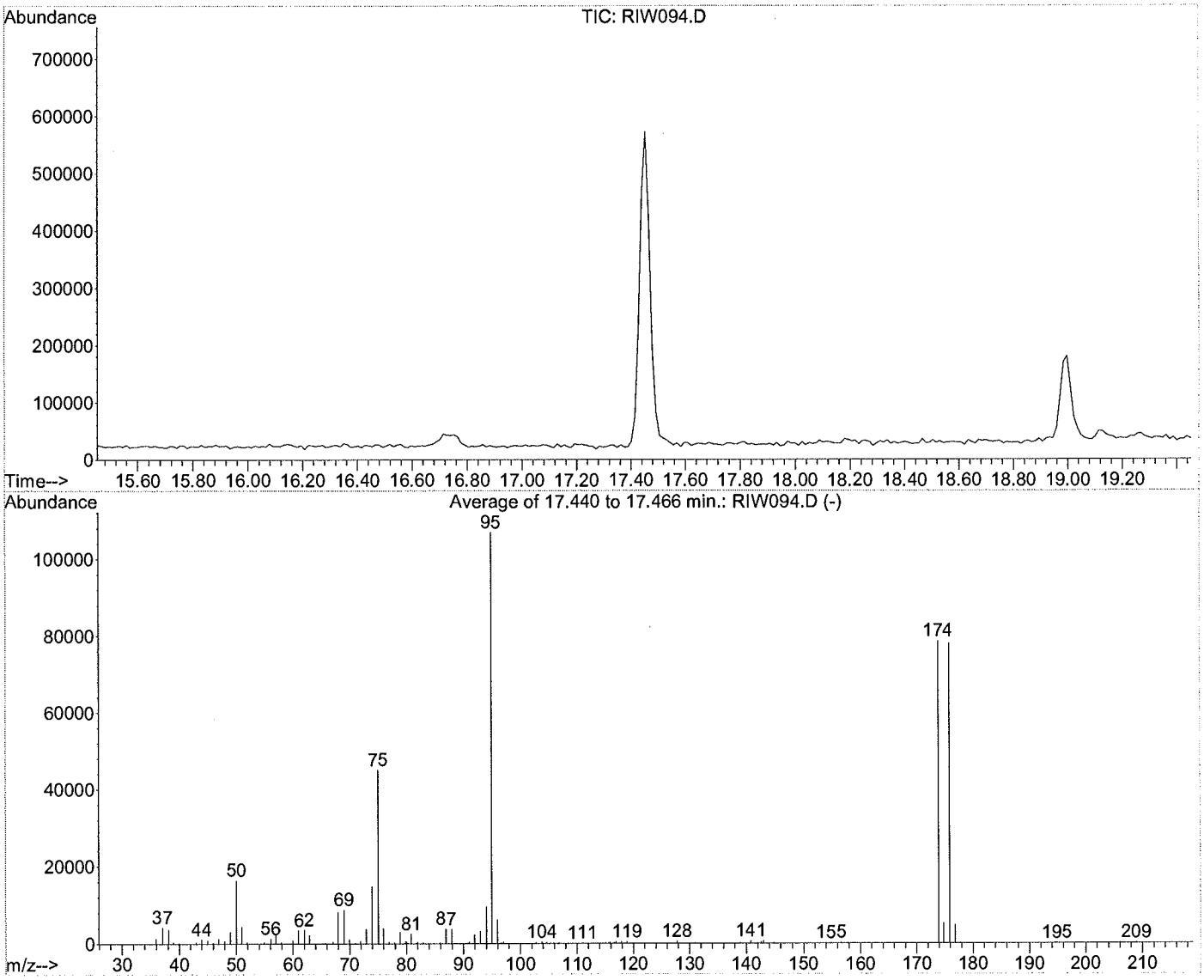
Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RIW080
Instrument ID: 06

Project: VA SALT LAKE CITY
SDG No: 24I028
Date Analyzed: 09/19/24
Time Analyzed: 13:18

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	3477436	9.96	2910329	15.43	1285376	19.35
	UPPER LIMIT	6954872	10.1	5820658	15.60	2570752	19.52
	LOWER LIMIT	1738718	9.79	1455165	15.26	642688	19.18
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	3707936	9.96	2614527	15.43	1184753	19.35
2	MBLK1W	4050463	9.96	3252197	15.43	1581164	19.35
3	LCS1W	3650815	9.97	2900538	15.43	1314903	19.35
4	LCD1W	3744497	9.96	2984997	15.43	1400283	19.35
5	MW13D-GW090724	3988349	9.96	3239897	15.43	1506151	19.35
6	MW13L-GW090724	3346647	9.96	2726610	15.43	1311541	19.35
7	MW13S-GW090724	3788162	9.97	3042664	15.43	1423258	19.35
8	MW18-GW090724	3555161	9.96	2978545	15.43	1420596	19.35
9	FD03-GW090724	3474319	9.96	2847836	15.43	1363382	19.35
10	MW19-GW090724	3177899	9.96	2589054	15.43	1251966	19.35
11	MW20D-GW090724	3954650	9.96	3210514	15.44	1586997	19.35
12	FD05-GW090724	3251103	9.96	2627227	15.43	1257883	19.35
13	FD06-GW090724	3196192	9.96	2651862	15.43	1281372	19.35
14	MW20S-GW090724	3559771	9.96	2954940	15.43	1461749	19.35
15	MW25A-GW090724	3261010	9.96	2688158	15.43	1289773	19.35
16	MW25B-GW090724	3454078	9.96	2827191	15.43	1336162	19.35
17	MW25C-GW090724	3056682	9.96	2557964	15.43	1247024	19.35
18	MW28-GW090724	3002167	9.96	2427055	15.43	1200530	19.35
19	MW28-GW090724MS	3211635	9.96	2609408	15.43	1264303	19.35
20	MW28-GW090724MSD	3243786	9.96	2557185	15.43	1240185	19.35
21	MW13D-GW090724MS	3304655	9.97	2703255	15.43	1270611	19.35
22	MW13D-GW090724MSD	3248621	9.96	2626720	15.43	1309886	19.35
23	MW26C-GW090724	3530341	9.96	2903612	15.43	1384972	19.35

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data File : D:\HPCHEM\1\DATA\24I20\RIW094.D Vial: 1
Acq On : 20 Sep 2024 1:19 pm Operator: PMai
Sample : BFB06I05 Inst : 06
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06I19.M (RTE Integrator)
Title : METHOD 8260



Spectrum Information: Average of 17.440 to 17.466 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.3	16391	PASS
75	95	30	60	42.1	45032	PASS
95	95	100	100	100.0	106939	PASS
96	95	5	9	5.7	6070	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	73.6	78704	PASS
175	174	5	9	6.6	5166	PASS
176	174	95	101	99.2	78053	PASS
177	176	5	9	6.1	4770	PASS

RIW094.D VO06I19.M Tue Oct 08 11:13:27 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW095.D Vial: 2
Acq On : 20 Sep 2024 1:56 pm Operator: PMai
Sample : CVO06I191 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	107	0.00
2	T,M	Dichlorodifluoromethane	10.000	10.907	-9.1	137	-0.02
3	P,T,M	Chloromethane	10.000	8.852	11.5	106	-0.02
4	C,T,M	Vinyl chloride	10.000	9.568	4.3	128	-0.02
5	T,M	Bromomethane	10.000	10.015	-0.2	126	-0.02
6	T,M	Chloroethane	10.000	9.253	7.5	112	-0.02
7	T,M	Dichlorofluoromethane	10.000	10.604	-6.0	120	-0.02
8	T,M	Trichlorofluoromethane	10.000	10.558	-5.6	127	-0.02
9	T,M	Acrolein	50.000	32.942	34.1#	82	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.016	-10.2	131	-0.02
11	T,M	Acetone	50.000	35.055	29.9#	77	-0.02
12	C,T,M	1,1-Dichloroethene	10.000	9.728	2.7	103	-0.02
13	T,M	tert-Butyl alcohol	250.000	161.790	35.3#	62	-0.02
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	7.136	28.6#	70	0.00
16	T,M	Iodomethane	10.000	10.112	-1.1	108	-0.02
17	T,M	Allyl chloride	10.000	9.562	4.4	99	0.00
18	T,M	Methylene chloride	10.000	8.170	18.3	90	-0.02
19	T,M	Carbon disulfide	10.000	9.699	3.0	101	0.00
20	T,M	Acrylonitrile	50.000	37.667	24.7#	78	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	7.747	22.5#	76	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	9.623	3.8	101	-0.02
23	T,M	Isopropyl ether (DIPE)	10.000	8.035	19.6	80	0.00
24	T,M	Vinyl acetate	10.000	6.284	37.2#	70	0.00
25	P,T,M	1,1-Dichloroethane	10.000	9.025	9.7	94	-0.02
26	T,M	2-Butanol	250.000	141.751	43.3#	57	-0.02
27	T,M	tert-Butyl ethyl ether (ETB	10.000	8.203	18.0	81	0.00
28	T,M	2-Butanone	50.000	31.850	36.3#	68	0.00
29	T,M	2,2-Dichloropropane	10.000	10.820	-8.2	110	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	9.121	8.8	96	0.00
31	C,T,M	Chloroform	10.000	8.837	11.6	94	-0.02
32	T,M	Bromochloromethane	10.000	8.595	14.0	87	-0.02
33	T,M	Tetrahydrofuran	10.000	5.562	44.4#	62	0.02
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	0.00
35	S	Dibromofluoromethane	10.000	9.376	6.2	99	-0.02
36	T,M	1,1,1-Trichloroethane	10.000	9.741	2.6	100	0.00
37	T,M	Cyclohexane	10.000	11.049	-10.5	111	-0.02
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.06
39	T,M	1,1-Dichloropropene	10.000	9.062	9.4	95	-0.02
40	T,M	Carbon tetrachloride	10.000	9.776	2.2	99	0.00
41	T,M	tert-Amyl methyl ether (TAM	10.000	7.615	23.8#	75	0.00
42	S	1,2-Dichloroethane-d4	10.000	8.448	15.5	84	0.00
43	T,M	1,2-Dichloroethane	10.000	7.450	25.5#	74	0.00
44	T,M	Benzene	10.000	9.047	9.5	91	0.00
45	T,M	Trichloroethene	10.000	9.356	6.4	94	0.00
46	T,M	Methylcyclohexane	10.000	10.189	-1.9	98	-0.02
47	C,T,M	1,2-Dichloropropane	10.000	7.971	20.3#	82	0.00
48	T,M	1,4-Dioxane	200.000	122.887	38.6#	58	0.00
49	T,M	Bromodichloromethane	10.000	7.700	23.0#	81	0.00
50	T,M	Dibromomethane	10.000	7.934	20.7#	82	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW095.D Vial: 2
Acq On : 20 Sep 2024 1:56 pm Operator: PMai
Sample : CVO06I191 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	10.000	5.893	41.1#	62	0.00
52	T,M	4-Methyl-2-pentanone	50.000	32.706	34.6#	64	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	7.597	24.0#	77	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	90	0.00
55	S	Toluene-d8	10.000	11.212	-12.1	97	0.00
56	C,T,M	Toluene	10.000	10.150	-1.5	86	0.00
57	T,M	Ethyl methacrylate	10.000	6.785	32.1#	61	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	8.116	18.8	71	0.00
59	T,M	1,1,2-Trichloroethane	10.000	8.171	18.3	71	0.02
60	T,M	2-Hexanone	50.000	33.491	33.0#	58	0.00
61	T,M	1,3-Dichloropropane	10.000	7.867	21.3#	68	0.00
62	T,M	Tetrachloroethene	10.000	10.212	-2.1	89	0.00
63	T,M	Dibromochloromethane	10.000	7.951	20.5#	70	0.00
64	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
65	T,M	1,2-Dibromoethane	10.000	7.864	21.4#	68	0.00
66	T,M	1-Chlorohexane	10.000	9.541	4.6	93	0.00
67	P,T,M	Chlorobenzene	10.000	9.401	6.0	81	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.060	-0.6	82	0.00
69	C,T,M	Ethylbenzene	10.000	9.557	4.4	85	0.01
70	T,M	m-Xylene & p-Xylene	20.000	18.848	5.8	85	0.00
71	T,M	o-Xylene	10.000	9.743	2.6	84	0.00
72	T,M	Styrene	10.000	8.869	11.3	76	0.00
73	T,M	Isopropylbenzene	10.000	9.971	0.3	88	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	92	0.00
75	P,T,M	Bromoform	10.000	6.645	33.6#	63	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	7.401	26.0#	65	0.00
77	S	4-Bromofluorobenzene	10.000	9.063	9.4	83	0.00
78	T,M	1,2,3-Trichloropropane	10.000	6.858	31.4#	63	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	5.462	45.4#	53	0.00
80	T,M	n-Propylbenzene	10.000	9.123	8.8	86	0.00
81	T,M	Bromobenzene	10.000	8.810	11.9	78	0.01
82	T,M	1,3,5-Trimethylbenzene	10.000	9.706	2.9	88	0.00
83	T,M	2-Chlorotoluene	10.000	9.087	9.1	84	0.00
84	T,M	4-Chlorotoluene	10.000	9.089	9.1	79	0.00
85	T,M	tert-Butylbenzene	10.000	10.468	-4.7	91	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	9.134	8.7	85	0.00
87	T,M	sec-Butylbenzene	10.000	9.621	3.8	90	0.00
88	T,M	p-Isopropyltoluene	10.000	9.361	6.4	86	0.00
89	T,M	1,3-Dichlorobenzene	10.000	8.677	13.2	77	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	9.165	8.4	83	0.00
91	T,M	1,4-Dichlorobenzene	10.000	8.287	17.1	75	0.00
92	T,M	n-Butylbenzene	10.000	9.395	6.1	89	0.00
93	T,M	1,2-Dichlorobenzene	10.000	8.902	11.0	77	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	7.028	29.7#	65	0.00
95	T,M	1,2,4-Trichlorobenzene	10.000	9.749	2.5	87	0.00
96	T,M	Hexachlorobutadiene	10.000	10.607	-6.1	90	0.00
97	T,M	Naphthalene	10.000	9.428	5.7	82	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	9.851	1.5	87	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW095.D Vial: 2
Acq On : 20 Sep 2024 1:56 pm Operator: PMai
Sample : CVO06I191 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	107	0.00
2	T,M	Dichlorodifluoromethane	0.422	0.461	-9.2	137	-0.02
3	P,T,M	Chloromethane	0.387	0.343	11.4	106	-0.02
4	C,T,M	Vinyl chloride	0.303	0.290	4.3	128	-0.02
5	T,M	Bromomethane	0.239	0.250	-4.6	126	-0.02
6	T,M	Chloroethane	0.203	0.182	10.3	112	-0.02
7	T,M	Dichlorofluoromethane	0.725	0.744	-2.6	120	-0.02
8	T,M	Trichlorofluoromethane	0.399	0.421	-5.5	127	-0.02
9	T,M	Acrolein	0.014	0.009	35.7#	82	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.305	0.356	-16.7	131	-0.02
11	T,M	Acetone	0.040	0.028	30.0#	77	-0.02
12	C,T,M	1,1-Dichloroethene	0.529	0.515	2.6	103	-0.02
13	T,M	tert-Butyl alcohol	0.012	0.008	33.3#	62	-0.02
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.022	0.015	31.8#	70	0.00
16	T,M	Iodomethane	0.496	0.501	-1.0	108	-0.02
17	T,M	Allyl chloride	0.169	0.162	4.1	99	0.00
18	T,M	Methylene chloride	0.456	0.340	25.4#	90	-0.02
19	T,M	Carbon disulfide	0.550	0.606	-10.2	101	0.00
20	T,M	Acrylonitrile	0.050	0.038	24.0#	78	0.00
21	T,M	tert-Butyl methyl ether (MT	0.507	0.393	22.5#	76	0.00
22	T,M	trans-1,2-Dichloroethene	0.316	0.304	3.8	101	-0.02
23	T,M	Isopropyl ether (DIPE)	1.045	0.840	19.6	80	0.00
24	T,M	Vinyl acetate	0.377	0.237	37.1#	70	0.00
25	P,T,M	1,1-Dichloroethane	0.528	0.477	9.7	94	-0.02
26	T,M	2-Butanol	0.011	0.008	27.3#	57	-0.02
27	T,M	tert-Butyl ethyl ether (ETB	0.758	0.622	17.9	81	0.00
28	T,M	2-Butanone	0.069	0.044	36.2#	68	0.00
29	T,M	2,2-Dichloropropane	0.330	0.357	-8.2	110	0.00
30	T,M	cis-1,2-Dichloroethene	0.326	0.298	8.6	96	0.00
31	C,T,M	Chloroform	0.523	0.462	11.7	94	-0.02
32	T,M	Bromochloromethane	0.141	0.122	13.5	87	-0.02
33	T,M	Tetrahydrofuran	0.037	0.020	45.9#	62	0.02
34	T,M	tert-Amyl alcohol	0.000	0.000	0.0	0#	0.00
35	S	Dibromofluoromethane	0.231	0.265	-14.7	99	-0.02
36	T,M	1,1,1-Trichloroethane	0.421	0.410	2.6	100	0.00
37	T,M	Cyclohexane	0.539	0.596	-10.6	111	-0.02
38	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	-0.06
39	T,M	1,1-Dichloropropene	0.142	0.129	9.2	95	-0.02
40	T,M	Carbon tetrachloride	0.349	0.341	2.3	99	0.00
41	T,M	tert-Amyl methyl ether (TAM	0.620	0.472	23.9#	75	0.00
42	S	1,2-Dichloroethane-d4	0.221	0.187	15.4	84	0.00
43	T,M	1,2-Dichloroethane	0.263	0.196	25.5#	74	0.00
44	T,M	Benzene	1.146	1.037	9.5	91	0.00
45	T,M	Trichloroethene	0.298	0.279	6.4	94	0.00
46	T,M	Methylcyclohexane	0.568	0.578	-1.8	98	-0.02
47	C,T,M	1,2-Dichloropropane	0.284	0.226	20.4#	82	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	58	0.00
49	T,M	Bromodichloromethane	0.368	0.283	23.1#	81	0.00
50	T,M	Dibromomethane	0.134	0.107	20.1#	82	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I20\RIW095.D Vial: 2
Acq On : 20 Sep 2024 1:56 pm Operator: PMai
Sample : CVO06I191 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	0.089	0.053	40.4#	62	0.00
52	T,M	4-Methyl-2-pentanone	0.189	0.124	34.4#	64	0.00
53	T,M	cis-1,3-Dichloropropene	0.450	0.342	24.0#	77	0.00
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	90	0.00
55	S	Toluene-d8	1.294	1.451	-12.1	97	0.00
56	C,T,M	Toluene	1.509	1.531	-1.5	86	0.00
57	T,M	Ethyl methacrylate	0.332	0.225	32.2#	61	0.00
58	T,M	trans-1,3-Dichloropropene	0.424	0.344	18.9	71	0.00
59	T,M	1,1,2-Trichloroethane	0.217	0.177	18.4	71	0.02
60	T,M	2-Hexanone	0.158	0.106	32.9#	58	0.00
61	T,M	1,3-Dichloropropane	0.400	0.315	21.3#	68	0.00
62	T,M	Tetrachloroethene	0.310	0.317	-2.3	89	0.00
63	T,M	Dibromochloromethane	0.267	0.212	20.6#	70	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.206	0.162	21.4#	68	0.00
66	T,M	1-Chlorohexane	0.643	0.613	4.7	93	0.00
67	P,T,M	Chlorobenzene	0.924	0.868	6.1	81	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.292	0.294	-0.7	82	0.00
69	C,T,M	Ethylbenzene	1.859	1.777	4.4	85	0.01
70	T,M	m-Xylene & p-Xylene	1.421	1.339	5.8	85	0.00
71	T,M	o-Xylene	1.399	1.363	2.6	84	0.00
72	T,M	Styrene	1.045	0.927	11.3	76	0.00
73	T,M	Isopropylbenzene	1.815	1.810	0.3	88	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	92	0.00
75	P,T,M	Bromoform	0.290	0.204	29.7#	63	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.578	0.428	26.0#	65	0.00
77	S	4-Bromofluorobenzene	1.116	1.012	9.3	83	0.00
78	T,M	1,2,3-Trichloropropane	0.159	0.109	31.4#	63	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.176	0.096	45.5#	53	0.00
80	T,M	n-Propylbenzene	5.517	5.033	8.8	86	0.00
81	T,M	Bromobenzene	0.790	0.696	11.9	78	0.01
82	T,M	1,3,5-Trimethylbenzene	3.365	3.267	2.9	88	0.00
83	T,M	2-Chlorotoluene	3.233	2.938	9.1	84	0.00
84	T,M	4-Chlorotoluene	2.963	2.693	9.1	79	0.00
85	T,M	tert-Butylbenzene	0.711	0.745	-4.8	91	0.00
86	T,M	1,2,4-Trimethylbenzene	3.489	3.187	8.7	85	0.00
87	T,M	sec-Butylbenzene	4.751	4.571	3.8	90	0.00
88	T,M	p-Isopropyltoluene	4.038	3.779	6.4	86	0.00
89	T,M	1,3-Dichlorobenzene	1.767	1.533	13.2	77	0.00
90	T,M	1,2,3-Trimethylbenzene	3.158	2.894	8.4	83	0.00
91	T,M	1,4-Dichlorobenzene	1.750	1.450	17.1	75	0.00
92	T,M	n-Butylbenzene	4.351	4.087	6.1	89	0.00
93	T,M	1,2-Dichlorobenzene	1.462	1.302	10.9	77	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.102	0.072	29.4#	65	0.00
95	T,M	1,2,4-Trichlorobenzene	1.149	1.120	2.5	87	0.00
96	T,M	Hexachlorobutadiene	0.621	0.659	-6.1	90	0.00
97	T,M	Naphthalene	1.548	1.459	5.7	82	0.00
98	T,M	1,2,3-Trichlorobenzene	0.867	0.854	1.5	87	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW095.D Vial: 2
Acq On : 20 Sep 2024 1:56 pm Operator: PMai
Sample : CVO06I191 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:05 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3707936	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2614527	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1184753	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	982446	9.38	ug/l	-0.02
Spiked Amount 10.000			Recovery =	93.80%		
42) 1,2-Dichloroethane-d4	9.08	65	692586	8.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	84.50%		
55) Toluene-d8	12.81	98	3794160	11.21	ug/l	0.00
Spiked Amount 10.000			Recovery =	112.10%		
77) 4-Bromofluorobenzene	17.45	95	1198878	9.06	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.60%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1708525	10.91	ug/l	98
3) Chloromethane	1.87	50	1270947	8.85	ug/l	99
4) Vinyl chloride	1.99	62	1076182	9.57	ug/l	99
5) Bromomethane	2.43	94	928124	10.02	ug/l	100
6) Chloroethane	2.50	64	673533	9.25	ug/l	96
7) Dichlorofluoromethane	2.54	67	2760381	10.60	ug/l	99
8) Trichlorofluoromethane	2.80	101	1561645	10.56	ug/l	98
9) Acrolein	3.32	56	171572	32.94	ug/l	91
10) 1,1,2-Trichloro-1,2,2-trif	3.34	151	1318567	11.02	ug/l	98
11) Acetone	3.40	43	524995	35.06	ug/l	99
12) 1,1-Dichloroethene	3.55	61	1907965	9.73	ug/l	97
13) tert-Butyl alcohol	3.70	59	749530	161.79	ug/l	99
15) Methyl acetate	4.10	74	57109	7.14	ug/l	90
16) Iodomethane	3.99	142	1858468	10.11	ug/l	98
17) Allyl chloride	4.12	76	600444	9.56	ug/l	95
18) Methylene chloride	4.28	49	1260865	8.17	ug/l	92
19) Carbon disulfide	4.26	76	2247620	9.70	ug/l	100
20) Acrylonitrile	4.54	53	700783	37.67	ug/l	98
21) tert-Butyl methyl ether (M	4.58	73	1456676	7.75	ug/l	99
22) trans-1,2-Dichloroethene	4.79	96	1127508	9.62	ug/l	98
23) Isopropyl ether (DIPE)	5.48	45	3113355	8.04	ug/l	97
24) Vinyl acetate	5.71	43	879418	6.28	ug/l	100
25) 1,1-Dichloroethane	5.63	63	1768281	9.02	ug/l	98
26) 2-Butanol	6.19	45	728816	141.75	ug/l	96
27) tert-Butyl ethyl ether (ET	6.38	59	2304997	8.20	ug/l	100
28) 2-Butanone	6.67	43	810451	31.85	ug/l	98
29) 2,2-Dichloropropane	6.93	77	1322920	10.82	ug/l	99
30) cis-1,2-Dichloroethene	7.05	96	1103907	9.12	ug/l	98
31) Chloroform	7.43	83	1713166	8.84	ug/l	98
32) Bromochloromethane	7.81	130	450585	8.59	ug/l	100
33) Tetrahydrofuran	7.95	42	75773	5.56	ug/l	87
36) 1,1,1-Trichloroethane	8.35	97	1519187	9.74	ug/l	98
37) Cyclohexane	8.33	84	2209085	11.05	ug/l	98
39) 1,1-Dichloropropene	8.71	110	477307	9.06	ug/l	98
40) Carbon tetrachloride	8.90	119	1263601	9.78	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	1750073	7.61	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW095.D Vial: 2
Acq On : 20 Sep 2024 1:56 pm Operator: PMai
Sample : CVO06I191 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:05 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloroethane	9.29	62	727003	7.45 ug/l	95
44) Benzene	9.27	78	3844851	9.05 ug/l	99
45) Trichloroethene	10.55	130	1035336	9.36 ug/l	99
46) Methylcyclohexane	10.61	83	2144374	10.19 ug/l	96
47) 1,2-Dichloropropane	10.91	63	837903	7.97 ug/l	99
48) 1,4-Dioxane	11.45	88	60478	122.89 ug/l	95
49) Bromodichloromethane	11.35	83	1050203	7.70 ug/l	99
50) Dibromomethane	11.41	93	395055	7.93 ug/l	95
51) 2-Chloroethyl vinyl ether	12.04	63	194946	5.89 ug/l	97
52) 4-Methyl-2-pentanone	12.08	43	2293896	32.71 ug/l	98
53) cis-1,3-Dichloropropene	12.40	75	1268073	7.60 ug/l	99
56) Toluene	12.94	91	4003392	10.15 ug/l	99
57) Ethyl methacrylate	13.38	69	588230	6.79 ug/l	96
58) trans-1,3-Dichloropropene	13.32	75	899636	8.12 ug/l	91
59) 1,1,2-Trichloroethane	13.59	97	462897	8.17 ug/l	97
60) 2-Hexanone	13.65	43	1384972	33.49 ug/l	97
61) 1,3-Dichloropropane	14.03	76	823197	7.87 ug/l	100
62) Tetrachloroethene	14.07	164	828852	10.21 ug/l	98
63) Dibromochloromethane	14.43	129	554854	7.95 ug/l	100
65) 1,2-Dibromoethane	14.76	107	423364	7.86 ug/l	100
66) 1-Chlorohexane	15.12	91	1603006	9.54 ug/l	93
67) Chlorobenzene	15.50	112	2270480	9.40 ug/l	100
68) 1,1,1,2-Tetrachloroethane	15.59	131	768128	10.06 ug/l	97
69) Ethylbenzene	15.61	91	4645262	9.56 ug/l	99
70) m-Xylene & p-Xylene	15.74	91	7000347	18.85 ug/l	98
71) o-Xylene	16.47	91	3563397	9.74 ug/l	100
72) Styrene	16.53	104	2423828	8.87 ug/l	98
73) Isopropylbenzene	17.08	105	4731390	9.97 ug/l	99
75) Bromoform	17.07	173	241847	6.65 ug/l	97
76) 1,1,2,2-Tetrachloroethane	17.36	83	507109	7.40 ug/l	100
78) 1,2,3-Trichloropropane	17.57	110	129501	6.86 ug/l	94
79) trans-1,4-Dichloro-2-buten	17.67	53	113834	5.46 ug/l	91
80) n-Propylbenzene	17.67	91	5963090	9.12 ug/l	99
81) Bromobenzene	17.73	156	824825	8.81 ug/l	96
82) 1,3,5-Trimethylbenzene	17.90	105	3870022	9.71 ug/l	99
83) 2-Chlorotoluene	17.91	91	3480362	9.09 ug/l	97
84) 4-Chlorotoluene	17.97	91	3190404	9.09 ug/l	99
85) tert-Butylbenzene	18.35	134	882294	10.47 ug/l	97
86) 1,2,4-Trimethylbenzene	18.39	105	3775635	9.13 ug/l	99
87) sec-Butylbenzene	18.60	105	5415011	9.62 ug/l	99
88) p-Isopropyltoluene	18.76	119	4477749	9.36 ug/l	100
89) 1,3-Dichlorobenzene	18.87	146	1816149	8.68 ug/l	97
90) 1,2,3-Trimethylbenzene	18.95	105	3428730	9.17 ug/l	100
91) 1,4-Dichlorobenzene	18.99	146	1718046	8.29 ug/l	100
92) n-Butylbenzene	19.21	91	4842568	9.40 ug/l	100
93) 1,2-Dichlorobenzene	19.37	146	1542120	8.90 ug/l	99
94) 1,2-Dibromo-3-chloropropan	20.14	157	85119	7.03 ug/l	93
95) 1,2,4-Trichlorobenzene	20.97	180	1327092	9.75 ug/l	99
96) Hexachlorobutadiene	21.10	225	780192	10.61 ug/l	98
97) Naphthalene	21.24	128	1728620	9.43 ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I20\RIW095.D Vial: 2
Acq On : 20 Sep 2024 1:56 pm Operator: PMai
Sample : CVO06I191 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:05 2024 Quant Results File: VO06I19B.RES

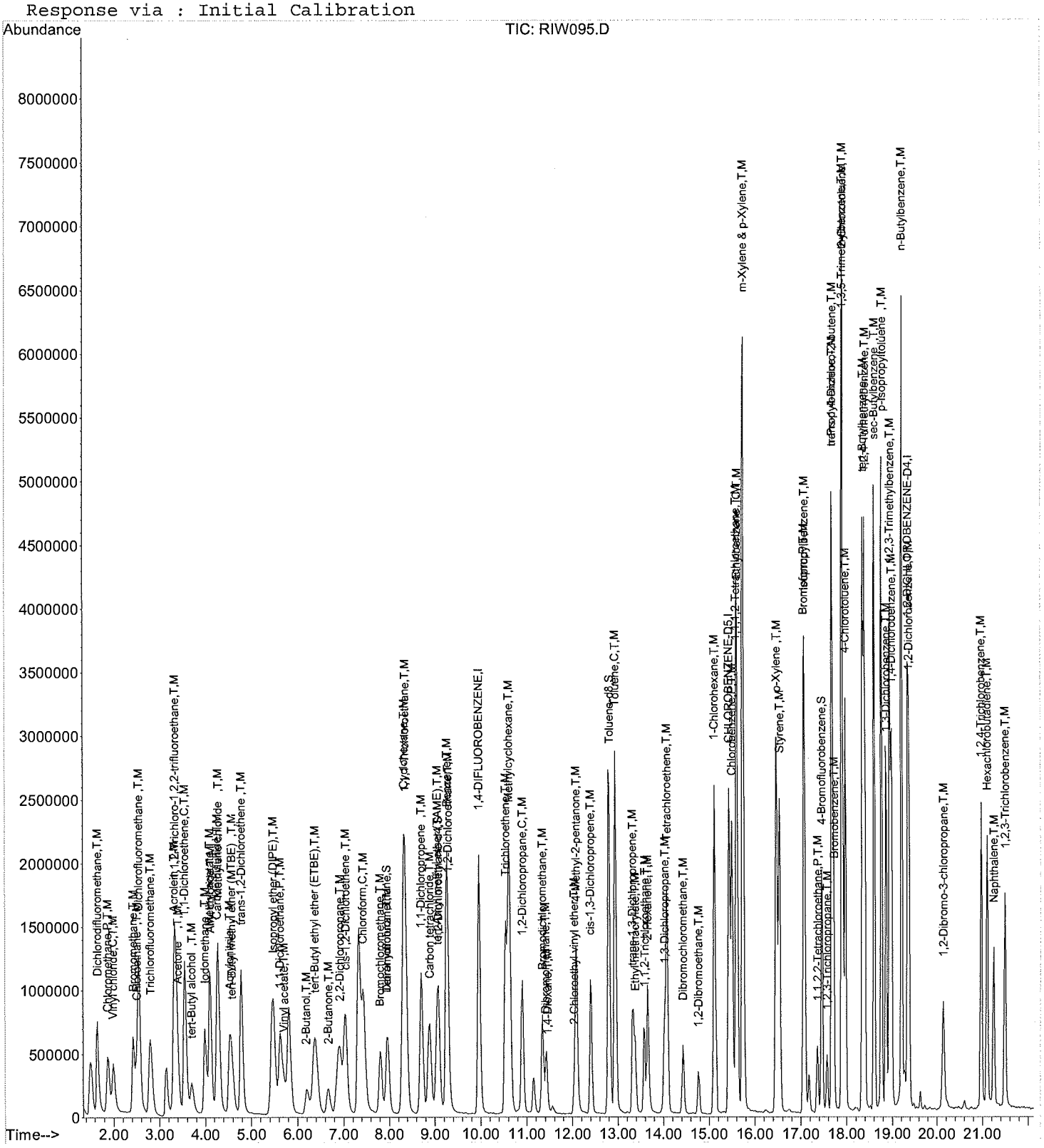
Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1011937	9.85	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I20\RIW095.D Vial: 2
Acq On : 20 Sep 2024 1:56 pm Operator: PMai
Sample : CVO06I191 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:05 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SDG No : 24I028
Lab File ID: RIW125 BFB Injection Date: 09/21/24
Instrument ID: 06 BFB Injection Time: 07:29

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.666
75	30 - 60% of mass 95	39.445
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.974
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	73.248
175	5 - 9% of mass 174	6.361(8.68)1
176	95 - 101% % of mass 174	69.686(95.14)1
177	5 - 9% % of mass 176	4.845(6.95)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CVO06I192	RIW126	09/21/24	08:05
2	LCS2W	VO06I06L	RIW127	09/21/24	08:33
3	LCD2W	VO06I06C	RIW128	09/21/24	08:59
4	MBLK2W	VO06I06B	RIW130	09/21/24	09:51
5	TB02-GW090924	24I028-19	RIW131	09/21/24	10:18
6	MW45-GW090724	24I028-16	RIW133	09/21/24	11:10
7	FB01-GW090724	24I028-17	RIW134	09/21/24	11:37
8	EB01-GW090724	24I028-18	RIW135	09/21/24	12:03

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

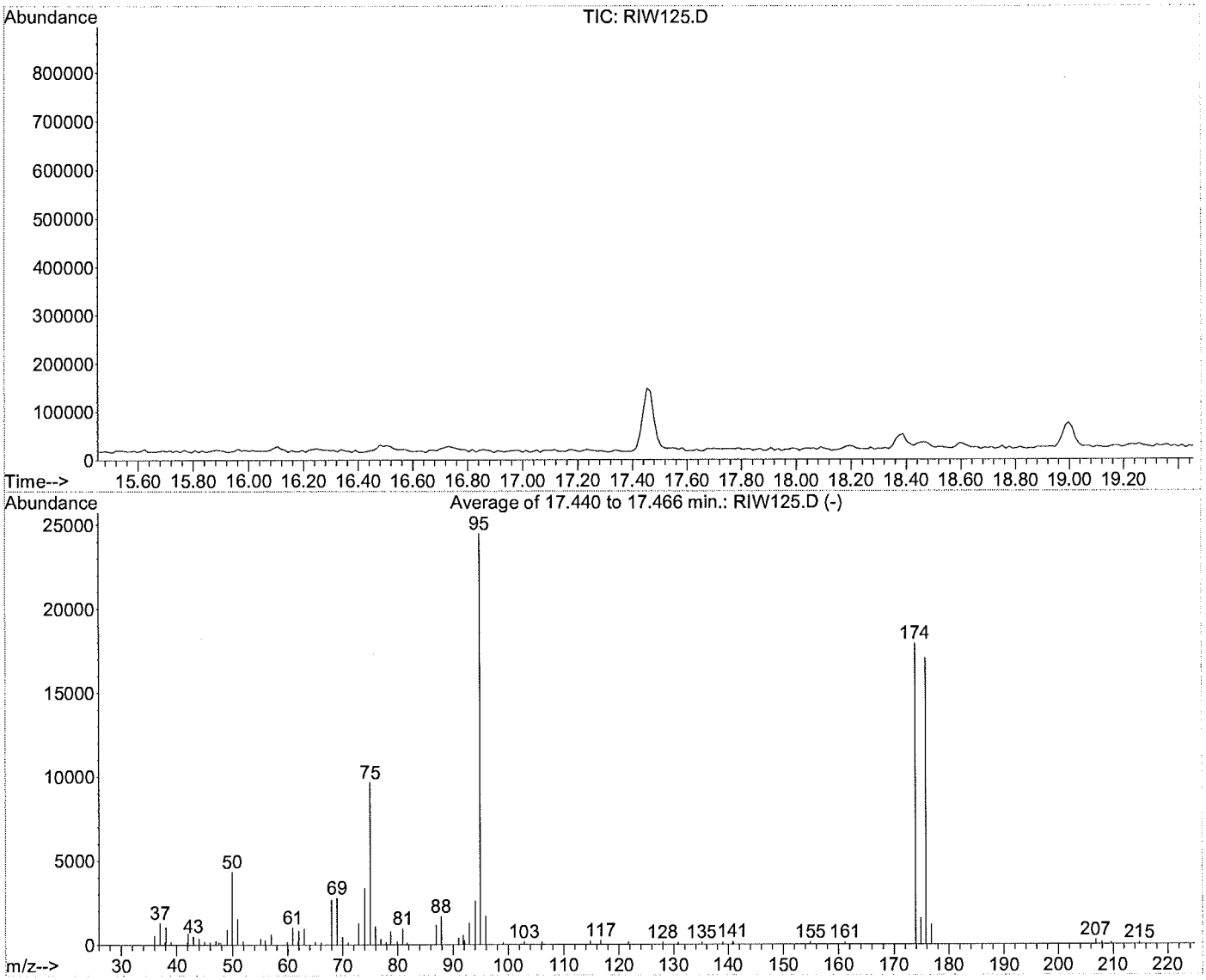
Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RIW080
Instrument ID: 06

Project: VA SALT LAKE CITY
SDG No: 24I028
Date Analyzed: 09/19/24
Time Analyzed: 13:18

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	3477436	9.96	2910329	15.43	1285376	19.35
	UPPER LIMIT	6954872	10.1	5820658	15.60	2570752	19.52
	LOWER LIMIT	1738718	9.79	1455165	15.26	642688	19.18
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	3304508	9.96	2395912	15.43	1194124	19.35
2	LCS2W	3599838	9.96	2851913	15.43	1372629	19.35
3	LCD2W	3758345	9.96	2942290	15.43	1398011	19.35
4	MBLK2W	3585929	9.96	2935993	15.43	1386567	19.35
5	TB02-GW090924	3133958	9.96	2576567	15.43	1261586	19.35
6	MW45-GW090724	3671079	9.96	2913574	15.43	1391317	19.35
7	FB01-GW090724	3695332	9.96	2922012	15.43	1328810	19.35
8	EB01-GW090724	3788571	9.96	2968062	15.43	1331427	19.35

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data File : D:\HPCHEM\1\DATA\24I21\RIW125.D Vial: 1
Acq On : 21 Sep 2024 7:29 am Operator: DHguye
Sample : BFB06I06 Inst : 06
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260



AutoFind: Scans 839, 840, 841; Background Corrected with Scan 832

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	4324	PASS
75	95	30	60	39.4	9655	PASS
95	95	100	100	100.0	24477	PASS
96	95	5	9	7.0	1707	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	73.2	17929	PASS
175	174	5	9	8.7	1557	PASS
176	174	95	101	95.1	17057	PASS
177	176	5	9	7.0	1186	PASS

RIW125.D VO06I19B.M Tue Oct 15 16:11:55 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	95	0.00
2	T,M	Dichlorodifluoromethane	10.000	10.715	-7.1	120	-0.02
3	P,T,M	Chloromethane	10.000	9.770	2.3	104	-0.02
4	C,T,M	Vinyl chloride	10.000	10.421	-4.2	124	-0.02
5	T,M	Bromomethane	10.000	10.538	-5.4	118	-0.02
6	T,M	Chloroethane	10.000	9.060	9.4	98	-0.02
7	T,M	Dichlorofluoromethane	10.000	9.923	0.8	100	-0.02
8	T,M	Trichlorofluoromethane	10.000	10.357	-3.6	111	-0.02
9	T,M	Acrolein	50.000	44.006	12.0	98	-0.02
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.782	2.2	105	-0.02
11	T,M	Acetone	50.000	40.996	18.0	80	-0.02
12	C,T,M	1,1-Dichloroethene	10.000	9.453	5.5	89	-0.02
13	T,M	tert-Butyl alcohol	250.000	218.678	12.5	75	-0.02
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	10.783	-7.8	94	-0.02
16	T,M	Iodomethane	10.000	10.398	-4.0	99	-0.02
17	T,M	Allyl chloride	10.000	10.551	-5.5	97	0.00
18	T,M	Methylene chloride	10.000	9.010	9.9	88	-0.02
19	T,M	Carbon disulfide	10.000	9.850	1.5	92	-0.02
20	T,M	Acrylonitrile	50.000	46.538	6.9	86	-0.02
21	T,M	tert-Butyl methyl ether (MT	10.000	10.463	-4.6	92	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.616	-6.2	100	-0.02
23	T,M	Isopropyl ether (DIPE)	10.000	9.686	3.1	86	-0.02
24	T,M	Vinyl acetate	10.000	7.986	20.1#	79	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.005	-0.1	92	-0.02
26	T,M	2-Butanol	250.000	183.528	26.6#	66	-0.02
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.241	-2.4	91	0.00
28	T,M	2-Butanone	50.000	39.697	20.6#	75	-0.02
29	T,M	2,2-Dichloropropane	10.000	11.704	-17.0	106	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.146	-1.5	96	-0.02
31	C,T,M	Chloroform	10.000	9.820	1.8	93	-0.02
32	T,M	Bromochloromethane	10.000	10.510	-5.1	95	-0.02
33	T,M	Tetrahydrofuran	10.000	7.368	26.3#	74	-0.02
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-0.02
35	S	Dibromofluoromethane	10.000	10.168	-1.7	95	-0.02
36	T,M	1,1,1-Trichloroethane	10.000	10.381	-3.8	95	0.00
37	T,M	Cyclohexane	10.000	10.869	-8.7	97	-0.02
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.06
39	T,M	1,1-Dichloropropene	10.000	9.871	1.3	93	-0.02
40	T,M	Carbon tetrachloride	10.000	10.339	-3.4	93	-0.02
41	T,M	tert-Amyl methyl ether (TAM	10.000	9.934	0.7	88	0.00
42	S	1,2-Dichloroethane-d4	10.000	9.235	7.7	82	0.00
43	T,M	1,2-Dichloroethane	10.000	9.010	9.9	80	-0.02
44	T,M	Benzene	10.000	10.127	-1.3	90	-0.02
45	T,M	Trichloroethene	10.000	9.853	1.5	88	0.00
46	T,M	Methylcyclohexane	10.000	10.703	-7.0	92	-0.02
47	C,T,M	1,2-Dichloropropane	10.000	8.981	10.2	83	0.00
48	T,M	1,4-Dioxane	200.000	144.365	27.8#	60	0.00
49	T,M	Bromodichloromethane	10.000	8.939	10.6	83	0.00
50	T,M	Dibromomethane	10.000	9.371	6.3	86	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	10.000	6.927	30.7#	65	0.00
52	T,M	4-Methyl-2-pentanone	50.000	41.953	16.1	74	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	8.500	15.0	77	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	82	0.00
55	S	Toluene-d8	10.000	10.922	-9.2	87	-0.02
56	C,T,M	Toluene	10.000	10.546	-5.5	82	0.00
57	T,M	Ethyl methacrylate	10.000	8.300	17.0	68	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	9.201	8.0	74	0.00
59	T,M	1,1,2-Trichloroethane	10.000	9.512	4.9	76	0.00
60	T,M	2-Hexanone	50.000	39.822	20.4#	64	0.00
61	T,M	1,3-Dichloropropane	10.000	9.066	9.3	72	0.00
62	T,M	Tetrachloroethene	10.000	10.722	-7.2	86	0.00
63	T,M	Dibromochloromethane	10.000	9.291	7.1	75	0.00
64	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
65	T,M	1,2-Dibromoethane	10.000	8.937	10.6	71	0.00
66	T,M	1-Chlorohexane	10.000	8.126	18.7	73	0.00
67	P,T,M	Chlorobenzene	10.000	9.917	0.8	78	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	11.571	-15.7	86	0.00
69	C,T,M	Ethylbenzene	10.000	9.787	2.1	80	0.00
70	T,M	m-Xylene & p-Xylene	20.000	19.466	2.7	81	-0.01
71	T,M	o-Xylene	10.000	10.643	-6.4	84	-0.01
72	T,M	Styrene	10.000	9.430	5.7	74	-0.01
73	T,M	Isopropylbenzene	10.000	10.569	-5.7	86	-0.01
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	93	0.00
75	P,T,M	Bromoform	10.000	7.641	23.6#	74	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	8.731	12.7	78	-0.01
77	S	4-Bromofluorobenzene	10.000	8.275	17.2	76	0.00
78	T,M	1,2,3-Trichloropropane	10.000	7.472	25.3#	69	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	6.136	38.6#	60	0.00
80	T,M	n-Propylbenzene	10.000	8.580	14.2	81	0.00
81	T,M	Bromobenzene	10.000	8.942	10.6	79	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	9.471	5.3	87	0.00
83	T,M	2-Chlorotoluene	10.000	9.204	8.0	86	0.00
84	T,M	4-Chlorotoluene	10.000	8.591	14.1	75	0.00
85	T,M	tert-Butylbenzene	10.000	10.098	-1.0	89	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	9.072	9.3	85	0.00
87	T,M	sec-Butylbenzene	10.000	9.389	6.1	88	0.00
88	T,M	p-Isopropyltoluene	10.000	9.006	9.9	84	0.00
89	T,M	1,3-Dichlorobenzene	10.000	8.587	14.1	77	-0.01
90	T,M	1,2,3-Trimethylbenzene	10.000	9.539	4.6	87	-0.01
91	T,M	1,4-Dichlorobenzene	10.000	8.404	16.0	76	0.00
92	T,M	n-Butylbenzene	10.000	8.833	11.7	84	0.00
93	T,M	1,2-Dichlorobenzene	10.000	9.505	4.9	83	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	8.443	15.6	79	0.00
95	T,M	1,2,4-Trichlorobenzene	10.000	10.014	-0.1	90	0.00
96	T,M	Hexachlorobutadiene	10.000	9.901	1.0	84	0.00
97	T,M	Naphthalene	10.000	10.875	-8.8	95	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	10.779	-7.8	96	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	95	0.00
2	T,M	Dichlorodifluoromethane	0.422	0.453	-7.3	120	-0.02
3	P,T,M	Chloromethane	0.387	0.378	2.3	104	-0.02
4	C,T,M	Vinyl chloride	0.303	0.316	-4.3	124	-0.02
5	T,M	Bromomethane	0.239	0.263	-10.0	118	-0.02
6	T,M	Chloroethane	0.203	0.178	12.3	98	-0.02
7	T,M	Dichlorofluoromethane	0.725	0.699	3.6	100	-0.02
8	T,M	Trichlorofluoromethane	0.399	0.413	-3.5	111	-0.02
9	T,M	Acrolein	0.014	0.012	14.3	98	-0.02
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.305	0.319	-4.6	105	-0.02
11	T,M	Acetone	0.040	0.033	17.5	80	-0.02
12	C,T,M	1,1-Dichloroethene	0.529	0.500	5.5	89	-0.02
13	T,M	tert-Butyl alcohol	0.012	0.011	8.3	75	-0.02
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.022	0.023	-4.5	94	-0.02
16	T,M	Iodomethane	0.496	0.515	-3.8	99	-0.02
17	T,M	Allyl chloride	0.169	0.179	-5.9	97	0.00
18	T,M	Methylene chloride	0.456	0.373	18.2	88	-0.02
19	T,M	Carbon disulfide	0.550	0.616	-12.0	92	-0.02
20	T,M	Acrylonitrile	0.050	0.047	6.0	86	-0.02
21	T,M	tert-Butyl methyl ether (MT	0.507	0.531	-4.7	92	0.00
22	T,M	trans-1,2-Dichloroethene	0.316	0.335	-6.0	100	-0.02
23	T,M	Isopropyl ether (DIPE)	1.045	1.012	3.2	86	-0.02
24	T,M	Vinyl acetate	0.377	0.301	20.2#	79	0.00
25	P,T,M	1,1-Dichloroethane	0.528	0.529	-0.2	92	-0.02
26	T,M	2-Butanol	0.011	0.010	9.1	66	-0.02
27	T,M	tert-Butyl ethyl ether (ETB	0.758	0.776	-2.4	91	0.00
28	T,M	2-Butanone	0.069	0.054	21.7#	75	-0.02
29	T,M	2,2-Dichloropropane	0.330	0.386	-17.0	106	0.00
30	T,M	cis-1,2-Dichloroethene	0.326	0.331	-1.5	96	-0.02
31	C,T,M	Chloroform	0.523	0.513	1.9	93	-0.02
32	T,M	Bromochloromethane	0.141	0.149	-5.7	95	-0.02
33	T,M	Tetrahydrofuran	0.037	0.027	27.0#	74	-0.02
34	T,M	tert-Amyl alcohol	0.000	0.000	0.0	0#	-0.02
35	S	Dibromofluoromethane	0.231	0.288	-24.7#	95	-0.02
36	T,M	1,1,1-Trichloroethane	0.421	0.437	-3.8	95	0.00
37	T,M	Cyclohexane	0.539	0.586	-8.7	97	-0.02
38	T,M	2,2,4-Trimethylpentane	0.000	0.001	0.0	0#	0.06
39	T,M	1,1-Dichloropropene	0.142	0.140	1.4	93	-0.02
40	T,M	Carbon tetrachloride	0.349	0.360	-3.2	93	-0.02
41	T,M	tert-Amyl methyl ether (TAM	0.620	0.616	0.6	88	0.00
42	S	1,2-Dichloroethane-d4	0.221	0.204	7.7	82	0.00
43	T,M	1,2-Dichloroethane	0.263	0.237	9.9	80	-0.02
44	T,M	Benzene	1.146	1.161	-1.3	90	-0.02
45	T,M	Trichloroethene	0.298	0.294	1.3	88	0.00
46	T,M	Methylcyclohexane	0.568	0.607	-6.9	92	-0.02
47	C,T,M	1,2-Dichloropropane	0.284	0.255	10.2	83	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	60	0.00
49	T,M	Bromodichloromethane	0.368	0.329	10.6	83	0.00
50	T,M	Dibromomethane	0.134	0.126	6.0	86	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	0.089	0.062	30.3#	65	0.00
52	T,M	4-Methyl-2-pentanone	0.189	0.159	15.9	74	0.00
53	T,M	cis-1,3-Dichloropropene	0.450	0.383	14.9	77	0.00
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	82	0.00
55	S	Toluene-d8	1.294	1.414	-9.3	87	-0.02
56	C,T,M	Toluene	1.509	1.591	-5.4	82	0.00
57	T,M	Ethyl methacrylate	0.332	0.275	17.2	68	0.00
58	T,M	trans-1,3-Dichloropropene	0.424	0.390	8.0	74	0.00
59	T,M	1,1,2-Trichloroethane	0.217	0.206	5.1	76	0.00
60	T,M	2-Hexanone	0.158	0.126	20.3#	64	0.00
61	T,M	1,3-Dichloropropane	0.400	0.363	9.3	72	0.00
62	T,M	Tetrachloroethene	0.310	0.333	-7.4	86	0.00
63	T,M	Dibromochloromethane	0.267	0.248	7.1	75	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.206	0.184	10.7	71	0.00
66	T,M	1-Chlorohexane	0.643	0.522	18.8	73	0.00
67	P,T,M	Chlorobenzene	0.924	0.916	0.9	78	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.292	0.338	-15.8	86	0.00
69	C,T,M	Ethylbenzene	1.859	1.820	2.1	80	0.00
70	T,M	m-Xylene & p-Xylene	1.421	1.383	2.7	81	-0.01
71	T,M	o-Xylene	1.399	1.489	-6.4	84	-0.01
72	T,M	Styrene	1.045	0.986	5.6	74	-0.01
73	T,M	Isopropylbenzene	1.815	1.918	-5.7	86	-0.01
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	93	0.00
75	P,T,M	Bromoform	0.290	0.235	19.0	74	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.578	0.505	12.6	78	-0.01
77	S	4-Bromofluorobenzene	1.116	0.924	17.2	76	0.00
78	T,M	1,2,3-Trichloropropane	0.159	0.119	25.2#	69	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.176	0.108	38.6#	60	0.00
80	T,M	n-Propylbenzene	5.517	4.734	14.2	81	0.00
81	T,M	Bromobenzene	0.790	0.707	10.5	79	0.00
82	T,M	1,3,5-Trimethylbenzene	3.365	3.187	5.3	87	0.00
83	T,M	2-Chlorotoluene	3.233	2.976	7.9	86	0.00
84	T,M	4-Chlorotoluene	2.963	2.545	14.1	75	0.00
85	T,M	tert-Butylbenzene	0.711	0.718	-1.0	89	0.00
86	T,M	1,2,4-Trimethylbenzene	3.489	3.165	9.3	85	0.00
87	T,M	sec-Butylbenzene	4.751	4.461	6.1	88	0.00
88	T,M	p-Isopropyltoluene	4.038	3.636	10.0	84	0.00
89	T,M	1,3-Dichlorobenzene	1.767	1.517	14.1	77	-0.01
90	T,M	1,2,3-Trimethylbenzene	3.158	3.012	4.6	87	-0.01
91	T,M	1,4-Dichlorobenzene	1.750	1.471	15.9	76	0.00
92	T,M	n-Butylbenzene	4.351	3.843	11.7	84	0.00
93	T,M	1,2-Dichlorobenzene	1.462	1.390	4.9	83	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.102	0.086	15.7	79	0.00
95	T,M	1,2,4-Trichlorobenzene	1.149	1.151	-0.2	90	0.00
96	T,M	Hexachlorobutadiene	0.621	0.615	1.0	84	0.00
97	T,M	Naphthalene	1.548	1.683	-8.7	95	0.00
98	T,M	1,2,3-Trichlorobenzene	0.867	0.935	-7.8	96	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:09 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3304508	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2395912	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1194124	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	951311	10.17	ug/l	-0.02
Spiked Amount 10.000			Recovery = 101.70%			
42) 1,2-Dichloroethane-d4	9.08	65	674768	9.24	ug/l	0.00
Spiked Amount 10.000			Recovery = 92.40%			
55) Toluene-d8	12.79	98	3386770	10.92	ug/l	-0.02
Spiked Amount 10.000			Recovery = 109.20%			
77) 4-Bromofluorobenzene	17.45	95	1103240	8.27	ug/l	0.00
Spiked Amount 10.000			Recovery = 82.70%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	1495805	10.71	ug/l	99
3) Chloromethane	1.87	50	1250010	9.77	ug/l	100
4) Vinyl chloride	1.99	62	1044543	10.42	ug/l	99
5) Bromomethane	2.42	94	870681	10.54	ug/l	100
6) Chloroethane	2.50	64	587748	9.06	ug/l	94
7) Dichlorofluoromethane	2.54	67	2308281	9.92	ug/l	100
8) Trichlorofluoromethane	2.80	101	1365188	10.36	ug/l	99
9) Acrolein	3.30	56	204265	44.01	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.34	151	1052702	9.78	ug/l	100
11) Acetone	3.40	43	547172	41.00	ug/l	95
12) 1,1-Dichloroethene	3.55	61	1652366	9.45	ug/l	97
13) tert-Butyl alcohol	3.70	59	902855	218.68	ug/l	100
15) Methyl acetate	4.07	74	76905	10.78	ug/l	82
16) Iodomethane	3.99	142	1703179	10.40	ug/l	99
17) Allyl chloride	4.12	76	590465	10.55	ug/l	97
18) Methylene chloride	4.28	49	1232168	9.01	ug/l	92
19) Carbon disulfide	4.24	76	2034797	9.85	ug/l	100
20) Acrylonitrile	4.51	53	771622	46.54	ug/l	99
21) tert-Butyl methyl ether (M	4.58	73	1753195	10.46	ug/l	100
22) trans-1,2-Dichloroethene	4.79	96	1108491	10.62	ug/l	97
23) Isopropyl ether (DIPE)	5.46	45	3344679	9.69	ug/l	96
24) Vinyl acetate	5.71	43	996119	7.99	ug/l	99
25) 1,1-Dichloroethane	5.62	63	1746992	10.00	ug/l	98
26) 2-Butanol	6.19	45	851452	183.53	ug/l	100
27) tert-Butyl ethyl ether (ET	6.38	59	2564592	10.24	ug/l	99
28) 2-Butanone	6.65	43	900220	39.70	ug/l	96
29) 2,2-Dichloropropane	6.92	77	1275354	11.70	ug/l	99
30) cis-1,2-Dichloroethene	7.03	96	1094314	10.15	ug/l	99
31) Chloroform	7.43	83	1696577	9.82	ug/l	99
32) Bromochloromethane	7.80	130	491050	10.51	ug/l	98
33) Tetrahydrofuran	7.91	42	89452	7.37	ug/l	92
36) 1,1,1-Trichloroethane	8.35	97	1442766	10.38	ug/l	99
37) Cyclohexane	8.33	84	1936719	10.87	ug/l	98
39) 1,1-Dichloropropene	8.71	110	463340	9.87	ug/l	97
40) Carbon tetrachloride	8.87	119	1190927	10.34	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	2034686	9.93	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:09 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.27	62	783573	9.01	ug/l	98
44)	Benzene	9.25	78	3835233	10.13	ug/l	99
45)	Trichloroethene	10.55	130	971687	9.85	ug/l	100
46)	Methylcyclohexane	10.61	83	2007462	10.70	ug/l	95
47)	1,2-Dichloropropane	10.91	63	841436	8.98	ug/l	98
48)	1,4-Dioxane	11.45	88	63318	144.36	ug/l	100
49)	Bromodichloromethane	11.35	83	1086490	8.94	ug/l	99
50)	Dibromomethane	11.41	93	415866	9.37	ug/l	98
51)	2-Chloroethyl vinyl ether	12.04	63	204214	6.93	ug/l	99
52)	4-Methyl-2-pentanone	12.08	43	2622257	41.95	ug/l	96
53)	cis-1,3-Dichloropropene	12.39	75	1264418	8.50	ug/l	97
56)	Toluene	12.94	91	3811768	10.55	ug/l	99
57)	Ethyl methacrylate	13.38	69	659332	8.30	ug/l	90
58)	trans-1,3-Dichloropropene	13.32	75	934642	9.20	ug/l	91
59)	1,1,2-Trichloroethane	13.57	97	493796	9.51	ug/l	98
60)	2-Hexanone	13.65	43	1509084	39.82	ug/l	97
61)	1,3-Dichloropropane	14.03	76	869328	9.07	ug/l	98
62)	Tetrachloroethene	14.07	164	797460	10.72	ug/l	97
63)	Dibromochloromethane	14.43	129	594110	9.29	ug/l	100
65)	1,2-Dibromoethane	14.76	107	440866	8.94	ug/l	98
66)	1-Chlorohexane	15.12	91	1251021	8.13	ug/l	97
67)	Chlorobenzene	15.49	112	2194647	9.92	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.59	131	809631	11.57	ug/l	96
69)	Ethylbenzene	15.60	91	4359380	9.79	ug/l	99
70)	m-Xylene & p-Xylene	15.73	91	6625587	19.47	ug/l	99
71)	o-Xylene	16.45	91	3567213	10.64	ug/l	99
72)	Styrene	16.52	104	2361666	9.43	ug/l	99
73)	Isopropylbenzene	17.06	105	4595766	10.57	ug/l	99
75)	Bromoform	17.06	173	280807	7.64	ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.35	83	602916	8.73	ug/l	99
78)	1,2,3-Trichloropropane	17.57	110	142214	7.47	ug/l	94
79)	trans-1,4-Dichloro-2-buten	17.67	53	128880	6.14	ug/l	98
80)	n-Propylbenzene	17.67	91	5652733	8.58	ug/l	99
81)	Bromobenzene	17.71	156	843875	8.94	ug/l	97
82)	1,3,5-Trimethylbenzene	17.89	105	3806022	9.47	ug/l	99
83)	2-Chlorotoluene	17.91	91	3553252	9.20	ug/l	94
84)	4-Chlorotoluene	17.97	91	3039543	8.59	ug/l	96
85)	tert-Butylbenzene	18.35	134	857838	10.10	ug/l	96
86)	1,2,4-Trimethylbenzene	18.39	105	3779842	9.07	ug/l	99
87)	sec-Butylbenzene	18.60	105	5326537	9.39	ug/l	99
88)	p-Isopropyltoluene	18.76	119	4342133	9.01	ug/l	99
89)	1,3-Dichlorobenzene	18.86	146	1811415	8.59	ug/l	97
90)	1,2,3-Trimethylbenzene	18.93	105	3596909	9.54	ug/l	99
91)	1,4-Dichlorobenzene	18.98	146	1756211	8.40	ug/l	99
92)	n-Butylbenzene	19.21	91	4588739	8.83	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	1659597	9.50	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	103069	8.44	ug/l	95
95)	1,2,4-Trichlorobenzene	20.97	180	1373866	10.01	ug/l	100
96)	Hexachlorobutadiene	21.10	225	734075	9.90	ug/l	99
97)	Naphthalene	21.24	128	2009773	10.88	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:09 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

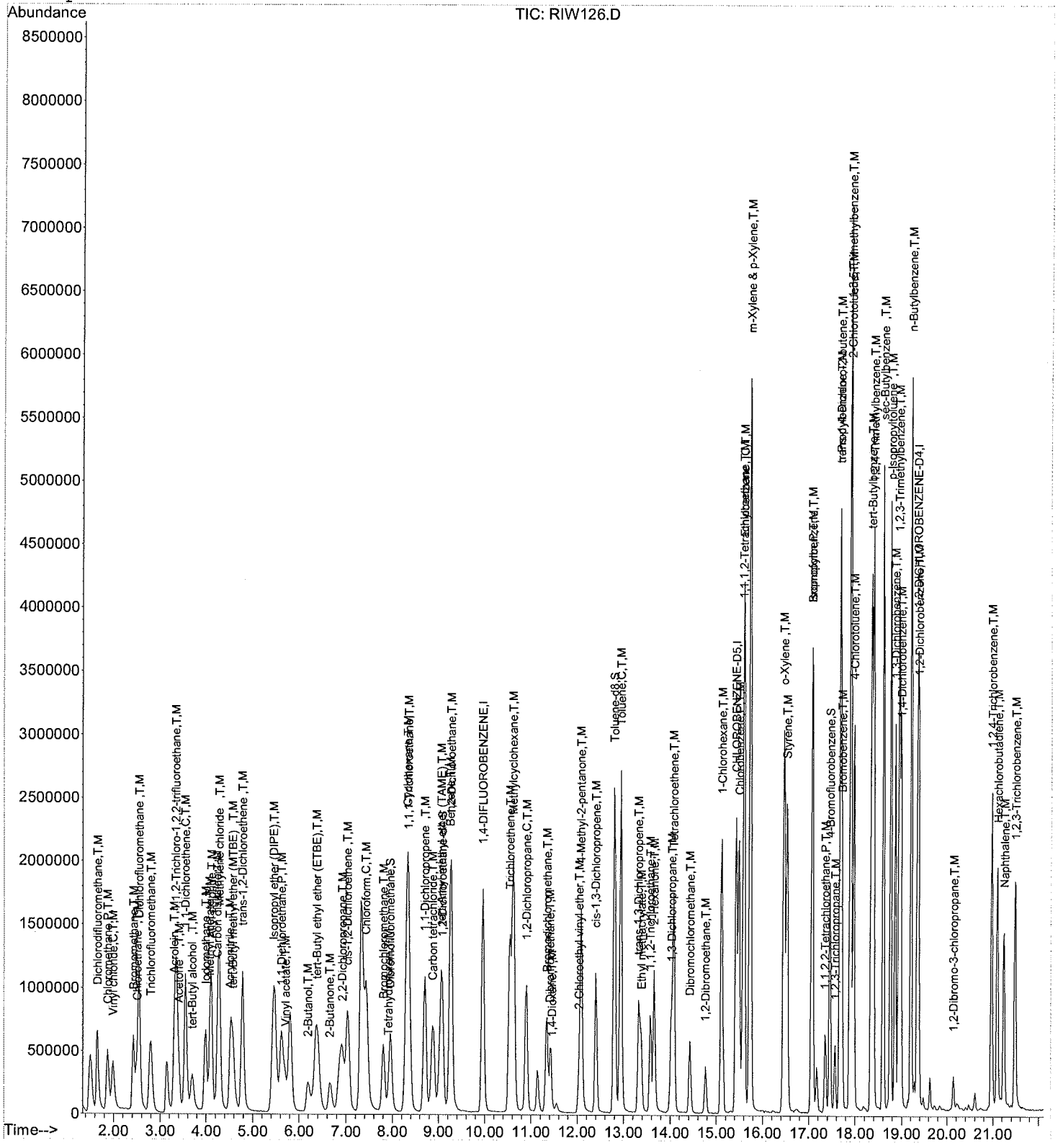
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	1115956	10.78	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I21\RIW126.D Vial: 2
Acq On : 21 Sep 2024 8:05 am Operator: DHguye
Sample : CVO06I192 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 9:09 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments: * = varied amount

Book #: A06-083
Instrument No.: 06
Analytical Sequence: 24I19
Method File: V006I19 B
Analytical Batch: V006I196

INITIAL CALIBRATION REFERENCE			
DATE	9/19/2024		
ICAL ID	V006 L 19		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SV1-45-24-03 SV1-45-27-02	*	250 250
DCC 4ADD	SV1-45-32-02		250
DCC 8260	SV1-45-32-03		50
DCC KET	SV1-45-19-02		250
BFB	SV1-45-01-01	1	50
IS/SURR. IS SS	SV1-43-95-01 SV1-38-15-15	1 *	250 250
ICV/LCS CS2 GAS	SV1-45-25-02 SV1-43-80-02	1 1	250 250
ICV/LCS 3ADD	SV1-43-81-03	5	50
ICV/LCS 8260	SV1-43-85-02	5	50
ICV/LCS KET 2-BVT	SV1-45-21-03	5 12.5	250 500
Data File Folder	24I19		

	LOT #	Syringe Lot #
pH strip	N/A	MSV-03-04-12-4
Chlorine strip		MSV-03-04-12-6
Methanol		MSV-03-~~26~~03-26
$NaHSO_4$		MSV-03-02-24
Reagent Water	RWS-24-001	
Sand		

SOP #
☒ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☒ 25 mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☐ Water
☐ pH <2. Outliers indicated on analytical sequence.
☐ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☒ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: MM/IM
Date: 9/19/2024
Disposed By: MM
Date Disposed: 9/20/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24I19

Line	Vial	FileName	Multiplier	SampleName		Misc Info	Injected
1	1	RIW074.D	1.	BFB06I04		T/CHK	19 Sep 2024 09:28
2	2	RIW075.D	1.	VO06I191	0.03/0.15uL	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	19 Sep 2024 11:07
3	3	RIW076.D	1.	VO06I192	0.05/0.25uL	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	19 Sep 2024 11:33
4	4	RIW077.D	1.	VO06I193	0.10/0.50uL	1.0ppb 8260/5.0ppb KET-AA/25ppb TBA	19 Sep 2024 11:59
5	5	RIW078.D	1.	VO06I194	0.20/1.00uL	2.0ppb 8260/10ppb KET-AA/50ppb TBA	19 Sep 2024 12:25
6	6	RIW079.D	1.	VO06I195	0.50/2.50uL	5.0ppb 8260/25ppb KET-AA/125ppb TBA	19 Sep 2024 12:51
7	7	RIW080.D	1.	VO06I196	1.00/5.00uL	10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 13:18
8	8	RIW081.D	1.	VO06I197	2.00/10.0uL	20ppb 8260/100ppb KET-AA/500ppb TBA	19 Sep 2024 13:44
9	9	RIW082.D	1.	VO06I198	3.00/15.0uL	30ppb 8260/150ppb KET-AA/750ppb TBA	19 Sep 2024 14:10
10	10	RIW083.D	1.	VO06I199	5.00/25.0uL	50ppb 8260/250ppb KET-AA/1250ppb TBA	19 Sep 2024 14:36
11	11	RIW084.D	1.	VO06I1910	10.0/50.0uL	100ppb 8260/500ppb KET-AA/2500ppb TBA	19 Sep 2024 15:02
12	12	RIW085.D	1.	RINSE			19 Sep 2024 15:28
13	13	RIW086.D	1.	RINSE			19 Sep 2024 15:54
14	14	RIW087.D	1.	IVO06I1901 **		10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 16:20
15	15	RIW088.D	1.	RINSE			19 Sep 2024 16:59
16	16	RIW089.D	1.	LOD1 0.02/0.10		0.2ppb 8260/4.0ppb KET-AA/5.0ppb TBA	19 Sep 2024 17:26
17	17	RIW090.D	1.	LOD2 0.03/0.15		0.4ppb 8260/4.0ppb KET-AA/10ppb TBA	19 Sep 2024 17:52
18	18	RIW091.D	1.	LOQ		80ppb 1,4-Dioxane	19 Sep 2024 18:18
19	1	RIW092.D	1.	BFB06I05		T/CHK	19 Sep 2024 18:52
20	2	RIW093.D	1.	IVO06I1902		10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 19:59

** Not evaluated for Dichlorofluoromethane & 1,1,2 Trichloro-1,2,2-trifluoroethane

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
VOLATILES

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A06-083
Instrument No.:	06
Analytical Sequence:	24I20
Method File:	VO06I19
Analytical Batch:	CVO06I191

INITIAL CALIBRATION REFERENCE			
DATE	9/19/2024		
ICAL ID	VO06 I 19 B		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2	SV1 45 24 03	1	250
DCC GAS	SV1 45 27 02	1	250
DCC 4ADD	SV1 45 32 02	1	250
DCC 8260	SV1 45 32 03	5	50
DCC KET	SV1 45 19 02	5	250
BFB	SV1 45 01 01	1	50
IS/SURR. IS	SV1 43 95 01	5	250
IS/SURR. SS	SV1 30 15 15	5	250
ICV/LCS CS2	SV1 45 25 02	1	250
ICV/LCS GAS	SV1 43 88 02	1	250
ICV/LCS 3ADD	SV1 43 ~~85~~ 81 02 03	5	50
ICV/LCS 8260	SV1 43 85 02	5	50
ICV/LCS KET	SV1 45 21 03	5	250
Data File Folder	24I20		
	LOT #	Syringe Lot #	
pH strip	N/A / HCH39975	MSV 03 04 12 6	
Chlorine strip	213906 / 233301B	MSV 03 01 12 4	
Methanol			
$NaHSO_4$			
Reagent Water	RW4 23 001		
Sand			

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: JM/JM
Date: 9/20/2024
Disposed By: ~~AG~~ JM
Date Disposed: 9/21/2024

Injection Log

Directory: D:\HPCHEM\1\DATA\24I20

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RIW094.D	1.	BFB06I05	T/CHK	20 Sep 2024 13:19
2	2	RIW095.D	1.	CVO06I191	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Sep 2024 13:56
3	3	RIW096.D	1.	VO06I05L	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Sep 2024 14:47
4	4	RIW097.D	1.	VO06I05C	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Sep 2024 15:13
5	5	RIW098.D	1.	RINSE	25mL	20 Sep 2024 15:40
6	6	RIW099.D	1.	VO06I05B	25mL	20 Sep 2024 16:06
7	7	RIW100.D	1.	VO06I05X	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Sep 2024 16:32
8	8	RIW101.D	1.	VO06I05Y	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Sep 2024 16:58
9	9	RIW102.D	1.	24I028-01	25mL	20 Sep 2024 17:24
10	10	RIW103.D	1.	24I028-02	25mL	20 Sep 2024 17:50
11	11	RIW104.D	1.	24I028-03	25mL	20 Sep 2024 18:17
12	12	RIW105.D	1.	24I028-04	25mL	20 Sep 2024 18:43
13	13	RIW106.D	1.	24I028-05	25mL	20 Sep 2024 19:09
14	14	RIW107.D	1.	24I028-06	25mL	20 Sep 2024 19:35
15	15	RIW108.D	1.	24I028-07	25mL	20 Sep 2024 20:01
16	16	RIW109.D	1.	24I028-08	25mL	20 Sep 2024 20:27
17	17	RIW110.D	1.	24I028-09	25mL	20 Sep 2024 20:53
18	18	RIW111.D	1.	24I028-10	25mL	20 Sep 2024 21:19
19	19	RIW112.D	1.	24I028-11	25mL	20 Sep 2024 21:45
20	20	RIW113.D	1.	24I028-12	25mL	20 Sep 2024 22:11
21	21	RIW114.D	1.	24I028-13	25mL	20 Sep 2024 22:38
22	22	RIW115.D	1.	24I028-15	25mL	20 Sep 2024 23:04
23	23	RIW116.D	1.	24I028-15M	25mL	20 Sep 2024 23:31
24	24	RIW117.D	1.	24I028-15S	25mL	20 Sep 2024 23:57
25	25	RIW118.D	1.	24I028-01M	25mL	21 Sep 2024 00:23
26	26	RIW119.D	1.	24I028-01S	25mL	21 Sep 2024 00:49
27	27	RIW120.D	1.	24I028-14	25mL	21 Sep 2024 01:16
28	31	RIW124.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Sep 2024 01:42

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A06-083
Instrument No.:	06
Analytical Sequence:	24I21
Method File:	V006I19
Analytical Batch:	CV006I192

SOP #
☒ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1

PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☒ 25-mL Purge

SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☒ Water
☒ pH <2. Outliers indicated on analytical sequence.
☒ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	9/19/2024		
ICAL ID	VO06 I 1 9 B		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2	SV1 45 4 03	1	250
DCC GAS	SV1 45 27 02	1	250
DCC 4ADD	SV1 45 32 02	1	250
DCC ~~8260~~ KET	SV1 45 19 02	5	250
DCC 8260	SV1 45 32 03	5	50
BFB	SV1 45 01 01	1	50
IS/SURR.	SV1 45 33 02	5	250
ICV/LCS CS2	SV1 45 25 02	1	250
ICV/LCS GAS	SV1 43 88 02	1	250
ICV/LCS 4ADD	SV1 45 81 03	5	50
ICV/LCS 8260	SV1 43 85 02	5	50
ICV/LCS KET	SV1 45 21 03	5	250
Data File Folder	24I21		
	LOT #	Syringe Lot #	
pH strip	HCH39975	MSV 03 04 12 6	
Chlorine strip		MSV 03 04 12 4	
Methanol			
$NaHSO_4$			
Reagent Water	RW4 23 001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: MM/PM
Date: 9/21/2024
Disposed By: MM
Date Disposed: 9/22/2024

Injection Log

Directory: D:\HPCHEM\1\DATA\24I21

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RIW125.D	1.	BFB06I06	T/CHK	21 Sep 2024 07:29
2	2	RIW126.D	1.	CVO06I192	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Sep 2024 08:05
3	3	RIW127.D	1.	VO06I06L	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Sep 2024 08:33
4	4	RIW128.D	1.	VO06I06C	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Sep 2024 08:59
5	5	RIW129.D	1.	RINSE	25mL	21 Sep 2024 09:25
6	6	RIW130.D	1.	VO06I06B	25mL	21 Sep 2024 09:51
7	7	RIW131.D	1.	24I028-19	25mL	21 Sep 2024 10:18
8	8	RIW132.D	1.	24I027-15	25mL	21 Sep 2024 10:44
9	9	RIW133.D	1.	24I028-16	25mL	21 Sep 2024 11:10
10	10	RIW134.D	1.	24I028-17	25mL	21 Sep 2024 11:37
11	11	RIW135.D	1.	24I028-18	25mL	21 Sep 2024 12:03
12	12	RIW136.D	1.	24I039-17	25mL	21 Sep 2024 12:29
13	13	RIW137.D	1.	24I025-02	25mL	21 Sep 2024 12:55
14	14	RIW138.D	1.	24I025-01	25mL	21 Sep 2024 13:21
15	15	RIW139.D	1.	24I027-04	25mL	21 Sep 2024 13:47
16	16	RIW140.D	1.	24I027-05	25mL	21 Sep 2024 14:14
17	17	RIW141.D	1.	24I027-06	25mL	21 Sep 2024 14:40
18	18	RIW142.D	1.	24I027-07	25mL	21 Sep 2024 15:06
19	19	RIW143.D	1.	24I027-08	25mL	21 Sep 2024 15:33
20	20	RIW144.D	1.	24I027-09	25mL	21 Sep 2024 15:59
21	21	RIW145.D	1.	24I027-10	25mL	21 Sep 2024 16:25
22	22	RIW146.D	1.	24I027-11	25mL	21 Sep 2024 16:52
23	23	RIW147.D	1.	24I027-12	25mL	21 Sep 2024 17:18
24	24	RIW148.D	1.	24I027-13	25mL	21 Sep 2024 17:44
25	25	RIW149.D	1.	24I027-14	25mL	21 Sep 2024 18:11
26	26	RIW150.D	1.	24I027-01	25mL	21 Sep 2024 18:37
27	27	RIW151.D	1.	24I027-02	25mL	22 Sep 2024 07:34

EMAX LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 10-09-2024
EMAX Batch No.: 24I061

Attn: Cherie Zakowski

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202

Subject: Laboratory Report
Project: VA SALT LAKE CITY

Enclosed is the Laboratory report for samples received on 09/13/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
MW14D-GW091024	I061-01	09/10/24	WATER	VOLATILE ORGANICS BY GC/MS
MW14S-GW091024	I061-02	09/10/24	WATER	VOLATILE ORGANICS BY GC/MS
MW27-GW091024	I061-03	09/10/24	WATER	VOLATILE ORGANICS BY GC/MS
MW29A-GW091024	I061-04	09/10/24	WATER	VOLATILE ORGANICS BY GC/MS
FD07-GW091024	I061-05	09/10/24	WATER	VOLATILE ORGANICS BY GC/MS
MW29B-GW091024	I061-06	09/10/24	WATER	VOLATILE ORGANICS BY GC/MS
MW29C-GW091024	I061-07	09/10/24	WATER	VOLATILE ORGANICS BY GC/MS
MW31A-GW091024	I061-08	09/10/24	WATER	VOLATILE ORGANICS BY GC/MS
MW31B-GW091024	I061-09	09/10/24	WATER	VOLATILE ORGANICS BY GC/MS
MW31C-GW091024	I061-10	09/10/24	WATER	VOLATILE ORGANICS BY GC/MS
MW03RA-GW091124	I061-11	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS
MW03RB-GW091124	I061-12	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS
IW01-GW091124	I061-13	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS
MW03RC-GW091124	I061-14	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS
EW01-GW091124	I061-15	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS
EB02-GW091124	I061-16	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS
TB04-GW091124	I061-17	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS
MW08A-GW091024	I061-18	09/10/24	WATER	VOLATILE ORGANICS BY GC/MS
MW03RD-GW091124	I061-19	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS
MW03RA-GW091124MS	I061-11M	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS
MW03RA-GW091124MSD	I061-11S	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS
MW03RC-GW091124MS	I061-14M	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS
MW03RC-GW091124MSD	I061-14S	09/11/24	WATER	VOLATILE ORGANICS BY GC/MS

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912023-25
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

CHAIN OF CUSTODY

EMAX Laboratories, Inc.
3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE
EMAX CONTROL NO. 24I061
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEL 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE: DW=Drinking Water; GW=Ground Water; WW=Waste Water; SD=Solid Waste SL=Sl; SS=Soil/ Sediment; WP=Wipes PP=Pure P; AR=Air; O=Blanks (trip/rinse/fie

PRESERVATIVE: IC = Ice; HC = HCl; HN=HNO3; SH=NaO3; ST=Na2S2O3; ZA=Zinc Acetate; HS=H2SO4

ANALYSIS REQUIRED: VOCs (8260C); Anions (Cl, SO4); Nitrate/Nitrite (SM4500-NO3E); Alkalinity (SM2320B); TOC (SW9060); TDS (SM 2540C); Dissolved Gases (RSK-175)

TAT: ☐ Rush __24__hrs. ☐ Rush __48_hrs ☐ Rush_72_hrs ☐ 7 days ☐ 14 days ☒ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	PRESERVATIVE CODE HCl	IC	HS	IC	HS	IC	HCl	COMMENTS
1	MW14D-GW091024	14D	9/10/24	0946	3	40mL	Voa	GW		X							
2	MW14S-GW091024	14S	9/10/24	1109	3					X							
3	MW27-GW091024	27	9/10/24	0918	3					X							
4	MW29A-GW091024	29A	9/10/24	1110	3					X							
5	FD07-GW091024	—	9/10/24	1115	3				X	X							
6	MW29B-GW091024	29B	9/10/24	1220	3					X							
7	MW29C-GW091024	29C	9/10/24	1345	3					X							
8	MW31A-GW091024	31A	9/10/24	1740	3					X							
9	MW31B-GW091024	31B	9/10/24	~~1635~~ 1625	3					X							

Instructions: Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

JPB 9/11/24

Cooler # 2 Temp. (oC) 3.1 Sample #s

SAMPLER
COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Emma Goldberg CDM Smith	9/12/24	1600	
	9/13/24	10:00	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

CHAIN OF CUSTODY

EMAX Laboratories, Inc.
3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE
EMAX CONTROL NO. 24I061
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEI 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE: DW=Drinking Water; GW=Ground Water; WW=Waste Water; SD=Solid Waste SL=Sl; SS=Soil/ Sediment; WP=Wipes PP=Pure P; AR=Air; O=Blanks (trip/rinse/fie

PRESERVATIVE: IC = Ice; HC = HCl; HN=HNO3; SH=NaO3; ST=Na2S2O3; ZA=Zinc Acetate; HS=H2SO4

ANALYSIS REQUIRED: VOCs (8260C); Anions (Cl, SO4); Nitrate/Nitrite (SM4500-NO3E); Alkalinity (SM2320B); TOC (SW9060); TDS (SM 2540C); Dissolved Gases (RSK-175)

TAT: ☐ Rush __24__hrs. ☐ Rush __48_hrs ☐ Rush_72_hrs ☐ 7 days ☐ 14 days ☑ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	PRESERVATIVE CODE HCl	IC	HS	IC	HS	IC	HCl	COMMENTS
1	MW31C-GW09 10 24	31C	9/10/24	1745	3	40mL	Voa	GW		X							
2	MW03RA-GW09 11 24	03RA	9/11/24	1045	9				X	X							MS/MSD
3	MW03RB-GW09 11 24	03RB	9/11/24	1100	3					X							
4	IW01-GW09 11 24	IW01	9/11/24	1111	3					X							
5	MW03RC-GW09 11 24	03RC	9/11/24	1530	9				X	X							MS/MSD
6	EW01-GW09 11 24	EW01	9/11/24	1521	3					X							
7	EB02-GW09 11 24	—	9/11/24	1620	3			O		X							
8	TB04-GW09 11 24	—	9/11/24	1720	3			O		X							
9	MW08A-GW09 10 24	08A	9/10/24	1142	3					X							

Instructions
Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler # | Temp. (oC) | Sample #s

SAMPLER
COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Emma Stoltzberg CDM Smith	9/12/24	1600	
	9/13/24	10:00	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

CHAIN OF CUSTODY

EMAX Laboratories, Inc.
3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE
EMAX CONTROL NO. 24I061
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEL 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sl	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

TAT
- ☐ Rush __24__ hrs.
- ☐ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☑ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	VOCs (8260C)	Anions (Cl, SO4)	Nitrate/Nitrite (SM4500-NO3E)	Alkalinity (SM2320B)	TOC (SW9060)	TDS (SM 2540C)	Dissolved Gases (RSK-175)	COMMENTS
										PRESERVATIVE CODE							
										HCl	IC	HS	IC	HS	IC	HCl	
19 1	MW03RD-GW091124	MW03RD	9/11/24	1740	3	40mL	VOA	GW		X							
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	

Instructions
Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s

SAMPLER
COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Emma Hadley CDM Smith	9/12/24	1600	
	9/13/24	10:00	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

EMAX LABORATORIES, INC.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 24I061
☒ Fedex ☐ UPS ☐ GSO ☐ Others	2794 3980 6386	Recipient Maria Rivera
☐ EMAX Courier ☐ Client Delivery		Date 09/13/24 Time 10:00

COC INSPECTION

☒ Client Name	☒ Client PM/FC	☐ Sampler Name	☒ Sampling Date/Time	☒ Sample ID	☒ Matrix
☒ Address	☒ Tel # / Fax #	☐ Courier Signature	☒ Analysis Required	☒ Preservative (if any)	☒ TAT
Safety Issues (if any)	☐ High concentrations expected	☐ From SuperFund Site	☐ Rad screening required		

Note:

PACKAGING INSPECTION

Container	☒ Cooler	☐ Box	☐ Other		
Condition	☒ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☒ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☒ bag
Temperatures (Cool, ≤6 °C but not frozen)	☐ Cooler 1 ____ °C	☒ Cooler 2 3.1 °C	☐ Cooler 3 ____ °C	☐ Cooler 4 ____ °C	☐ Cooler 5 ____ °C
	☐ Cooler 6 ____ °C	☐ Cooler 7 ____ °C	☐ Cooler 8 ____ °C	☐ Cooler 9 ____ °C	☐ Cooler 10 ____ °C
Thermometer:	(A) - S/N 24041221	B - S/N ____	C - S/N ____	D - S/N 230044057	

Comments: ☐ Temperature is out of range. PM was informed IMMEDIATELY.

Note:

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action

2 9/13/24

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

NOTES/OBSERVATIONS:

SAMPLE MATRIX IS DRINKING WATER? ☐ YES ☒ NO

LEGEND:

☐ Continue to next page.

Code	Description- Sample Management
D1	Analysis is not indicated in ____
D2	Analysis mismatch COC vs label
D3	Sample ID mismatch COC vs label
D4	Sample ID is not indicated in ____
D5	Container -[improper] [leaking] [broken]
D6	Date/Time is not indicated in ____
D7	Date/Time mismatch COC vs label
D8	Sample listed in COC is not received
D9	Sample received is not listed in COC
D10	No initial/date on corrections in COC/label
D11	Container count mismatch COC vs received
D12	Container size mismatch COC vs received

Code	Description-Sample Management
D13	Out of Holding Time
D14	Bubble is >6mm
D15	No trip blank in cooler
D16	Preservation not indicated in ____
D17	Preservation mismatch COC vs label
D18	Insufficient chemical preservative
D19	Insufficient Sample
D20	No filtration info for dissolved analysis
D21	No sample for moisture determination
D22	
D23	
D24	

Code	Description-Sample Management
R1	Proceed as indicated in ☐ COC ☐ Label
R2	Refer to attached instruction
R3	Cancel the analysis
R4	Use vial with smallest bubble first
R5	Log-in with latest sampling date and time+1 min
R6	Adjust pH as necessary
R7	Filter and preserved as necessary
R8	
R9	
R10	
R11	
R12	

REVIEWS:

Sample Labeling Maria Rivera Date 09/13/24 9/13/24

SRF Date 9/13/24

PM Date 9/13/24

ORIGIN ID:NPHA (407) 252-6579
EMMA GOLDBER
CDM SMITH, INC
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHIP DATE: 12SEP24
ACTWGT: 50.00 LB
CAD: 6997117/SSF02541
DIMS: 30x21x14 IN

BILL THIRD PARTY

Part # 156297-435 RHD_EXP 08/25

TO **ATTN SAMPLE RECEIVING**
EMAX LABORATORIES
3051 FUJITA ST

(2)
3.1

TORRANCE CA 90505

(999) 999-9999
INV:
PO:

REF: 276859-6545-F3063-TK5-GWSAMPL.GW-GROUNDW
DEPT:

FedEx
Express

E

J243824071301uv

1 of 2

TRK# 0201 **2794 3980 6386**

MASTER

WZ HHRA

FRI - 13 SEP 10:30A
PRIORITY OVERNIGHT
AHS
90505
CA-US **LAX**

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than LOQ/RL but greater than LOD/MDL/DL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range or estimated value.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

SDG#: 24I061

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I061

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of nineteen(19) water samples were received on 09/13/24 to be analyzed for Volatile Organics by GC/MS in accordance with Method SW5030B/8260C and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Instrument Performance and Calibration
Instrument tune check was performed prior to calibration. Result was within acceptance criteria. Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using secondary source (ICV). Continuing calibration (CCV) was carried out at a frequency required by the project. All project calibration requirements were satisfied except for Chloroform and 1,2-Dichloropropane in CCV(data file ID RIV629) were slightly biased high. However, analytes in question were not detected in associated field samples and were within project QC limits in associated LCS/LCD. Note that" Minimum Response Factor" for all analytes were within method recommended response factors with the exception of Acetone and 2-Butanone. However, percent recoveries for all target analytes were within 70-130% on all calibration points. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, three(3) method blanks were analyzed. VO01I21B, VO01I22B and VO01I24B were compliant to project requirement. Refer to sample result summary forms for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, three(3) sets of LCS/LCD were analyzed. All analytes were within LCS limits in VO01I21L/VO01I21C - and VO01I22L/VO01I22C except for results qualified with [*]. Refer to LCS summary forms for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, two(2) sets of MS/MSD (24I061-11M/24I061-11S) and (24I061-14M/24I061-14S) were analyzed. All analytes were within project QC limits except for results qualified with [*]. No reanalysis was performed because same result was observed in MS/MSD, which is indicative that sample reanalysis will provide similar results. Presence of matrix interference was suspected. Refer to Matrix QC summary forms for details.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met with the exception of those that were discussed within the associated QC parameter.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24I061
Instrument ID : 01

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	VO01I21L	1	NA	09/24/2402:02	09/24/2402:02	RIV551	RHV134	VO01I21	Lab Control Sample (LCS)
LCD1W	VO01I21C	1	NA	09/24/2402:32	09/24/2402:32	RIV552	RHV134	VO01I21	LCS Duplicate
MBLK1W	VO01I21B	1	NA	09/24/2403:31	09/24/2403:31	RIV554	RHV134	VO01I21	Method Blank
TB04-GW091124	24I061-17	1	NA	09/24/2404:00	09/24/2404:00	RIV555	RHV134	VO01I21	Field Sample
EW01-GW091124	24I061-15	1	NA	09/24/2404:29	09/24/2404:29	RIV556	RHV134	VO01I21	Field Sample
EB02-GW091124	24I061-16	1	NA	09/24/2404:58	09/24/2404:58	RIV557	RHV134	VO01I21	Field Sample
MW14D-GW091024	24I061-01	1	NA	09/24/2405:28	09/24/2405:28	RIV558	RHV134	VO01I21	Field Sample
MW14S-GW091024	24I061-02	1	NA	09/24/2405:57	09/24/2405:57	RIV559	RHV134	VO01I21	Field Sample
MW27-GW091024	24I061-03	1	NA	09/24/2406:26	09/24/2406:26	RIV560	RHV134	VO01I21	Field Sample
MW29A-GW091024	24I061-04	1	NA	09/24/2406:56	09/24/2406:56	RIV561	RHV134	VO01I21	Field Sample
FD07-GW091024	24I061-05	1	NA	09/24/2407:25	09/24/2407:25	RIV562	RHV134	VO01I21	Field Sample
MW29B-GW091024	24I061-06	1	NA	09/24/2407:55	09/24/2407:55	RIV563	RHV134	VO01I21	Field Sample
MW29C-GW091024	24I061-07	1	NA	09/24/2408:24	09/24/2408:24	RIV564	RHV134	VO01I21	Field Sample
MW31A-GW091024	24I061-08	1	NA	09/24/2408:54	09/24/2408:54	RIV565	RHV134	VO01I21	Field Sample
MW31B-GW091024	24I061-09	1	NA	09/24/2409:23	09/24/2409:23	RIV566	RHV134	VO01I21	Field Sample
MW31C-GW091024	24I061-10	1	NA	09/24/2409:53	09/24/2409:53	RIV567	RHV134	VO01I21	Field Sample
MW03RA-GW091124	24I061-11	1	NA	09/24/2410:23	09/24/2410:23	RIV568	RHV134	VO01I21	Field Sample
MW08A-GW091024	24I061-18	1	NA	09/24/2410:52	09/24/2410:52	RIV569	RHV134	VO01I21	Field Sample
MW03RA-GW091124MS	24I061-11M	1	NA	09/24/2411:22	09/24/2411:22	RIV570	RHV134	VO01I21	Matrix Spike Sample (MS)
MW03RA-GW091124MSD	24I061-11S	1	NA	09/24/2411:53	09/24/2411:53	RIV571	RHV134	VO01I21	MS Duplicate (MSD)
LCS2W	VO01I22L	1	NA	09/24/2414:02	09/24/2414:02	RIV575	RHV134	VO01I22	Lab Control Sample (LCS)
LCD2W	VO01I22C	1	NA	09/24/2414:32	09/24/2414:32	RIV576	RHV134	VO01I22	LCS Duplicate
MBLK2W	VO01I22B	1	NA	09/24/2415:33	09/24/2415:33	RIV578	RHV134	VO01I22	Method Blank
MW03RC-GW091124	24I061-14	1	NA	09/24/2419:32	09/24/2419:32	RIV586	RHV134	VO01I22	Field Sample
MW03RB-GW091124	24I061-12	1	NA	09/24/2420:02	09/24/2420:02	RIV587	RHV134	VO01I22	Field Sample
IW01-GW091124	24I061-13	1	NA	09/24/2420:31	09/24/2420:31	RIV588	RHV134	VO01I22	Field Sample
MW03RC-GW091124MS	24I061-14M	1	NA	09/24/2421:01	09/24/2421:01	RIV589	RHV134	VO01I22	Matrix Spike Sample (MS)
MW03RC-GW091124MSD	24I061-14S	1	NA	09/24/2421:31	09/24/2421:31	RIV590	RHV134	VO01I22	MS Duplicate (MSD)
MW03RD-GW091124	24I061-19	1	NA	09/24/2422:00	09/24/2422:00	RIV591	RHV134	VO01I22	Field Sample
LCS3W	VO01I24L	1	NA	09/25/2417:26	09/25/2417:26	RIV630	RHV134	VO01I24	Lab Control Sample (LCS)
LCD3W	VO01I24C	1	NA	09/25/2417:56	09/25/2417:56	RIV631	RHV134	VO01I24	LCS Duplicate
MBLK3W	VO01I24B	1	NA	09/25/2418:56	09/25/2418:56	RIV633	RHV134	VO01I24	Method Blank
MW03RB-GW091124	24I061-12I	10	NA	09/25/2419:55	09/25/2419:55	RIV635	RHV134	VO01I24	Diluted Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/10/24 09:46
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 05:28
Sample ID	: MW14D-GW091024	Date Analyzed:	09/24/24 05:28
Lab Samp ID:	24I061-01	Dilution Factor:	1
Lab File ID:	RIV558	Matrix:	WATER
Ext Btch ID:	VO01I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.32J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.23J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.4	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.12J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	36	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.27J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.0	10.0	110	70-130
Bromofluorobenzene	9.30	10.0	93	70-130
Toluene-d8	10.9	10.0	109	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV558.D Vial: 10
Acq On : 24 Sep 2024 5:28 am Operator: DNguye/CLingl
Sample : 24I061-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:47 2024 Quant Results File: VO01H09.RES

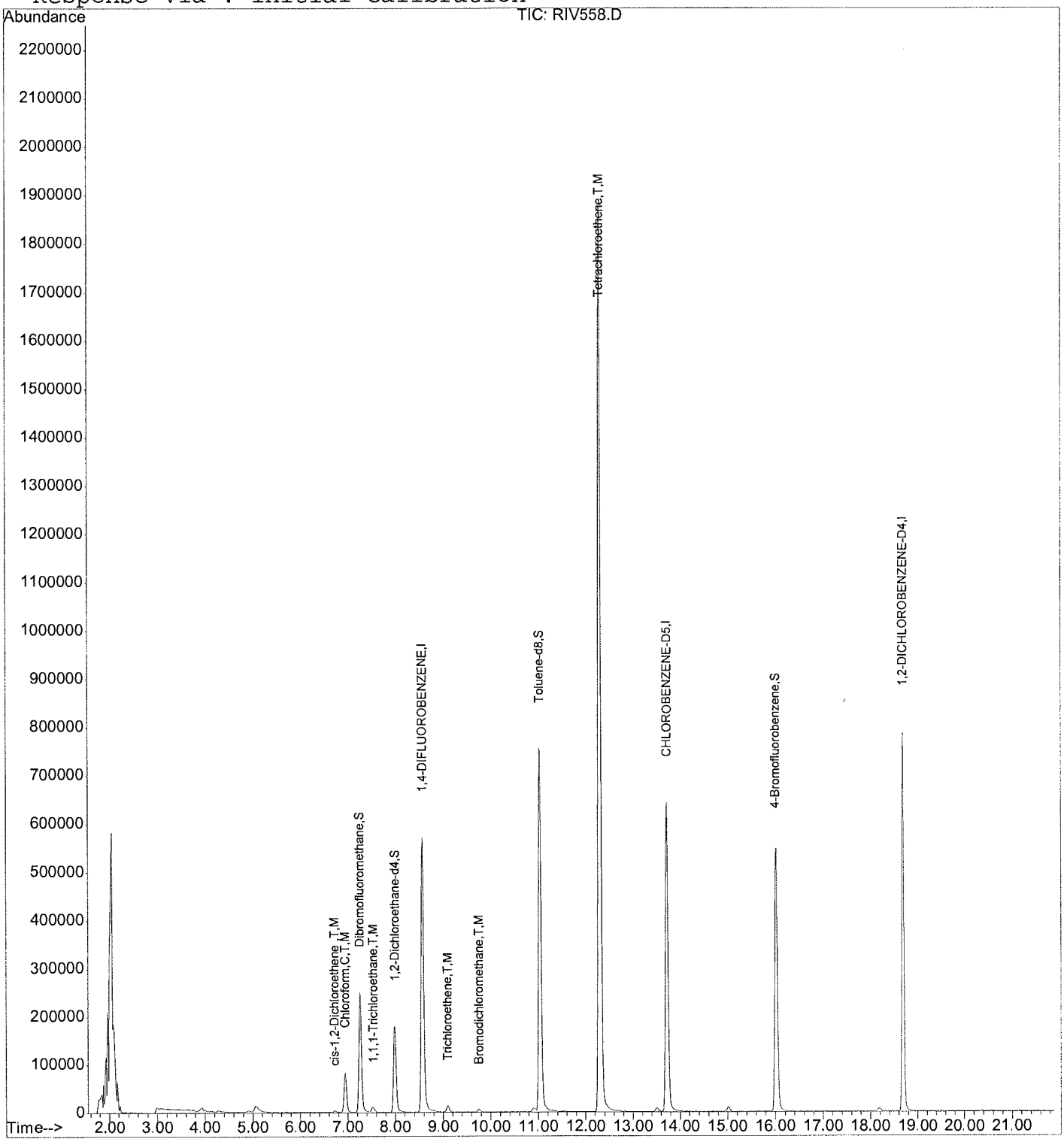
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

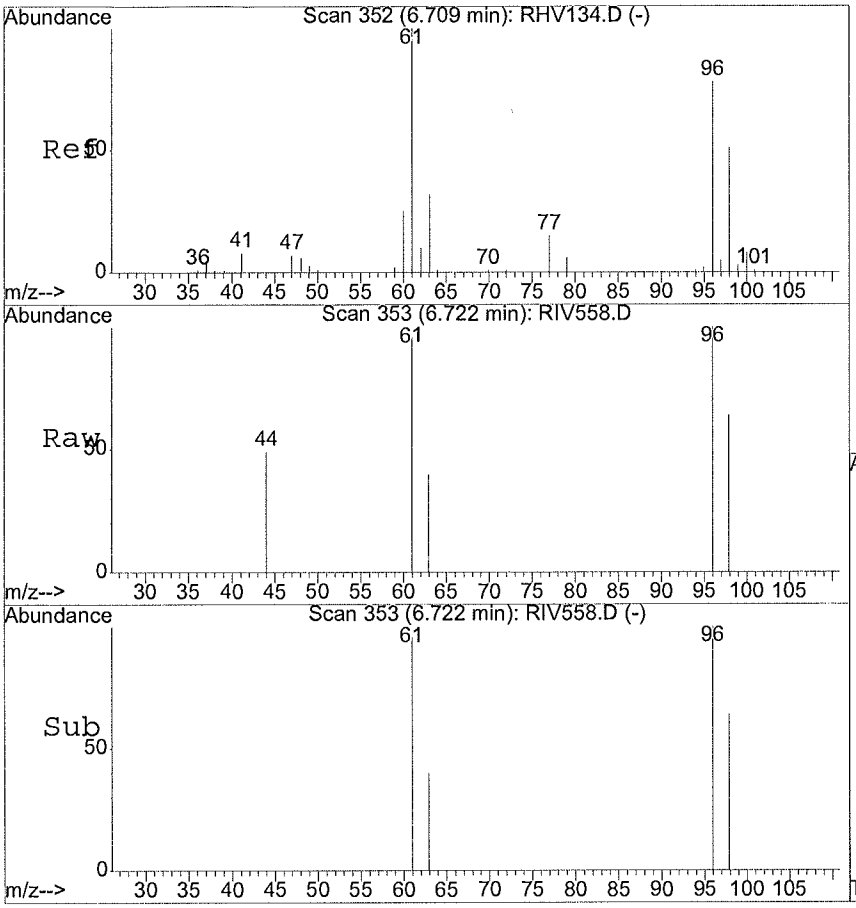
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	899527	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	774239	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	386055	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	287560	10.51	ug/l	0.01
Spiked Amount 10.000			Recovery =	105.10%		
41) 1,2-Dichloroethane-d4	8.00	65	267661	11.01	ug/l	0.01
Spiked Amount 10.000			Recovery =	110.10%		
54) Toluene-d8	11.03	98	1032096	10.91	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.10%		
76) 4-Bromofluorobenzene	16.01	95	455525	9.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.00%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.72	96	3817	0.12	ug/l	83
31) Chloroform	6.94	83	129436	2.37	ug/l	95
35) 1,1,1-Trichloroethane	7.54	97	17518	0.32	ug/l	96
44) Trichloroethene	9.09	130	8595	0.27	ug/l	88
47) Bromodichloromethane	9.76	83	8892	0.23	ug/l	96
61) Tetrachloroethene	12.31	164	955627	36.27	ug/l	94

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I23\RIV558.D Vial: 10
Acq On : 24 Sep 2024 5:28 am Operator: DNguye/CLing
Sample : 24I061-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:47 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

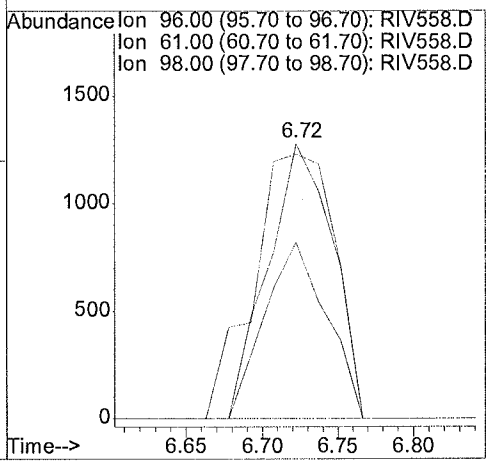


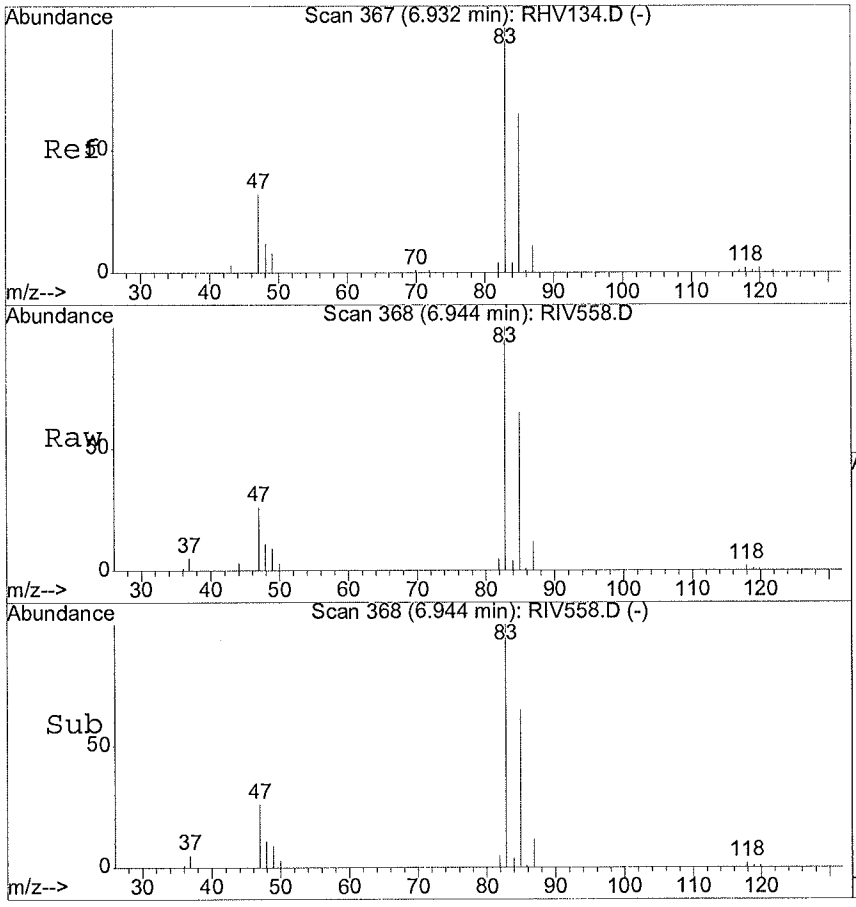


#30
cis-1,2-Dichloroethene
Concen: 0.12 ug/l
RT: 6.72 min Scan# 353
Delta R.T. 0.01 min
Lab File: RIV558.D
Acq: 24 Sep 2024 5:28 am

Tgt Ion: 96 Resp: 3817

Ion	Ratio	Lower	Upper
96	100		
61	120.8	119.2	179.2
98	61.4	35.1	95.1

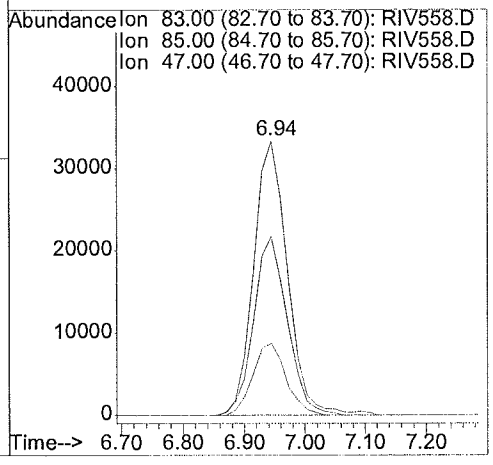


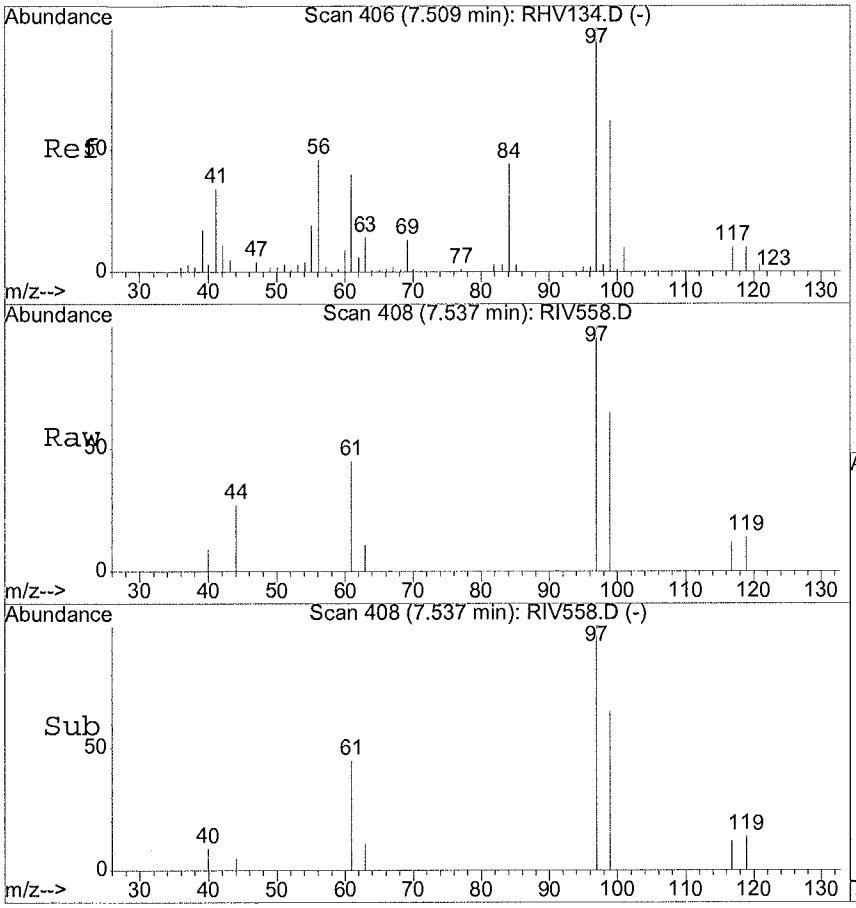


#31
Chloroform
Concen: 2.37 ug/l
RT: 6.94 min Scan# 368
Delta R.T. 0.01 min
Lab File: RIV558.D
Acq: 24 Sep 2024 5:28 am

Tgt Ion: 83 Resp: 129436

Ion	Ratio	Lower	Upper
83	100		
85	64.5	38.4	98.4
47	25.9	0.0	59.6

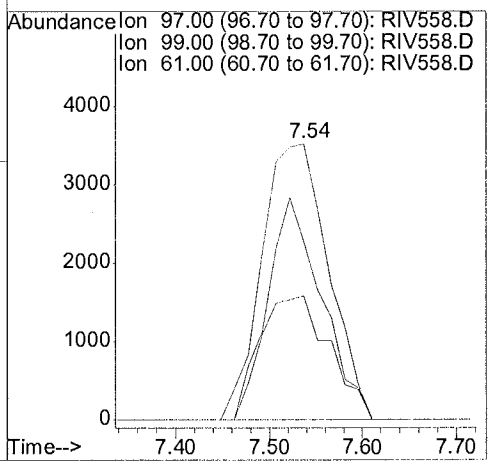


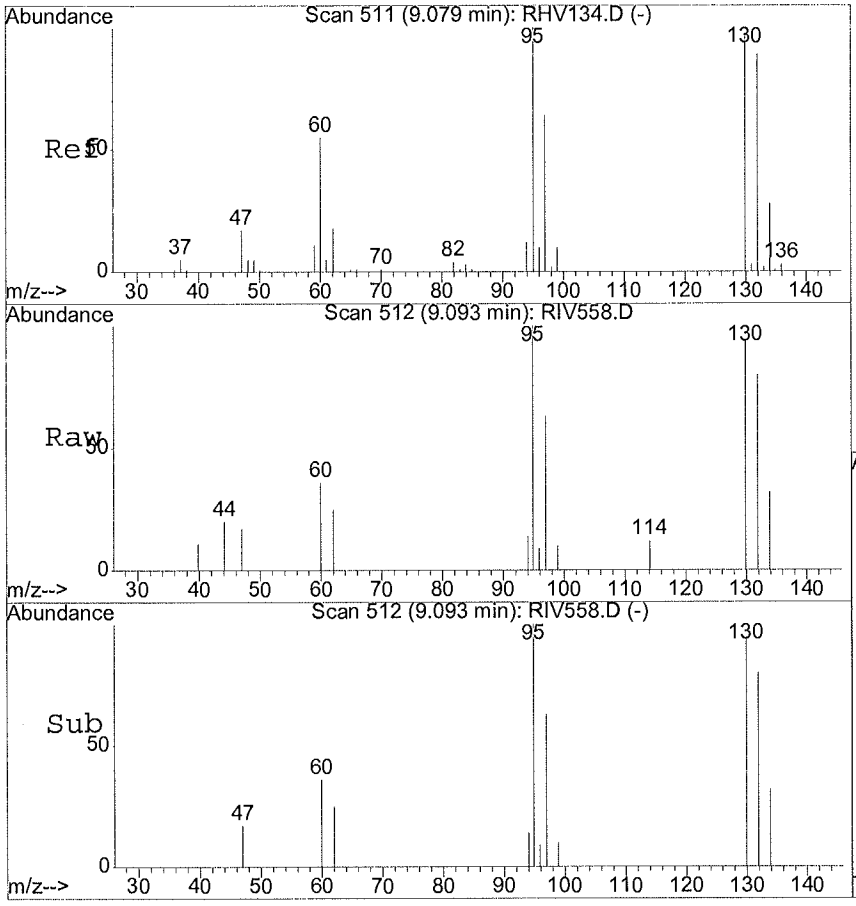


#35
1,1,1-Trichloroethane
Concen: 0.32 ug/l
RT: 7.54 min Scan# 408
Delta R.T. 0.03 min
Lab File: RIV558.D
Acq: 24 Sep 2024 5:28 am

Tgt Ion: 97 Resp: 17518

Ion	Ratio	Lower	Upper
97	100		
99	66.0	33.6	93.6
61	45.8	11.7	71.7

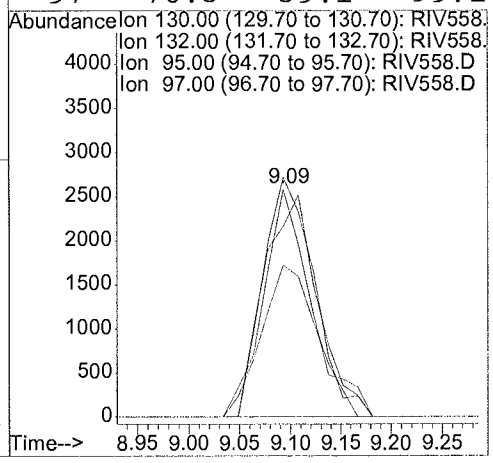


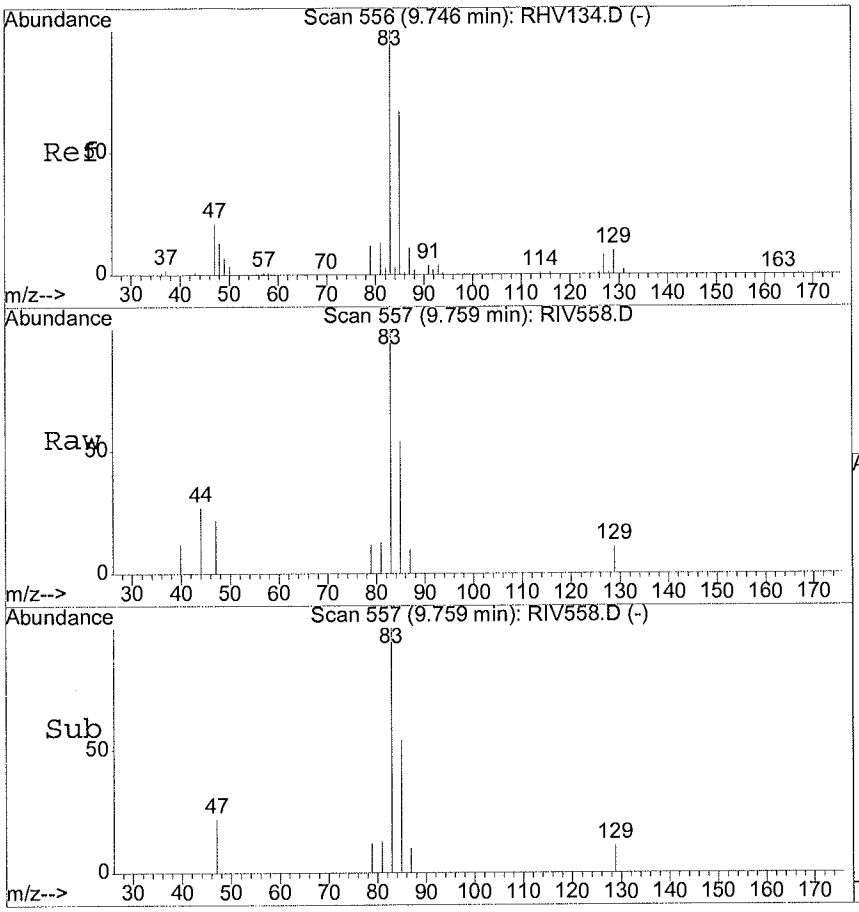


#44
Trichloroethene
Concen: 0.27 ug/l
RT: 9.09 min Scan# 512
Delta R.T. 0.01 min
Lab File: RIV558.D
Acq: 24 Sep 2024 5:28 am

Tgt Ion:130 Resp: 8595

Ion	Ratio	Lower	Upper
130	100		
132	108.8	62.7	122.7
95	111.5	72.0	132.0
97	76.3	39.1	99.1

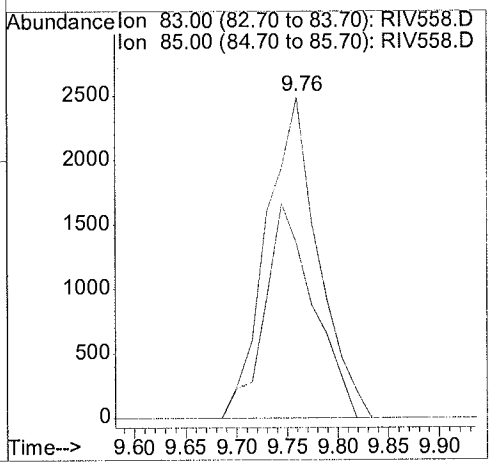


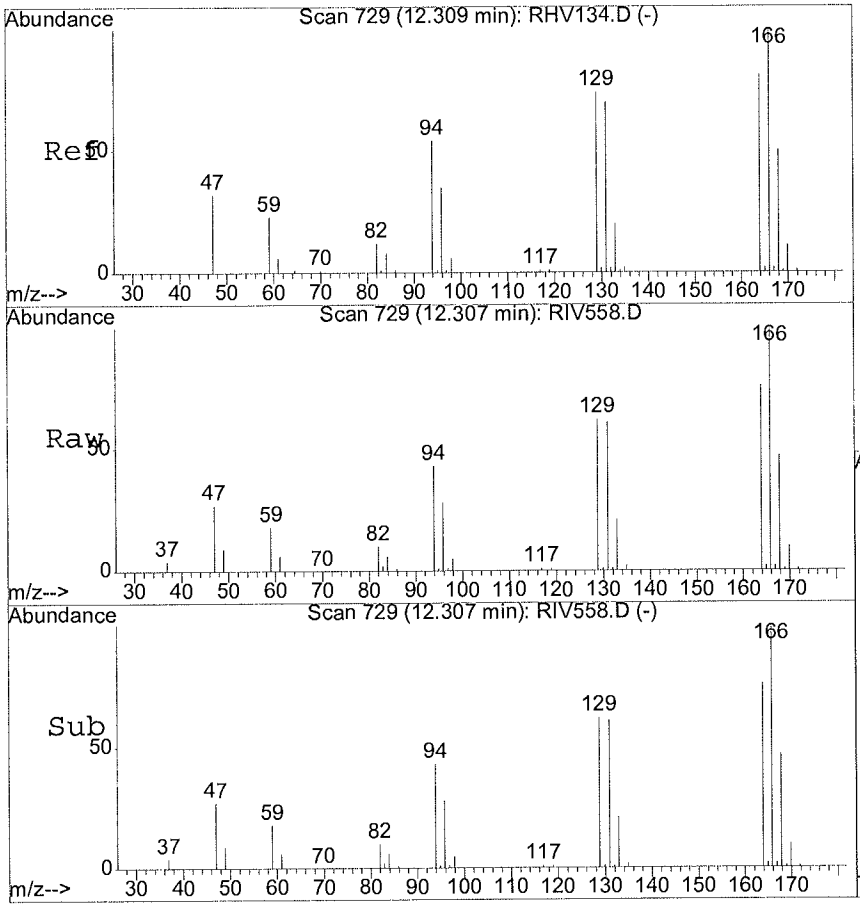


#47
Bromodichloromethane
Concen: 0.23 ug/l
RT: 9.76 min Scan# 557
Delta R.T. 0.01 min
Lab File: RIV558.D
Acq: 24 Sep 2024 5:28 am

Tgt Ion: 83 Resp: 8892

Ion	Ratio	Lower	Upper
83	100		
85	63.0	36.5	96.5

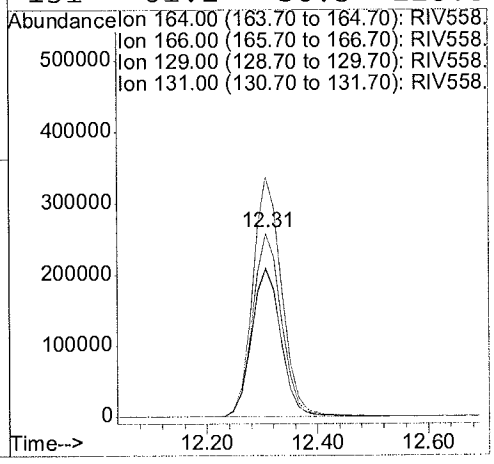




#61
Tetrachloroethene
Concen: 36.27 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV558.D
Acq: 24 Sep 2024 5:28 am

Tgt Ion:164 Resp: 955627

Ion	Ratio	Lower	Upper
164	100		
166	130.4	98.2	158.2
129	82.4	62.8	122.8
131	81.1	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/10/24 11:09
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 05:57
Sample ID	: MW14S-GW091024	Date Analyzed:	09/24/24 05:57
Lab Samp ID:	24I061-02	Dilution Factor:	1
Lab File ID:	RIV559	Matrix:	WATER
Ext Btch ID:	VOO1I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	0.26J	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	2.3	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	7.8	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	0.13J	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	3.6	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.0	10.0	110	70-130
Bromofluorobenzene	9.18	10.0	92	70-130
Toluene-d8	10.8	10.0	108	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV559.D Vial: 11
Acq On : 24 Sep 2024 5:57 am Operator: DNguye/CLingl
Sample : 24I061-02 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

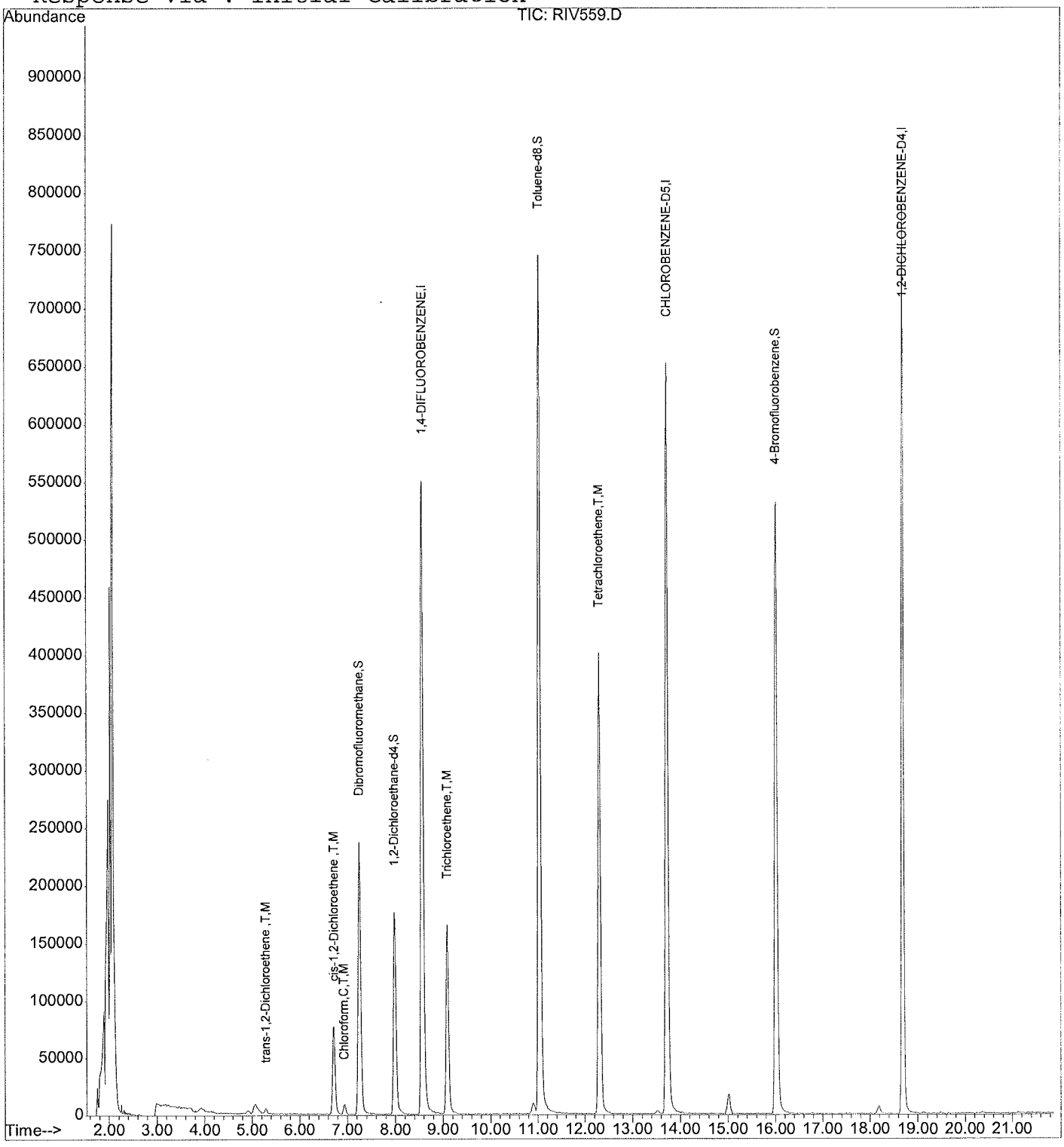
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	872001	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	758749	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	382497	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	277032	10.45	ug/l	0.01
Spiked Amount 10.000			Recovery =	104.50%		
41) 1,2-Dichloroethane-d4	7.98	65	258955	10.98	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.80%		
54) Toluene-d8	11.03	98	1004540	10.83	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.30%		
76) 4-Bromofluorobenzene	16.01	95	445707	9.18	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.80%		
Target Compounds						Qvalue
22) trans-1,2-Dichloroethene	5.29	61	4931	0.13	ug/l	84
30) cis-1,2-Dichloroethene	6.72	96	68675	2.32	ug/l	92
31) Chloroform	6.93	83	13883	0.26	ug/l	99
44) Trichloroethene	9.09	130	110553	3.62	ug/l	96
61) Tetrachloroethene	12.31	164	202430	7.84	ug/l	94

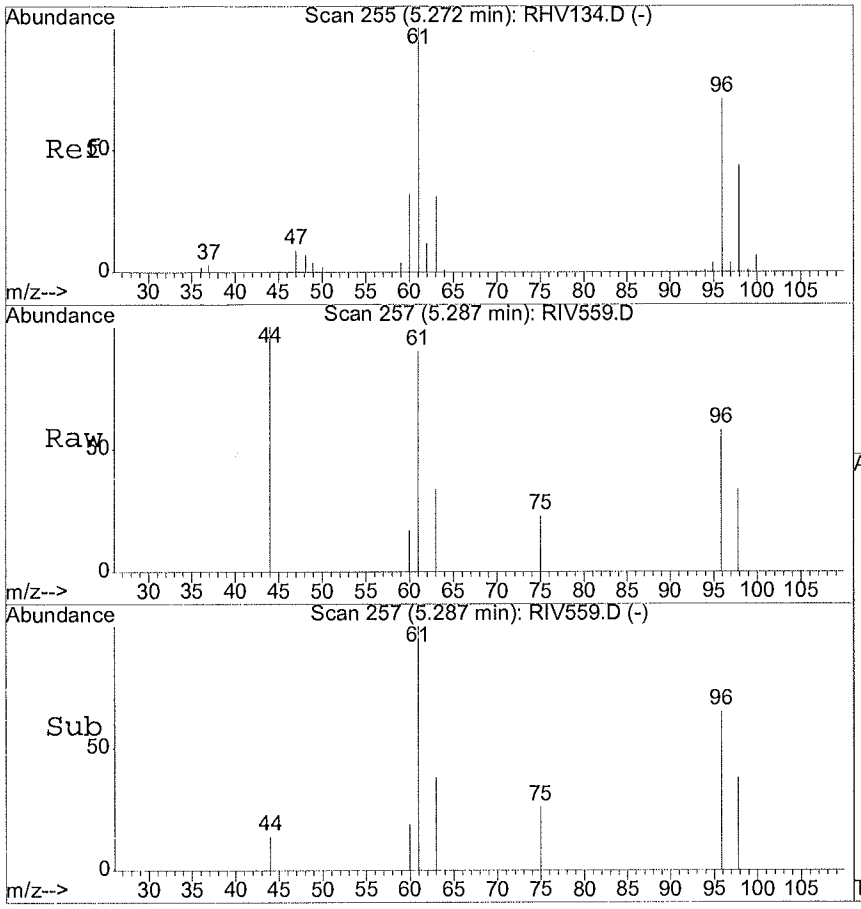
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV559.D Vial: 11
Acq On : 24 Sep 2024 5:57 am Operator: DNguye/CLing
Sample : 24I061-02 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:48 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

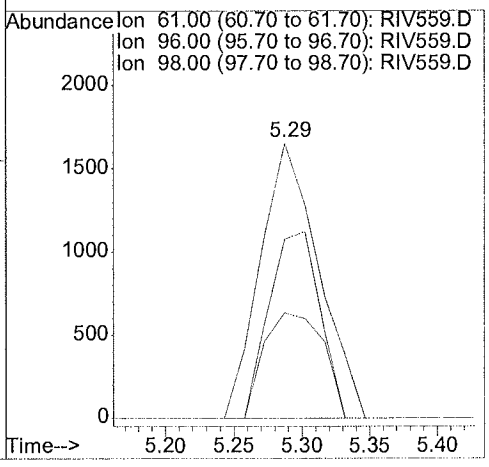


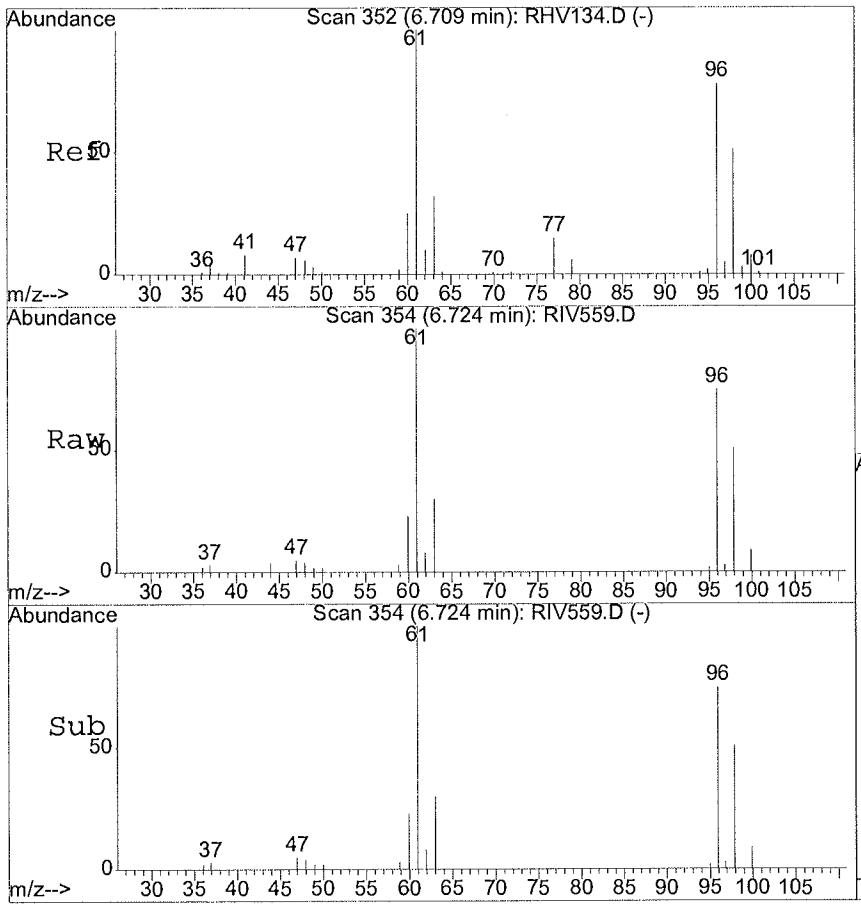


#22
trans-1,2-Dichloroethene
Concen: 0.13 ug/l
RT: 5.29 min Scan# 257
Delta R.T. 0.02 min
Lab File: RIV559.D
Acq: 24 Sep 2024 5:57 am

Tgt Ion: 61 Resp: 4931

Ion	Ratio	Lower	Upper
61	100		
96	59.0	44.1	104.1
98	38.7	16.8	76.8

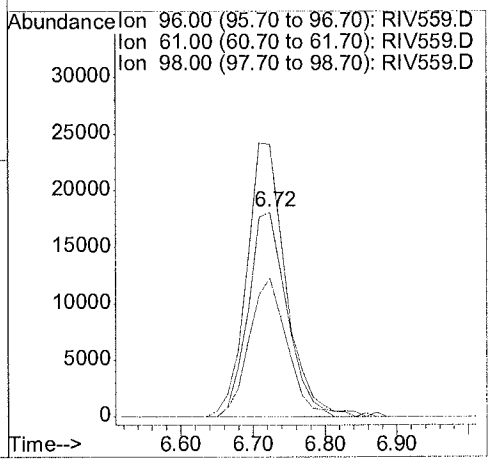


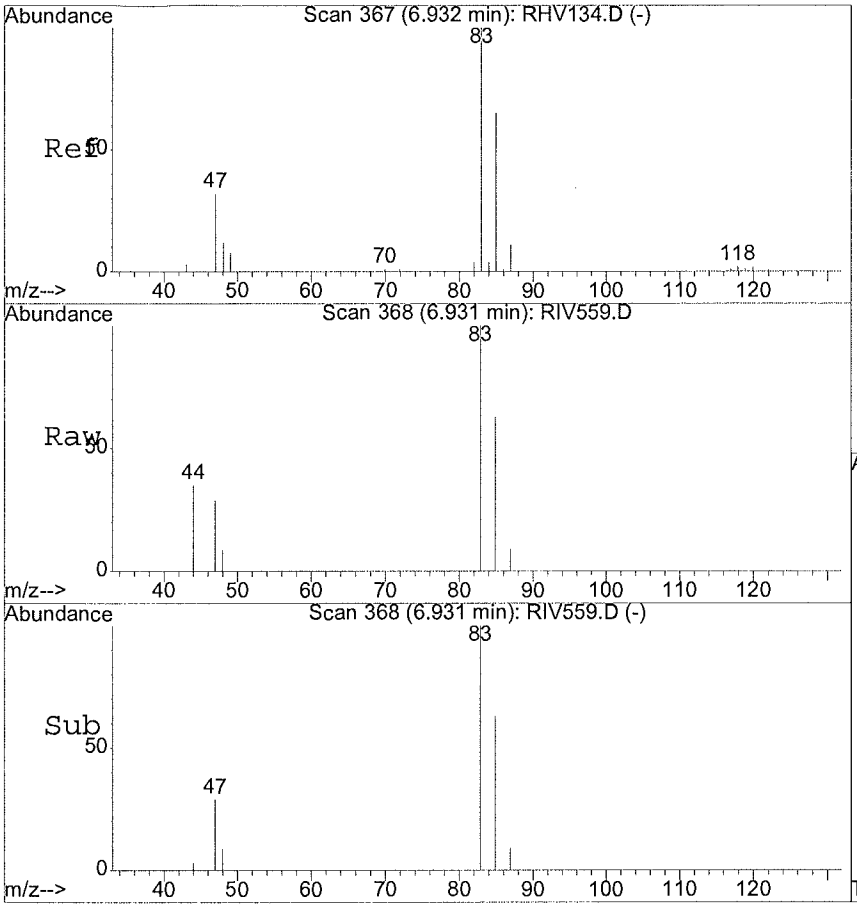


#30
cis-1,2-Dichloroethene
Concen: 2.32 ug/l
RT: 6.72 min Scan# 354
Delta R.T. 0.01 min
Lab File: RIV559.D
Acq: 24 Sep 2024 5:57 am

Tgt Ion: 96 Resp: 68675

Ion	Ratio	Lower	Upper
96	100		
61	134.0	119.2	179.2
98	65.3	35.1	95.1

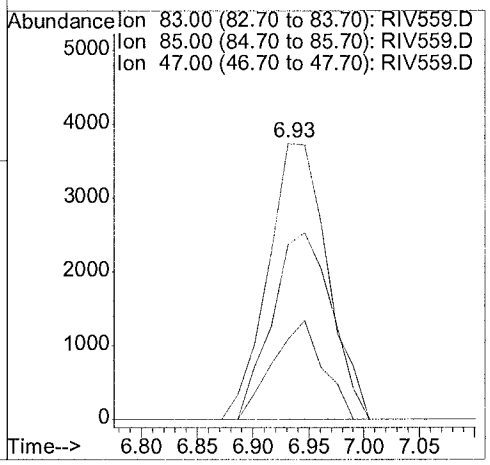


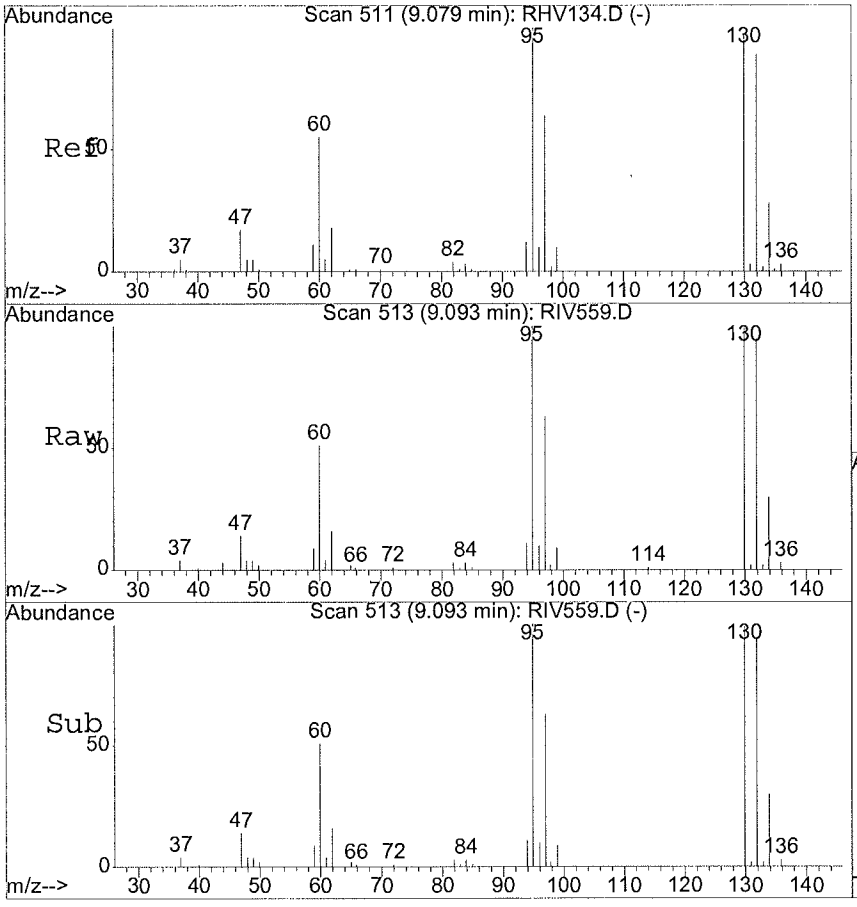


#31
Chloroform
Concen: 0.26 ug/l
RT: 6.93 min Scan# 368
Delta R.T. 0.00 min
Lab File: RIV559.D
Acq: 24 Sep 2024 5:57 am

Tgt Ion: 83 Resp: 13883

Ion	Ratio	Lower	Upper
83	100		
85	67.8	38.4	98.4
47	30.2	0.0	59.6

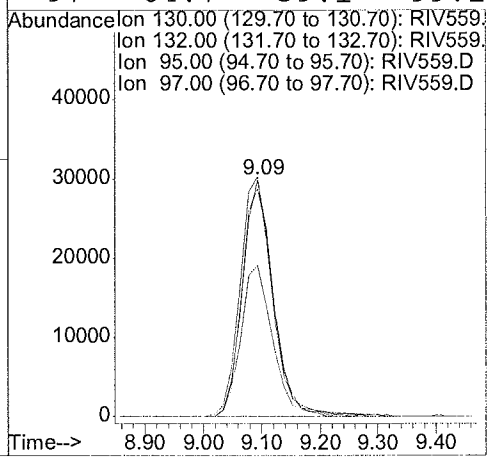


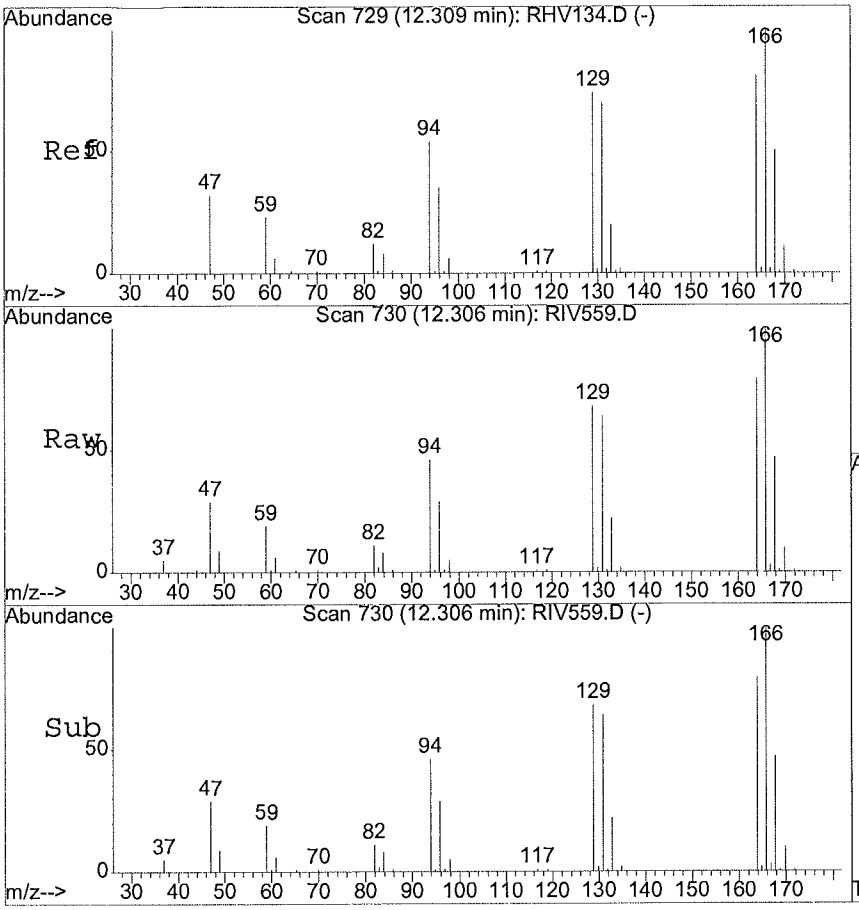


#44
Trichloroethene
Concen: 3.62 ug/l
RT: 9.09 min Scan# 513
Delta R.T. 0.01 min
Lab File: RIV559.D
Acq: 24 Sep 2024 5:57 am

Tgt Ion:130 Resp: 110553

Ion	Ratio	Lower	Upper
130	100		
132	97.8	62.7	122.7
95	104.9	72.0	132.0
97	64.7	39.1	99.1

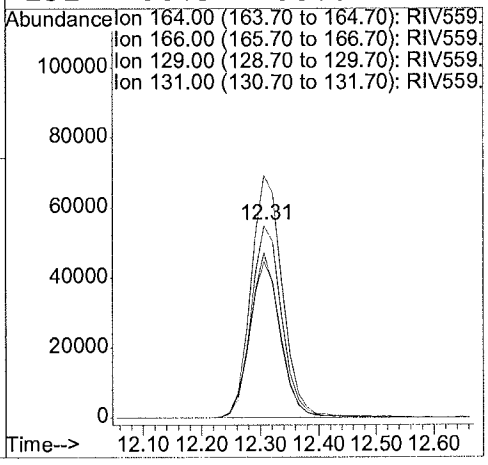




#61
Tetrachloroethene
Concen: 7.84 ug/l
RT: 12.31 min Scan# 730
Delta R.T. -0.00 min
Lab File: RIV559.D
Acq: 24 Sep 2024 5:57 am

Tgt Ion:164 Resp: 202430

Ion	Ratio	Lower	Upper
164	100		
166	129.4	98.2	158.2
129	83.5	62.8	122.8
131	80.9	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/10/24 09:18
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 06:26
Sample ID	: MW27-GW091024	Date Analyzed:	09/24/24 06:26
Lab Samp ID:	24I061-03	Dilution Factor:	1
Lab File ID:	RIV560	Matrix:	WATER
Ext Btch ID:	VO01I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	3.4J	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.43J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.7	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.0	10.0	110	70-130
Bromofluorobenzene	9.07	10.0	91	70-130
Toluene-d8	10.9	10.0	109	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV560.D Vial: 12
Acq On : 24 Sep 2024 6:26 am Operator: DNguye/CLingl
Sample : 24I061-03 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:49 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	879636	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	742110	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	371745	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	277947	10.39	ug/l	0.01
Spiked Amount 10.000			Recovery = 103.90%			
41) 1,2-Dichloroethane-d4	7.98	65	262009	11.02	ug/l	0.00
Spiked Amount 10.000			Recovery = 110.20%			
54) Toluene-d8	11.03	98	984520	10.85	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.50%			
76) 4-Bromofluorobenzene	16.01	95	427958	9.07	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.70%			
Target Compounds						Qvalue
13) Acetone	4.12	43	22654	3.43	ug/l	96
31) Chloroform	6.94	83	250462	4.68	ug/l	95
47) Bromodichloromethane	9.74	83	16662	0.43	ug/l	92

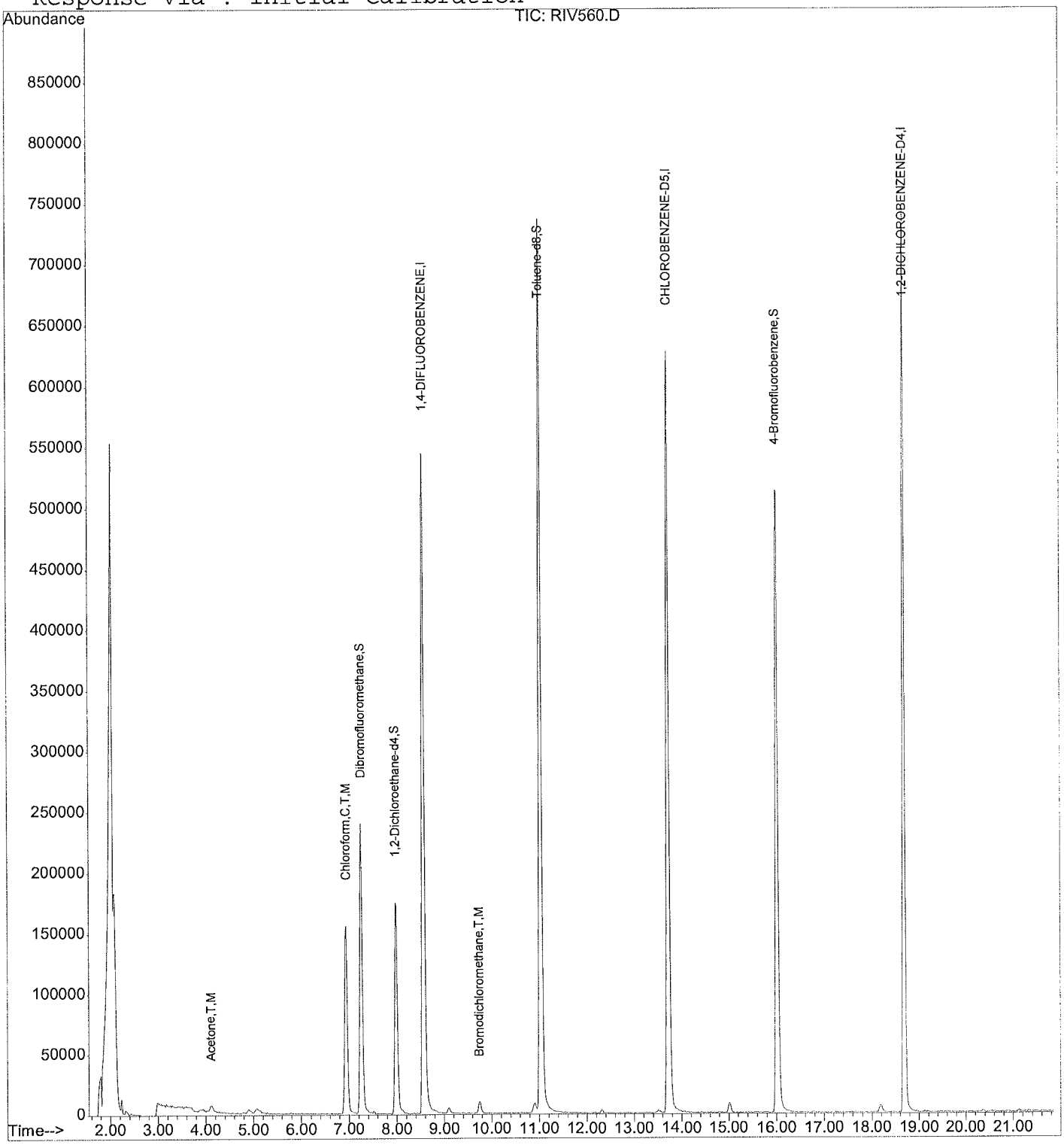
(#) = qualifier out of range (m) = manual integration

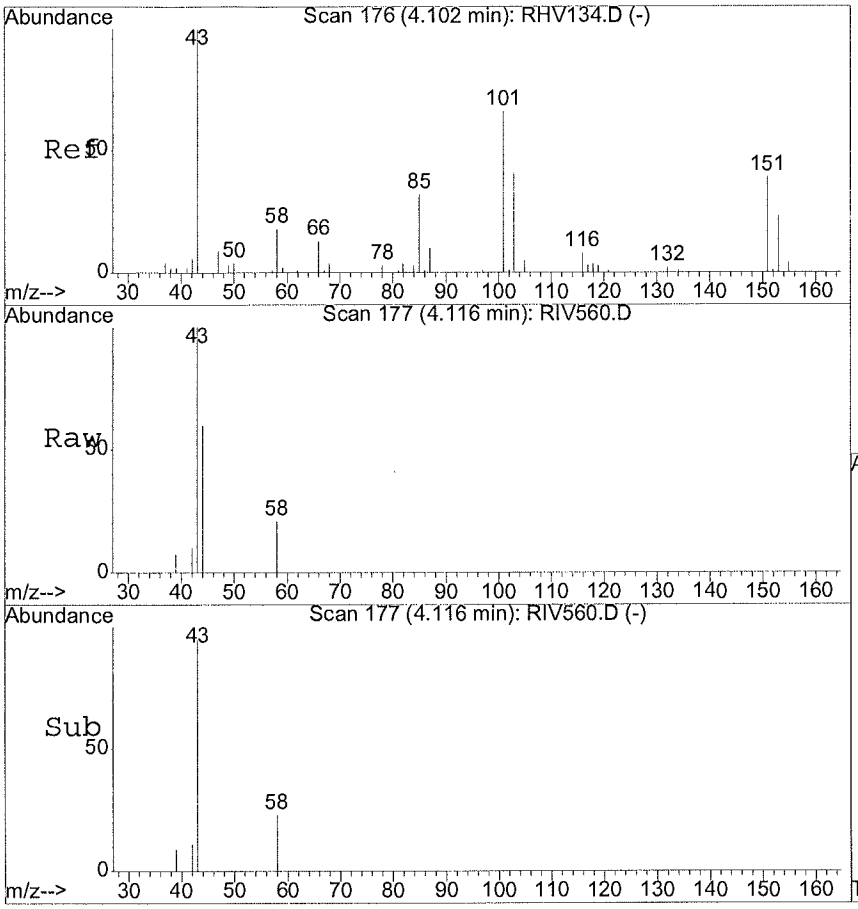
Data File : D:\HPCHEM\1\DATA\24I23\RIV560.D
Acq On : 24 Sep 2024 6:26 am
Sample : 24I061-03
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 10:49 2024

Vial: 12
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

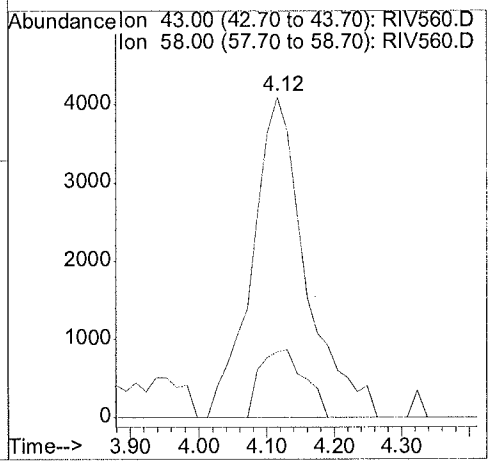


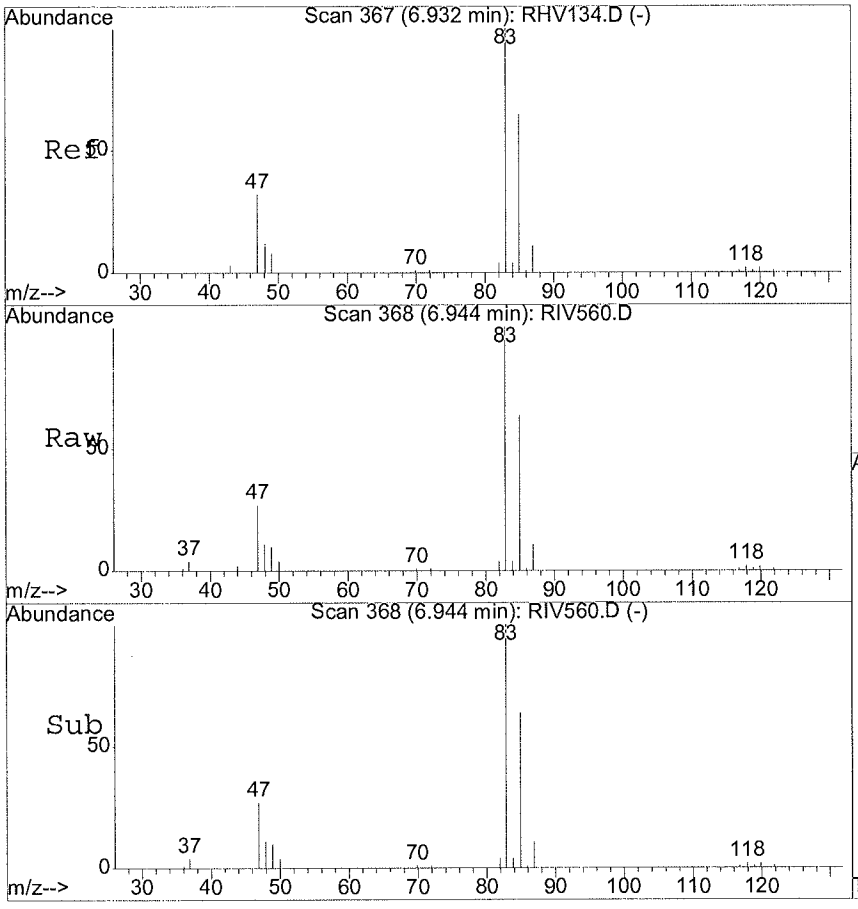


#13
Acetone
Concen: 3.43 ug/l
RT: 4.12 min Scan# 177
Delta R.T. 0.01 min
Lab File: RIV560.D
Acq: 24 Sep 2024 6:26 am

Tgt Ion: 43 Resp: 22654

Ion	Ratio	Lower	Upper
43	100		
58	17.7	0.0	49.5

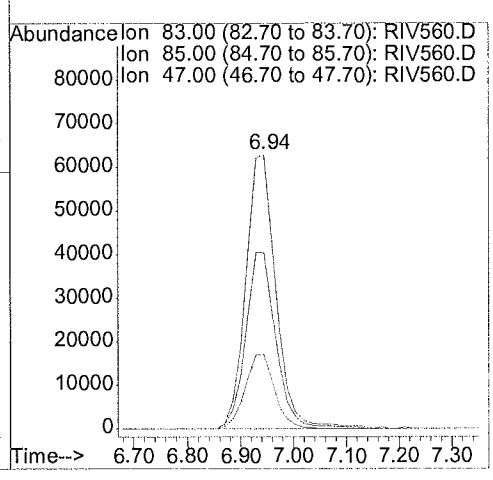


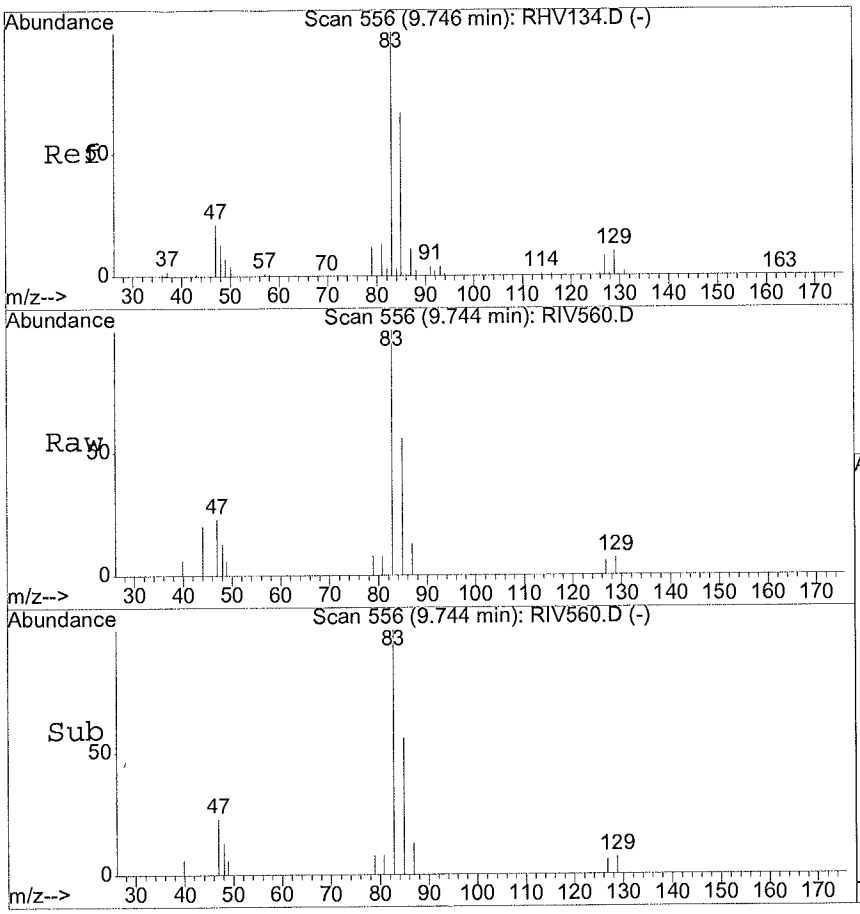


#31
Chloroform
Concen: 4.68 ug/l
RT: 6.94 min Scan# 368
Delta R.T. 0.01 min
Lab File: RIV560.D
Acq: 24 Sep 2024 6:26 am

Tgt Ion: 83 Resp: 250462

Ion	Ratio	Lower	Upper
83	100		
85	64.4	38.4	98.4
47	26.6	0.0	59.6

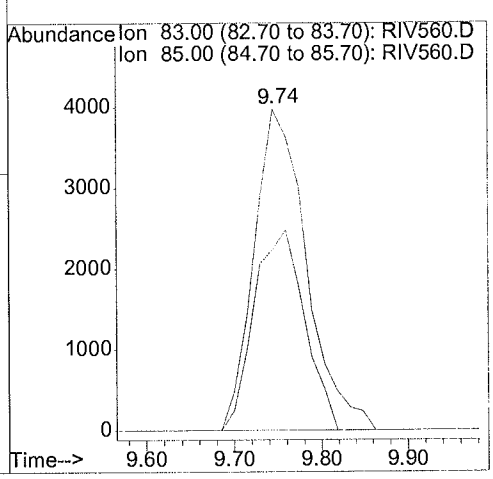




#47
Bromodichloromethane
Concen: 0.43 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RIV560.D
Acq: 24 Sep 2024 6:26 am

Tgt Ion: 83 Resp: 16662

Ion	Ratio	Lower	Upper
83	100		
85	59.9	36.5	96.5



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/10/24 11:10
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 06:56
Sample ID	: MW29A-GW091024	Date Analyzed:	09/24/24 06:56
Lab Samp ID:	24I061-04	Dilution Factor:	1
Lab File ID:	RIV561	Matrix:	WATER
Ext Btch ID:	VOO1I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.27J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	5.3	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	B.3	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.17J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.0	10.0	110	70-130
Bromofluorobenzene	B.9B	10.0	90	70-130
Toluene-dB	10.7	10.0	107	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV561.D Vial: 13
Acq On : 24 Sep 2024 6:56 am Operator: DNguye/CLingl
Sample : 24I061-04 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:49 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

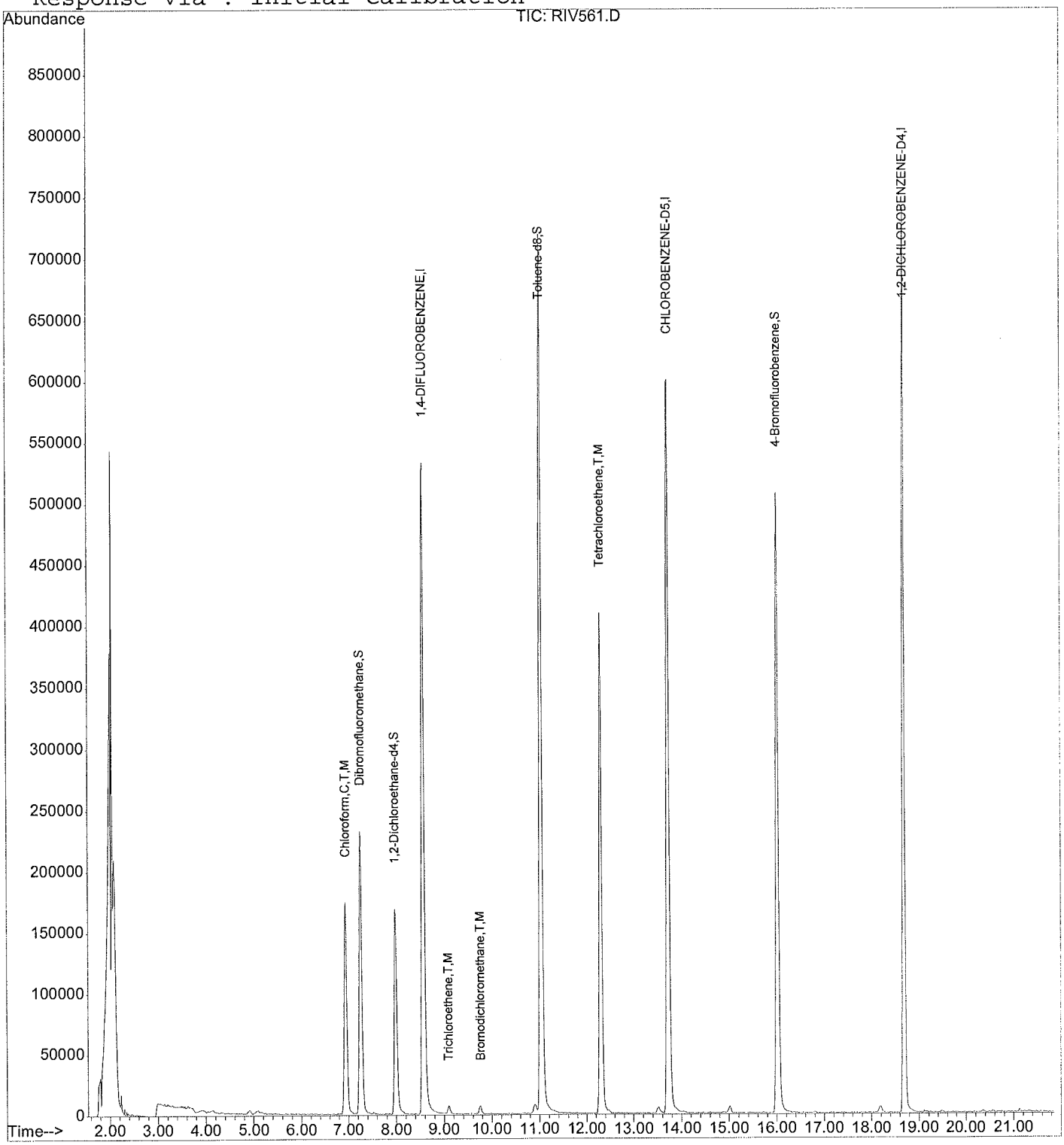
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.58	114	844920	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	729087	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	367957	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	269664	10.50	ug/l	0.01
Spiked Amount 10.000			Recovery = 105.00%			
41) 1,2-Dichloroethane-d4	7.98	65	250551	10.97	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.70%			
54) Toluene-d8	11.03	98	951411	10.68	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.80%			
76) 4-Bromofluorobenzene	16.01	95	419168	8.98	ug/l	0.00
Spiked Amount 10.000			Recovery = 89.80%			
Target Compounds						Qvalue
31) Chloroform	6.94	83	274296	5.34	ug/l	95
44) Trichloroethene	9.09	130	4886	0.17	ug/l	91
47) Bromodichloromethane	9.76	83	10172	0.27	ug/l	100
61) Tetrachloroethene	12.31	164	205466	8.28	ug/l	94

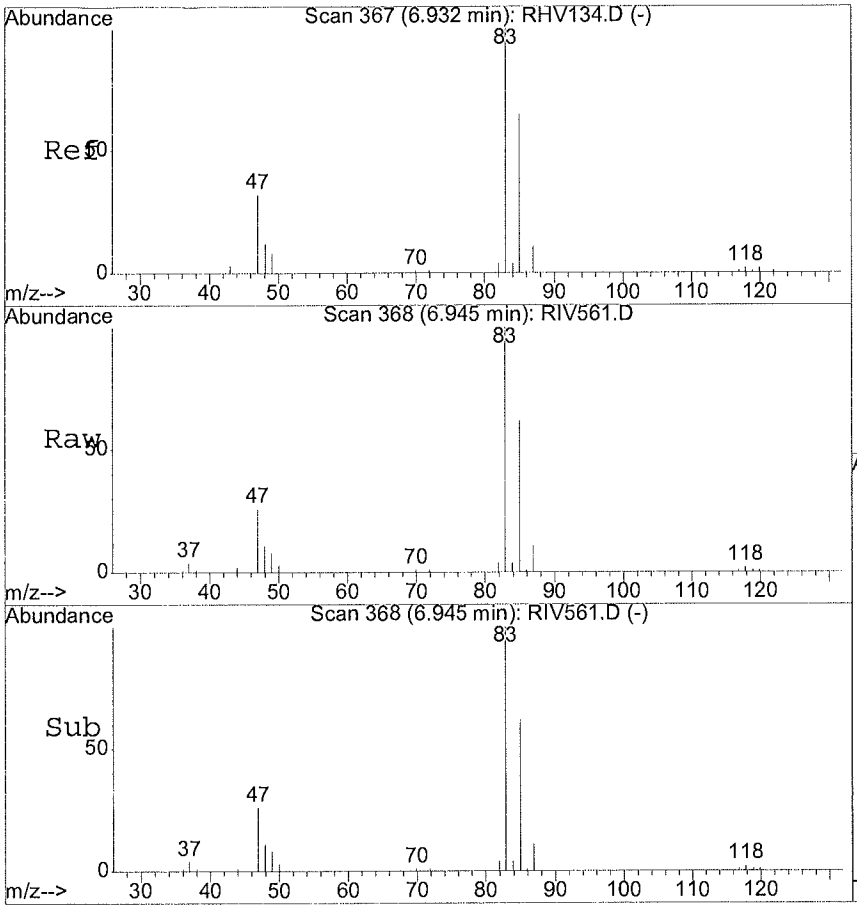
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I23\RIV561.D
Acq On : 24 Sep 2024 6:56 am
Sample : 24I061-04
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 10:49 2024

Vial: 13
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

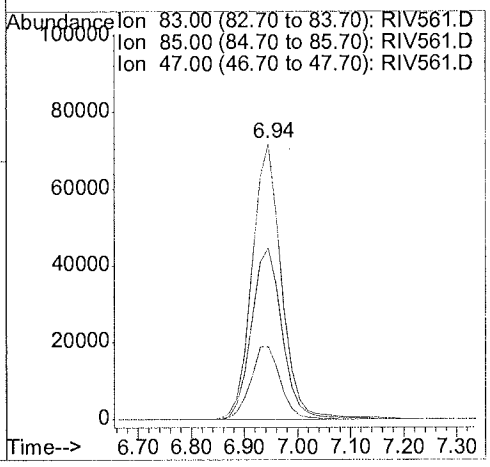


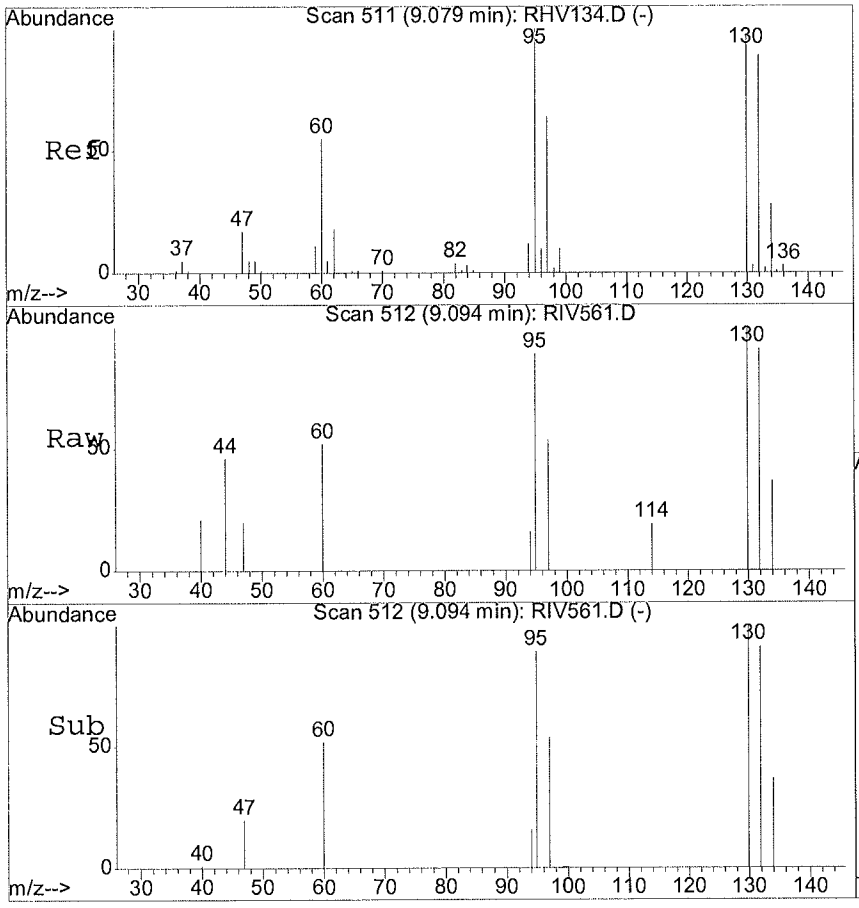


#31
Chloroform
Concen: 5.34 ug/l
RT: 6.94 min Scan# 368
Delta R.T. 0.01 min
Lab File: RIV561.D
Acq: 24 Sep 2024 6:56 am

Tgt Ion: 83 Resp: 274296

Ion	Ratio	Lower	Upper
83	100		
85	64.9	38.4	98.4
47	26.7	0.0	59.6

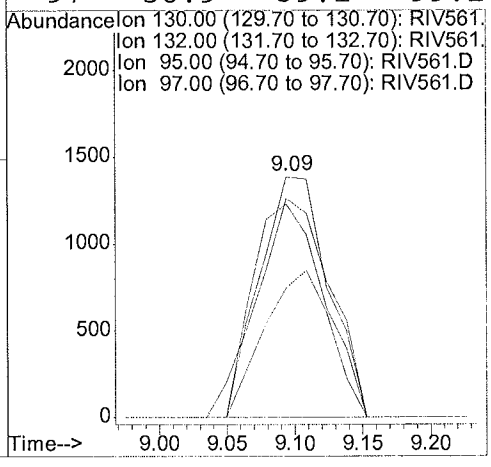


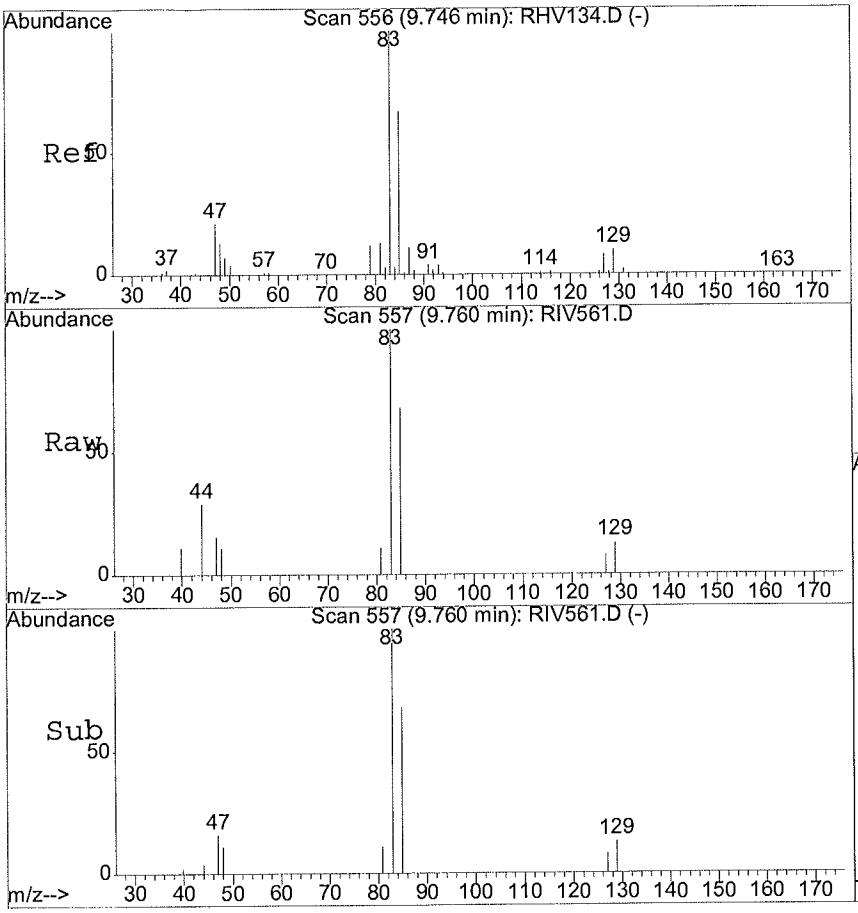


#44
Trichloroethene
Concen: 0.17 ug/l
RT: 9.09 min Scan# 512
Delta R.T. 0.02 min
Lab File: RIV561.D
Acq: 24 Sep 2024 6:56 am

Tgt Ion:130 Resp: 4886

Ion	Ratio	Lower	Upper
130	100		
132	97.1	62.7	122.7
95	92.3	72.0	132.0
97	58.9	39.1	99.1

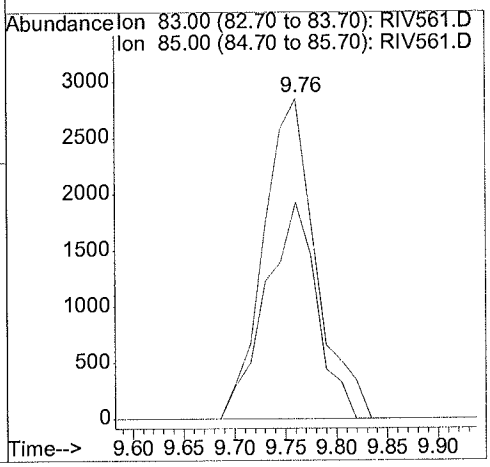


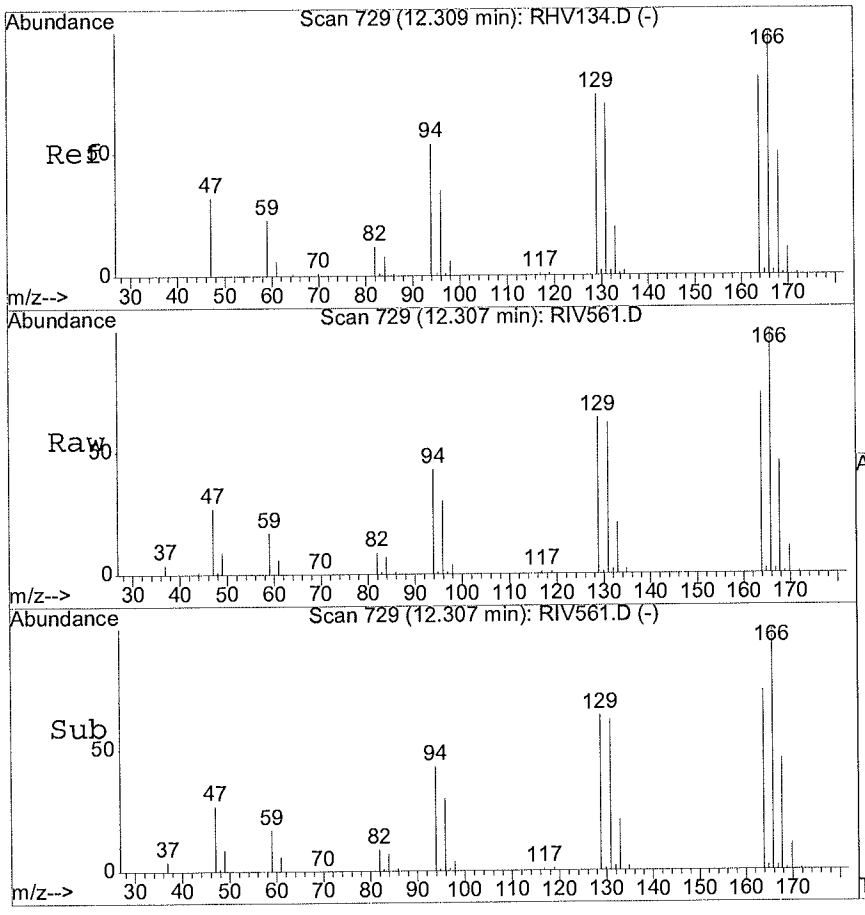


#47
Bromodichloromethane
Concen: 0.27 ug/l
RT: 9.76 min Scan# 557
Delta R.T. 0.02 min
Lab File: RIV561.D
Acq: 24 Sep 2024 6:56 am

Tgt Ion: 83 Resp: 10172

Ion	Ratio	Lower	Upper
83	100		
85	66.2	36.5	96.5

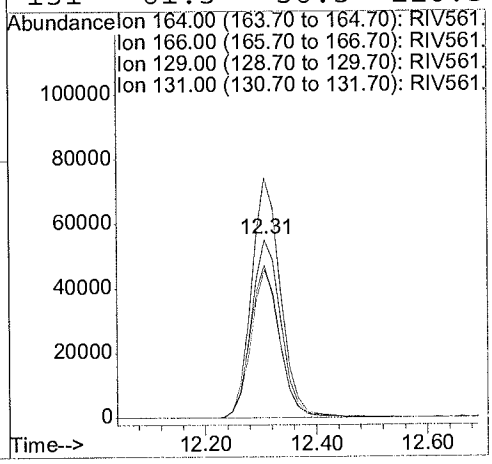




#61
Tetrachloroethene
Concen: 8.28 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV561.D
Acq: 24 Sep 2024 6:56 am

Tgt Ion:164 Resp: 205466

Ion	Ratio	Lower	Upper
164	100		
166	132.0	98.2	158.2
129	84.6	62.8	122.8
131	81.3	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/10/24 11:15
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 07:25
Sample ID	: FD07-GW091024	Date Analyzed:	09/24/24 07:25
Lab Samp ID:	24I061-05	Dilution Factor:	1
Lab File ID:	RIV562	Matrix:	WATER
Ext Btch ID:	VOO1I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.29J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	5.5	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	8.5	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.15J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.0	10.0	110	70-130
Bromofluorobenzene	8.88	10.0	89	70-130
Toluene-d8	10.8	10.0	108	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV562.D Vial: 14
Acq On : 24 Sep 2024 7:25 am Operator: DNguye/CLingl
Sample : 24I061-05 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:50 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

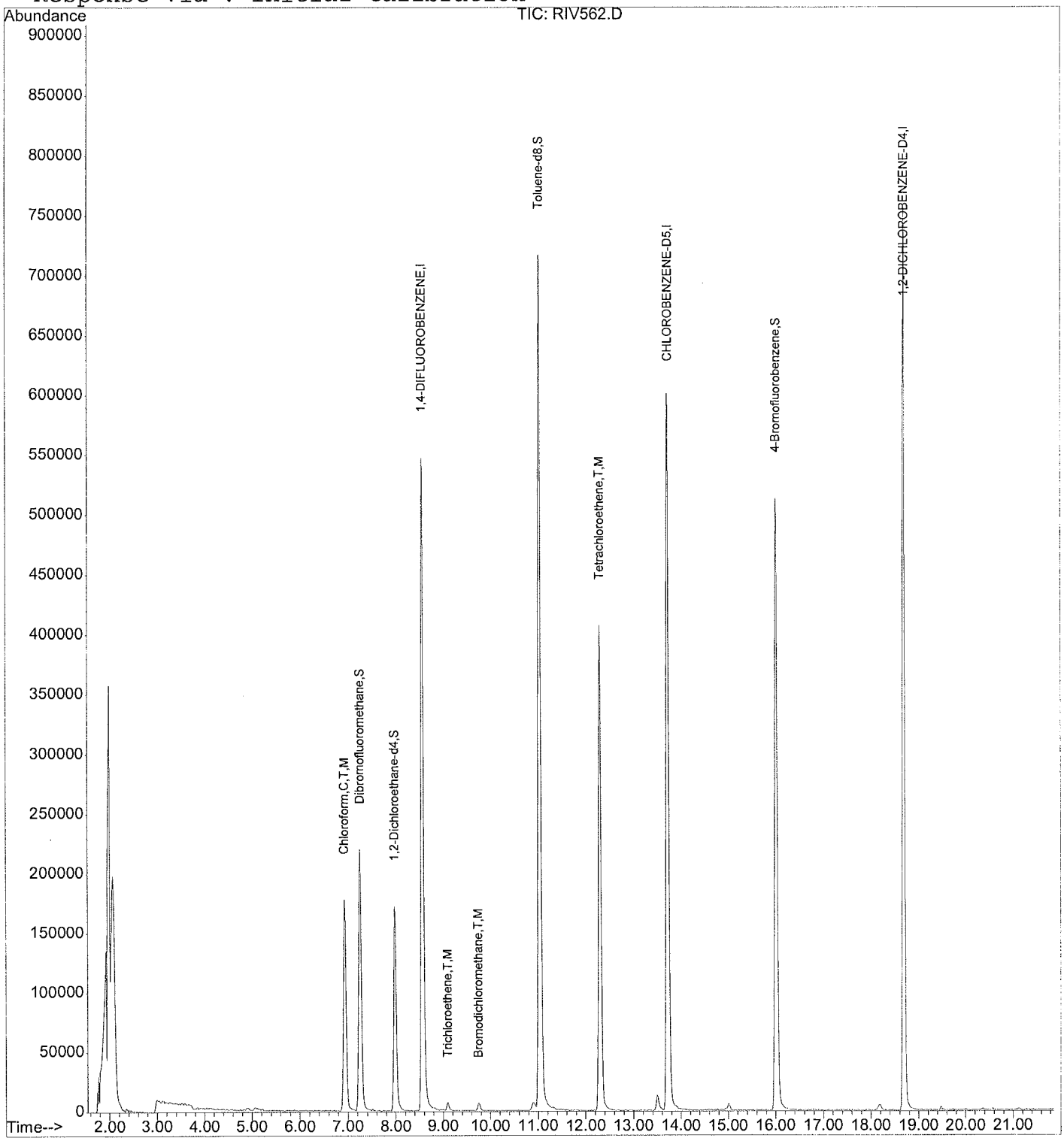
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	839968	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	709177	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	374150	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	265204	10.38	ug/l	0.01
Spiked Amount 10.000			Recovery = 103.80%			
41) 1,2-Dichloroethane-d4	7.98	65	250501	11.03	ug/l	0.00
Spiked Amount 10.000			Recovery = 110.30%			
54) Toluene-d8	11.03	98	935885	10.80	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.00%			
76) 4-Bromofluorobenzene	16.01	95	421518	8.88	ug/l	0.00
Spiked Amount 10.000			Recovery = 88.80%			
Target Compounds						Qvalue
31) Chloroform	6.93	83	281724	5.51	ug/l	94
44) Trichloroethene	9.09	130	4506	0.15	ug/l	92
47) Bromodichloromethane	9.75	83	10742	0.29	ug/l	94
61) Tetrachloroethene	12.31	164	205366	8.51	ug/l	94

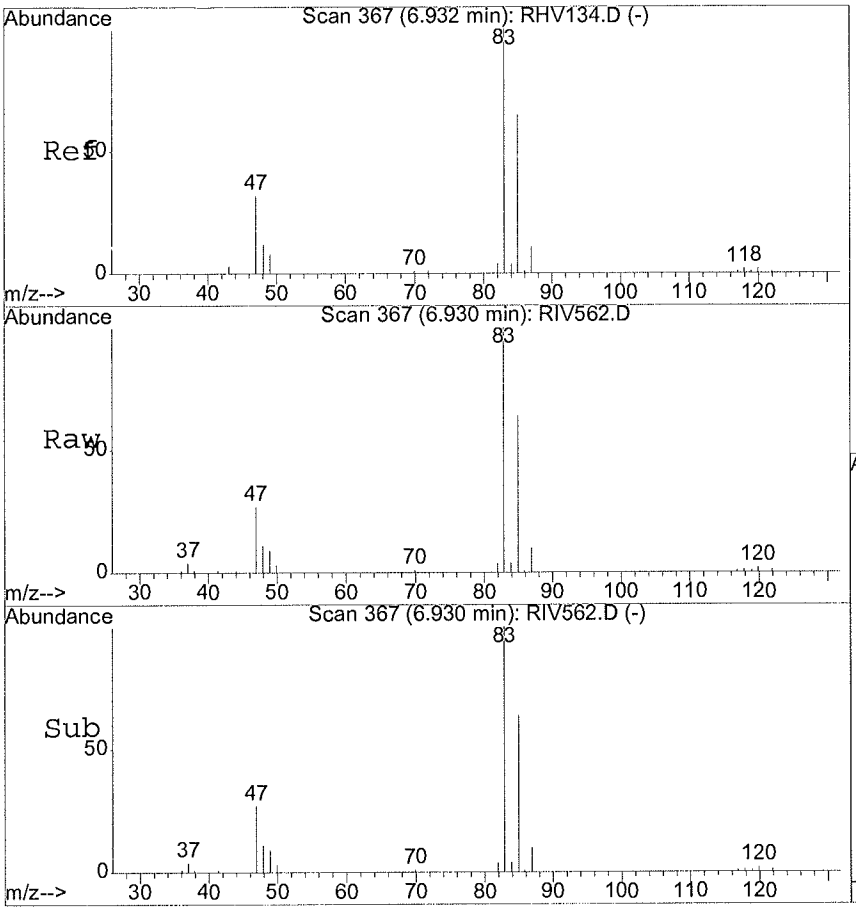
(#) = qualifier out of range (m) = manual integration
RIV562.D VO01H09.M Wed Oct 02 10:50:37 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV562.D Vial: 14
Acq On : 24 Sep 2024 7:25 am Operator: DNguye/CLing
Sample : 24I061-05 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:50 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

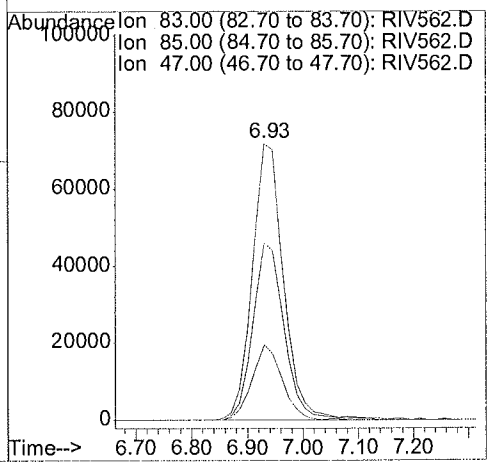


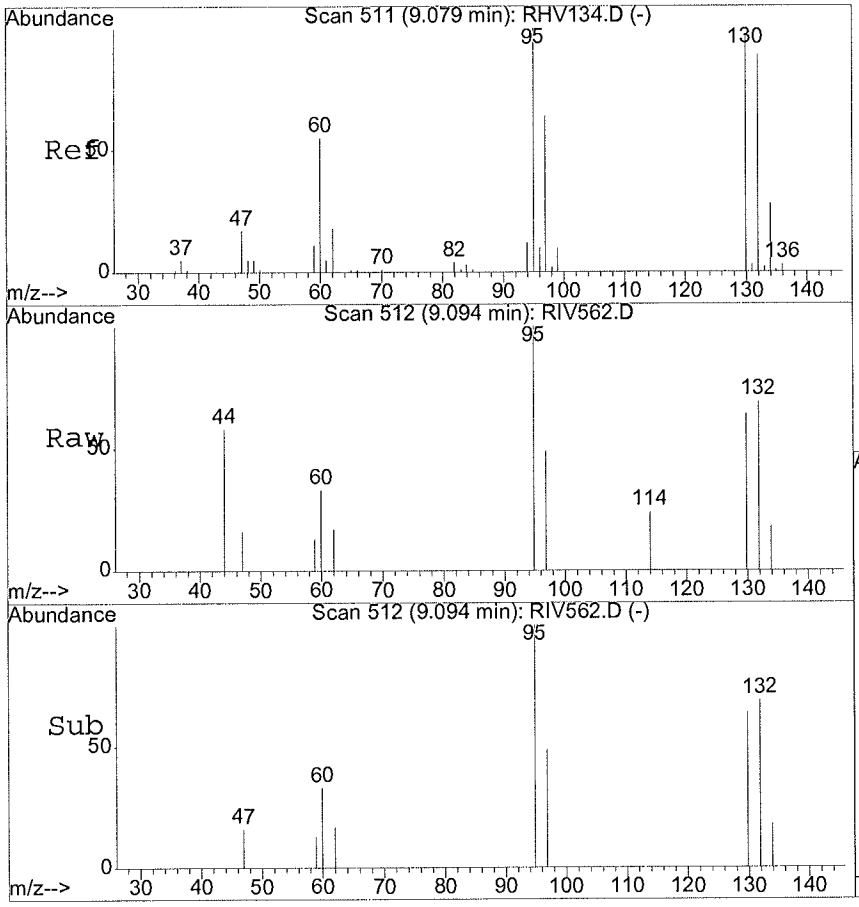


#31
Chloroform
Concen: 5.51 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV562.D
Acq: 24 Sep 2024 7:25 am

Tgt Ion: 83 Resp: 281724

Ion	Ratio	Lower	Upper
83	100		
85	64.2	38.4	98.4
47	26.0	0.0	59.6

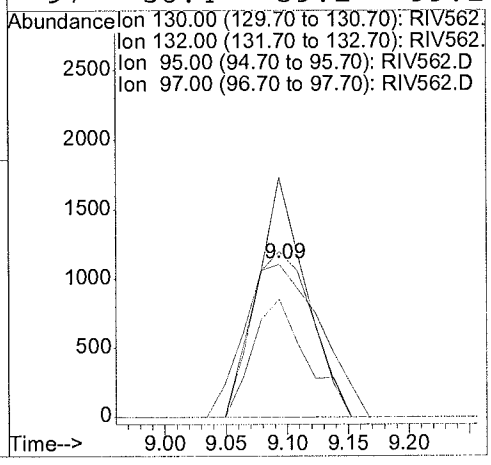


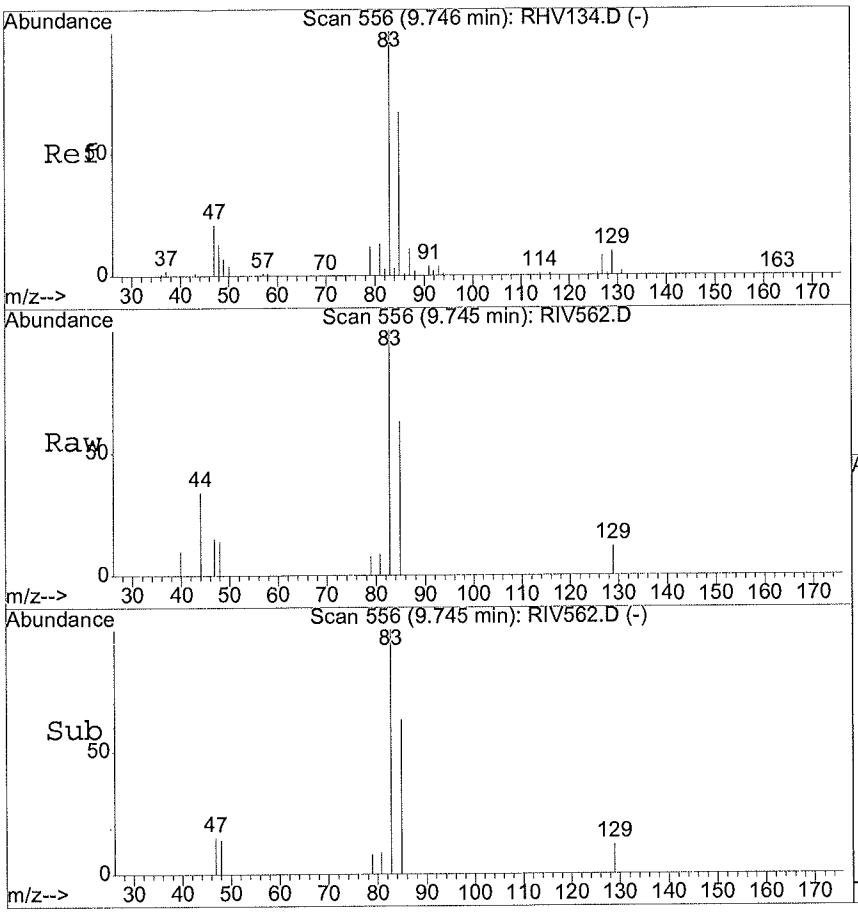


#44
Trichloroethene
Concen: 0.15 ug/l
RT: 9.09 min Scan# 512
Delta R.T. 0.01 min
Lab File: RIV562.D
Acq: 24 Sep 2024 7:25 am

Tgt Ion:130 Resp: 4506

Ion	Ratio	Lower	Upper
130	100		
132	92.6	62.7	122.7
95	113.9	72.0	132.0
97	58.4	39.1	99.1

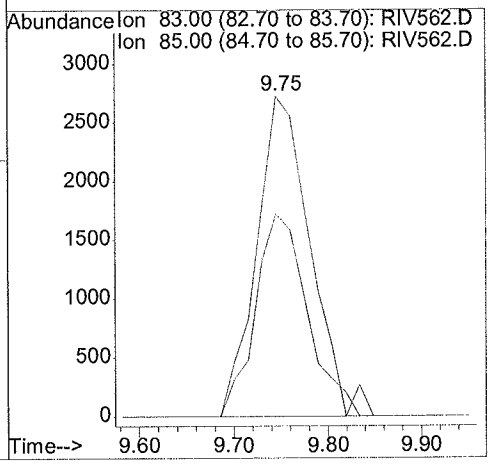


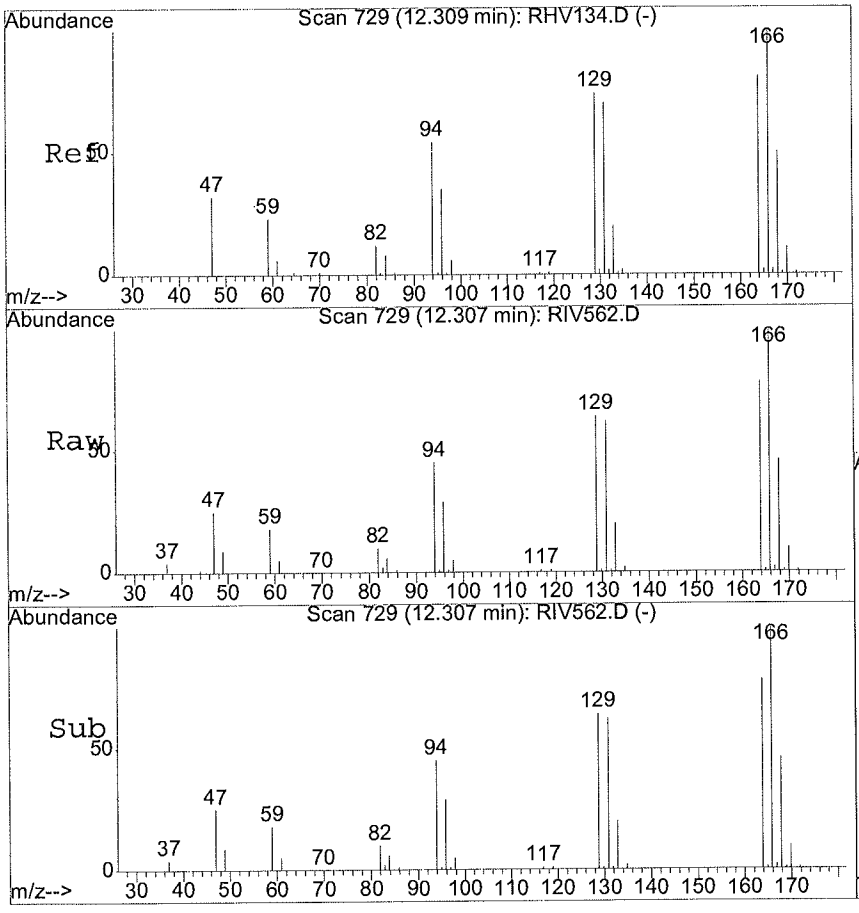


#47
Bromodichloromethane
Concen: 0.29 ug/l
RT: 9.75 min Scan# 556
Delta R.T. 0.00 min
Lab File: RIV562.D
Acq: 24 Sep 2024 7:25 am

Tgt Ion: 83 Resp: 10742

Ion	Ratio	Lower	Upper
83	100		
85	61.4	36.5	96.5

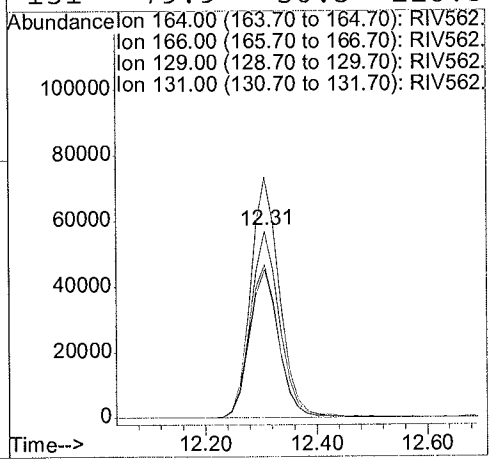




#61
Tetrachloroethene
Concen: 8.51 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV562.D
Acq: 24 Sep 2024 7:25 am

Tgt Ion:164 Resp: 205366

Ion	Ratio	Lower	Upper
164	100		
166	128.8	98.2	158.2
129	82.4	62.8	122.8
131	79.9	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM_SMITH	Date Collected:	09/10/24 12:20
Project	: VA_SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 07:55
Sample ID	: MW29B-GW091024	Date Analyzed:	09/24/24 07:55
Lab Samp ID:	24I061-06	Dilution Factor:	1
Lab File ID:	RIV563	Matrix:	WATER
Ext Btch ID:	VOOII21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.35J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	6.0	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.17J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	0.98J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	0.94J	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.2	10.0	112	70-130
Bromofluorobenzene	9.27	10.0	93	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV563.D Vial: 15
Acq On : 24 Sep 2024 7:55 am Operator: DNguye/CLingl
Sample : 24I061-06 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:53 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	825408	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	711983	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	357281	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	264708	10.55	ug/l	0.01
Spiked Amount 10.000			Recovery =	105.50%		
41) 1,2-Dichloroethane-d4	7.98	65	249993	11.20	ug/l	0.00
Spiked Amount 10.000			Recovery =	112.00%		
54) Toluene-d8	11.03	98	932914	10.72	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.20%		
76) 4-Bromofluorobenzene	16.01	95	420284	9.27	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.70%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	302099	6.02	ug/l	94
47) Bromodichloromethane	9.75	83	12614	0.35	ug/l	96
61) Tetrachloroethene	12.32	164	3424	0.14	ug/l	84
67) Ethylbenzene	13.89	91	22807	0.17	ug/l	95
68) m-Xylene & p-Xylene	14.02	91	102931	0.98	ug/l	91
69) o-Xylene	14.85	91	95341	0.94	ug/l	92

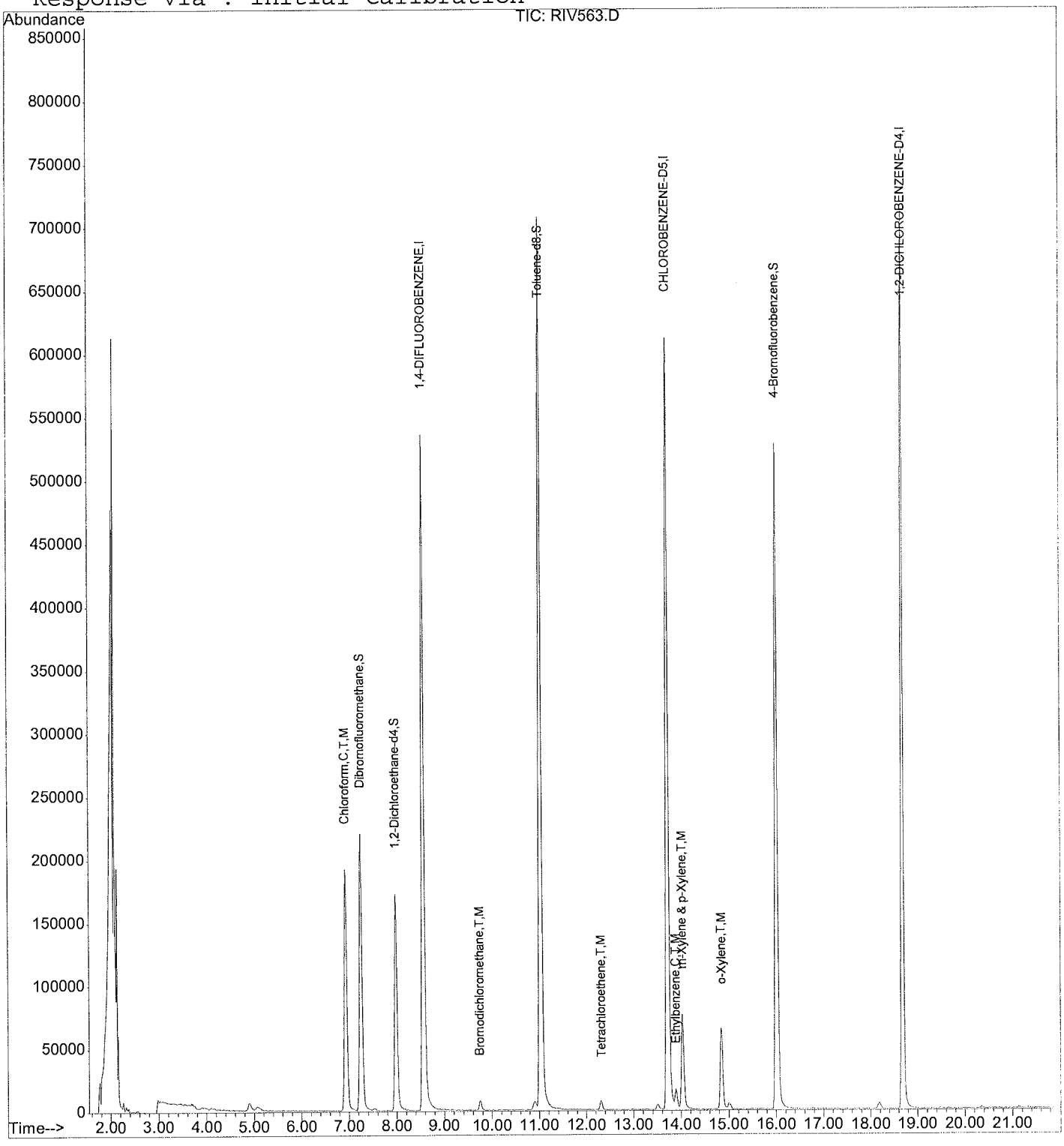
(#) = qualifier out of range (m) = manual integration

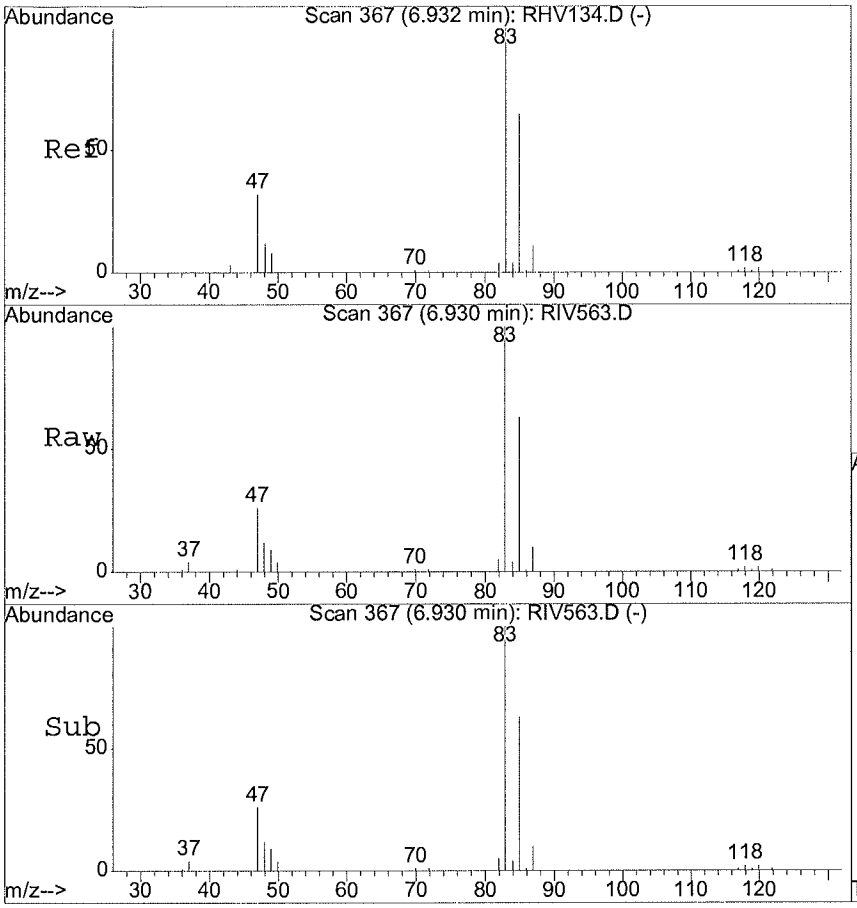
Data File : D:\HPCHEM\1\DATA\24I23\RIV563.D
Acq On : 24 Sep 2024 7:55 am
Sample : 24I061-06
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 10:53 2024

Vial: 15
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

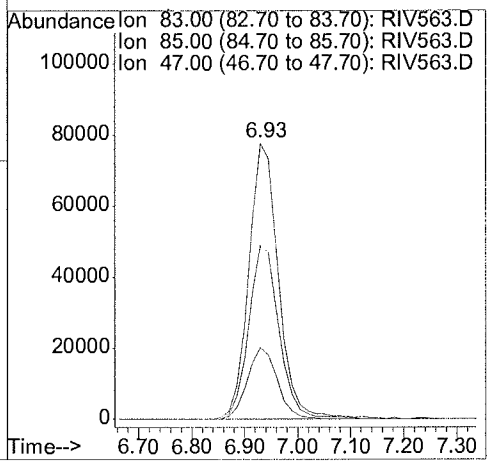


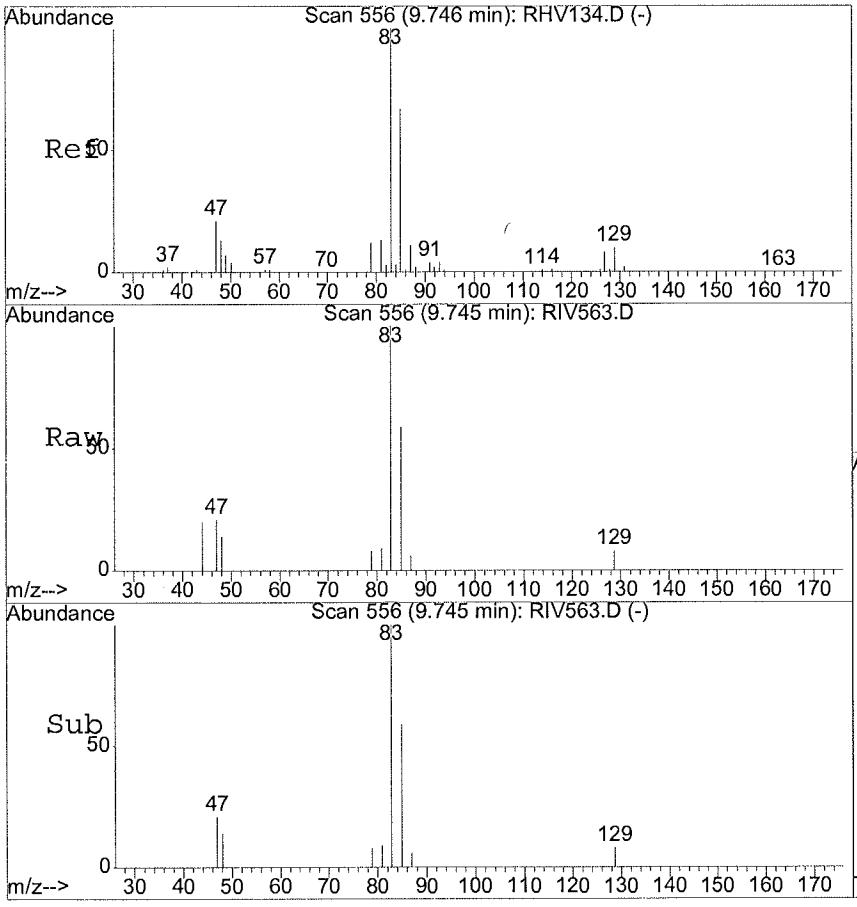


#31
Chloroform
Concen: 6.02 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV563.D
Acq: 24 Sep 2024 7:55 am

Tgt Ion: 83 Resp: 302099

Ion	Ratio	Lower	Upper
83	100		
85	64.3	38.4	98.4
47	26.0	0.0	59.6

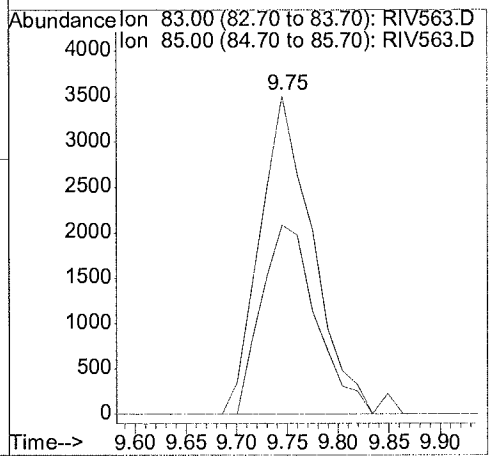


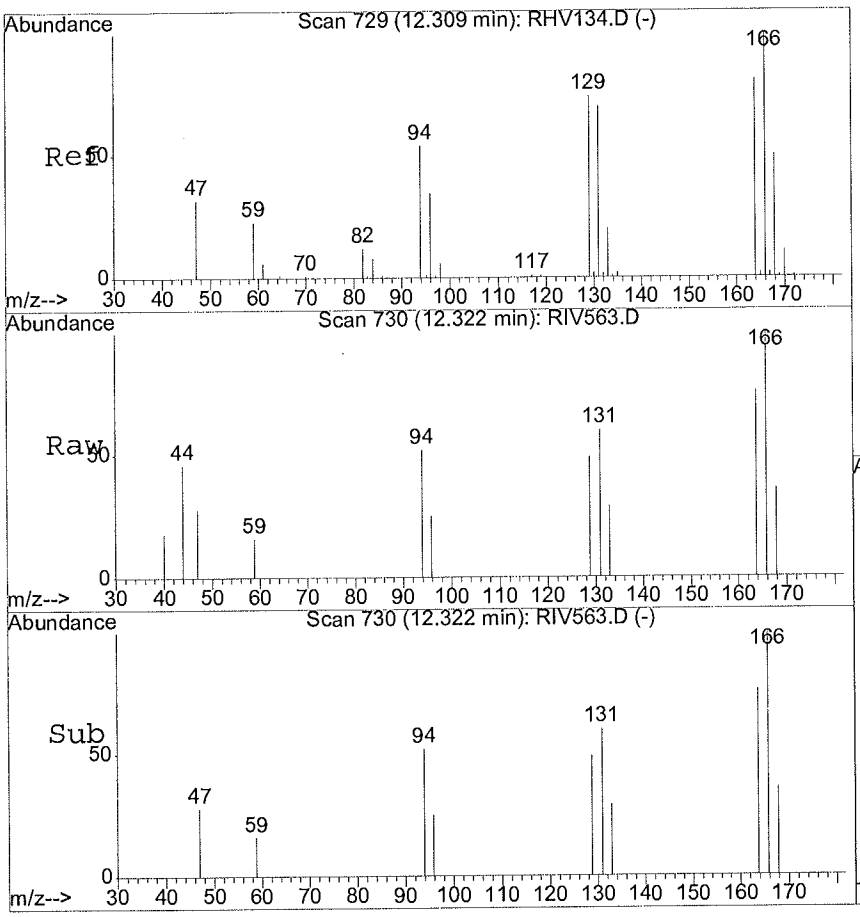


#47
Bromodichloromethane
Concen: 0.35 ug/l
RT: 9.75 min Scan# 556
Delta R.T. 0.00 min
Lab File: RIV563.D
Acq: 24 Sep 2024 7:55 am

Tgt Ion: 83 Resp: 12614

Ion	Ratio	Lower	Upper
83	100		
85	63.6	36.5	96.5

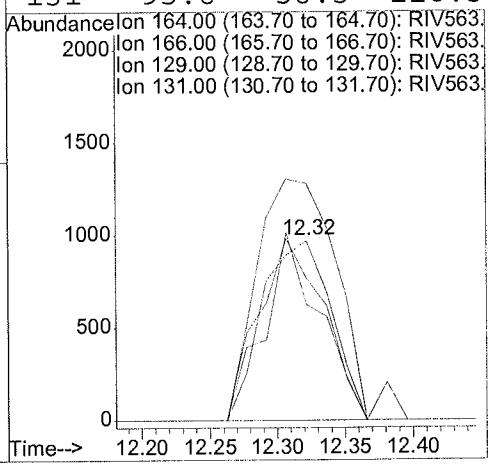


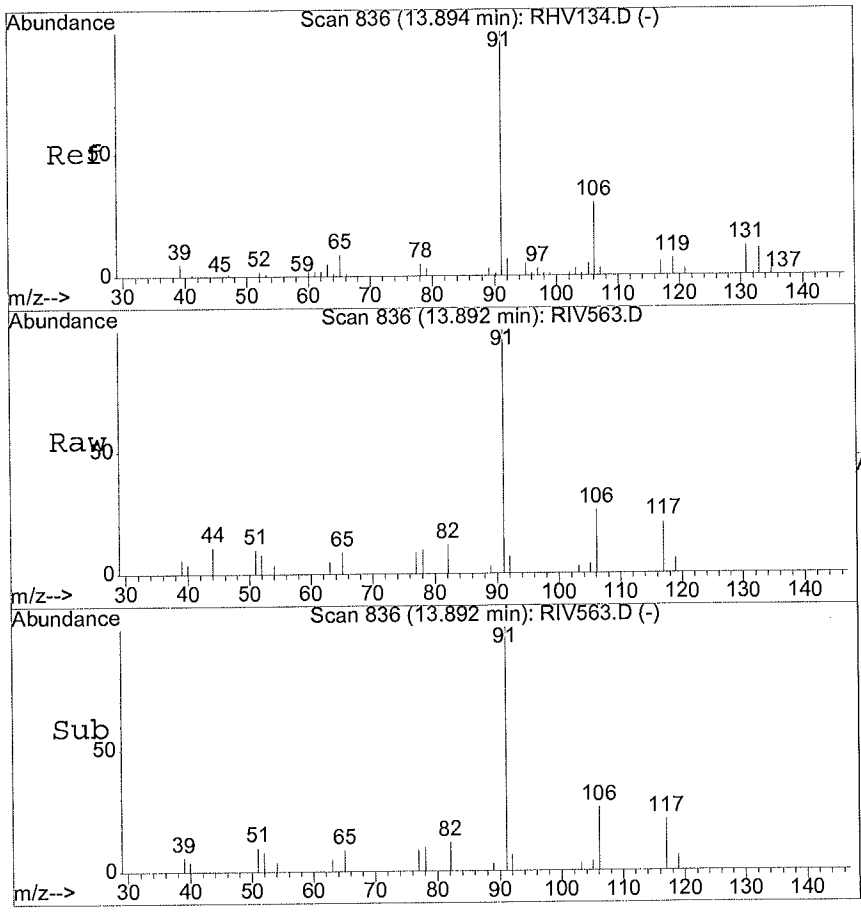


#61
Tetrachloroethene
Concen: 0.14 ug/l
RT: 12.32 min Scan# 730
Delta R.T. 0.01 min
Lab File: RIV563.D
Acq: 24 Sep 2024 7:55 am

Tgt Ion:164 Resp: 3424

Ion	Ratio	Lower	Upper
164	100		
166	158.1	98.2	158.2
129	84.5	62.8	122.8
131	95.8	58.3	118.3

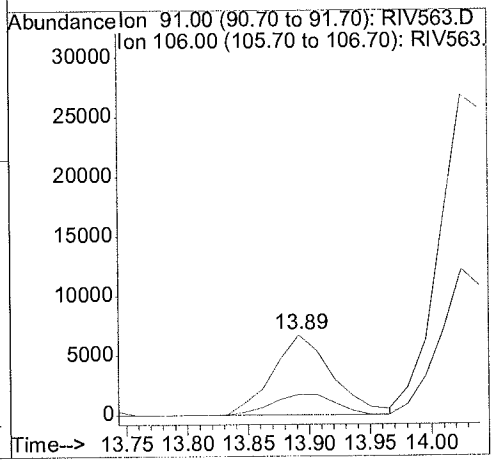


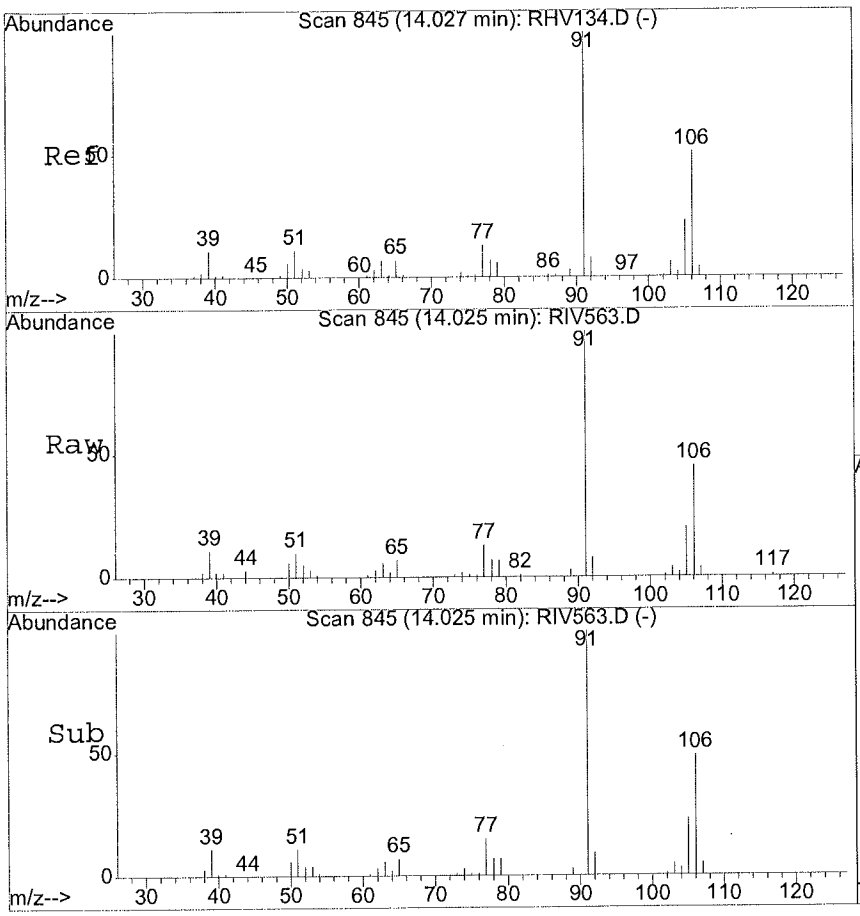


#67
Ethylbenzene
Concen: 0.17 ug/l
RT: 13.89 min Scan# 836
Delta R.T. -0.00 min
Lab File: RIV563.D
Acq: 24 Sep 2024 7:55 am

Tgt Ion: 91 Resp: 22807

Ion	Ratio	Lower	Upper
91	100		
106	27.1	0.0	59.6

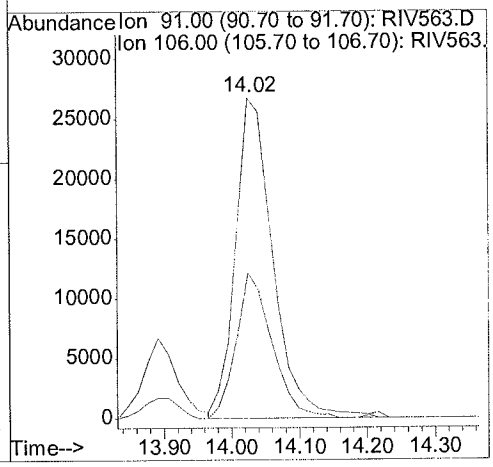


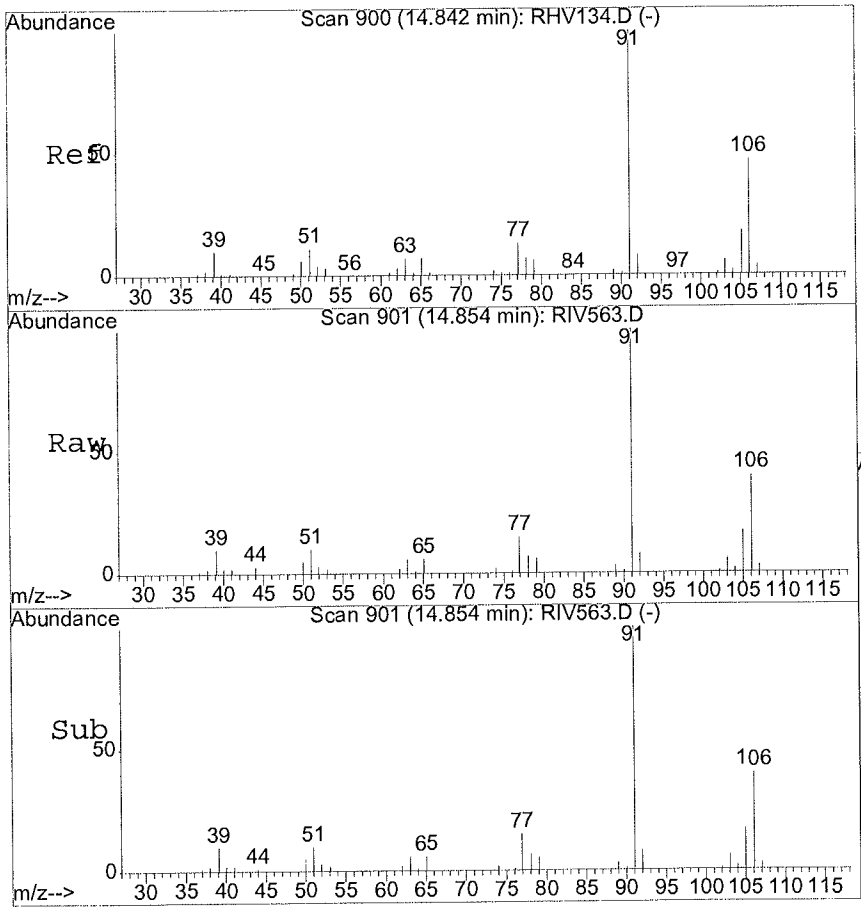


#68
m-Xylene & p-Xylene
Concen: 0.98 ug/l
RT: 14.02 min Scan# 845
Delta R.T. -0.00 min
Lab File: RIV563.D
Acq: 24 Sep 2024 7:55 am

Tgt Ion: 91 Resp: 102931

Ion	Ratio	Lower	Upper
91	100		
106	43.1	19.5	79.5

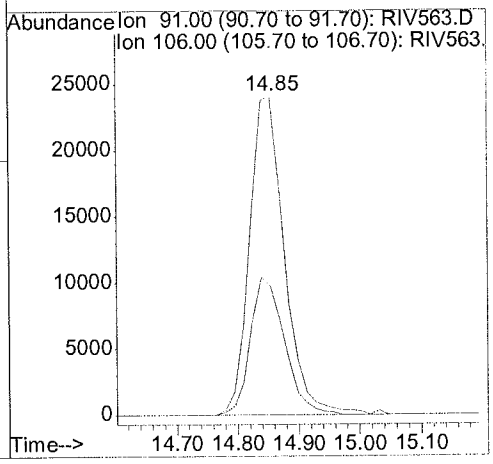




#69
o-Xylene
Concen: 0.94 ug/l
RT: 14.85 min Scan# 901
Delta R.T. 0.01 min
Lab File: RIV563.D
Acq: 24 Sep 2024 7:55 am

Tgt Ion: 91 Resp: 95341

Ion	Ratio	Lower	Upper
91	100		
106	42.4	17.6	77.6



METHOD SW50308/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/10/24 13:45
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 08:24
Sample ID	: MW29C-GW091024	Date Analyzed:	09/24/24 08:24
Lab Samp ID:	24I061-07	Dilution Factor:	1
Lab File ID:	RIV564	Matrix:	WATER
Ext Btch ID:	V001I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.41J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.9	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.24J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	1.4J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	1.0	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.4	10.0	114	70-130
Bromofluorobenzene	9.14	10.0	91	70-130
Toluene-d8	10.8	10.0	108	70-130
Dibromofluoromethane	10.6	10.0	106	70-130

Notes:
Sample Amount : 25ml
Prepared by : DNguye
Final Volume : 25ml
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV564.D Vial: 16
Acq On : 24 Sep 2024 8:24 am Operator: DNguye/CLingl
Sample : 24I061-07 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:52 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	805118	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	701413	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	359008	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	258441	10.56	ug/l	0.01
Spiked Amount 10.000			Recovery =	105.60%		
41) 1,2-Dichloroethane-d4	7.98	65	249145	11.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	114.50%		
54) Toluene-d8	11.03	98	926562	10.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.10%		
76) 4-Bromofluorobenzene	16.01	95	416189	9.14	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.40%		
Target Compounds						Qvalue
31) Chloroform	6.95	83	240928	4.92	ug/l	94
47) Bromodichloromethane	9.74	83	14499	0.41	ug/l	94
67) Ethylbenzene	13.89	91	31988	0.24	ug/l	100
68) m-Xylene & p-Xylene	14.04	91	146005	1.41	ug/l	95
69) o-Xylene	14.85	91	104230	1.04	ug/l	90

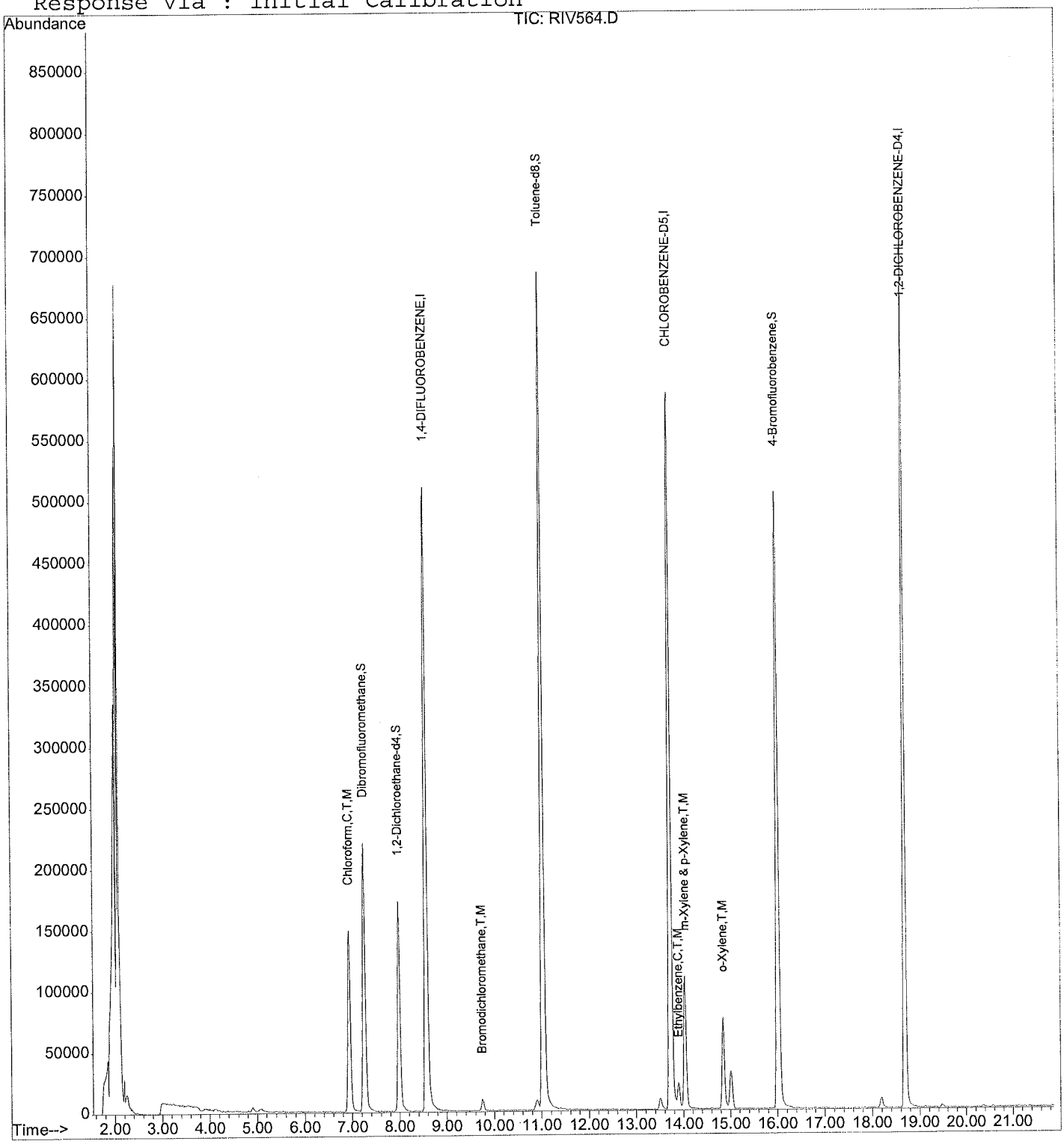
(#) = qualifier out of range (m) = manual integration

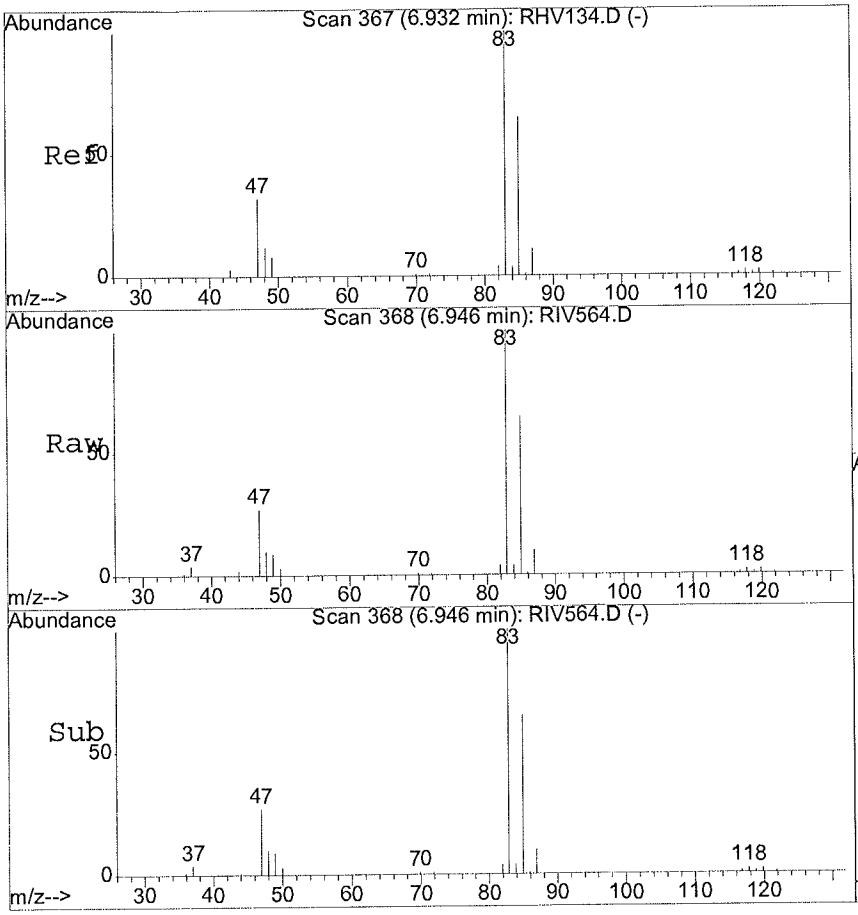
Data File : D:\HPCHEM\1\DATA\24I23\RIV564.D
Acq On : 24 Sep 2024 8:24 am
Sample : 24I061-07
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 10:52 2024

Vial: 16
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

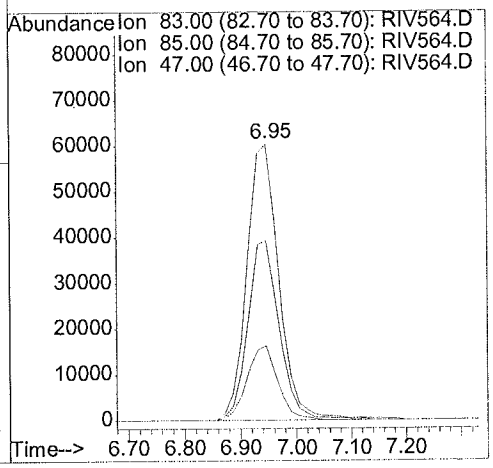


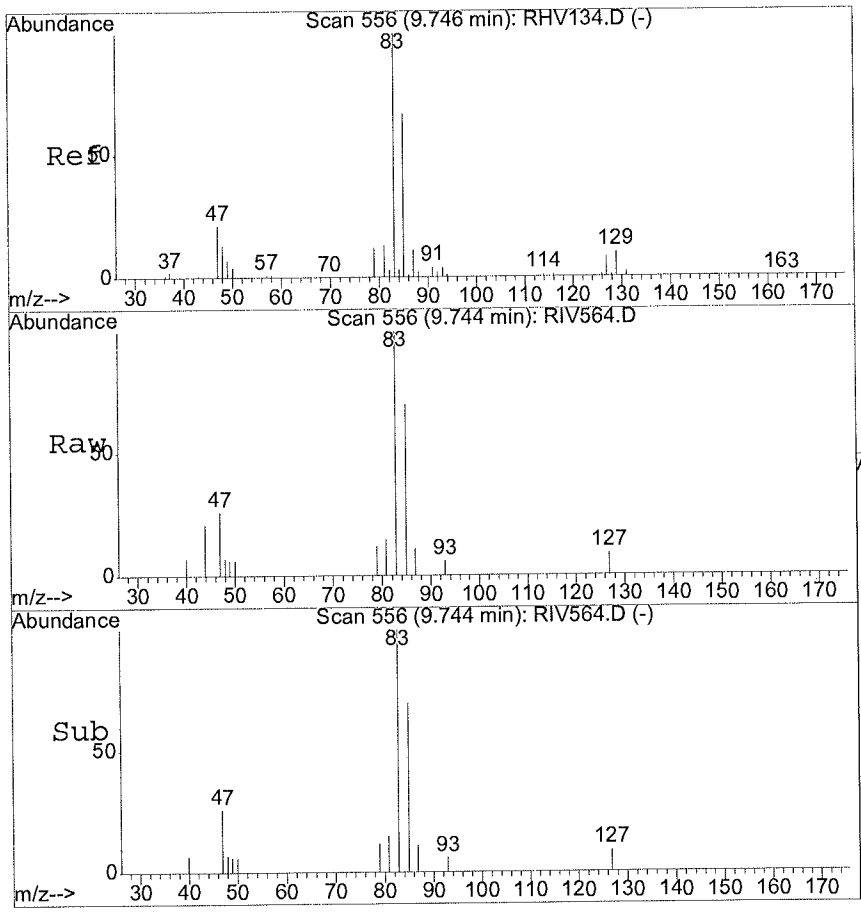


#31
Chloroform
Concen: 4.92 ug/l
RT: 6.95 min Scan# 368
Delta R.T. 0.01 min
Lab File: RIV564.D
Acq: 24 Sep 2024 8:24 am

Tgt Ion: 83 Resp: 240928

Ion	Ratio	Lower	Upper
83	100		
85	63.6	38.4	98.4
47	25.9	0.0	59.6

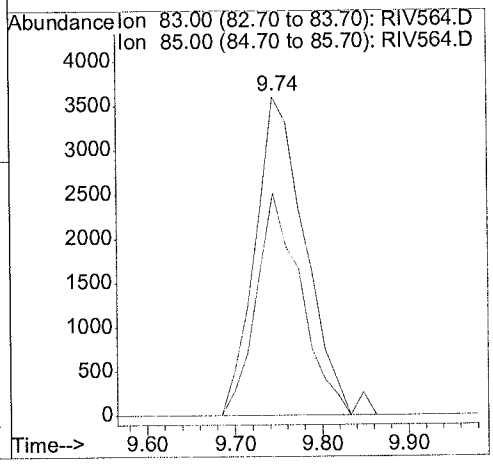


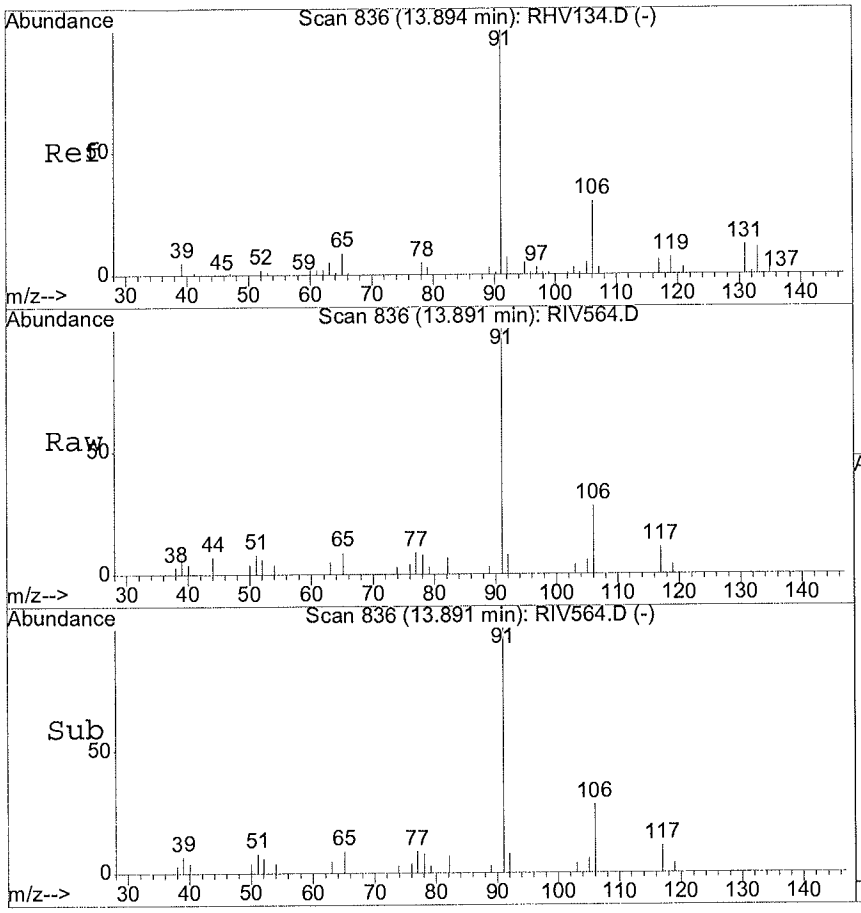


#47
Bromodichloromethane
Concen: 0.41 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RIV564.D
Acq: 24 Sep 2024 8:24 am

Tgt Ion: 83 Resp: 14499

Ion	Ratio	Lower	Upper
83	100		
85	61.9	36.5	96.5

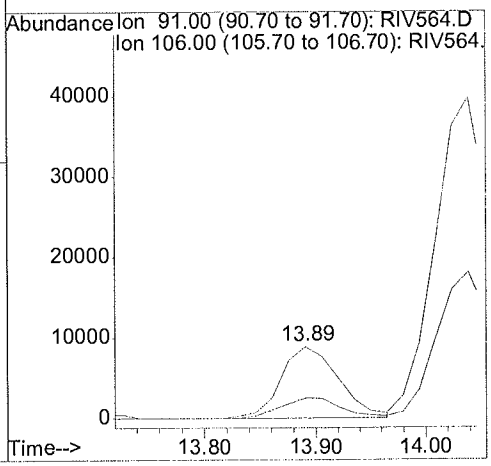


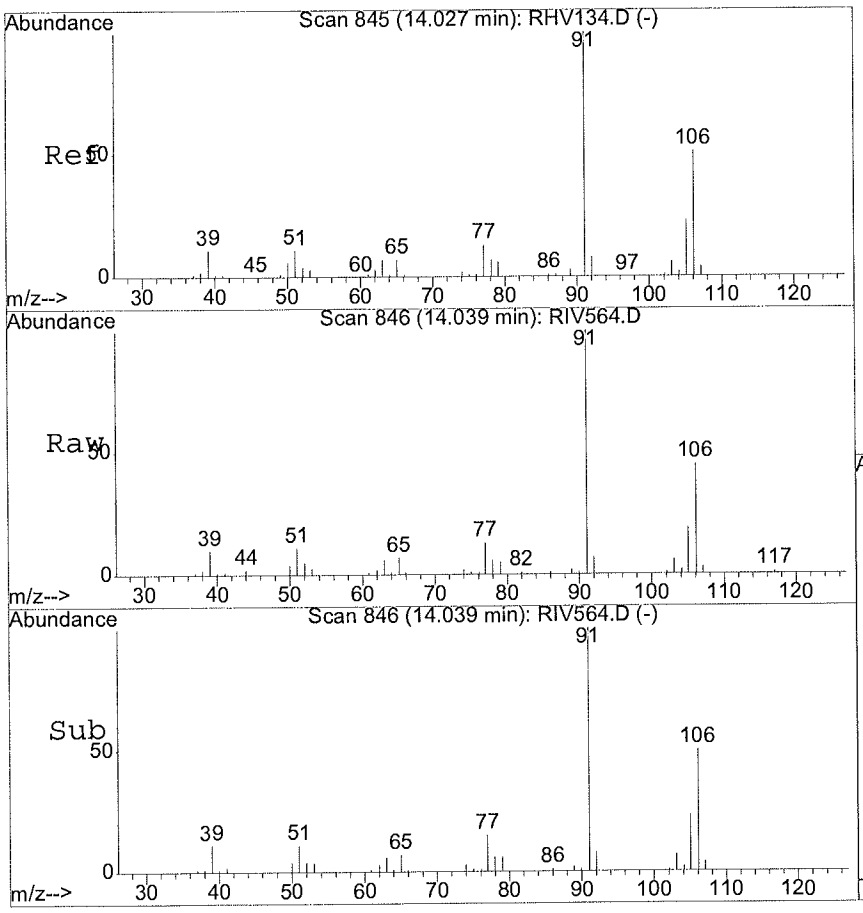


#67
Ethylbenzene
Concen: 0.24 ug/l
RT: 13.89 min Scan# 836
Delta R.T. -0.00 min
Lab File: RIV564.D
Acq: 24 Sep 2024 8:24 am

Tgt Ion: 91 Resp: 31988

Ion	Ratio	Lower	Upper
91	100		
106	29.6	0.0	59.6

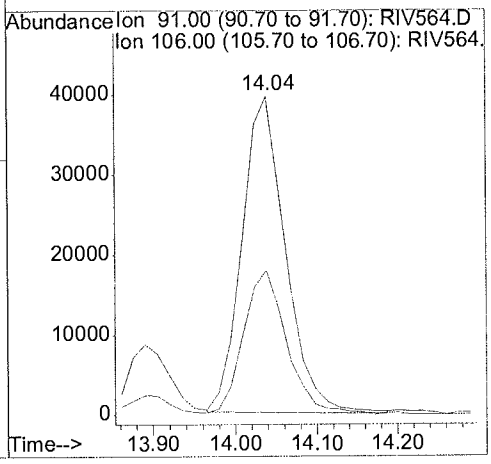


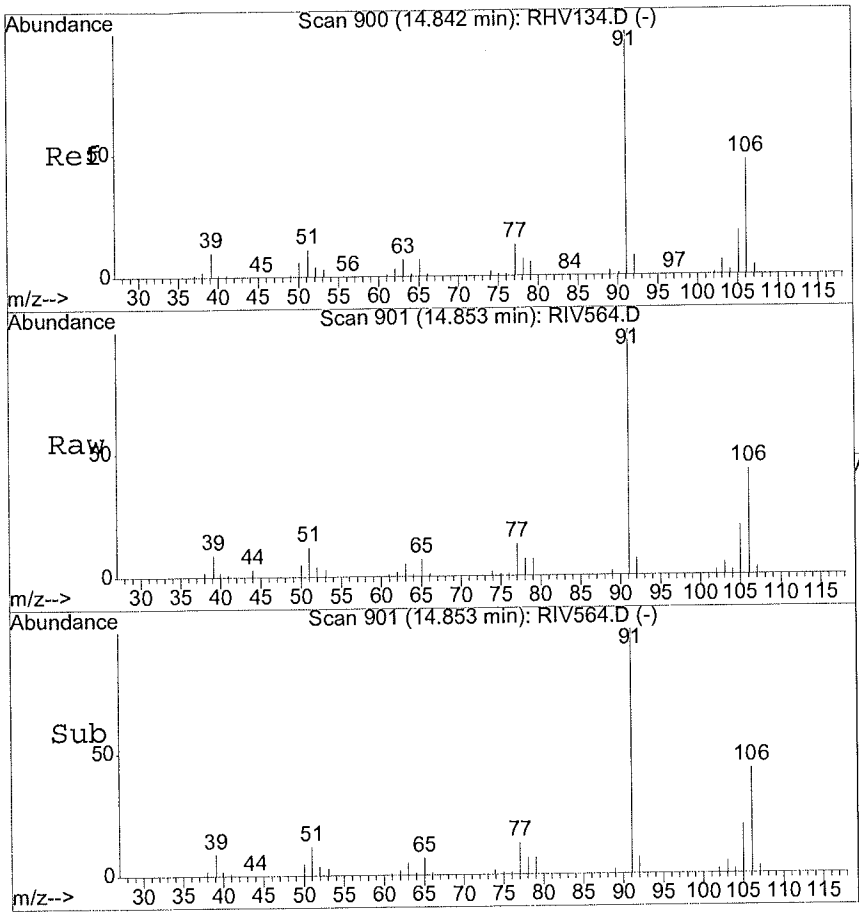


#68
m-Xylene & p-Xylene
Concen: 1.41 ug/l
RT: 14.04 min Scan# 846
Delta R.T. 0.01 min
Lab File: RIV564.D
Acq: 24 Sep 2024 8:24 am

Tgt Ion: 91 Resp: 146005

Ion	Ratio	Lower	Upper
91	100		
106	45.9	19.5	79.5

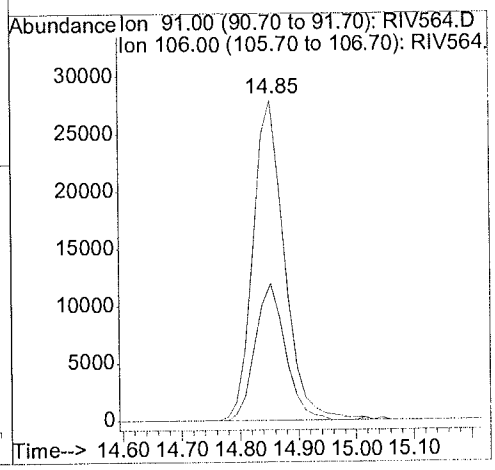




#69
o-Xylene
Concen: 1.04 ug/l
RT: 14.85 min Scan# 901
Delta R.T. 0.01 min
Lab File: RIV564.D
Acq: 24 Sep 2024 8:24 am

Tgt Ion: 91 Resp: 104230

Ion	Ratio	Lower	Upper
91	100		
106	41.1	17.6	77.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/10/24 17:40
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 08:54
Sample ID	: MW31A-GW091024	Date Analyzed:	09/24/24 08:54
Lab Samp ID:	24I061-08	Dilution Factor:	1
Lab File ID:	RIV565	Matrix:	WATER
Ext Btch ID:	VO01I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.19J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.9	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.19J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	0.98J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	1.1	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.57J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.3	10.0	113	70-130
Bromofluorobenzene	9.12	10.0	91	70-130
Toluene-d8	10.5	10.0	105	70-130
Dibromofluoromethane	10.6	10.0	106	70-130

Notes:
Sample Amount : 25ml
Prepared by : DNguye
Final Volume : 25ml
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV565.D
Acq On : 24 Sep 2024 8:54 am
Sample : 24I061-08
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 10:53 2024

Vial: 17
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	805401	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	697482	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	353933	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	258517	10.56	ug/l	0.01
Spiked Amount 10.000			Recovery =	105.60%		
41) 1,2-Dichloroethane-d4	7.98	65	246581	11.32	ug/l	0.00
Spiked Amount 10.000			Recovery =	113.20%		
54) Toluene-d8	11.03	98	894343	10.49	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.90%		
76) 4-Bromofluorobenzene	16.01	95	409393	9.12	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.20%		
Target Compounds						Qvalue
31) Chloroform	6.95	83	92413	1.89	ug/l	92
47) Bromodichloromethane	9.76	83	6640	0.19	ug/l	99
61) Tetrachloroethene	12.31	164	13612	0.57	ug/l	93
67) Ethylbenzene	13.91	91	24446	0.19	ug/l	95
68) m-Xylene & p-Xylene	14.04	91	101596	0.98	ug/l	92
69) o-Xylene	14.85	91	113588	1.14	ug/l	92

(#) = qualifier out of range (m) = manual integration

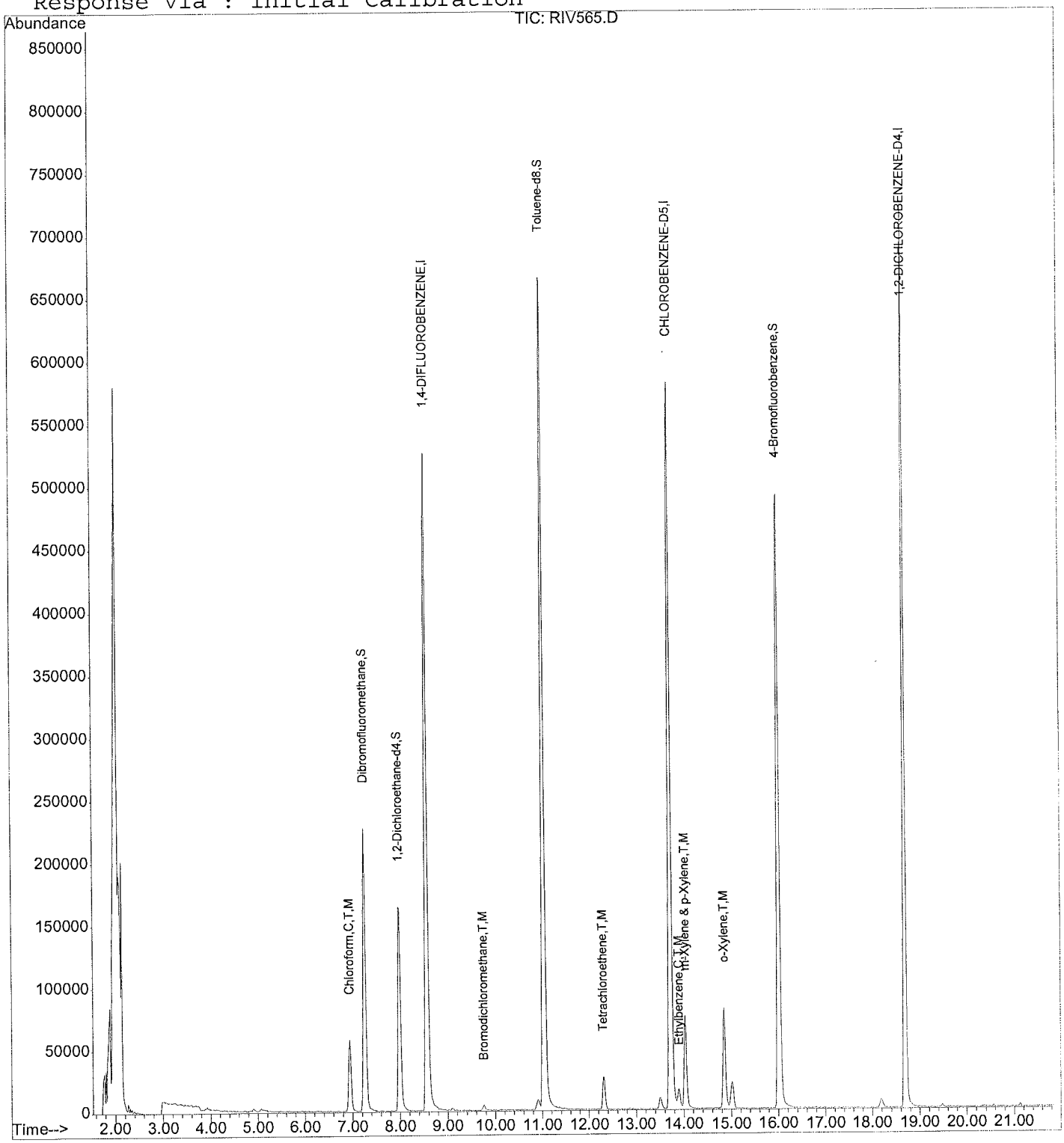
Quantitation Report

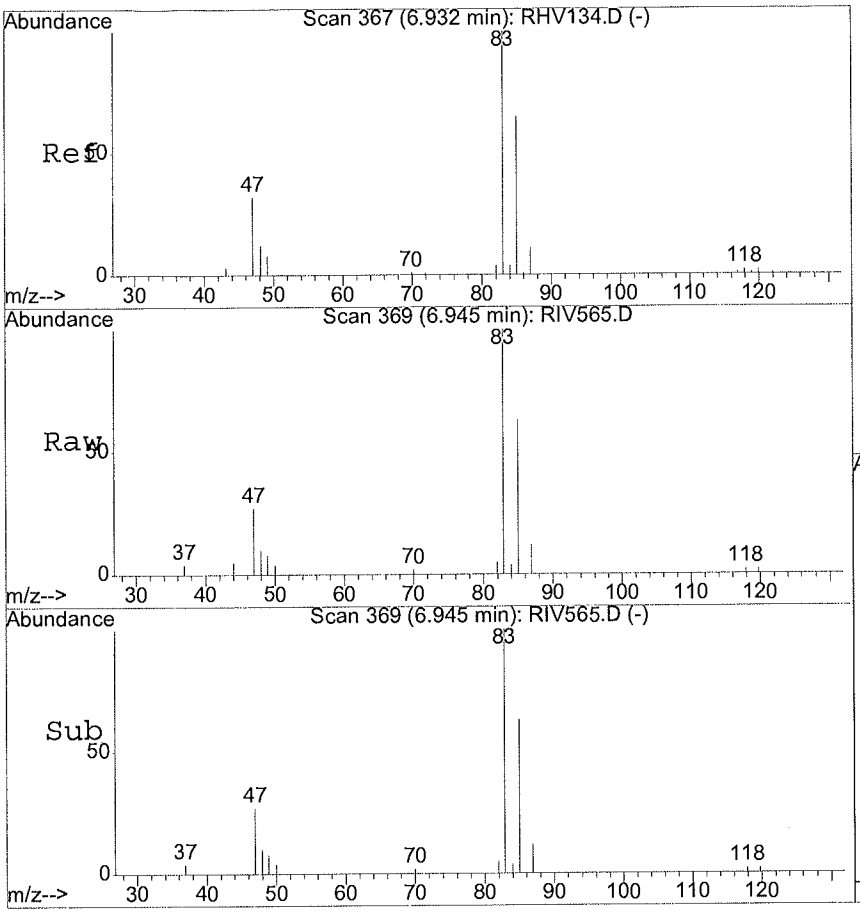
Data File : D:\HPCHEM\1\DATA\24I23\RIV565.D
Acq On : 24 Sep 2024 8:54 am
Sample : 24I061-08
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 10:53 2024

Vial: 17
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

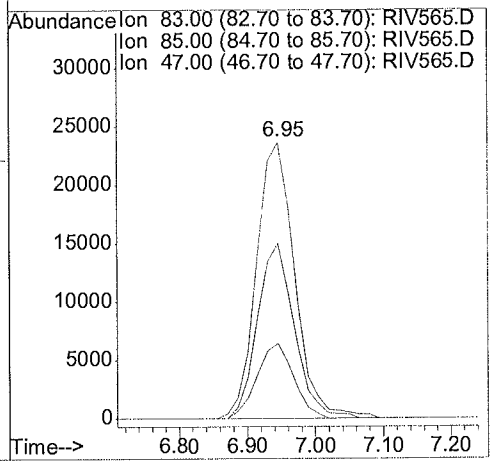


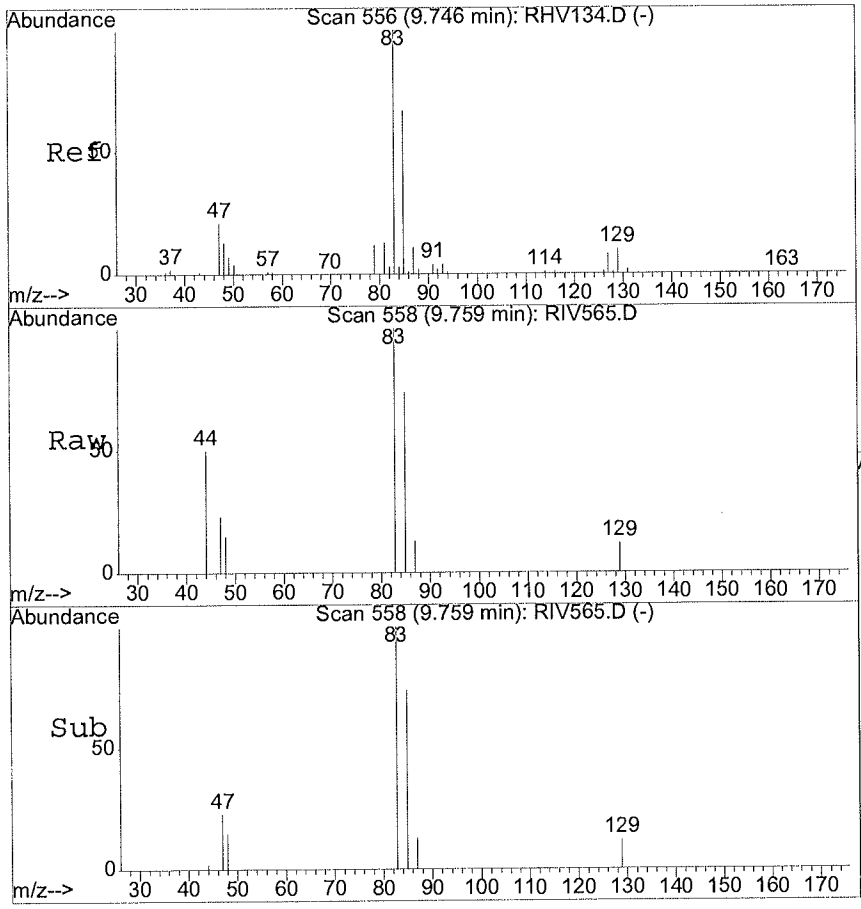


#31
Chloroform
Concen: 1.89 ug/l
RT: 6.95 min Scan# 369
Delta R.T. 0.01 min
Lab File: RIV565.D
Acq: 24 Sep 2024 8:54 am

Tgt Ion: 83 Resp: 92413

Ion	Ratio	Lower	Upper
83	100		
85	61.1	38.4	98.4
47	26.1	0.0	59.6

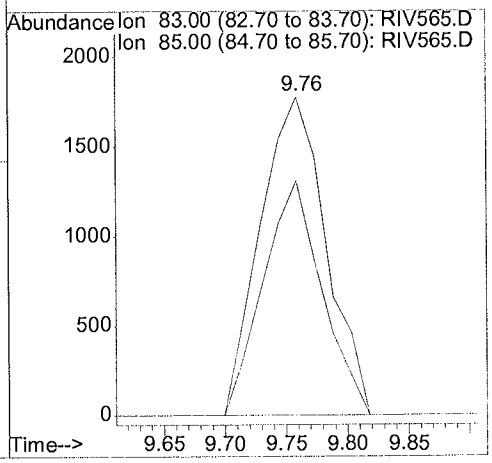


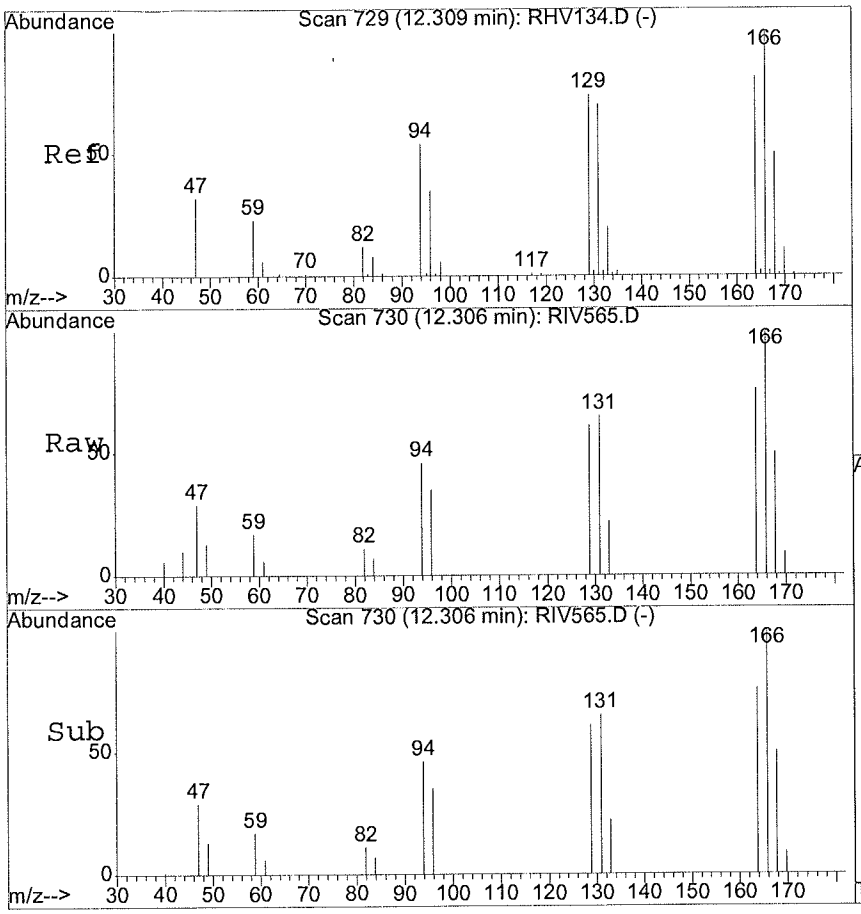


#47
Bromodichloromethane
Concen: 0.19 ug/l
RT: 9.76 min Scan# 558
Delta R.T. 0.01 min
Lab File: RIV565.D
Acq: 24 Sep 2024 8:54 am

Tgt Ion: 83 Resp: 6640

Ion	Ratio	Lower	Upper
83	100		
85	66.0	36.5	96.5

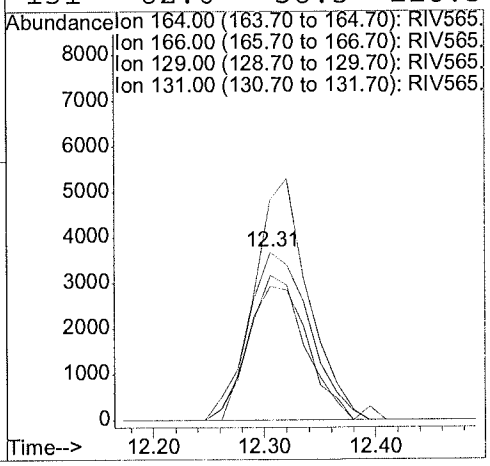


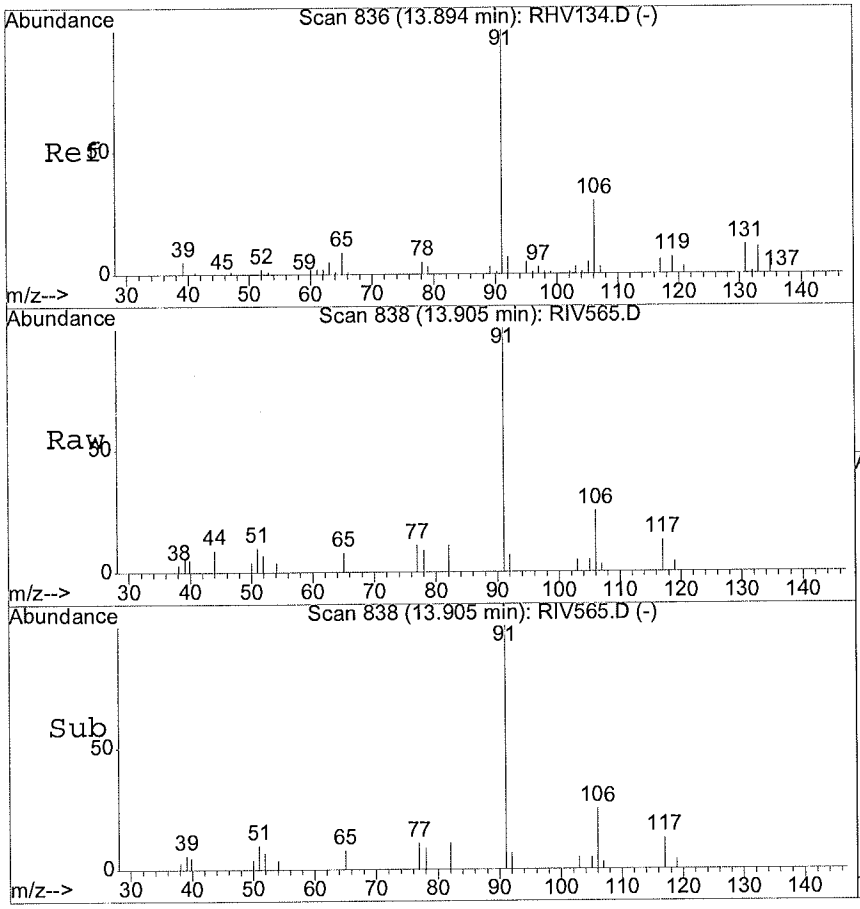


#61
Tetrachloroethene
Concen: 0.57 ug/l
RT: 12.31 min Scan# 730
Delta R.T. -0.00 min
Lab File: RIV565.D
Acq: 24 Sep 2024 8:54 am

Tgt Ion:164 Resp: 13612

Ion	Ratio	Lower	Upper
164	100		
166	132.4	98.2	158.2
129	81.7	62.8	122.8
131	82.6	58.3	118.3

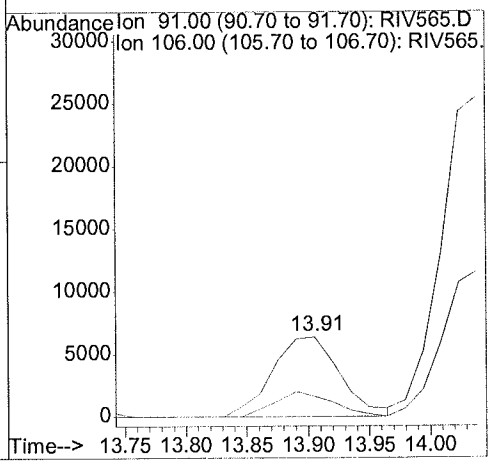


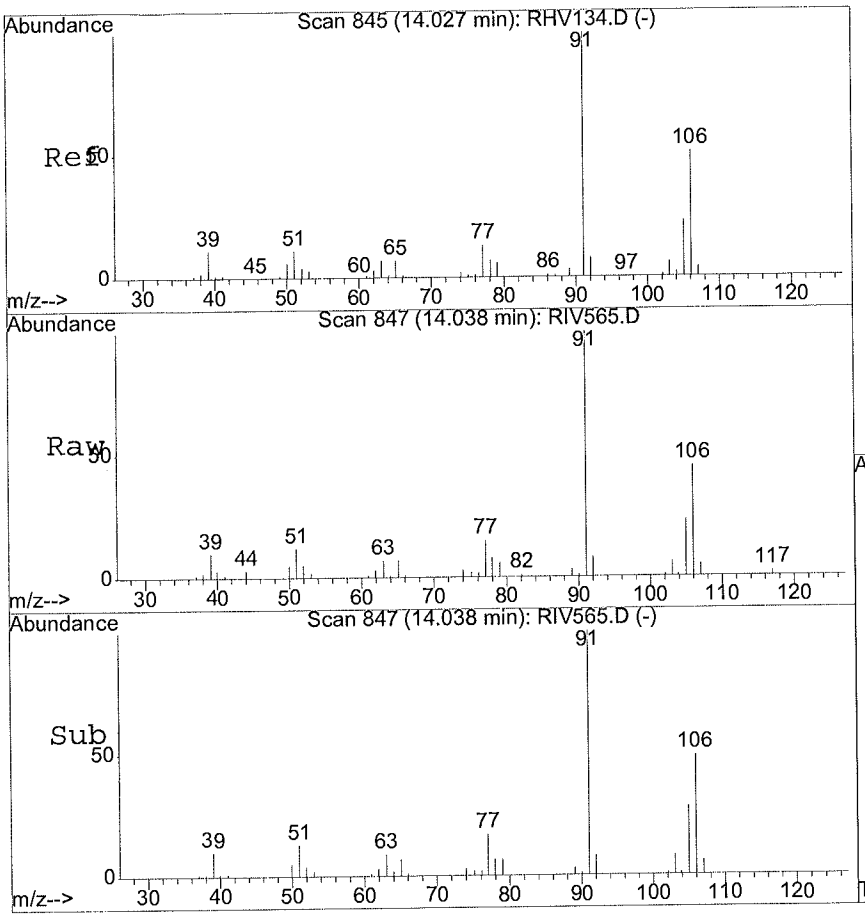


#67
Ethylbenzene
Concen: 0.19 ug/l
RT: 13.91 min Scan# 838
Delta R.T. 0.01 min
Lab File: RIV565.D
Acq: 24 Sep 2024 8:54 am

Tgt Ion: 91 Resp: 24446

Ion	Ratio	Lower	Upper
91	100		
106	26.8	0.0	59.6

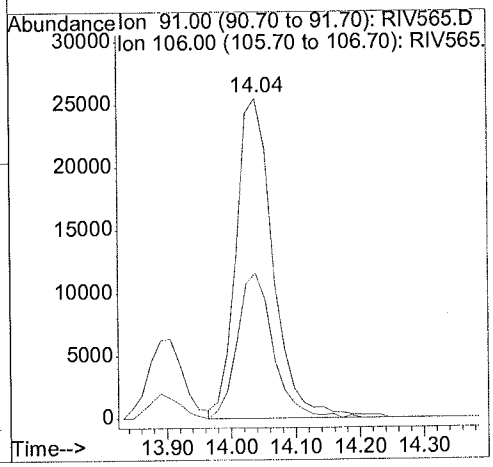


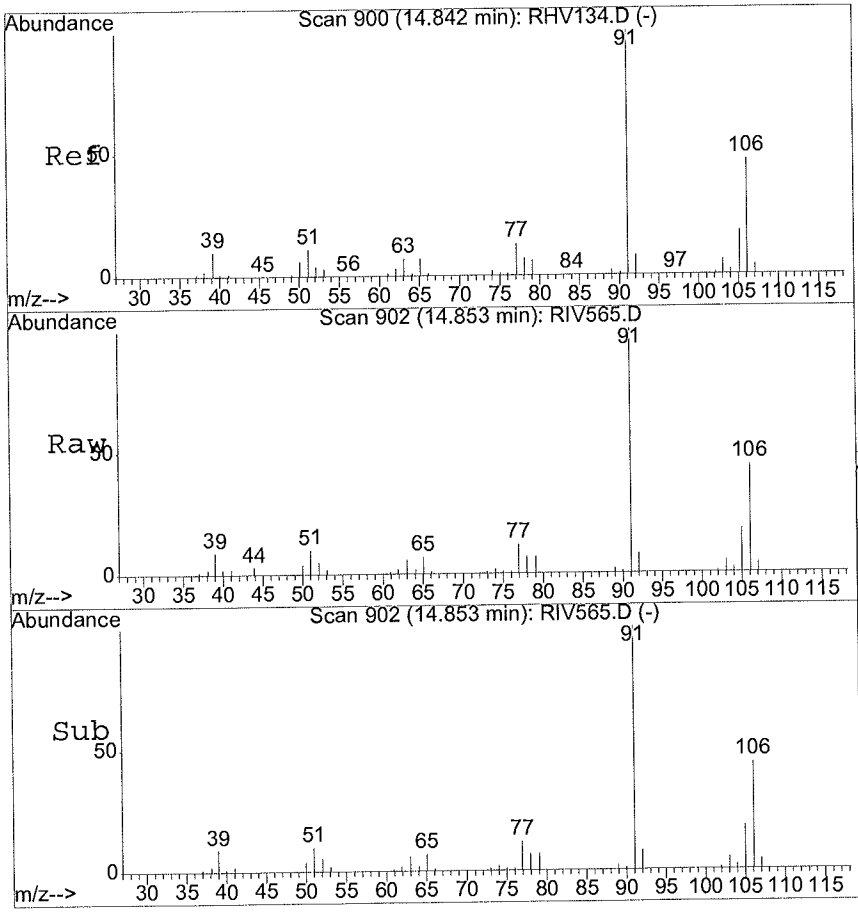


#68
m-Xylene & p-Xylene
Concen: 0.98 ug/l
RT: 14.04 min Scan# 847
Delta R.T. 0.01 min
Lab File: RIV565.D
Acq: 24 Sep 2024 8:54 am

Tgt Ion: 91 Resp: 101596

Ion	Ratio	Lower	Upper
91	100		
106	44.0	19.5	79.5

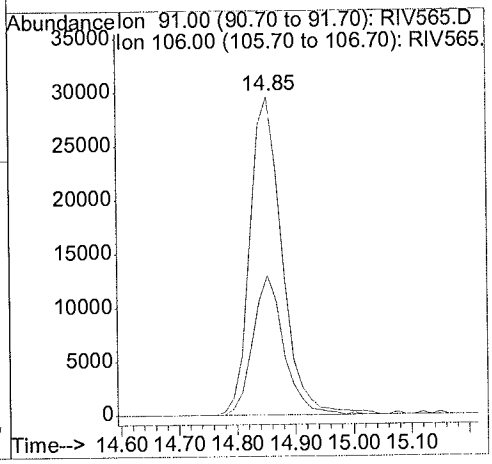




#69
o-Xylene
Concen: 1.14 ug/l
RT: 14.85 min Scan# 902
Delta R.T. 0.01 min
Lab File: RIV565.D
Acq: 24 Sep 2024 8:54 am

Tgt Ion: 91 Resp: 113588

Ion	Ratio	Lower	Upper
91	100		
106	42.4	17.6	77.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/10/24 16:25
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 09:23
Sample ID	: MW31B-GW091024	Date Analyzed:	09/24/24 09:23
Lab Samp ID:	24I061-09	Dilution Factor:	1
Lab File ID:	RIV566	Matrix:	WATER
Ext Btch ID:	V001I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.41J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.5	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.38J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	2.5	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	2.3	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.2	10.0	112	70-130
Bromofluorobenzene	9.14	10.0	91	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV566.D
Acq On : 24 Sep 2024 9:23 am
Sample : 24I061-09
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 10:54 2024

Vial: 18
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	785615	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	685669	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	348547	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	251121	10.51	ug/l	0.01
Spiked Amount 10.000			Recovery =	105.10%		
41) 1,2-Dichloroethane-d4	7.98	65	237212	11.17	ug/l	0.00
Spiked Amount 10.000			Recovery =	111.70%		
54) Toluene-d8	11.03	98	897494	10.71	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.10%		
76) 4-Bromofluorobenzene	16.01	95	404176	9.14	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.40%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	213349	4.47	ug/l	95
47) Bromodichloromethane	9.74	83	14144	0.41	ug/l	95
67) Ethylbenzene	13.89	91	49224	0.38	ug/l	98
68) m-Xylene & p-Xylene	14.02	91	256999	2.53	ug/l	95
69) o-Xylene	14.84	91	222315	2.27	ug/l	91

(#) = qualifier out of range (m) = manual integration

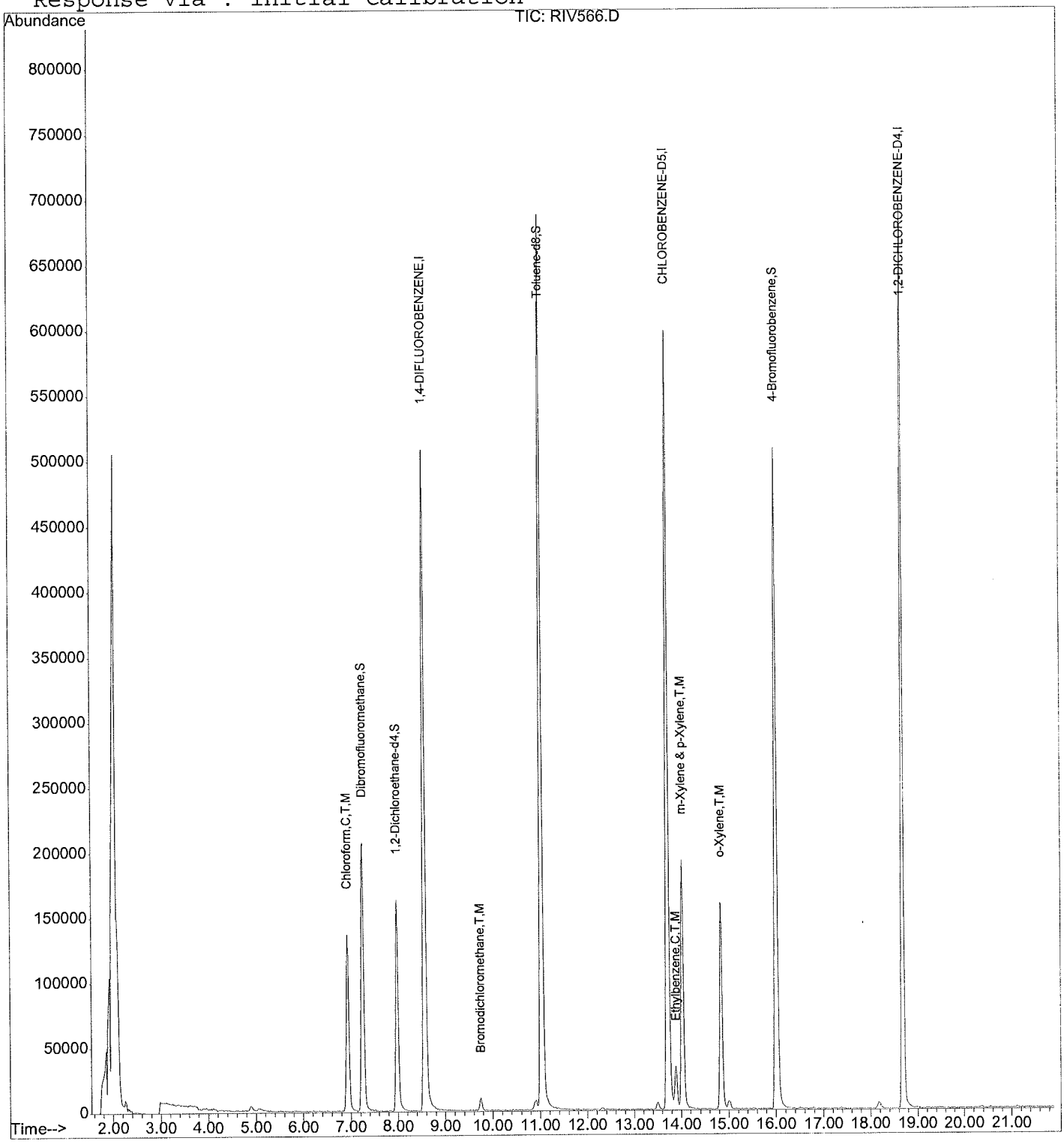
Quantitation Report

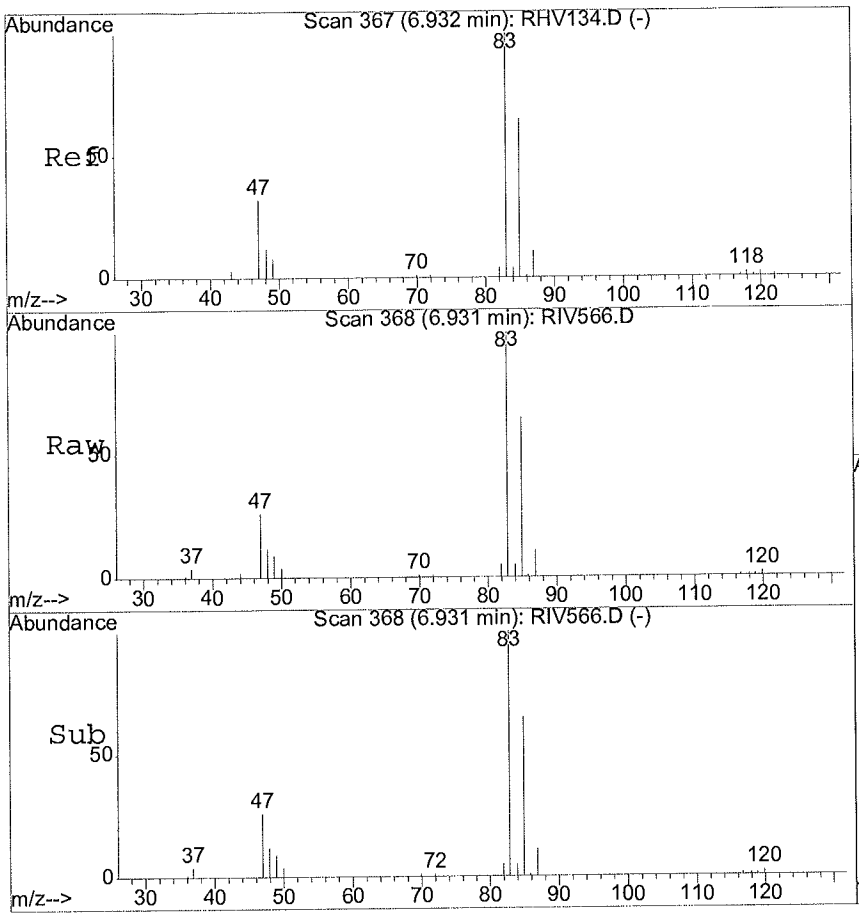
Data File : D:\HPCHEM\1\DATA\24I23\RIV566.D
Acq On : 24 Sep 2024 9:23 am
Sample : 24I061-09
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 10:54 2024

Vial: 18
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

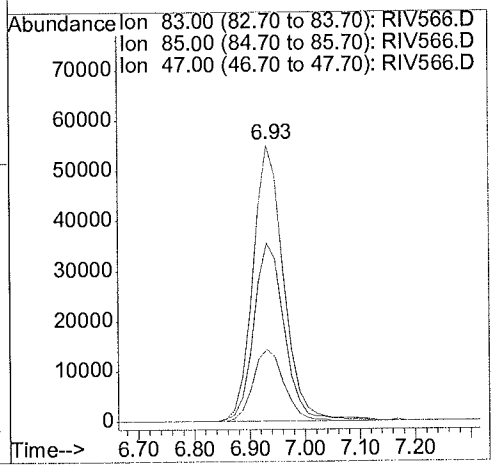


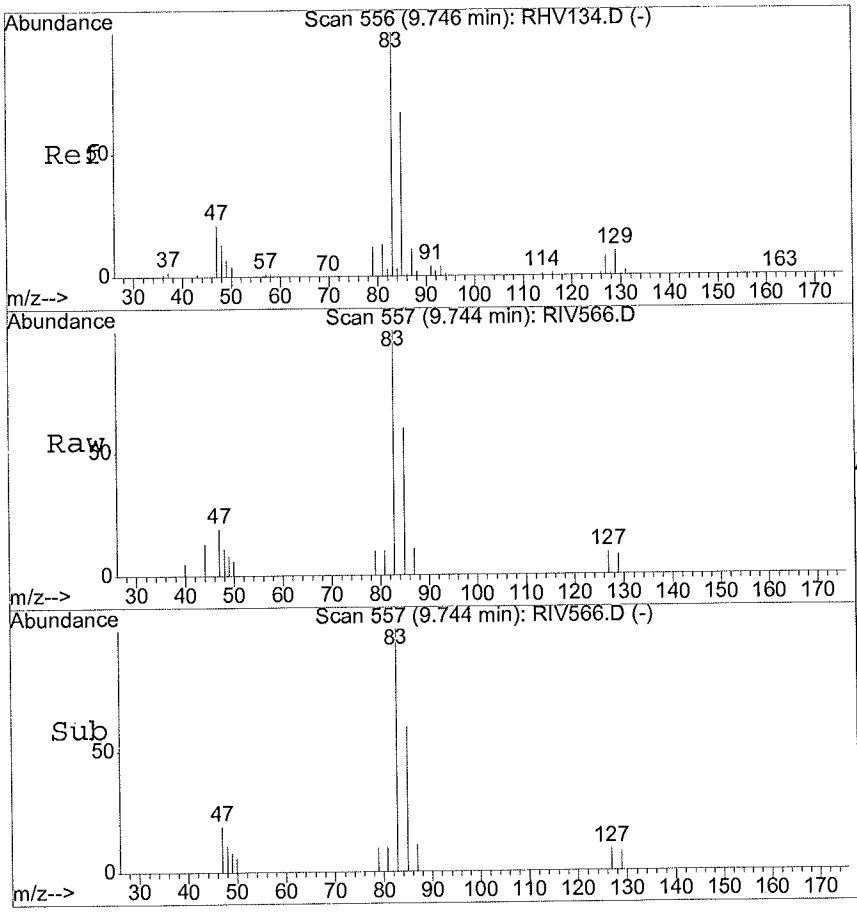


#31
Chloroform
Concen: 4.47 ug/l
RT: 6.93 min Scan# 368
Delta R.T. 0.00 min
Lab File: RIV566.D
Acq: 24 Sep 2024 9:23 am

Tgt Ion: 83 Resp: 213349

Ion	Ratio	Lower	Upper
83	100		
85	64.5	38.4	98.4
47	26.3	0.0	59.6

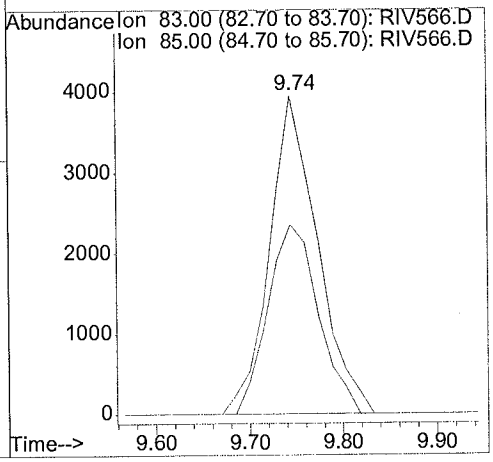


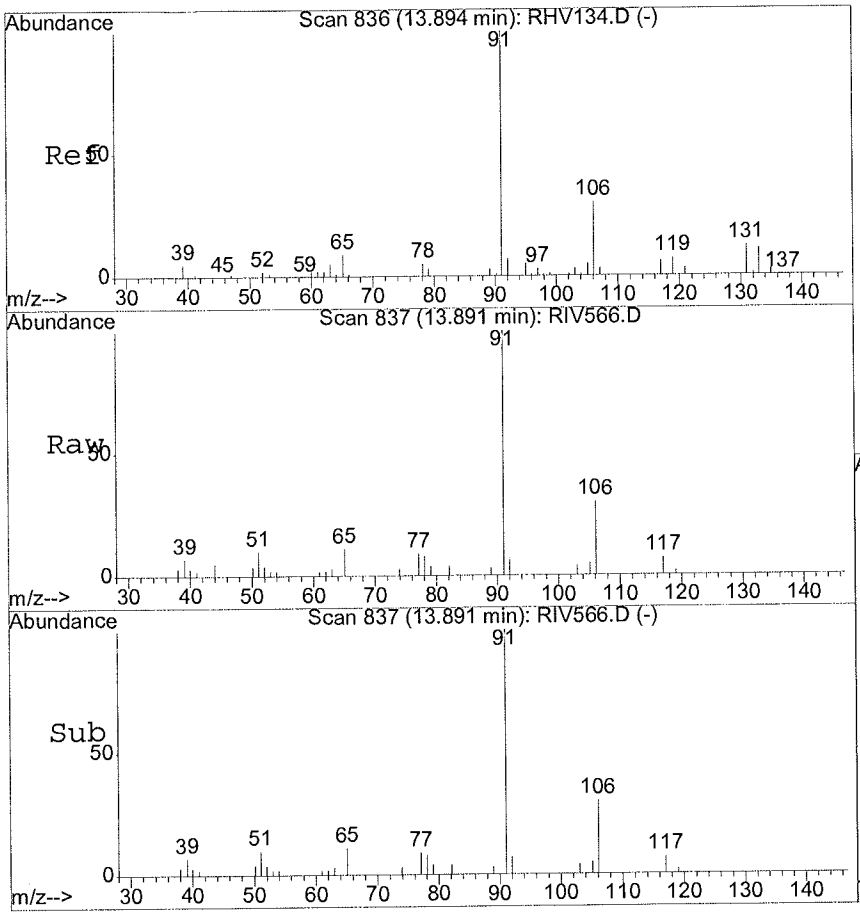


#47
Bromodichloromethane
Concen: 0.41 ug/l
RT: 9.74 min Scan# 557
Delta R.T. -0.00 min
Lab File: RIV566.D
Acq: 24 Sep 2024 9:23 am

Tgt Ion: 83 Resp: 14144

Ion	Ratio	Lower	Upper
83	100		
85	62.6	36.5	96.5

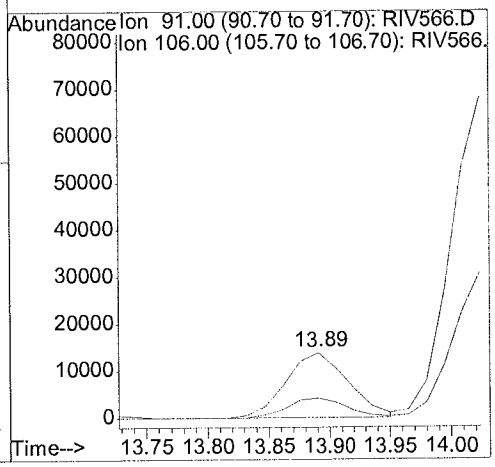


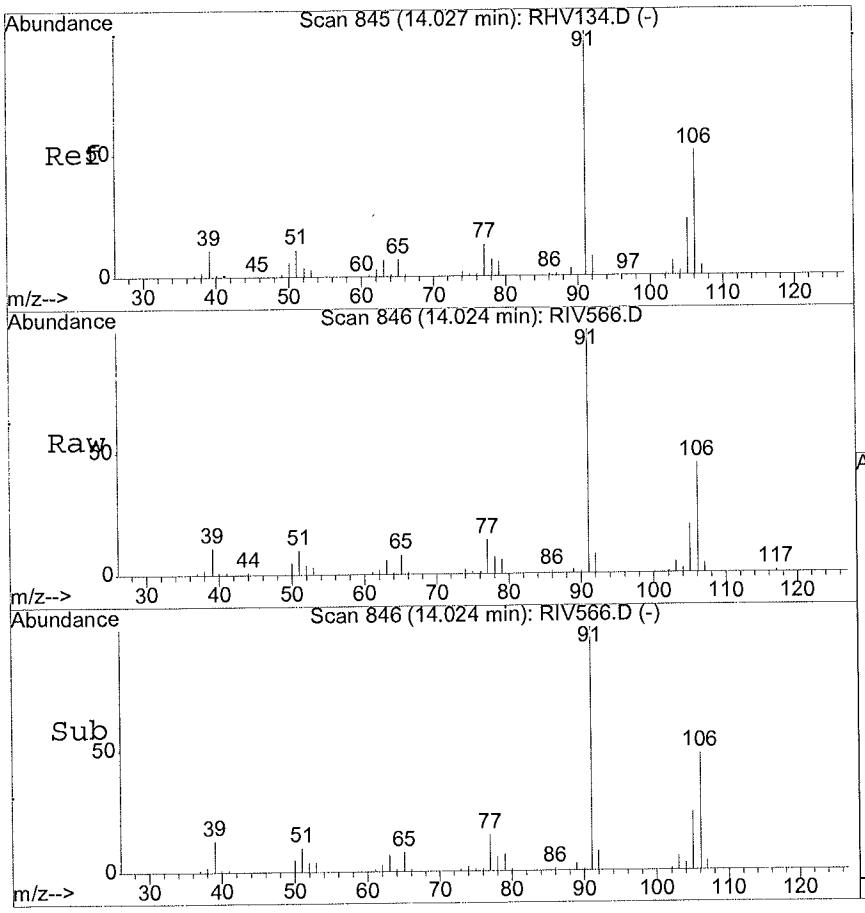


#67
Ethylbenzene
Concen: 0.38 ug/l
RT: 13.89 min Scan# 837
Delta R.T. -0.00 min
Lab File: RIV566.D
Acq: 24 Sep 2024 9:23 am

Tgt Ion: 91 Resp: 49224

Ion	Ratio	Lower	Upper
91	100		
106	28.4	0.0	59.6

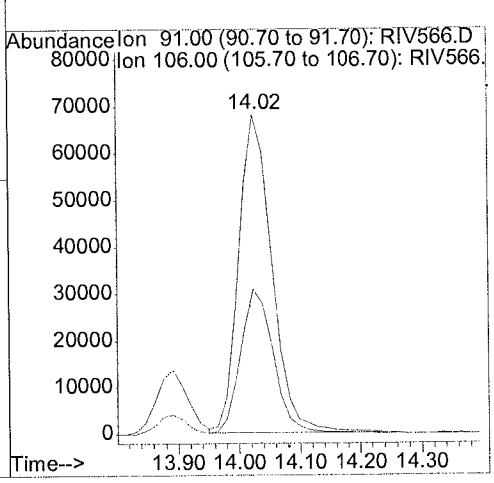


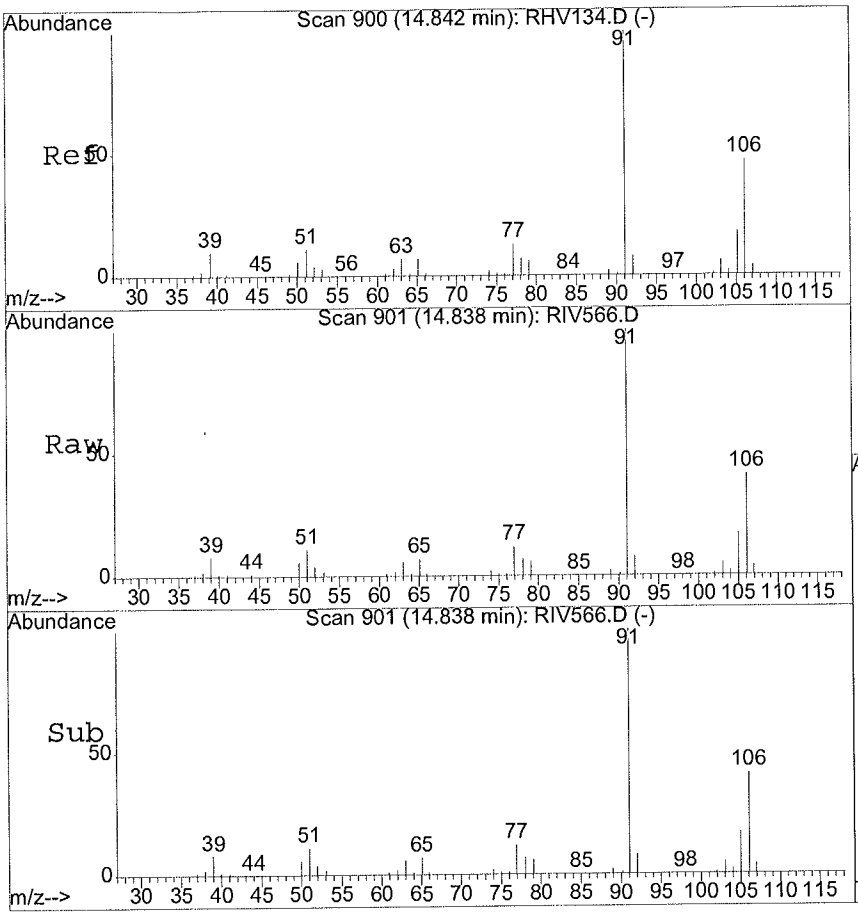


#68
m-Xylene & p-Xylene
Concen: 2.53 ug/l
RT: 14.02 min Scan# 846
Delta R.T. -0.00 min
Lab File: RIV566.D
Acq: 24 Sep 2024 9:23 am

Tgt Ion: 91 Resp: 256999

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.5	79.5

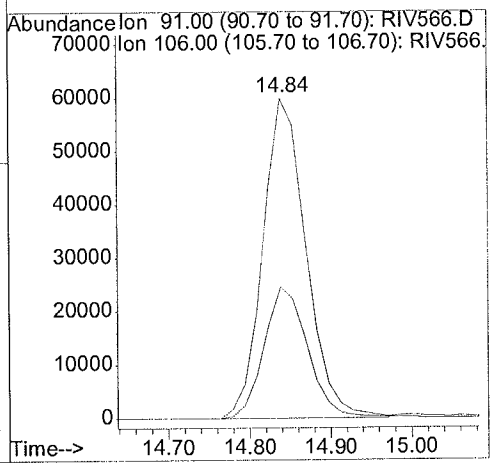




#69
o-Xylene
Concen: 2.27 ug/l
RT: 14.84 min Scan# 901
Delta R.T. -0.00 min
Lab File: RIV566.D
Acq: 24 Sep 2024 9:23 am

Tgt Ion: 91 Resp: 222315

Ion	Ratio	Lower	Upper
91	100		
106	41.4	17.6	77.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/10/24 17:45
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 09:53
Sample ID	: MW31C-GW091024	Date Analyzed:	09/24/24 09:53
Lab Samp ID:	24I061-10	Dilution Factor:	1
Lab File ID:	RIV567	Matrix:	WATER
Ext Btch ID:	V001I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.13J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.5	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.14J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	0.84J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	0.79J	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.0	10.0	110	70-130
Bromofluorobenzene	9.14	10.0	91	70-130
Toluene-d8	10.8	10.0	108	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV567.D Vial: 19
Acq On : 24 Sep 2024 9:53 am Operator: DNguye/CLingl
Sample : 24I061-10 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:55 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	776128	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	660130	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	336755	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	246009	10.42	ug/l	0.01
Spiked Amount 10.000			Recovery = 104.20%			
41) 1,2-Dichloroethane-d4	7.98	65	230552	10.99	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.90%			
54) Toluene-d8	11.03	98	872228	10.81	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.10%			
76) 4-Bromofluorobenzene	16.01	95	390577	9.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 91.40%			
Target Compounds						Qvalue
31) Chloroform	6.93	83	70078	1.48	ug/l	95
47) Bromodichloromethane	9.74	83	4537	0.13	ug/l	84
67) Ethylbenzene	13.89	91	17943	0.14	ug/l	91
68) m-Xylene & p-Xylene	14.04	91	82601	0.84	ug/l	94
69) o-Xylene	14.84	91	74511	0.79	ug/l	97

(#) = qualifier out of range (m) = manual integration

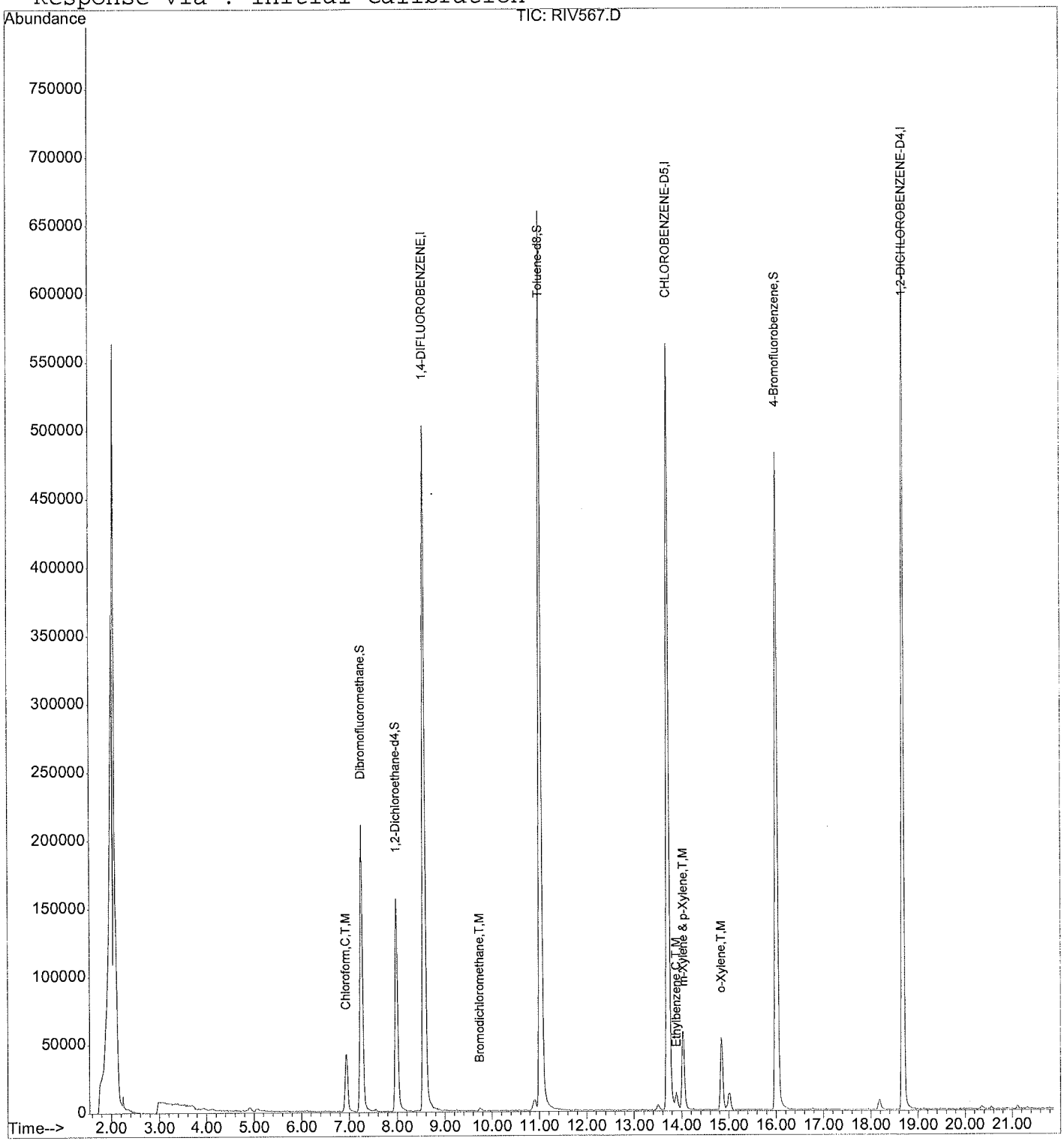
Quantitation Report

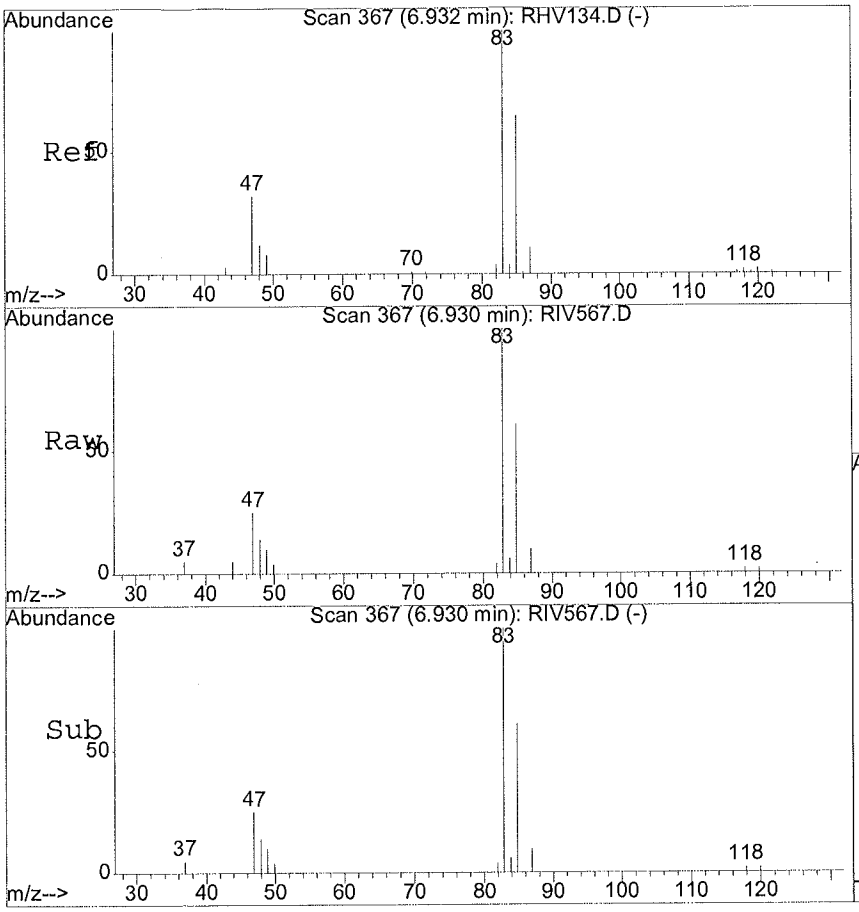
Data File : D:\HPCHEM\1\DATA\24I23\RIV567.D
Acq On : 24 Sep 2024 9:53 am
Sample : 24I061-10
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 10:55 2024

Vial: 19
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

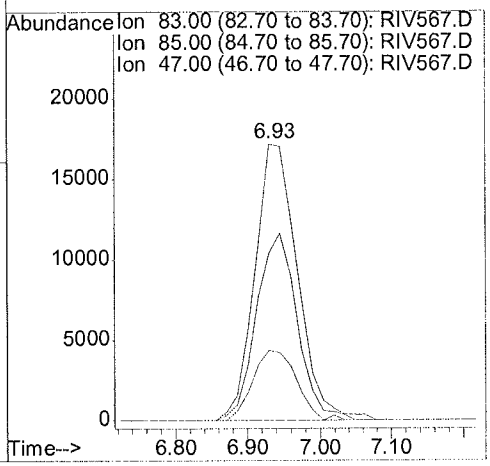


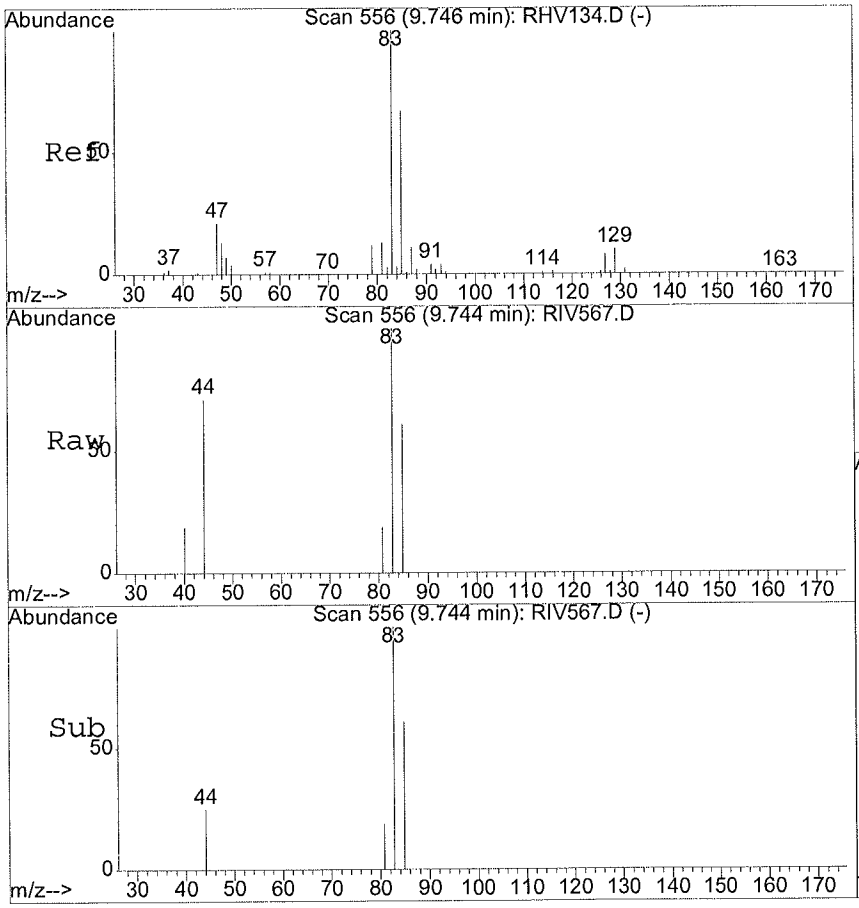


#31
Chloroform
Concen: 1.48 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV567.D
Acq: 24 Sep 2024 9:53 am

Tgt Ion: 83 Resp: 70078

Ion	Ratio	Lower	Upper
83	100		
85	64.9	38.4	98.4
47	25.9	0.0	59.6

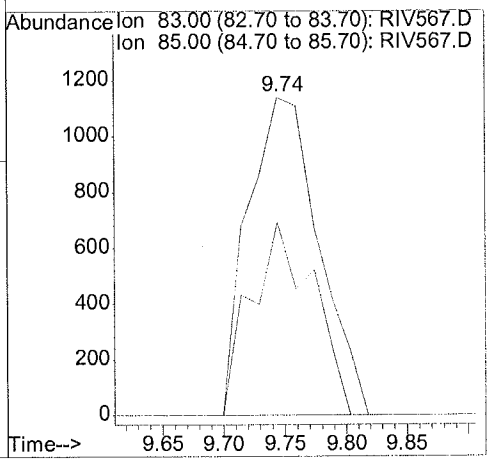


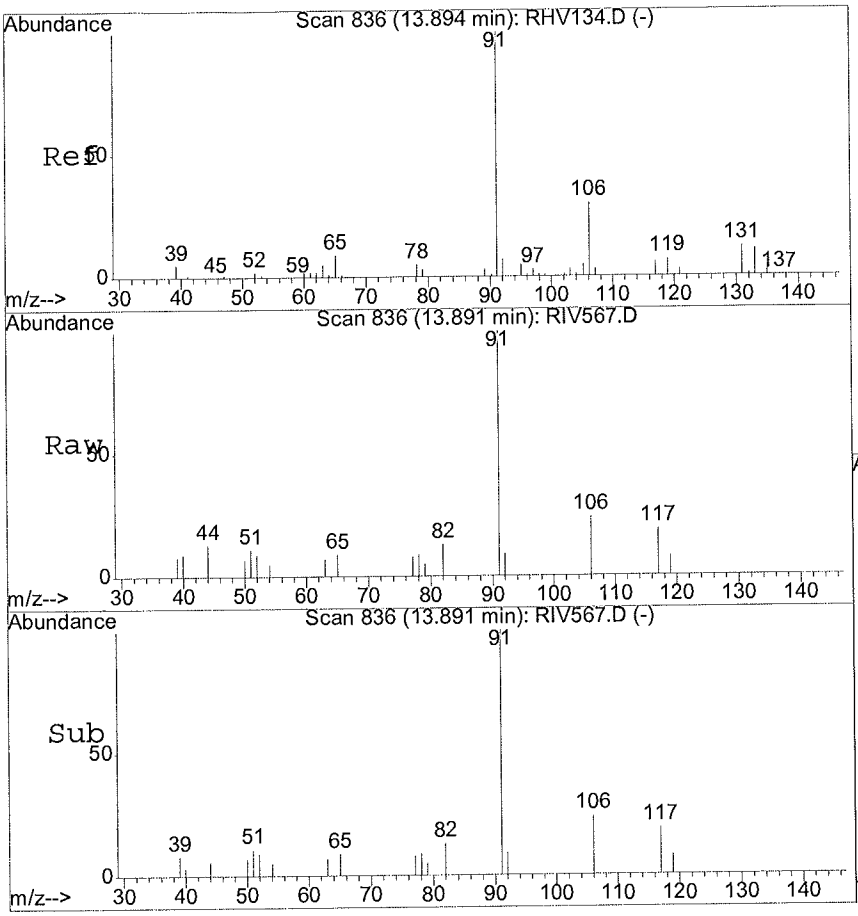


#47
Bromodichloromethane
Concen: 0.13 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RIV567.D
Acq: 24 Sep 2024 9:53 am

Tgt Ion: 83 Resp: 4537

Ion	Ratio	Lower	Upper
83	100		
85	53.6	36.5	96.5

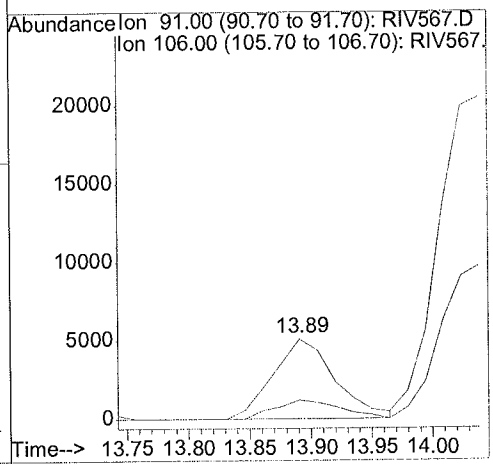


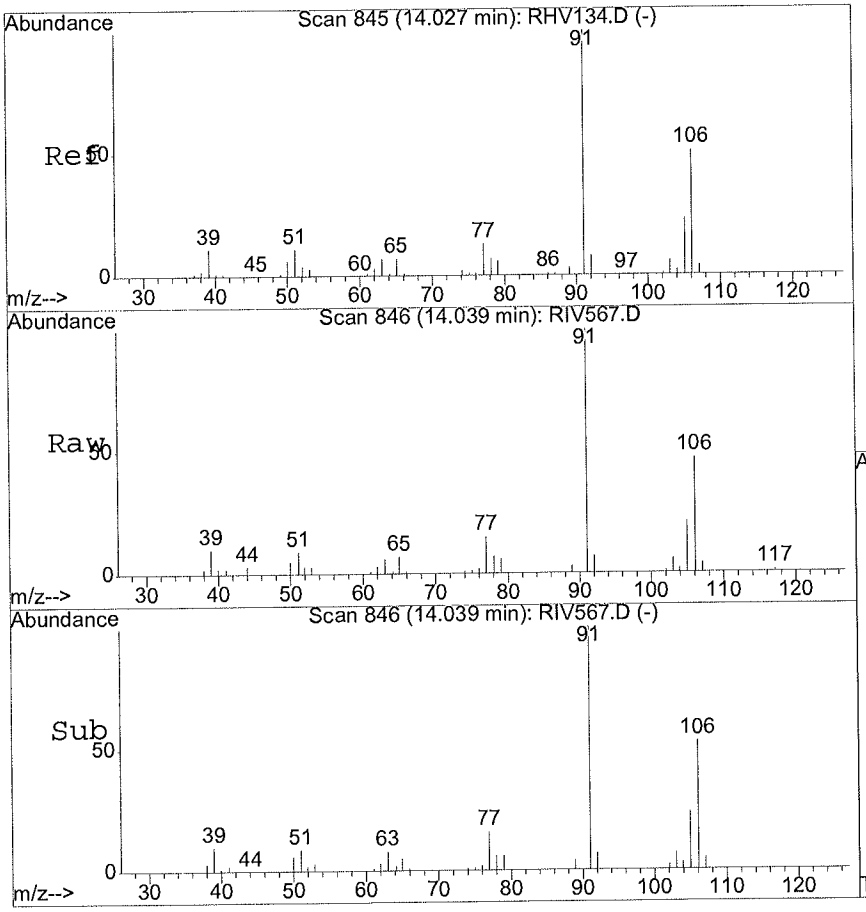


#67
Ethylbenzene
Concen: 0.14 ug/l
RT: 13.89 min Scan# 836
Delta R.T. -0.00 min
Lab File: RIV567.D
Acq: 24 Sep 2024 9:53 am

Tgt Ion: 91 Resp: 17943

Ion	Ratio	Lower	Upper
91	100		
106	24.5	0.0	59.6

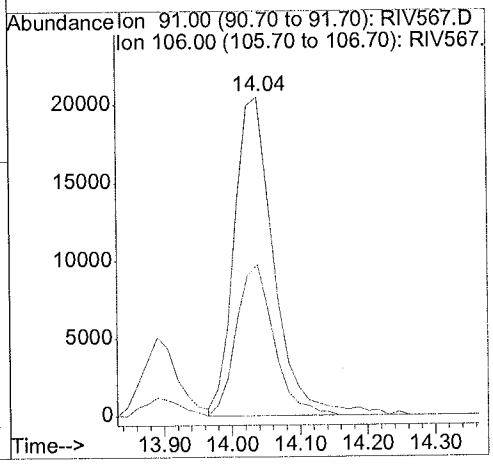


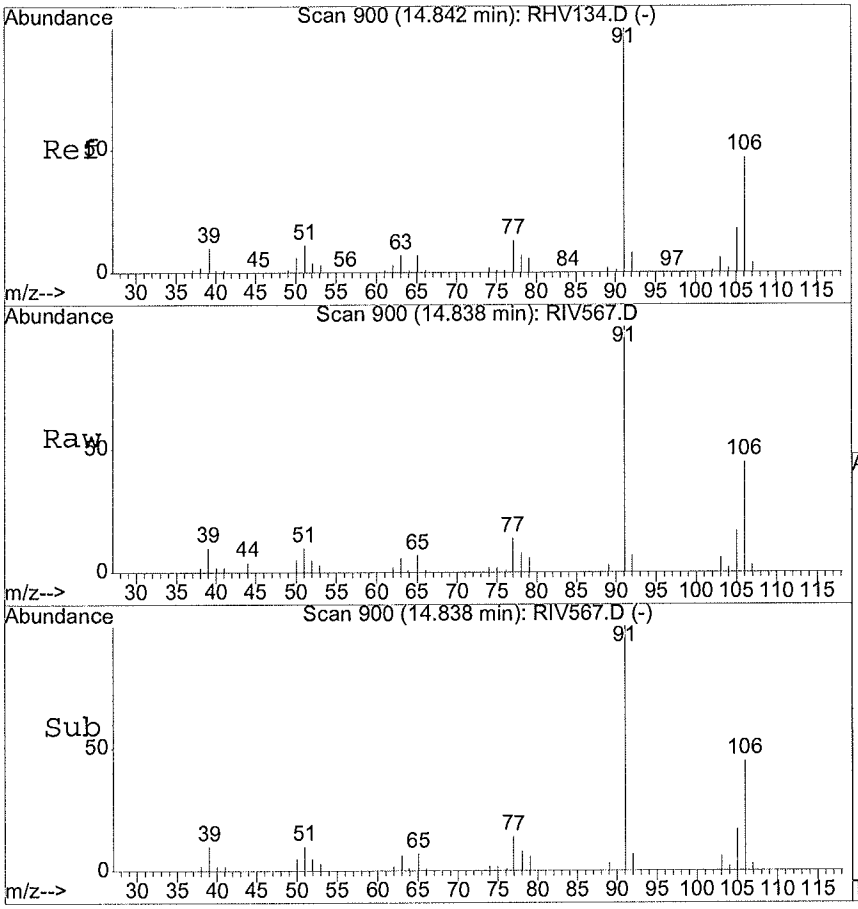


#68
m-Xylene & p-Xylene
Concen: 0.84 ug/l
RT: 14.04 min Scan# 846
Delta R.T. 0.01 min
Lab File: RIV567.D
Acq: 24 Sep 2024 9:53 am

Tgt Ion: 91 Resp: 82601

Ion	Ratio	Lower	Upper
91	100		
106	45.2	19.5	79.5

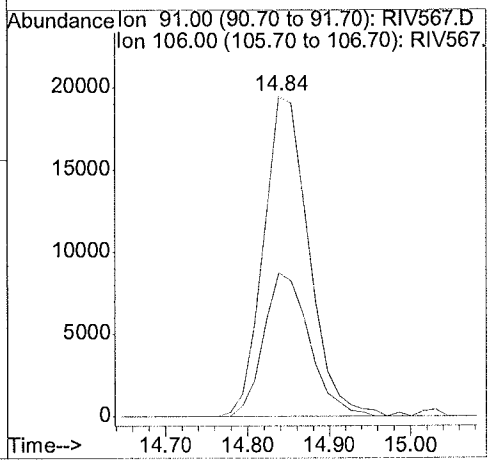




#69
o-Xylene
Concen: 0.79 ug/l
RT: 14.84 min Scan# 900
Delta R.T. -0.00 min
Lab File: RIV567.D
Acq: 24 Sep 2024 9:53 am

Tgt Ion: 91 Resp: 74511

Ion	Ratio	Lower	Upper
91	100		
106	45.3	17.6	77.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/11/24 10:45
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 10:23
Sample ID	: MW03RA-GW091124	Date Analyzed:	09/24/24 10:23
Lab Samp ID:	24I061-11	Dilution Factor:	1
Lab File ID:	RIV568	Matrix:	WATER
Ext Btch ID:	VOO1I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.42J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	5.9	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	32	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.16J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.7	10.0	117	70-130
Bromofluorobenzene	9.18	10.0	92	70-130
Toluene-d8	10.5	10.0	105	70-130
Dibromofluoromethane	10.7	10.0	107	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV568.D
Acq On : 24 Sep 2024 10:23 am
Sample : 24I061-11
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 10:55 2024

Vial: 20
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

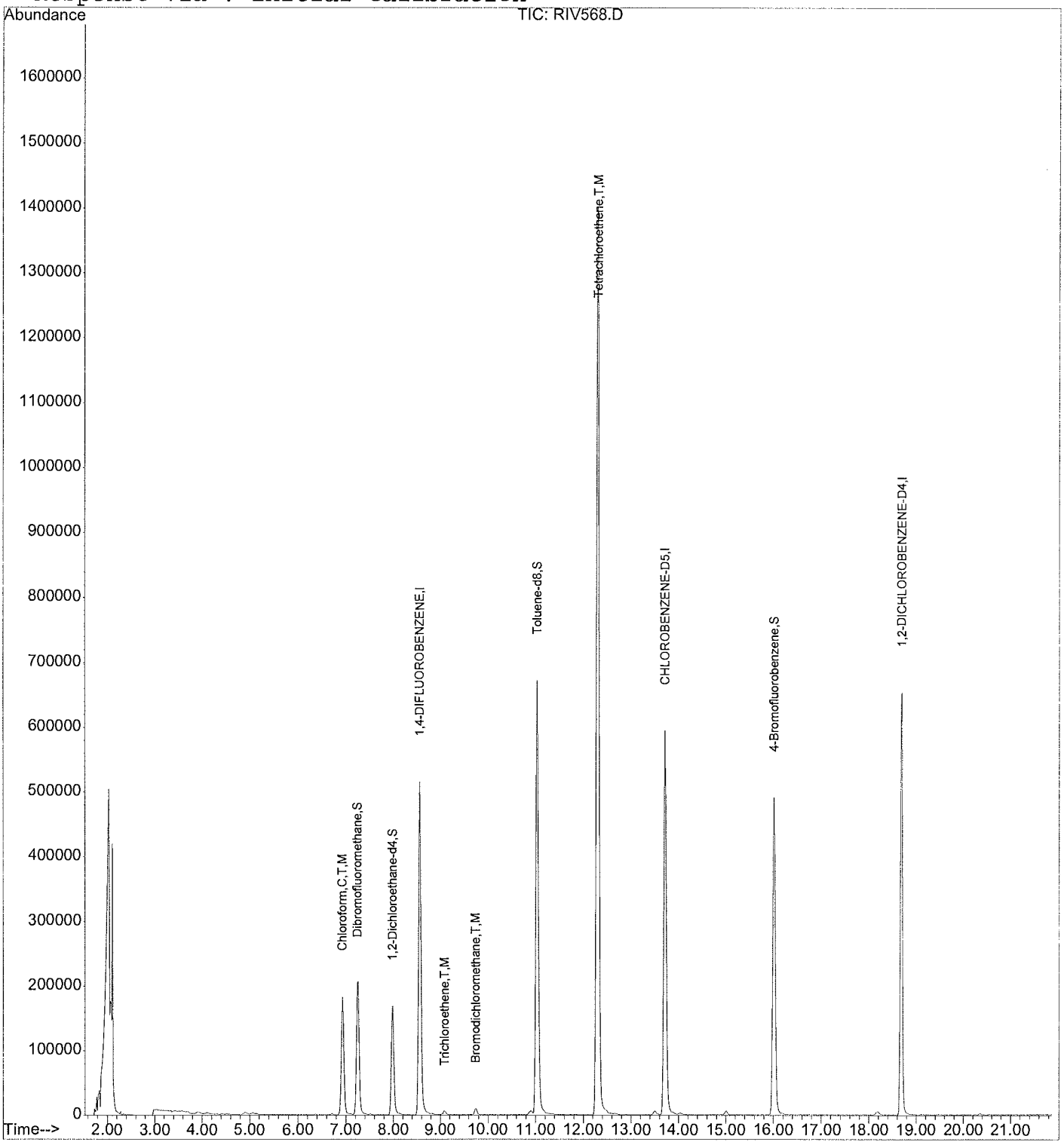
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	770467	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	675553	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	339276	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	250222	10.68	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.80%		
41) 1,2-Dichloroethane-d4	7.98	65	243149	11.67	ug/l	0.00
Spiked Amount 10.000			Recovery =	116.70%		
54) Toluene-d8	11.03	98	868327	10.52	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.20%		
76) 4-Bromofluorobenzene	16.01	95	395301	9.18	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.80%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	278136	5.94	ug/l	95
44) Trichloroethene	9.09	130	4427	0.16	ug/l	96
47) Bromodichloromethane	9.75	83	14333	0.42	ug/l	93
61) Tetrachloroethene	12.31	164	727992	31.66	ug/l	95

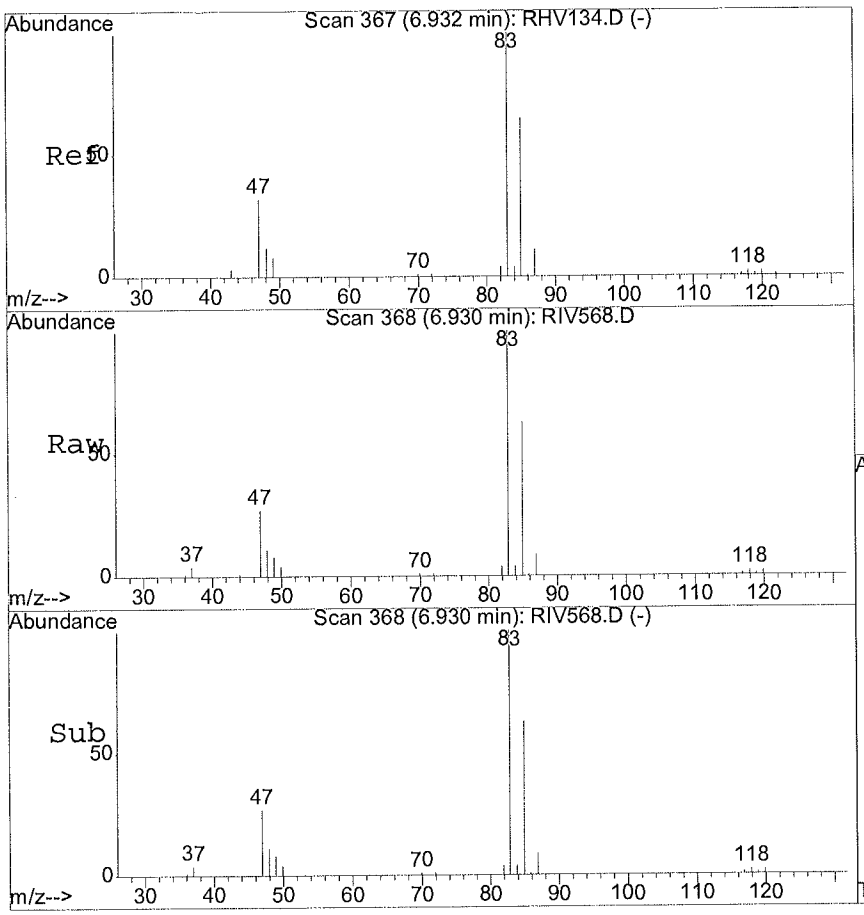
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV568.D Vial: 20
Acq On : 24 Sep 2024 10:23 am Operator: DNguye/CLing
Sample : 24I061-11 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:55 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

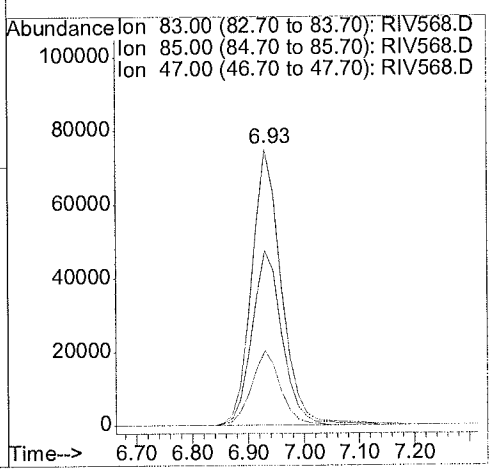


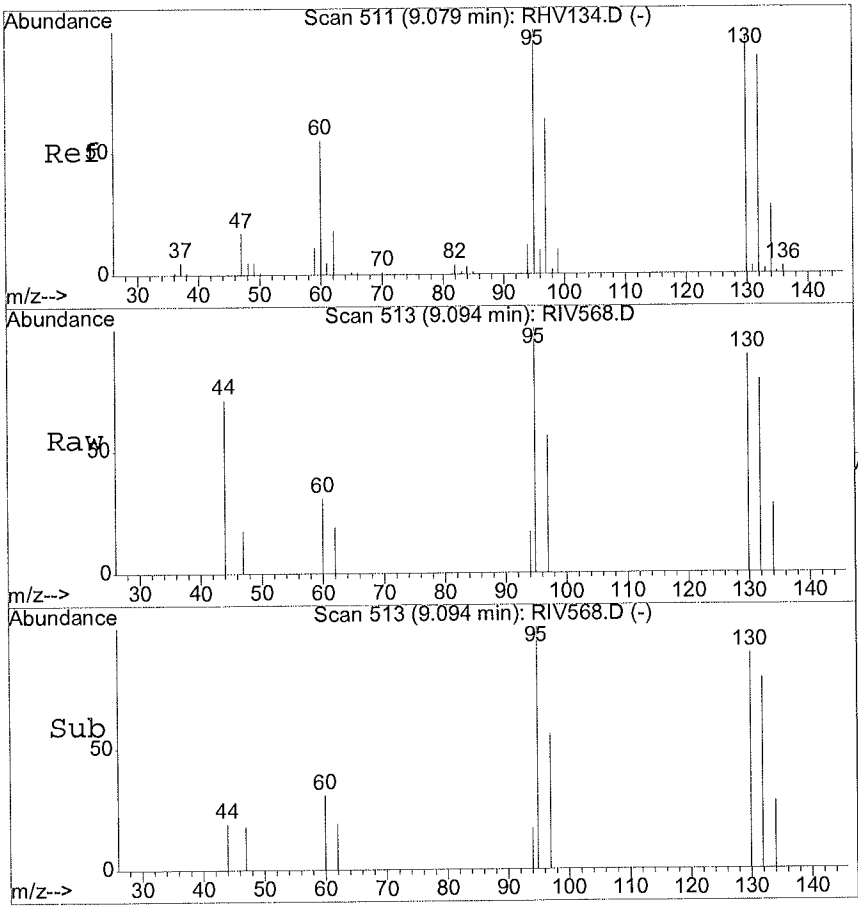


#31
Chloroform
Concen: 5.94 ug/l
RT: 6.93 min Scan# 368
Delta R.T. -0.00 min
Lab File: RIV568.D
Acq: 24 Sep 2024 10:23 am

Tgt Ion: 83 Resp: 278136

Ion	Ratio	Lower	Upper
83	100		
85	64.5	38.4	98.4
47	26.3	0.0	59.6

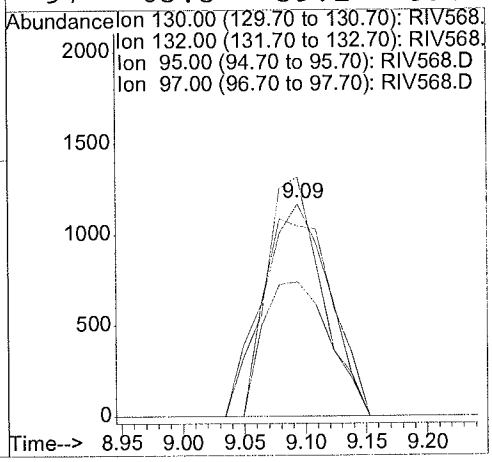


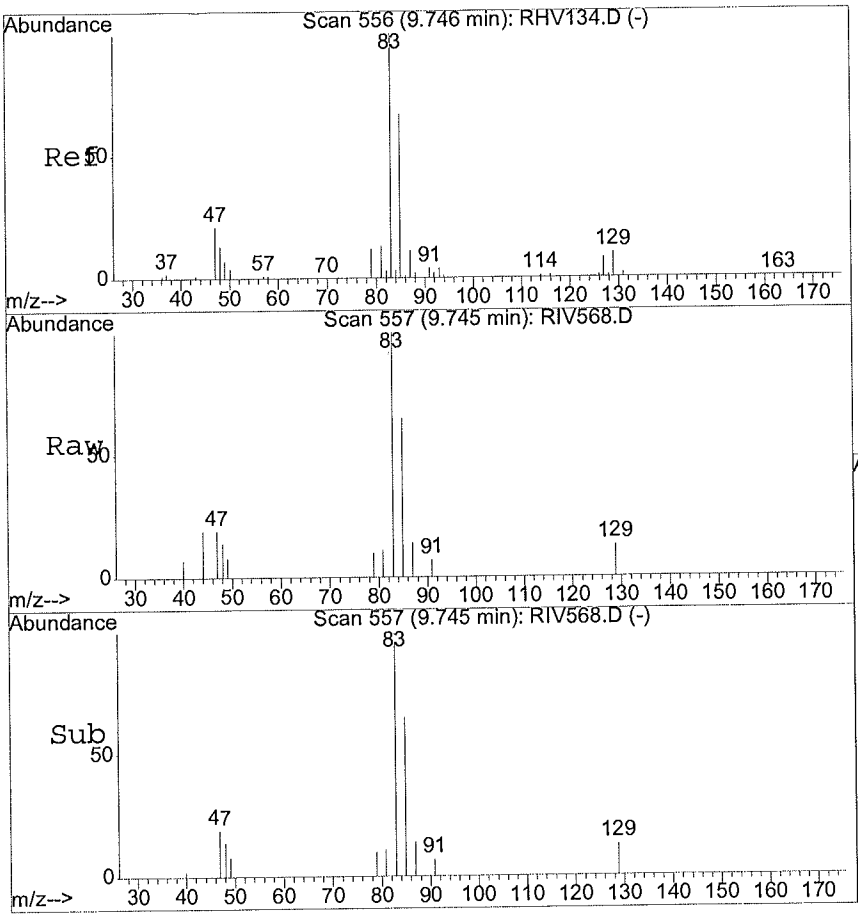


#44
Trichloroethene
Concen: 0.16 ug/l
RT: 9.09 min Scan# 513
Delta R.T. 0.01 min
Lab File: RIV568.D
Acq: 24 Sep 2024 10:23 am

Tgt Ion:130 Resp: 4427

Ion	Ratio	Lower	Upper
130	100		
132	95.1	62.7	122.7
95	98.2	72.0	132.0
97	63.3	39.1	99.1

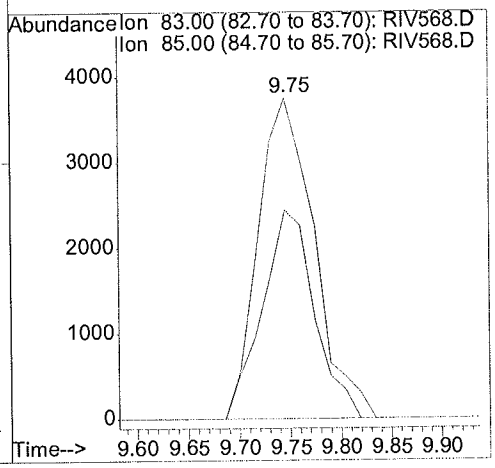


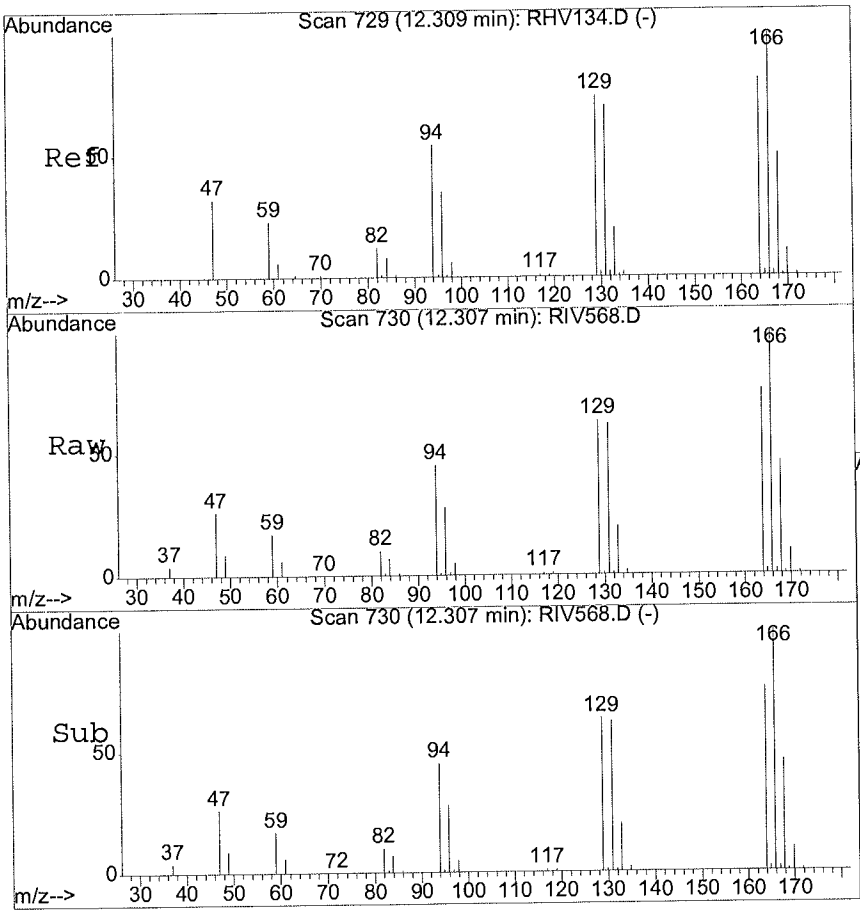


#47
Bromodichloromethane
Concen: 0.42 ug/l
RT: 9.75 min Scan# 557
Delta R.T. 0.00 min
Lab File: RIV568.D
Acq: 24 Sep 2024 10:23 am

Tgt Ion: 83 Resp: 14333

Ion	Ratio	Lower	Upper
83	100		
85	60.9	36.5	96.5

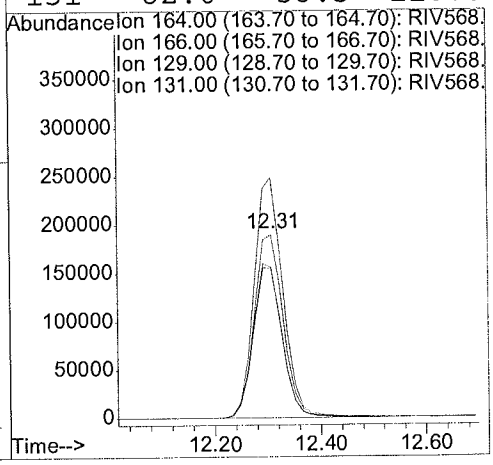




#61
Tetrachloroethene
Concen: 31.66 ug/l
RT: 12.31 min Scan# 730
Delta R.T. -0.00 min
Lab File: RIV568.D
Acq: 24 Sep 2024 10:23 am

Tgt Ion:164 Resp: 727992

Ion	Ratio	Lower	Upper
164	100		
166	128.8	98.2	158.2
129	83.6	62.8	122.8
131	82.0	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/11/24 11:00
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 20:02 # 09/25/24 19:55
Sample ID	: MW03RB-GW091124	Date Analyzed:	09/24/24 20:02 # 09/25/24 19:55
Lab Samp ID:	I061-12 #I061-12I	Dilution Factor:	1 # 10
Lab File ID:	RIV587 #RIV635	Matrix:	WATER
Ext Btch ID:	VD01I22 #VD01I24	% Moisture:	NA
Calib. Ref.:	RHV134 #RHV134	Instrument ID:	01 # 01

	PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
	1,1,1-Trichloroethane	ND	1.0	0.10
	1,1,2,2-Tetrachloroethane	ND	1.0	0.11
	1,1,2-Trichloroethane	ND	1.0	0.10
	1,1-Dichloroethane	ND	1.0	0.10
	1,1-Dichloroethene	ND	1.0	0.10
	1,2,3-Trichlorobenzene	ND	1.0	0.15
	1,2,4-Trichlorobenzene	ND	1.0	0.15
	1,2,4-Trimethylbenzene	ND	1.0	0.11
	1,2-Dibromo-3-chloropropane	ND	2.0	0.25
	1,2-Dichlorobenzene	ND	1.0	0.10
	1,2-Dichloroethane	ND	1.0	0.10
	1,2-Dichloropropane	ND	1.0	0.10
	1,3,5-Trimethylbenzene	ND	1.0	0.12
	1,3-Dichlorobenzene	ND	1.0	0.11
	1,4-Dichlorobenzene	ND	1.0	0.10
	2-Butanone	ND	20	2.5
	2-Hexanone	ND	20	2.5
	Acetone	3.6J	20	2.5
	Benzene	ND	1.0	0.10
	Bromochloromethane	ND	1.0	0.11
	Bromodichloromethane	0.47J	1.0	0.10
	Bromoform	ND	1.0	0.15
	Bromomethane	ND	1.0	0.16
	Carbon Disulfide	ND	1.0	0.25
	Carbon Tetrachloride	ND	1.0	0.10
	Chlorobenzene	ND	1.0	0.10
	Chloroethane	ND	1.0	0.27
	Chloroform	4.4	1.0	0.10
	Chloromethane	ND	1.0	0.15
	cis-1,2-Dichloroethylene	1.1	1.0	0.10
	Dibromochloromethane	ND	1.0	0.10
	Dichlorodifluoromethane	ND	1.0	0.15
	Ethylbenzene	0.20J	1.0	0.10
	Isopropylbenzene	ND	1.0	0.10
	m,p-Xylene	0.87J	2.0	0.21
	4-Methyl-2-Pentanone	ND	20	2.5
	Methylene Chloride	ND	2.0	0.50
	tert-Butyl Methyl Ether	ND	1.0	0.13
	o-Xylene	1.1	1.0	0.10
	Styrene	ND	1.0	0.25
#	Tetrachloroethene	170	10	1.5
	Toluene	ND	1.0	0.10
	Trans-1,2-DCE	ND	1.0	0.10
	cis-1,3-Dichloropropene	ND	1.0	0.10
	Trans-1,3-Dichloropropene	ND	1.0	0.11
	TCE	1.7	1.0	0.10
	Trichlorofluoromethane	ND	1.0	0.15
	Vinyl Chloride	ND	1.0	0.12
	1,2-Dibromoethane	ND	1.0	0.10
	Vinyl Acetate	ND	2.0	0.25
	Trichlorotrifluoroethane	ND	1.0	0.15
	Methyl Acetate	ND	2.0	0.25

	SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
	1,2-Dichloroethane-d4	11.2	10.0	112	70-130
	Bromofluorobenzene	9.13	10.0	91	70-130
	Toluene-d8	10.9	10.0	109	70-130
	Dibromofluoromethane	10.6	10.0	106	70-130
#	1,2-Dichloroethane-d4	104	100	104	70-130
#	Bromofluorobenzene	92.5	100	92	70-130
#	Toluene-d8	110	100	110	70-130
#	Dibromofluoromethane	104	100	104	70-130

Result(s) associated as marked on the header

Notes:
Sample Amount : 25ml — Final Volume : 25ml
Prepared by : DNguye — Analyzed by : DNguye
Sample Amount : 2.5ml — Final Volume : 25ml
Prepared by : DNguye — Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/11/24 11:00
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 20:02
Sample ID	: MW03RB-GW091124	Date Analyzed:	09/24/24 20:02
Lab Samp ID:	24I061-12	Dilution Factor:	1
Lab File ID:	RIV587	Matrix:	WATER
Ext Btch ID:	VOO1I22	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	3.6J	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.47J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.4	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	1.1	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.20J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	0.87J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	1.1	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	170E	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	1.7	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.2	10.0	112	70-130
Bromofluorobenzene	9.13	10.0	91	70-130
Toluene-dB	10.9	10.0	109	70-130
Dibromofluoromethane	10.6	10.0	106	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV587.D
Acq On : 24 Sep 2024 8:02 pm
Sample : 24I061-12
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 11:32 2024

Vial: 15
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	776028	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	655692	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	340752	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	249210	10.56	ug/l	0.01
Spiked Amount 10.000			Recovery = 105.60%			
41) 1,2-Dichloroethane-d4	7.98	65	234656	11.18	ug/l	0.00
Spiked Amount 10.000			Recovery = 111.80%			
54) Toluene-d8	11.03	98	876840	10.94	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.40%			
76) 4-Bromofluorobenzene	16.02	95	394789	9.13	ug/l	0.01
Spiked Amount 10.000			Recovery = 91.30%			
Target Compounds						Qvalue
13) Acetone	4.12	43	20553	3.60	ug/l	87
30) cis-1,2-Dichloroethene	6.71	96	28901	1.10	ug/l	88
31) Chloroform	6.95	83	208503	4.42	ug/l	94
44) Trichloroethene	9.09	130	45089	1.66	ug/l	96
47) Bromodichloromethane	9.76	83	15977	0.47	ug/l	94
61) Tetrachloroethene	12.31	164	3683743	165.07	ug/l	95
67) Ethylbenzene	13.89	91	25193	0.20	ug/l	94
68) m-Xylene & p-Xylene	14.04	91	84335	0.87	ug/l	95
69) o-Xylene	14.85	91	101042	1.08	ug/l	91

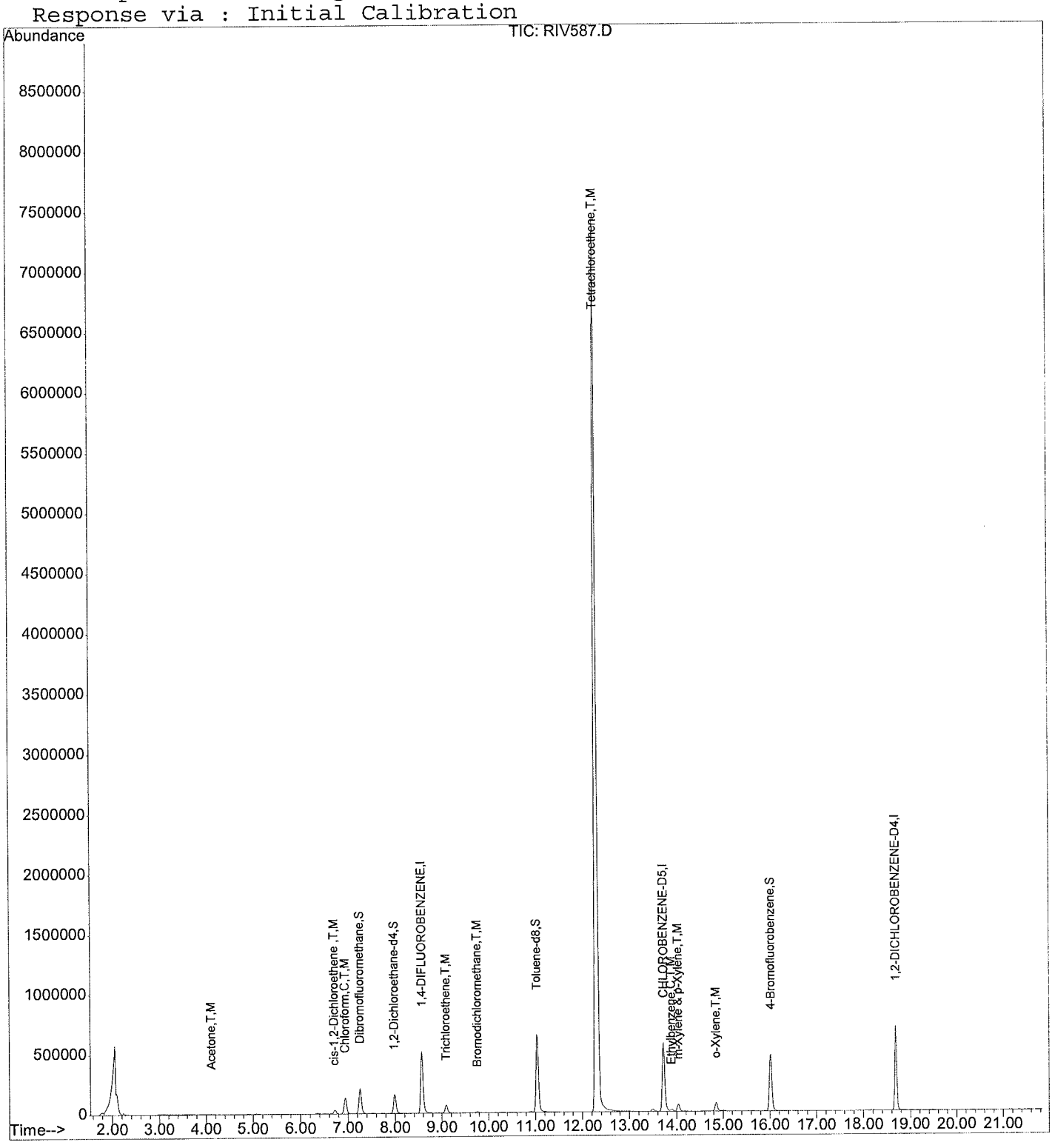
(#) = qualifier out of range (m) = manual integration

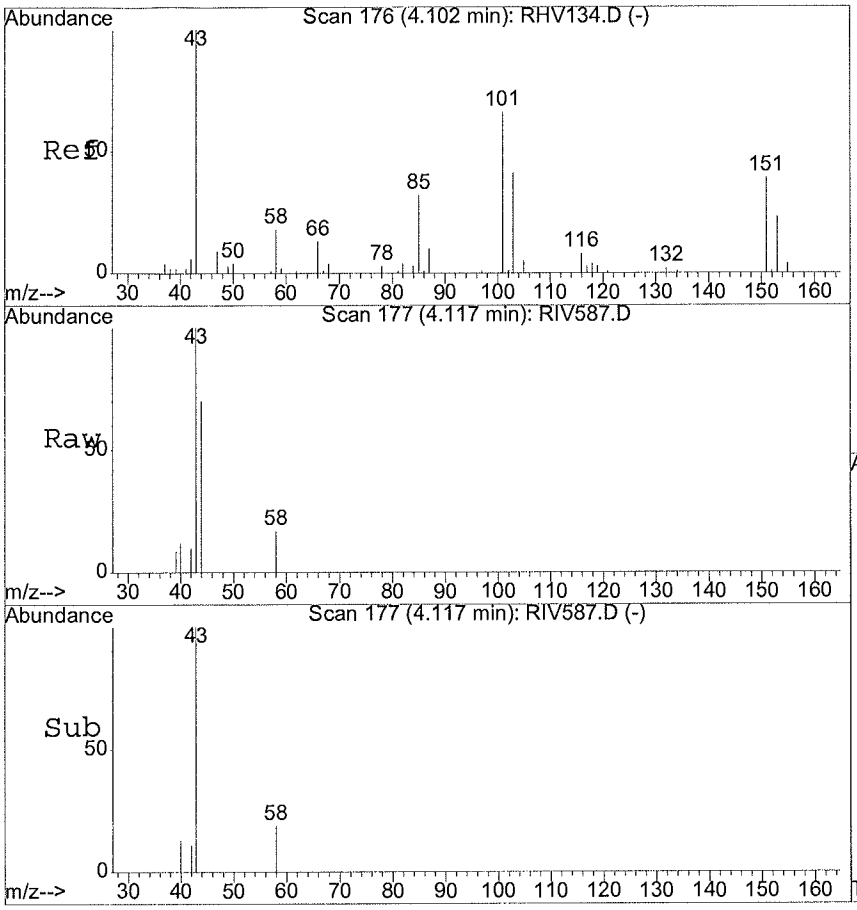
Data File : D:\HPCHEM\1\DATA\24I24\RIV587.D
Acq On : 24 Sep 2024 8:02 pm
Sample : 24I061-12
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 11:32 2024

Vial: 15
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

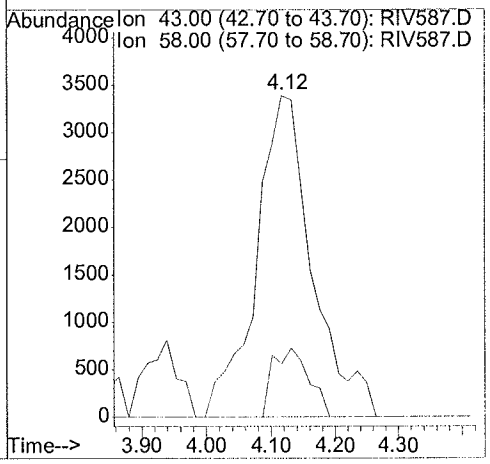


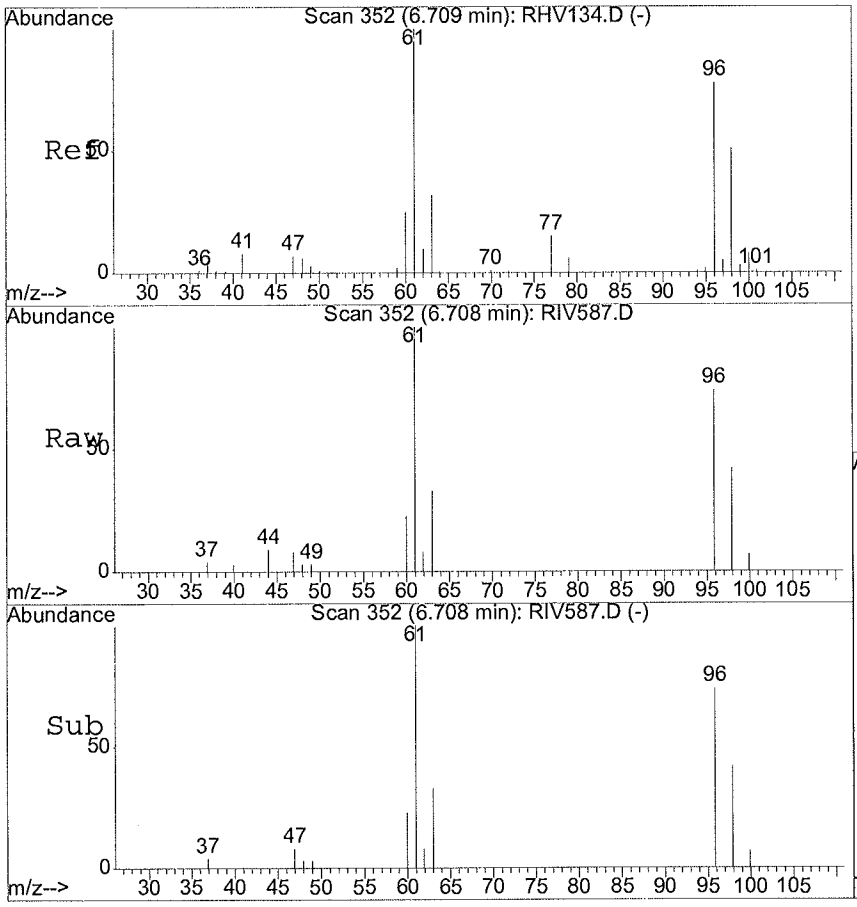


#13
Acetone
Concen: 3.60 ug/l
RT: 4.12 min Scan# 177
Delta R.T. 0.02 min
Lab File: RIV587.D
Acq: 24 Sep 2024 8:02 pm

Tgt Ion: 43 Resp: 20553

Ion	Ratio	Lower	Upper
43	100		
58	13.7	0.0	49.5

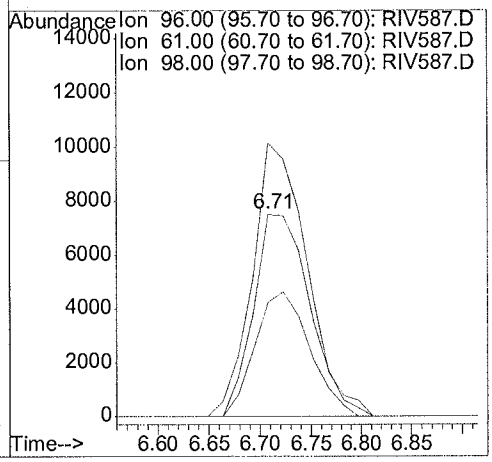


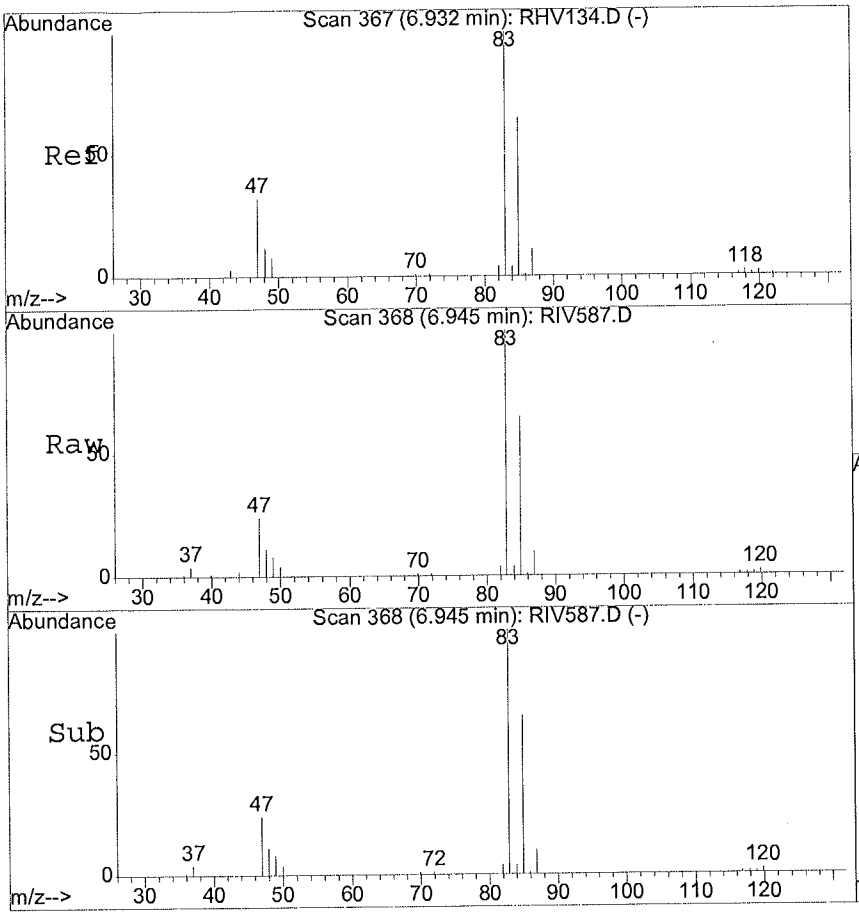


#30
cis-1,2-Dichloroethene
Concen: 1.10 ug/l
RT: 6.71 min Scan# 352
Delta R.T. -0.00 min
Lab File: RIV587.D
Acq: 24 Sep 2024 8:02 pm

Tgt Ion: 96 Resp: 28901

Ion	Ratio	Lower	Upper
96	100		
61	131.2	119.2	179.2
98	59.7	35.1	95.1

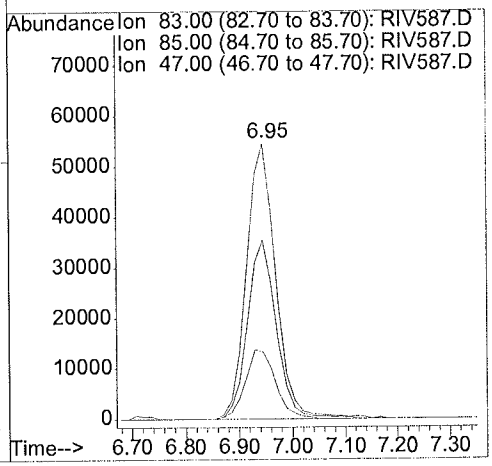


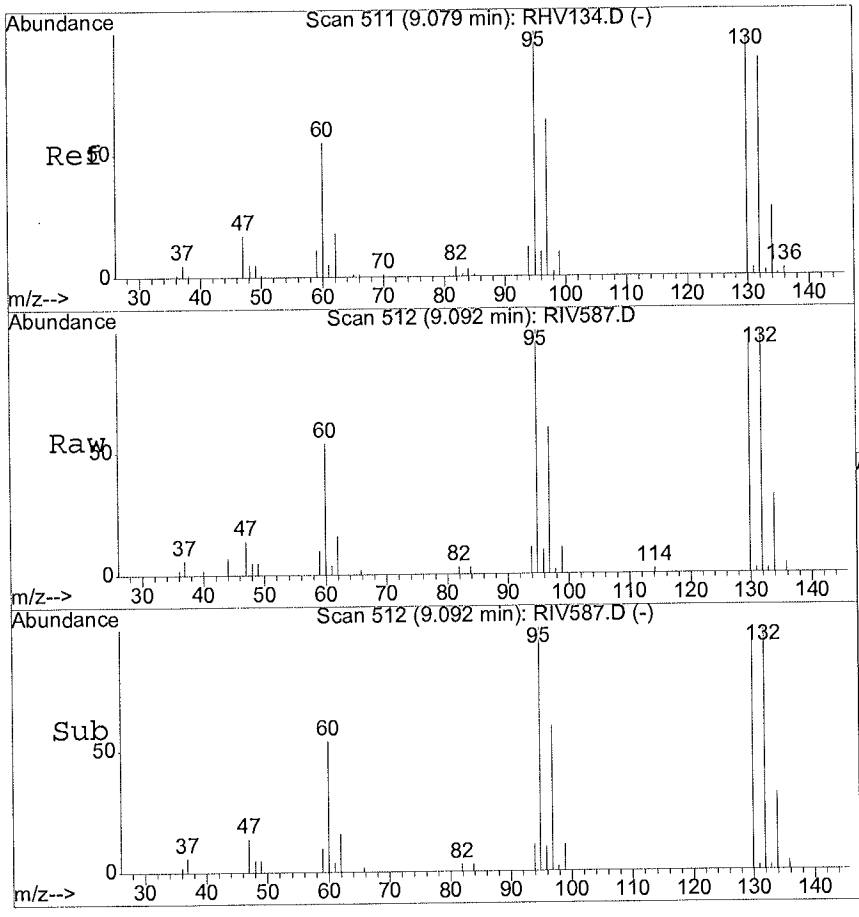


#31
Chloroform
Concen: 4.42 ug/l
RT: 6.95 min Scan# 368
Delta R.T. 0.01 min
Lab File: RIV587.D
Acq: 24 Sep 2024 8:02 pm

Tgt Ion: 83 Resp: 208503

Ion	Ratio	Lower	Upper
83	100		
85	64.1	38.4	98.4
47	26.1	0.0	59.6

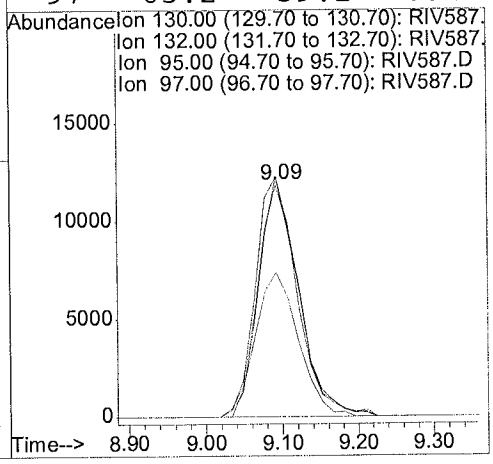


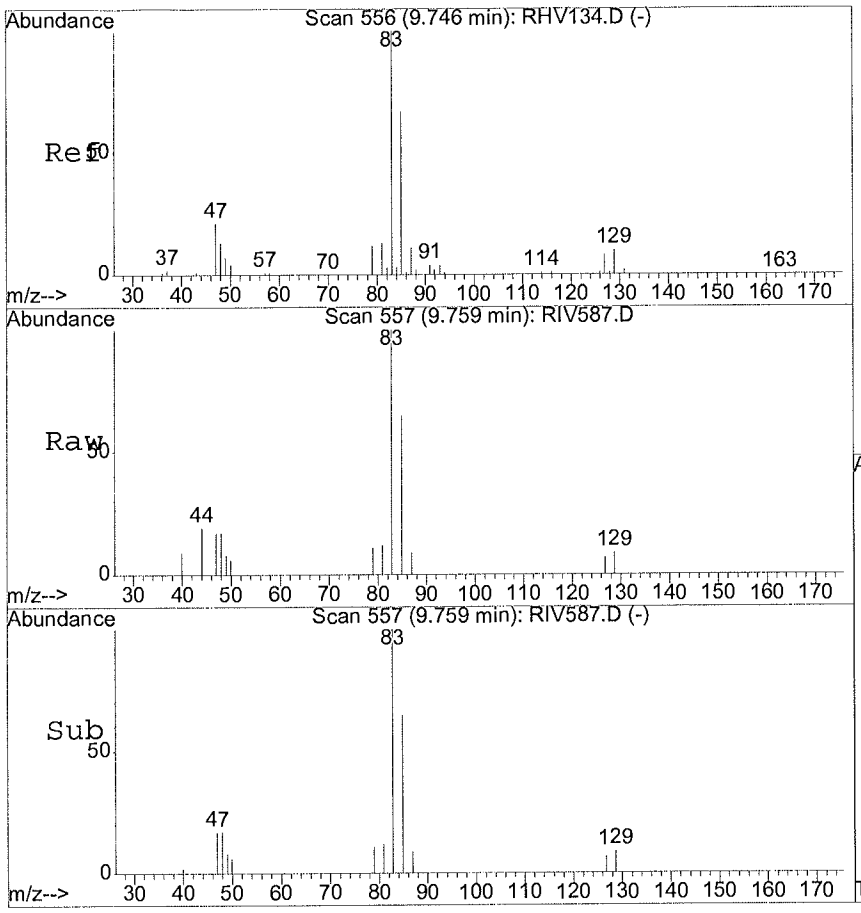


#44
Trichloroethene
Concen: 1.66 ug/l
RT: 9.09 min Scan# 512
Delta R.T. 0.01 min
Lab File: RIV587.D
Acq: 24 Sep 2024 8:02 pm

Tgt Ion:130 Resp: 45089

Ion	Ratio	Lower	Upper
130	100		
132	97.8	62.7	122.7
95	103.0	72.0	132.0
97	63.2	39.1	99.1

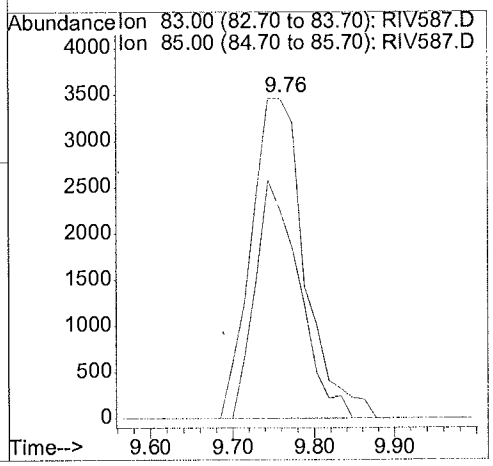


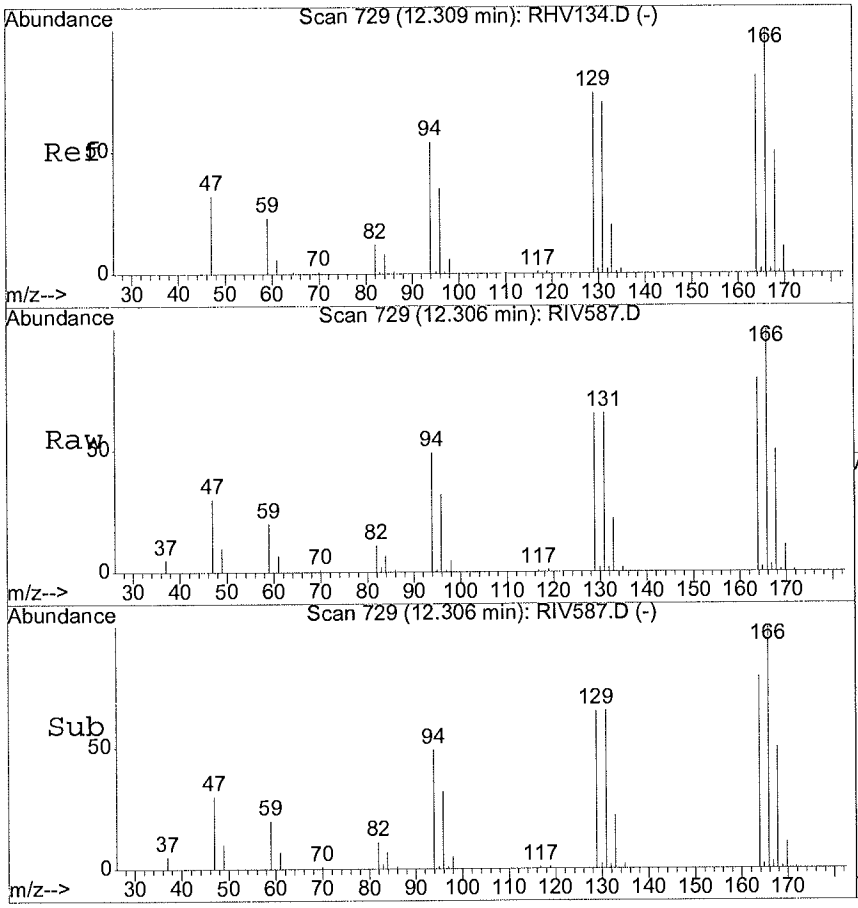


#47
Bromodichloromethane
Concen: 0.47 ug/l
RT: 9.76 min Scan# 557
Delta R.T. 0.01 min
Lab File: RIV587.D
Acq: 24 Sep 2024 8:02 pm

Tgt Ion: 83 Resp: 15977

Ion	Ratio	Lower	Upper
83	100		
85	61.3	36.5	96.5

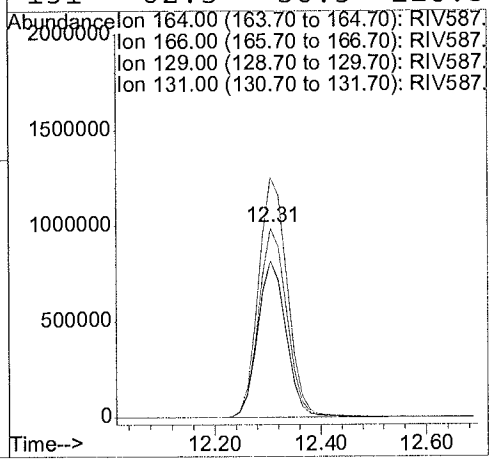


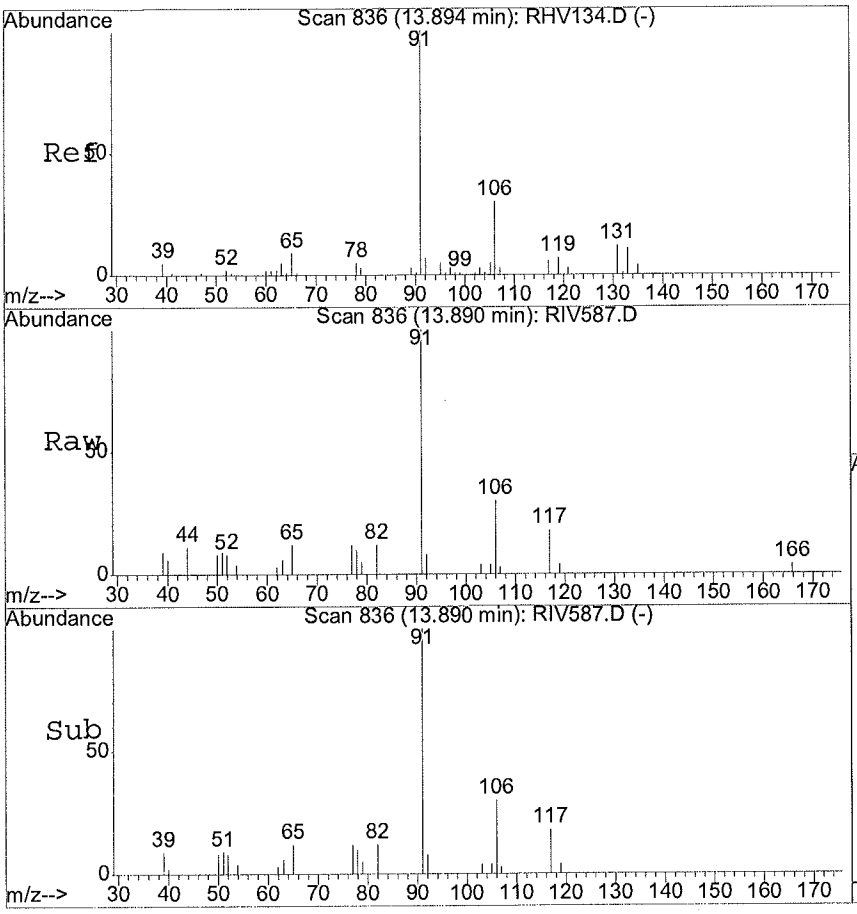


#61
Tetrachloroethene
Concen: 165.07 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV587.D
Acq: 24 Sep 2024 8:02 pm

Tgt Ion:164 Resp: 3683743

Ion	Ratio	Lower	Upper
164	100		
166	129.4	98.2	158.2
129	83.0	62.8	122.8
131	82.5	58.3	118.3

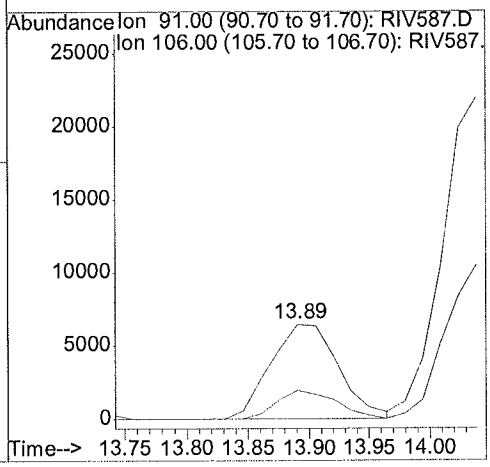


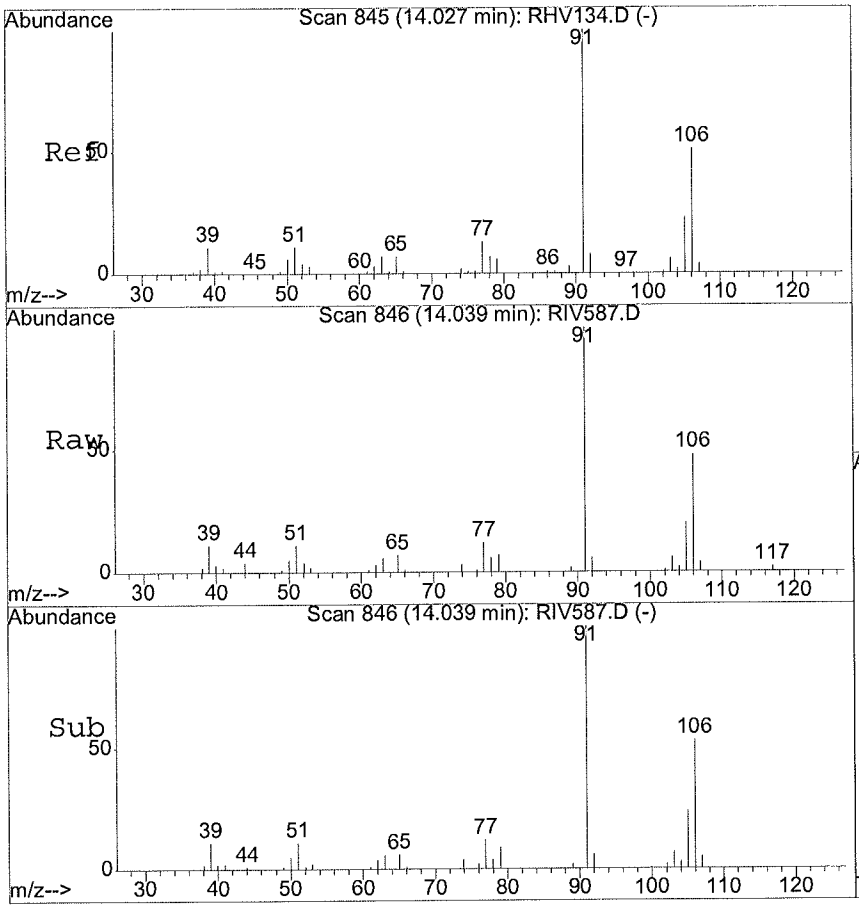


#67
Ethylbenzene
Concen: 0.20 ug/l
RT: 13.89 min Scan# 836
Delta R.T. -0.00 min
Lab File: RIV587.D
Acq: 24 Sep 2024 8:02 pm

Tgt Ion: 91 Resp: 25193

Ion	Ratio	Lower	Upper
91	100		
106	26.2	0.0	59.6

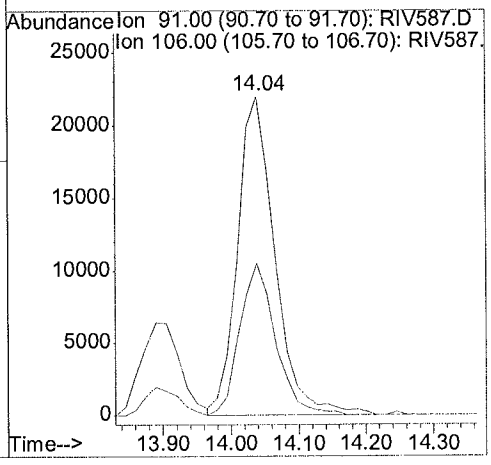


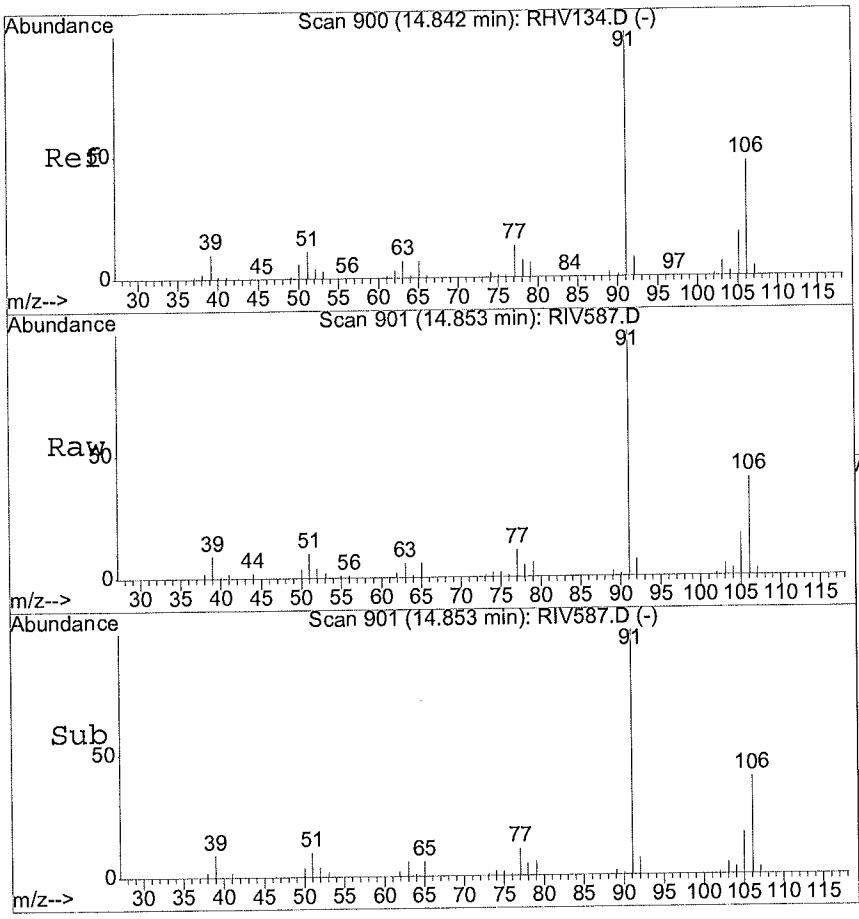


#68
m-Xylene & p-Xylene
Concen: 0.87 ug/l
RT: 14.04 min Scan# 846
Delta R.T. 0.01 min
Lab File: RIV587.D
Acq: 24 Sep 2024 8:02 pm

Tgt Ion: 91 Resp: 84335

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.5	79.5

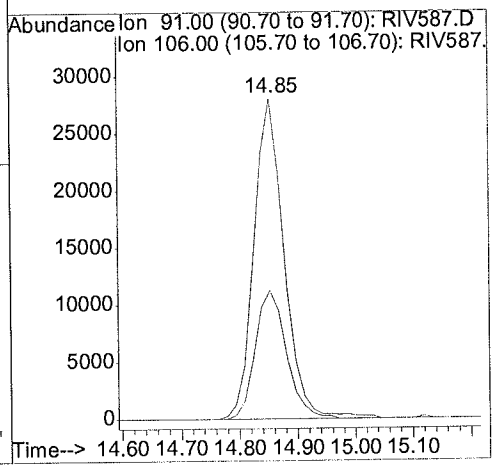




#69
o-Xylene
Concen: 1.08 ug/l
RT: 14.85 min Scan# 901
Delta R.T. 0.01 min
Lab File: RIV587.D
Acq: 24 Sep 2024 8:02 pm

Tgt Ion: 91 Resp: 101042

Ion	Ratio	Lower	Upper
91	100		
106	41.5	17.6	77.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/11/24 11:00
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/25/24 19:55
Sample ID	: MW03RB-GW091124	Date Analyzed:	09/25/24 19:55
Lab Samp ID:	24I061-12I	Dilution Factor:	10
Lab File ID:	RIV635	Matrix:	WATER
Ext Btch ID:	VOO1I24	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	10	1.0
1,1,2,2-Tetrachloroethane	ND	10	1.1
1,1,2-Trichloroethane	ND	10	1.0
1,1-Dichloroethane	ND	10	1.0
1,1-Dichloroethene	ND	10	1.0
1,2,3-Trichlorobenzene	ND	10	1.5
1,2,4-Trichlorobenzene	ND	10	1.5
1,2,4-Trimethylbenzene	ND	10	1.1
1,2-Dibromo-3-chloropropane	ND	20	2.5
1,2-Dichlorobenzene	ND	10	1.0
1,2-Dichloroethane	ND	10	1.0
1,2-Dichloropropane	ND	10	1.0
1,3,5-Trimethylbenzene	ND	10	1.2
1,3-Dichlorobenzene	ND	10	1.1
1,4-Dichlorobenzene	ND	10	1.0
2-Butanone	ND	200	25
2-Hexanone	ND	200	25
Acetone	ND	200	25
Benzene	ND	10	1.0
Bromochloromethane	ND	10	1.1
Bromodichloromethane	ND	10	1.0
Bromoform	ND	10	1.5
Bromomethane	ND	10	1.6
Carbon Disulfide	ND	10	2.5
Carbon Tetrachloride	ND	10	1.0
Chlorobenzene	ND	10	1.0
Chloroethane	ND	10	2.7
Chloroform	4.4J	10	1.0
Chloromethane	ND	10	1.5
cis-1,2-Dichloroethylene	1.1J	10	1.0
Dibromochloromethane	ND	10	1.0
Dichlorodifluoromethane	ND	10	1.5
Ethylbenzene	ND	10	1.0
Isopropylbenzene	ND	10	1.0
m,p-Xylene	ND	20	2.1
4-Methyl-2-Pentanone	ND	200	25
Methylene Chloride	ND	20	5.0
tert-Butyl Methyl Ether	ND	10	1.3
o-Xylene	ND	10	1.0
Styrene	ND	10	2.5
Tetrachloroethene	170	10	1.5
Toluene	ND	10	1.0
Trans-1,2-DCE	ND	10	1.0
cis-1,3-Dichloropropene	ND	10	1.0
Trans-1,3-Dichloropropene	ND	10	1.1
TCE	1.7J	10	1.0
Trichlorofluoromethane	ND	10	1.5
Vinyl Chloride	ND	10	1.2
1,2-Dibromoethane	ND	10	1.0
Vinyl Acetate	ND	20	2.5
Trichlorotrifluoroethane	ND	10	1.5
Methyl Acetate	ND	20	2.5

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	104	100	104	70-130
Bromofluorobenzene	92.5	100	92	70-130
Toluene-d8	110	100	110	70-130
Dibromofluoromethane	104	100	104	70-130

Notes:
Sample Amount : 2.5ml
Prepared by : DNguye
Final Volume : 25ml
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV635.D Vial: 8
Acq On : 25 Sep 2024 7:55 pm Operator: DNguye/CLingl
Sample : 24I061-12I 10X Inst : 01
Misc : 2.5mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 13:11 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

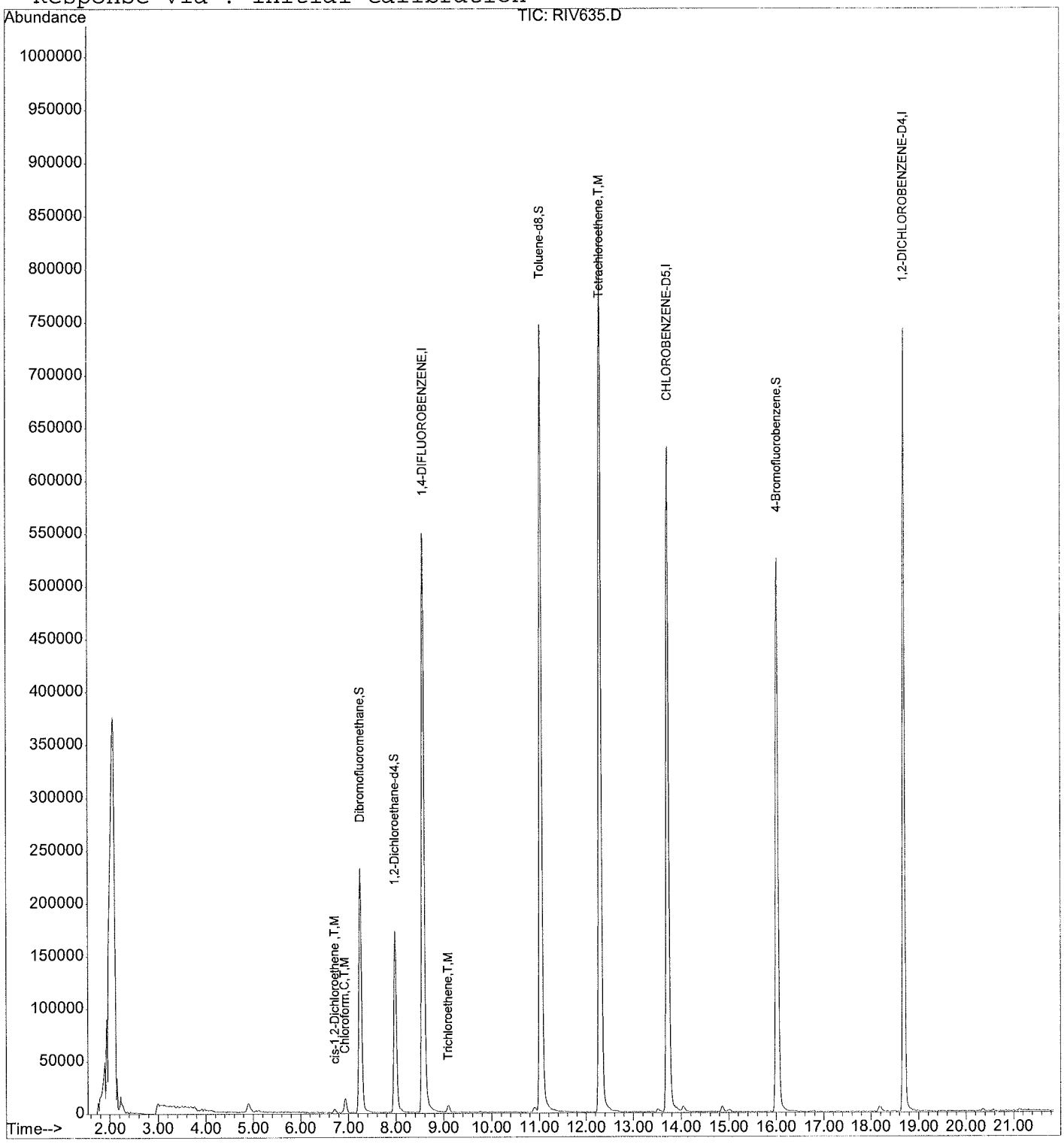
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	898058	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	755478	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	372343	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	282808	10.36	ug/l	0.01
Spiked Amount 10.000			Recovery =	103.60%		
41) 1,2-Dichloroethane-d4	7.98	65	252803	10.41	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.10%		
54) Toluene-d8	11.03	98	1011620	10.96	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.60%		
76) 4-Bromofluorobenzene	16.02	95	436891	9.25	ug/l	0.01
Spiked Amount 10.000			Recovery =	92.50%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.72	96	3292	0.11	ug/l	80
31) Chloroform	6.93	83	23935	0.44	ug/l	90
44) Trichloroethene	9.09	130	5301	0.17	ug/l	90
61) Tetrachloroethene	12.31	164	432881	16.84	ug/l	93

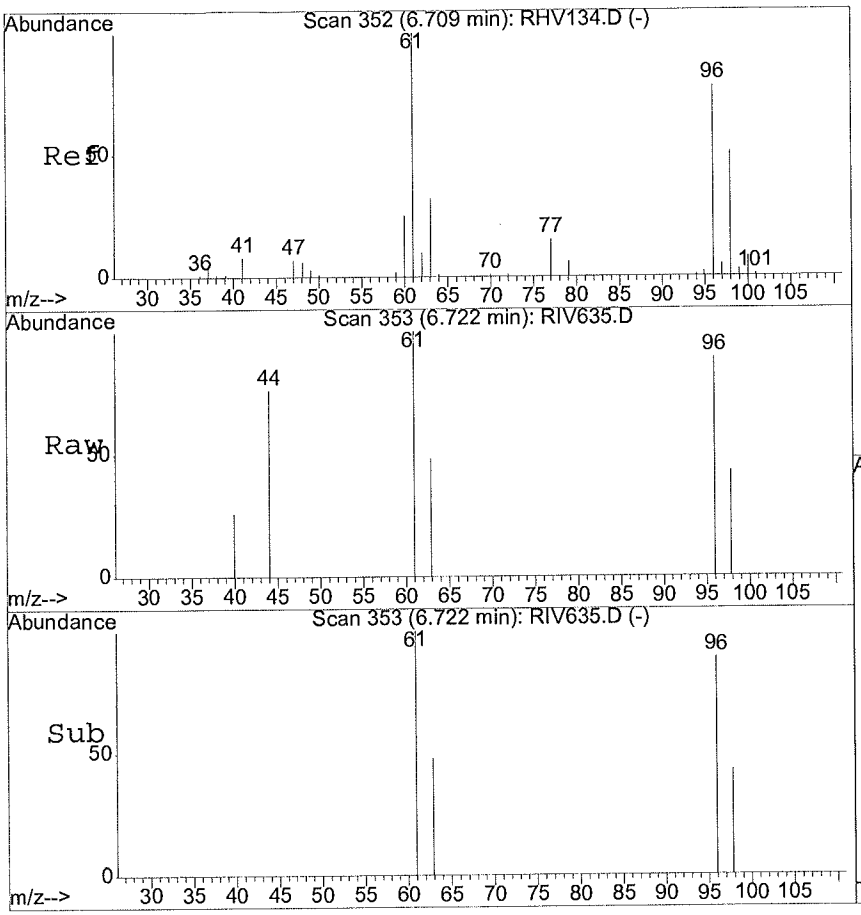
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I25\RIV635.D
Acq On : 25 Sep 2024 7:55 pm
Sample : 24I061-12I 10X
Misc : 2.5mL
MS Integration Params: RTE.P
Quant Time: Oct 2 13:11 2024

Vial: 8
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

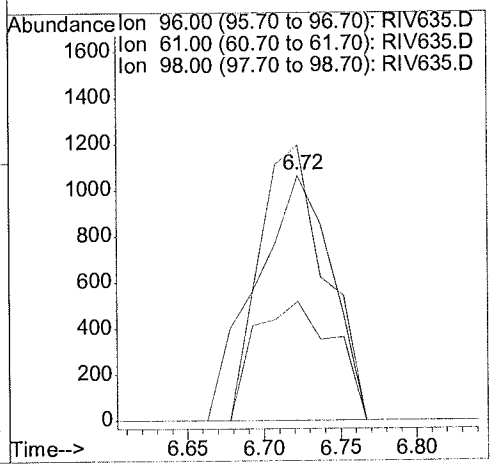


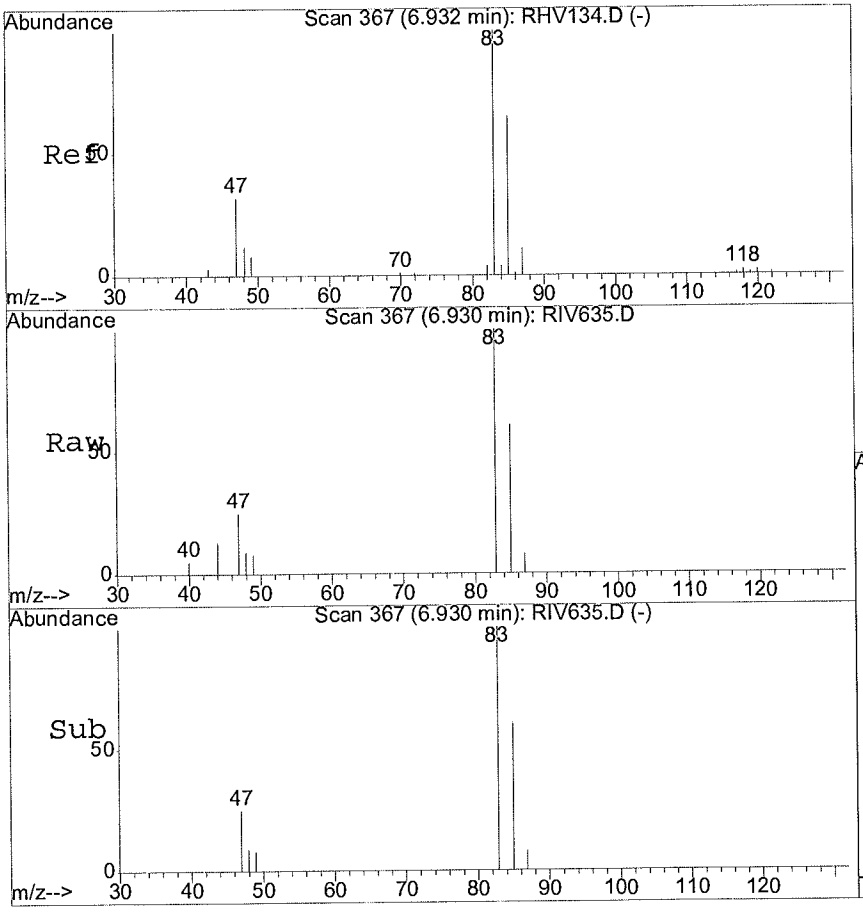


#30
cis-1,2-Dichloroethene
Concen: 0.11 ug/l
RT: 6.72 min Scan# 353
Delta R.T. 0.01 min
Lab File: RIV635.D
Acq: 25 Sep 2024 7:55 pm

Tgt Ion: 96 Resp: 3292

Ion	Ratio	Lower	Upper
96	100		
61	119.5	119.2	179.2
98	56.1	35.1	95.1

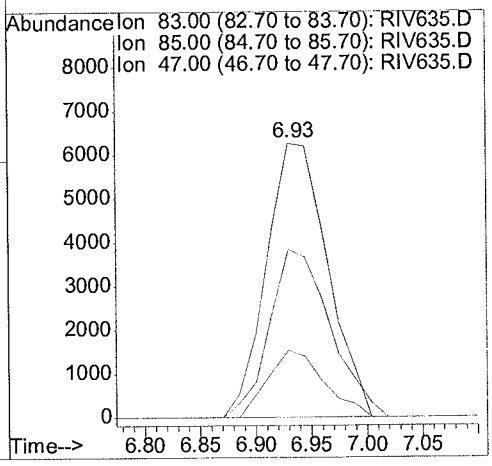


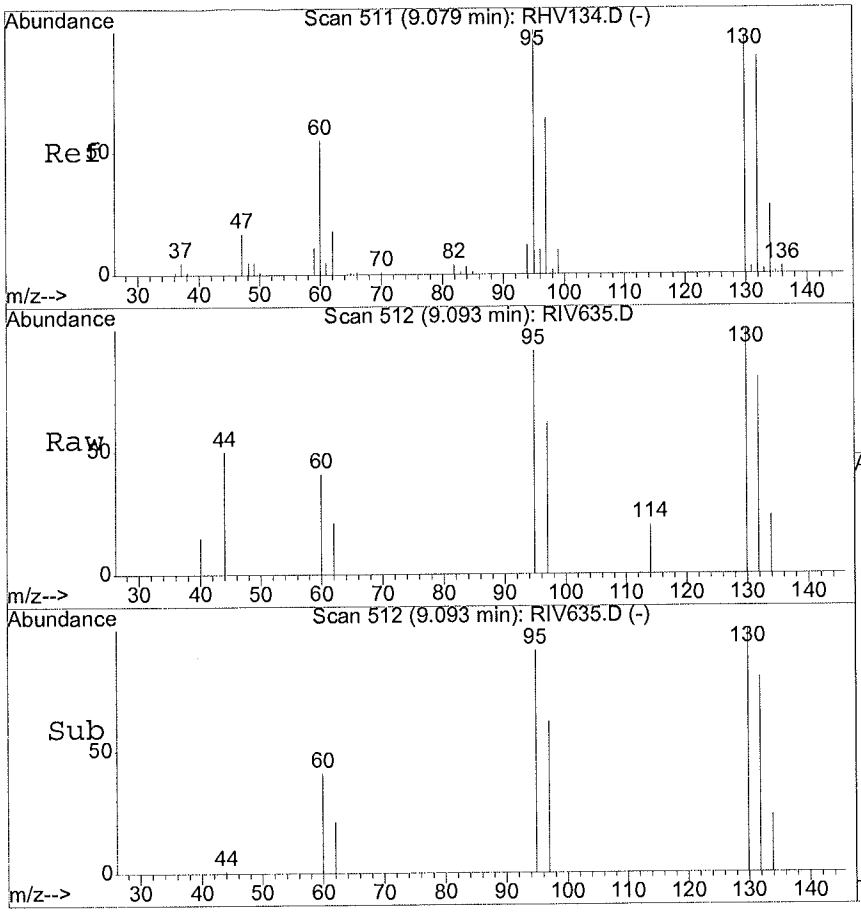


#31
Chloroform
Concen: 0.44 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV635.D
Acq: 25 Sep 2024 7:55 pm

Tgt Ion: 83 Resp: 23935

Ion	Ratio	Lower	Upper
83	100		
85	61.1	38.4	98.4
47	22.6	0.0	59.6

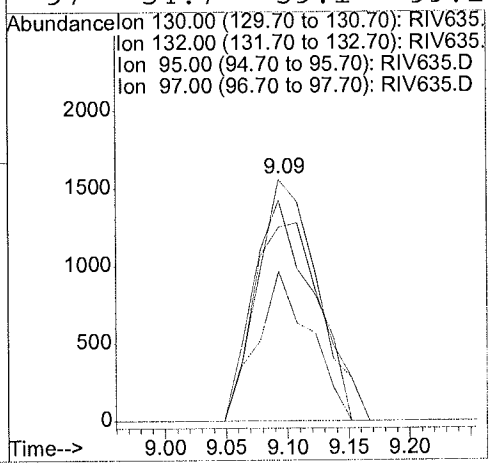


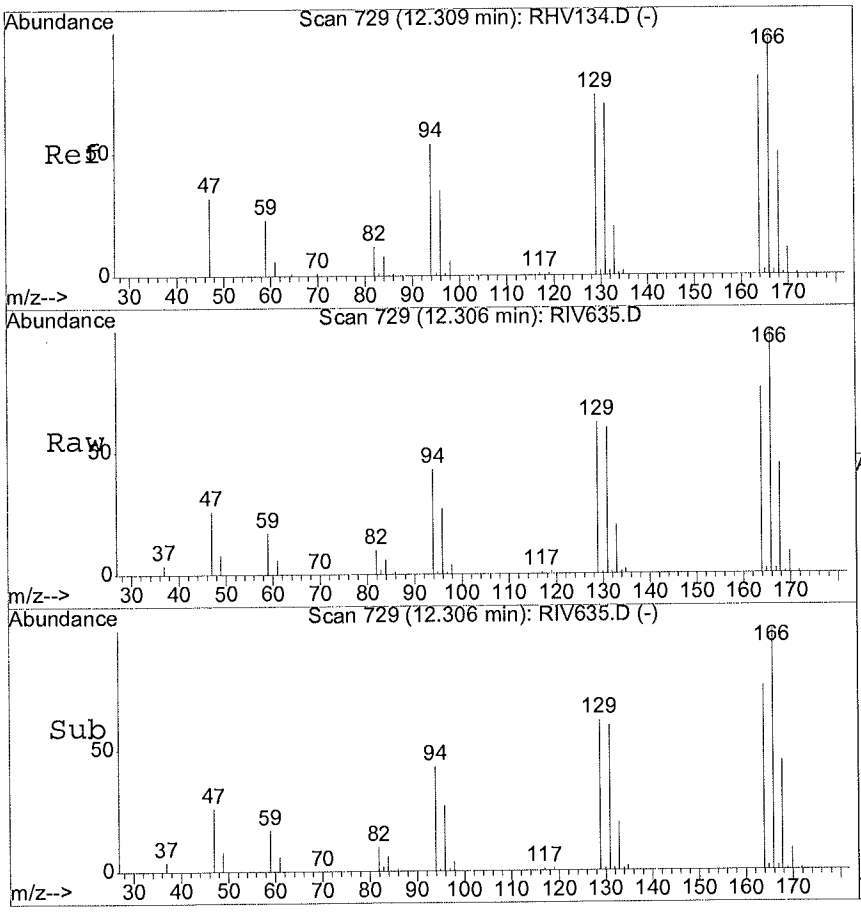


#44
Trichloroethene
Concen: 0.17 ug/l
RT: 9.09 min Scan# 512
Delta R.T. 0.01 min
Lab File: RIV635.D
Acq: 25 Sep 2024 7:55 pm

Tgt Ion:130 Resp: 5301

Ion	Ratio	Lower	Upper
130	100		
132	93.8	62.7	122.7
95	90.0	72.0	132.0
97	54.7	39.1	99.1

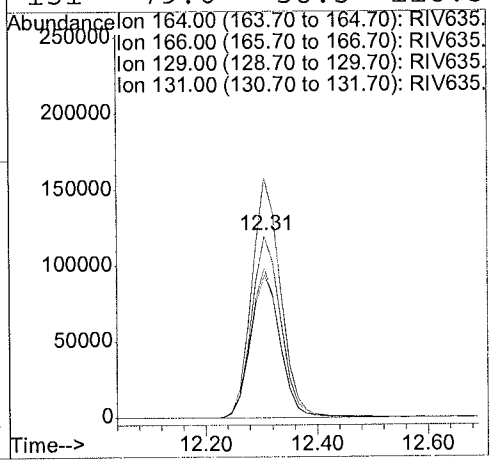




#61
Tetrachloroethene
Concen: 16.84 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV635.D
Acq: 25 Sep 2024 7:55 pm

Tgt Ion:164 Resp: 432881

Ion	Ratio	Lower	Upper
164	100		
166	130.4	98.2	158.2
129	81.7	62.8	122.8
131	79.6	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/11/24 11:11
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 20:31
Sample ID	: IW01-GW091124	Date Analyzed:	09/24/24 20:31
Lab Samp ID:	24I061-13	Dilution Factor:	1
Lab File ID:	RIV58B	Matrix:	WATER
Ext Btch ID:	V001I22	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.53J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.5	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.32J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	60	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.43J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.3	10.0	113	70-130
Bromofluorobenzene	9.12	10.0	91	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	10.7	10.0	107	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV588.D
Acq On : 24 Sep 2024 8:31 pm
Sample : 24I061-13
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 11:33 2024

Vial: 16
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

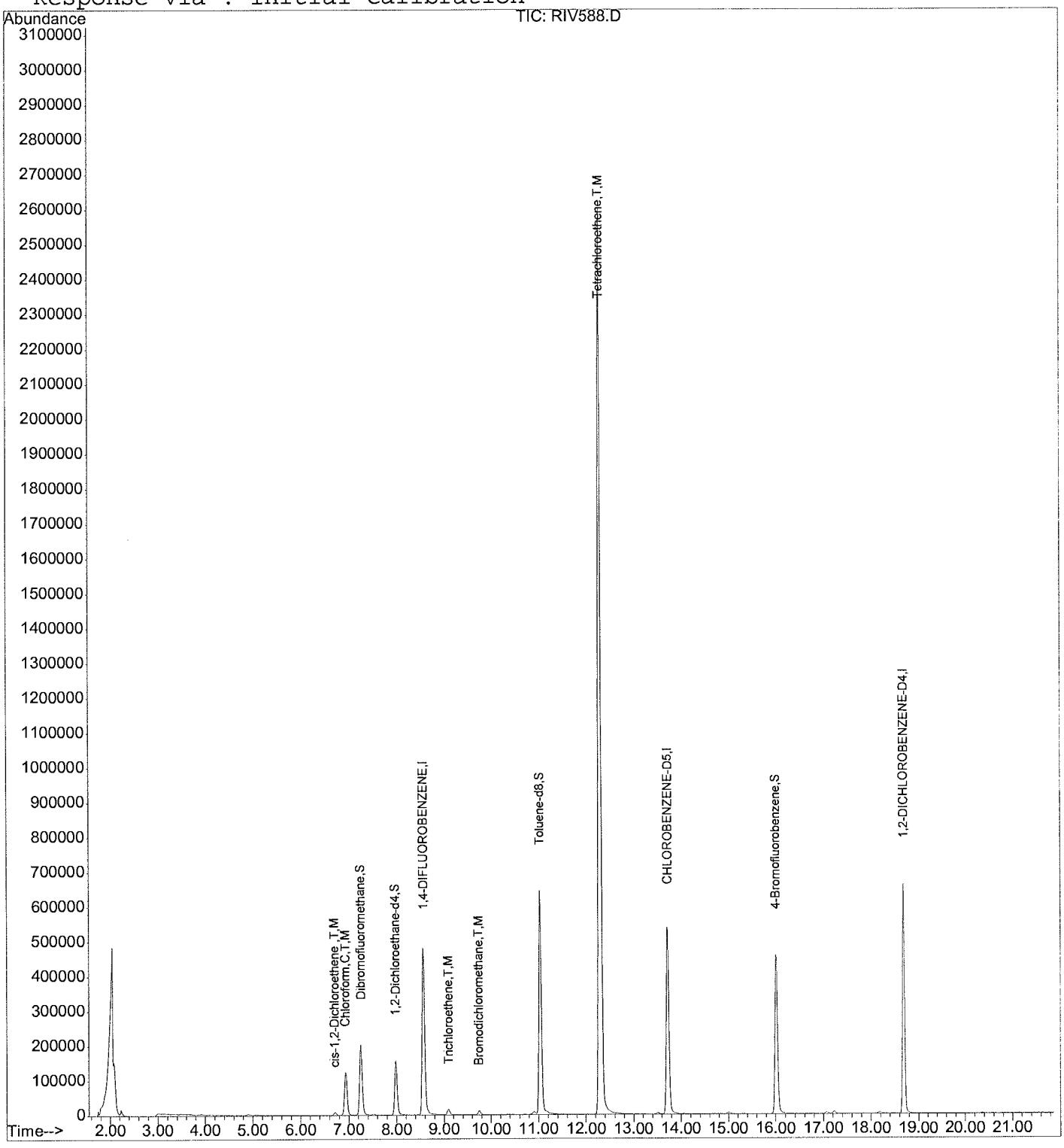
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	742477	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	644187	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	327355	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	242216	10.73	ug/l	0.01
Spiked Amount 10.000			Recovery =	107.30%		
41) 1,2-Dichloroethane-d4	7.98	65	226050	11.26	ug/l	0.00
Spiked Amount 10.000			Recovery =	112.60%		
54) Toluene-d8	11.03	98	843424	10.71	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.10%		
76) 4-Bromofluorobenzene	16.01	95	378712	9.12	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.20%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.71	96	8074	0.32	ug/l #	78
31) Chloroform	6.93	83	201417	4.46	ug/l	94
44) Trichloroethene	9.09	130	11297	0.43	ug/l	94
47) Bromodichloromethane	9.74	83	17209	0.53	ug/l	94
61) Tetrachloroethene	12.31	164	1306178	59.58	ug/l	94

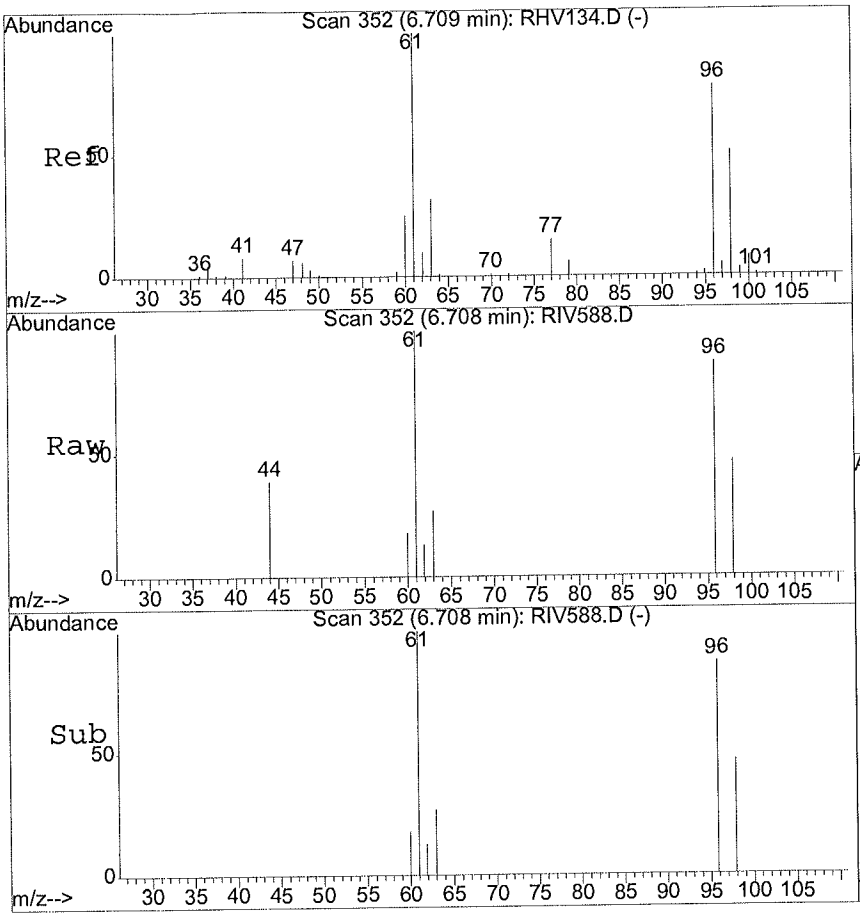
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I24\RIV588.D
Acq On : 24 Sep 2024 8:31 pm
Sample : 24I061-13
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 11:33 2024

Vial: 16
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

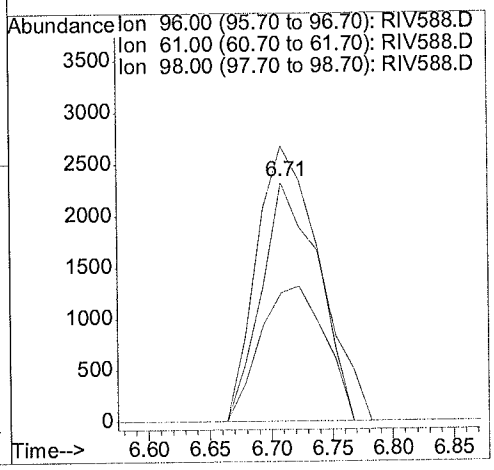


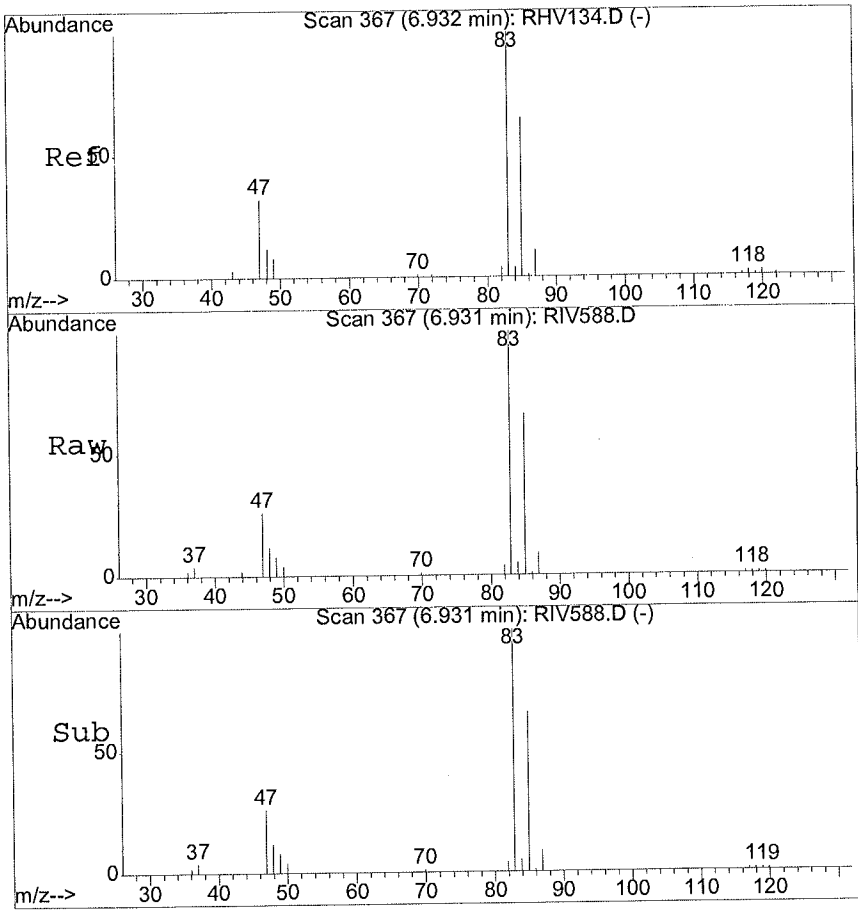


#30
cis-1,2-Dichloroethene
Concen: 0.32 ug/l
RT: 6.71 min Scan# 352
Delta R.T. -0.00 min
Lab File: RIV588.D
Acq: 24 Sep 2024 8:31 pm

Tgt Ion: 96 Resp: 8074

Ion	Ratio	Lower	Upper
96	100		
61	113.6	119.2	179.2#
98	60.1	35.1	95.1

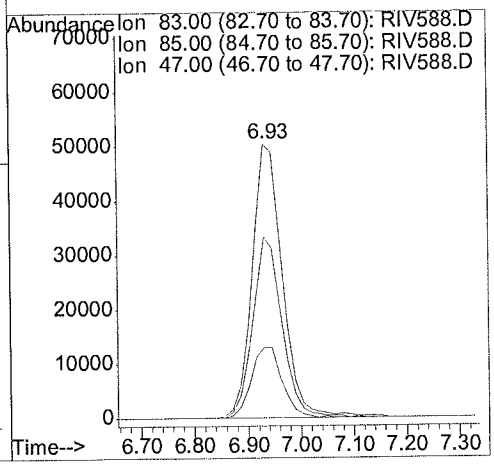


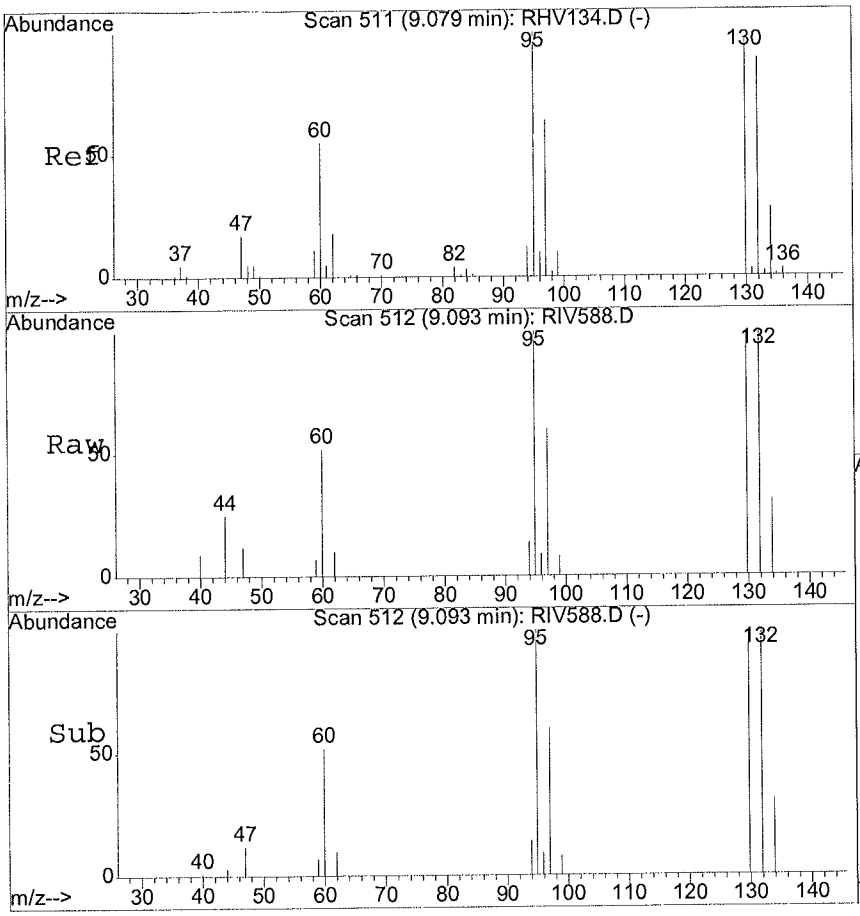


#31
Chloroform
Concen: 4.46 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV588.D
Acq: 24 Sep 2024 8:31 pm

Tgt Ion: 83 Resp: 201417

Ion	Ratio	Lower	Upper
83	100		
85	63.9	38.4	98.4
47	26.3	0.0	59.6

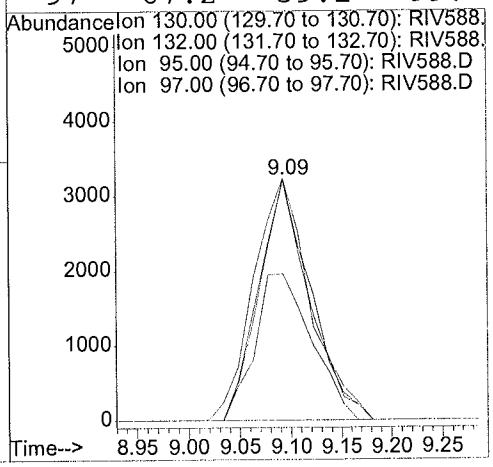


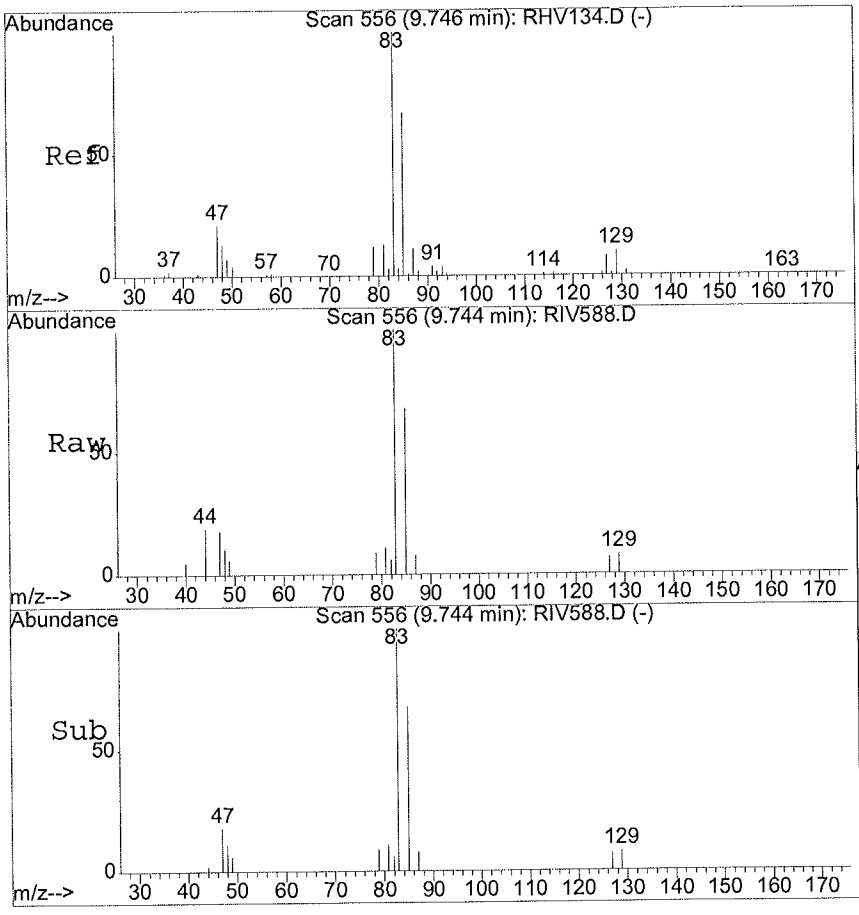


#44
Trichloroethene
Concen: 0.43 ug/l
RT: 9.09 min Scan# 512
Delta R.T. 0.01 min
Lab File: RIV588.D
Acq: 24 Sep 2024 8:31 pm

Tgt Ion:130 Resp: 11297

Ion	Ratio	Lower	Upper
130	100		
132	100.1	62.7	122.7
95	109.2	72.0	132.0
97	67.2	39.1	99.1

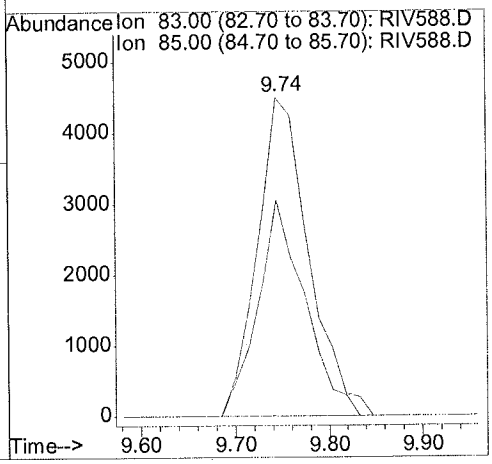


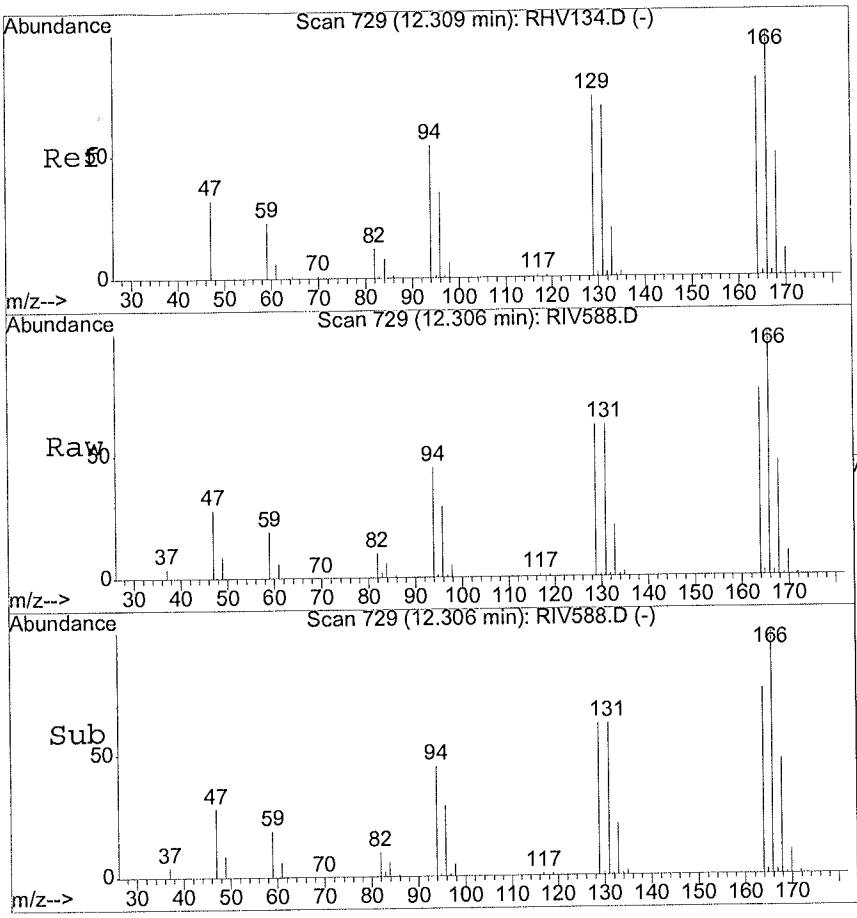


#47
Bromodichloromethane
Concen: 0.53 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RIV588.D
Acq: 24 Sep 2024 8:31 pm

Tgt Ion: 83 Resp: 17209

Ion	Ratio	Lower	Upper
83	100		
85	61.8	36.5	96.5

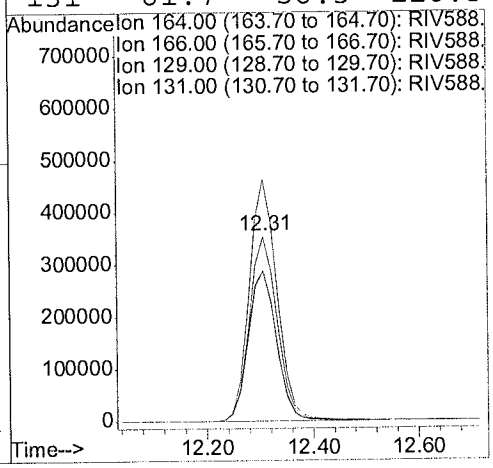




#61
Tetrachloroethene
Concen: 59.58 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV588.D
Acq: 24 Sep 2024 8:31 pm

Tgt Ion:164 Resp: 1306178

Ion	Ratio	Lower	Upper
164	100		
166	130.1	98.2	158.2
129	83.3	62.8	122.8
131	81.7	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/11/24 15:30
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 19:32
Sample ID	: MW03RC-GW091124	Date Analyzed:	09/24/24 19:32
Lab Samp ID:	24I061-14	Dilution Factor:	1
Lab File ID:	RIV586	Matrix:	WATER
Ext Btch ID:	VOO1I22	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.19J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.0	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.16J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	0.90J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	1.0	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	6.2	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.0	10.0	110	70-130
Bromofluorobenzene	8.90	10.0	89	70-130
Toluene-d8	10.8	10.0	108	70-130
Dibromofluoromethane	10.3	10.0	103	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV586.D Vial: 14
Acq On : 24 Sep 2024 7:32 pm Operator: DNguye/CLingl
Sample : 24I061-14 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 11:05 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	784092	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	664503	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	339322	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	244564	10.26	ug/l	0.01
Spiked Amount 10.000			Recovery =	102.60%		
41) 1,2-Dichloroethane-d4	8.00	65	233519	11.02	ug/l	0.01
Spiked Amount 10.000			Recovery =	110.20%		
54) Toluene-d8	11.03	98	876403	10.79	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.90%		
76) 4-Bromofluorobenzene	16.02	95	383074	8.90	ug/l	0.01
Spiked Amount 10.000			Recovery =	89.00%		
Target Compounds						Qvalue
31) Chloroform	6.95	83	95967	2.01	ug/l	93
47) Bromodichloromethane	9.76	83	6478	0.19	ug/l	96
61) Tetrachloroethene	12.31	164	140268	6.20	ug/l	95
67) Ethylbenzene	13.89	91	20373	0.16	ug/l	92
68) m-Xylene & p-Xylene	14.04	91	88121	0.90	ug/l	94
69) o-Xylene	14.85	91	99013	1.04	ug/l	89

(#) = qualifier out of range (m) = manual integration

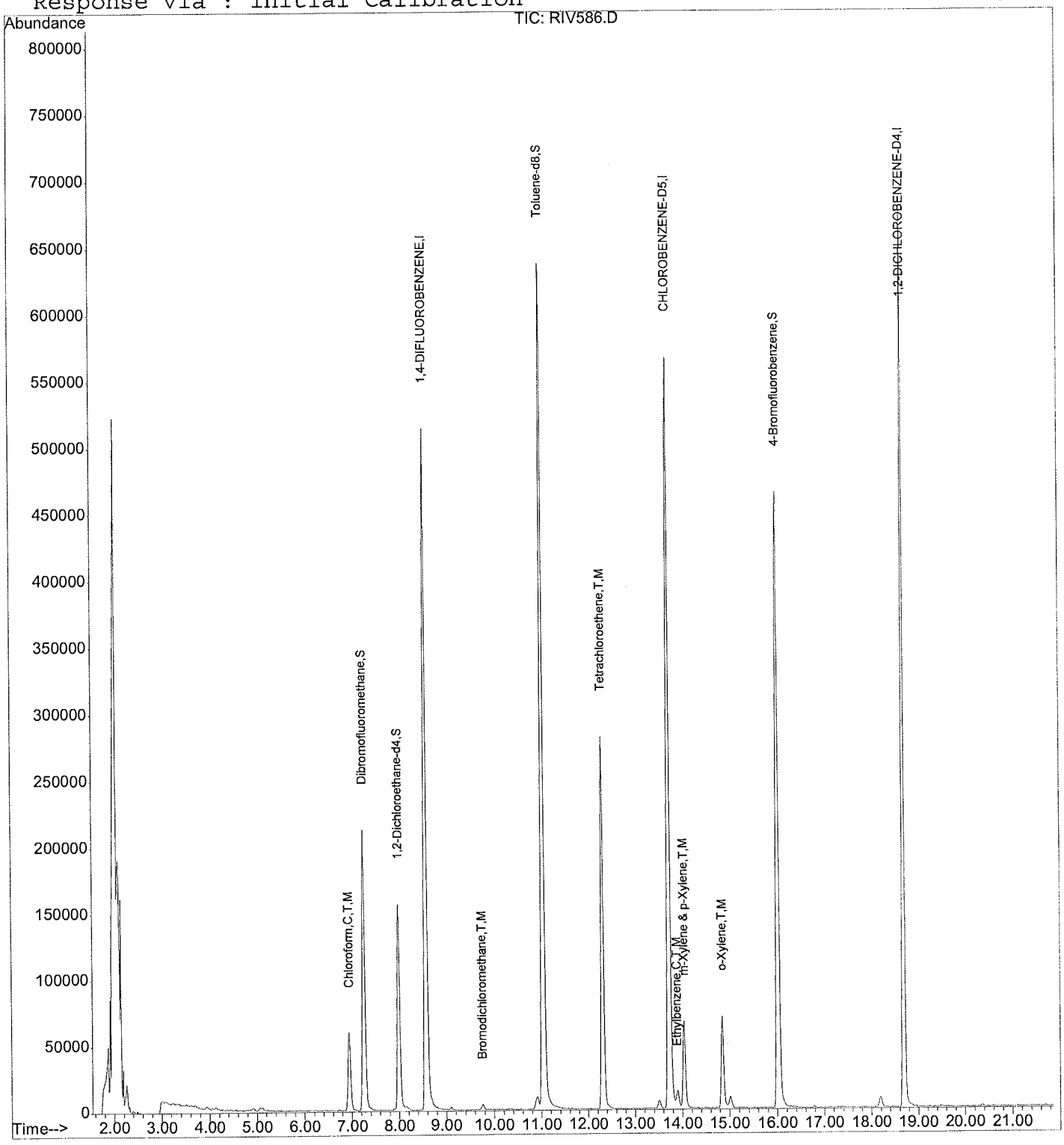
Quantitation Report

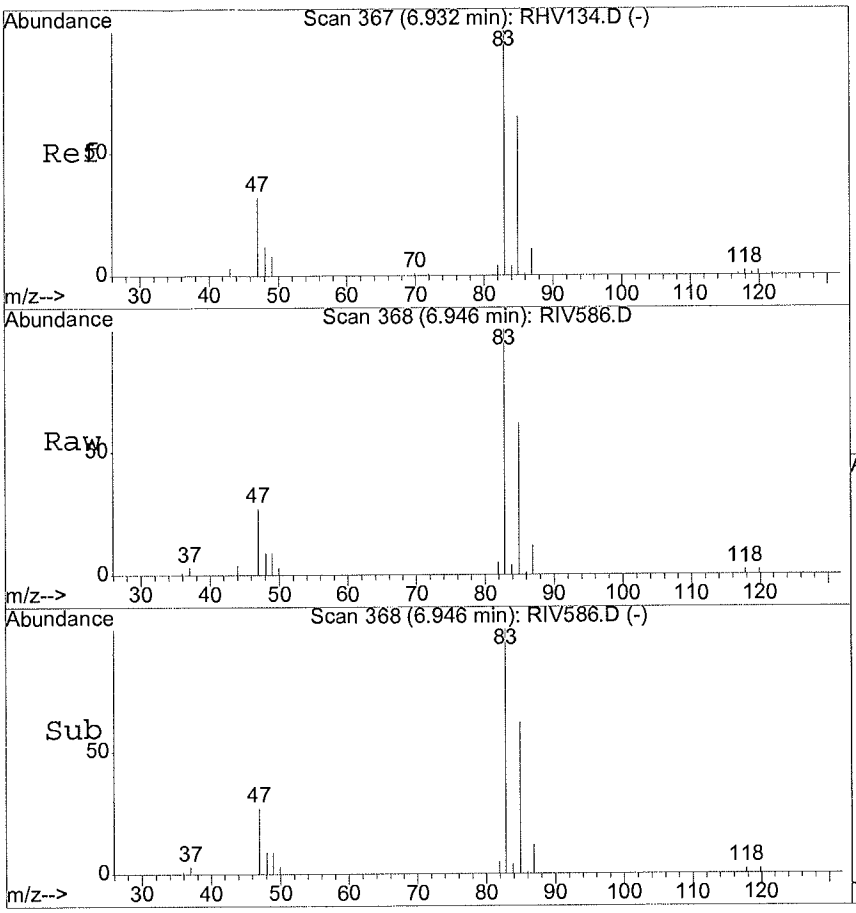
Data File : D:\HPCHEM\1\DATA\24I24\RIV586.D
Acq On : 24 Sep 2024 7:32 pm
Sample : 24I061-14
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 11:05 2024

Vial: 14
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

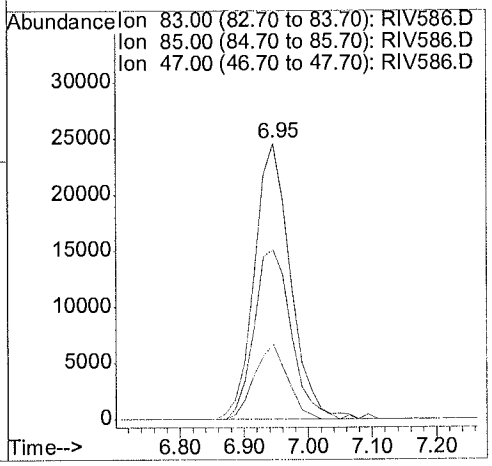


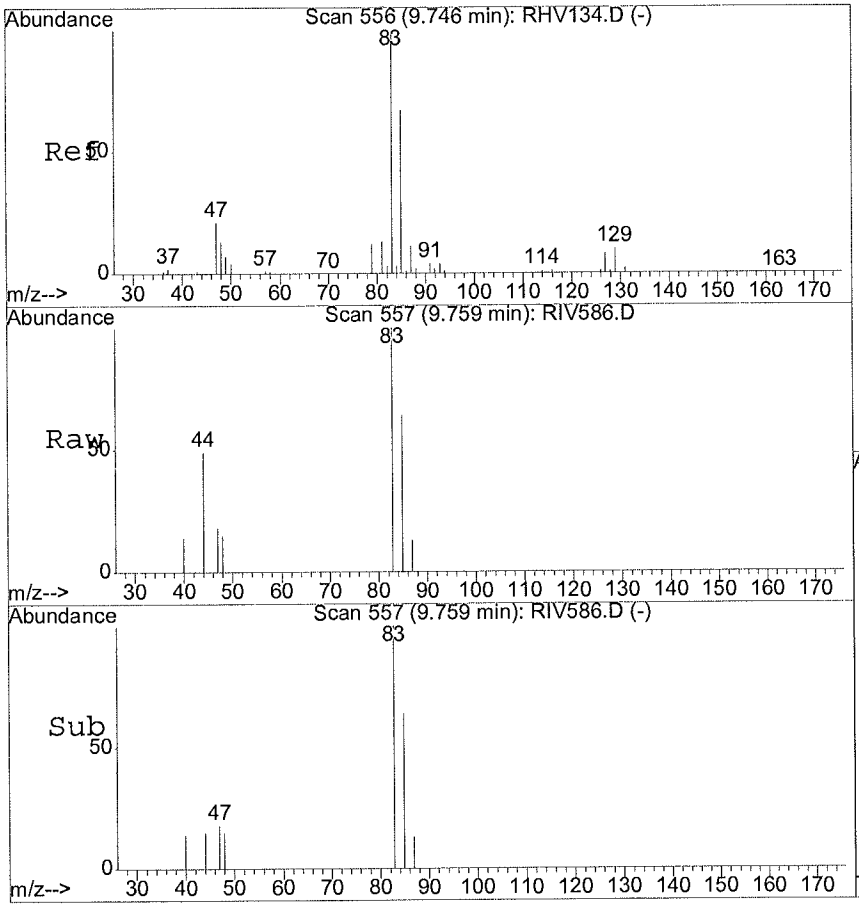


#31
Chloroform
Concen: 2.01 ug/l
RT: 6.95 min Scan# 368
Delta R.T. 0.01 min
Lab File: RIV586.D
Acq: 24 Sep 2024 7:32 pm

Tgt Ion: 83 Resp: 95967

Ion	Ratio	Lower	Upper
83	100		
85	63.0	38.4	98.4
47	24.9	0.0	59.6

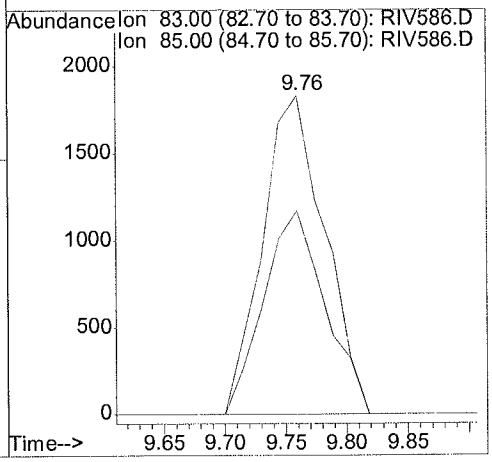


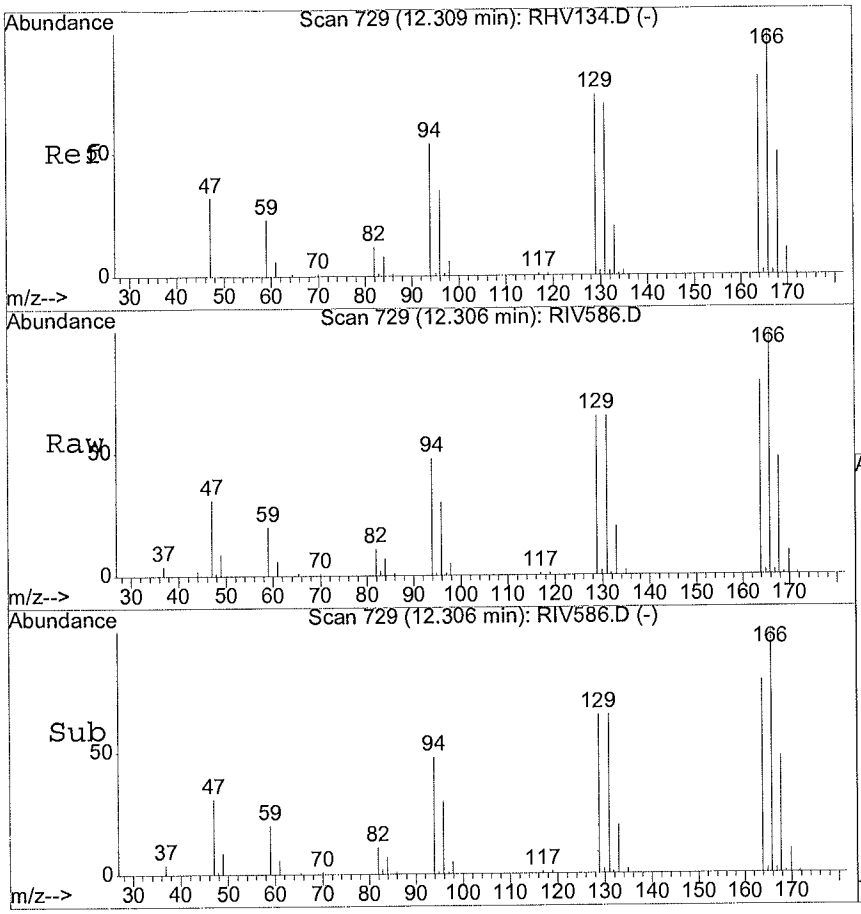


#47
Bromodichloromethane
Concen: 0.19 ug/l
RT: 9.76 min Scan# 557
Delta R.T. 0.01 min
Lab File: RIV586.D
Acq: 24 Sep 2024 7:32 pm

Tgt Ion: 83 Resp: 6478

Ion	Ratio	Lower	Upper
83	100		
85	63.7	36.5	96.5

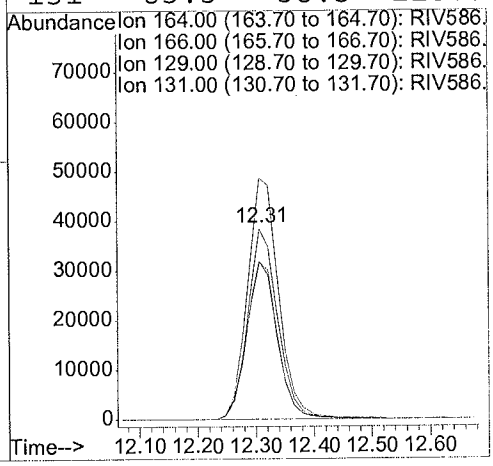


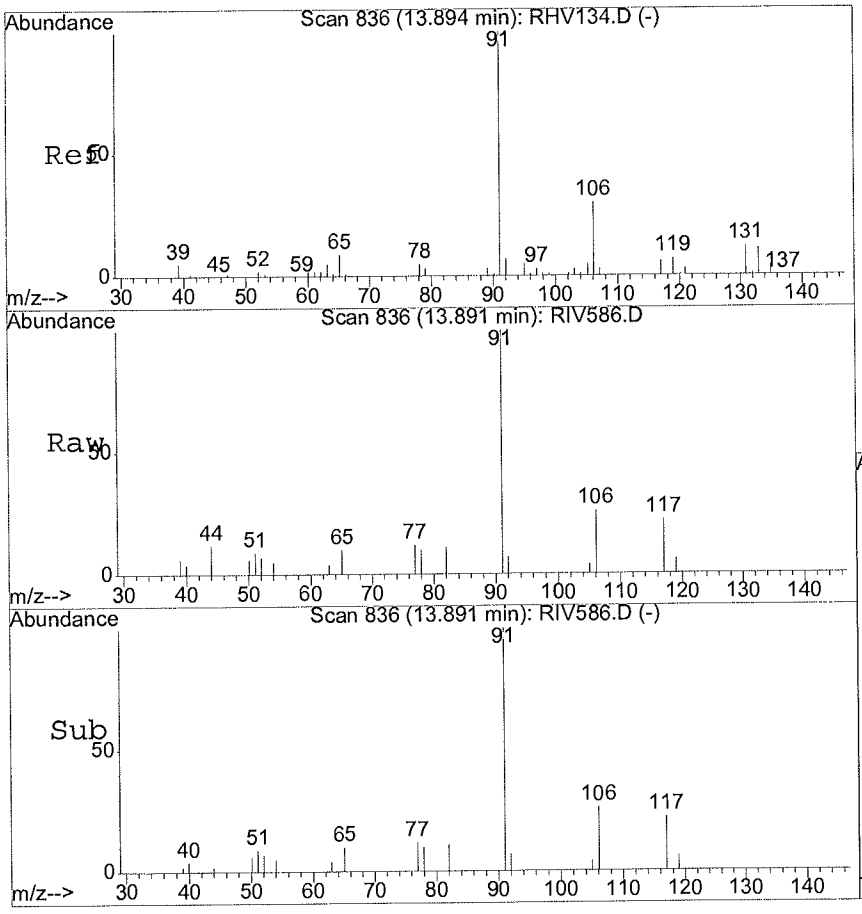


#61
Tetrachloroethene
Concen: 6.20 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV586.D
Acq: 24 Sep 2024 7:32 pm

Tgt Ion:164 Resp: 140268

Ion	Ratio	Lower	Upper
164	100		
166	130.9	98.2	158.2
129	84.4	62.8	122.8
131	83.5	58.3	118.3

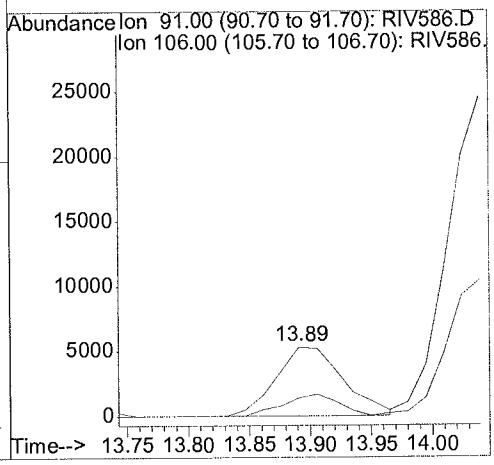


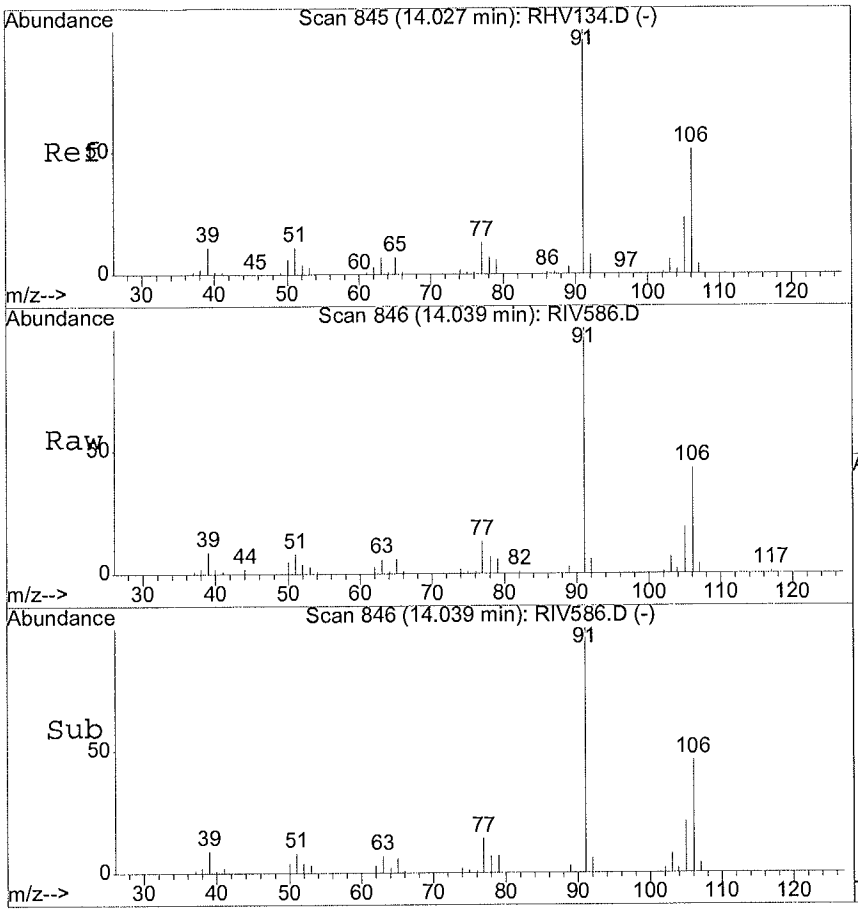


#67
Ethylbenzene
Concen: 0.16 ug/l
RT: 13.89 min Scan# 836
Delta R.T. -0.00 min
Lab File: RIV586.D
Acq: 24 Sep 2024 7:32 pm

Tgt Ion: 91 Resp: 20373

Ion	Ratio	Lower	Upper
91	100		
106	25.5	0.0	59.6

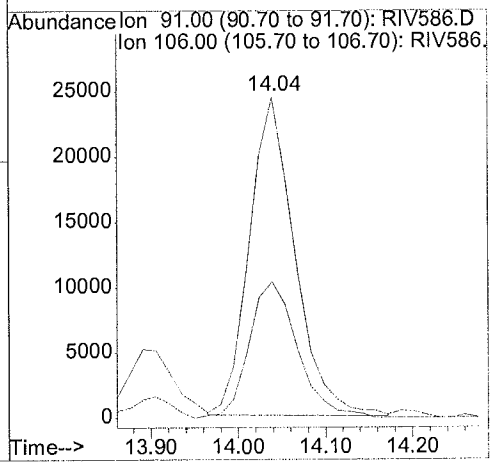


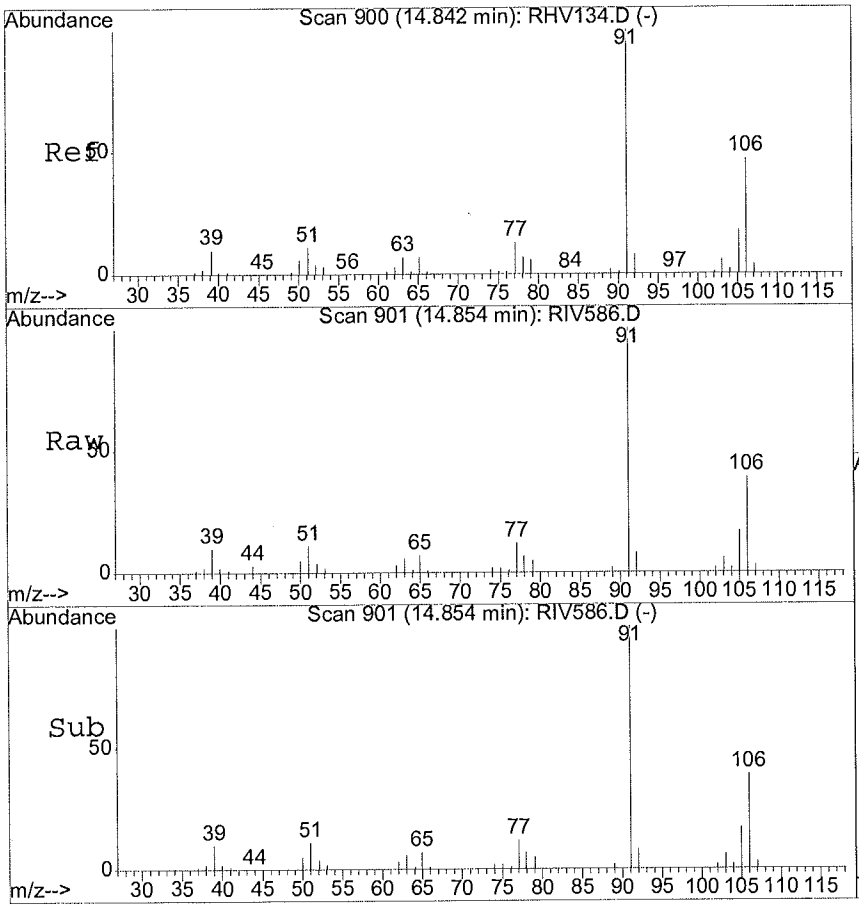


#68
m-Xylene & p-Xylene
Concen: 0.90 ug/l
RT: 14.04 min Scan# 846
Delta R.T. 0.01 min
Lab File: RIV586.D
Acq: 24 Sep 2024 7:32 pm

Tgt Ion: 91 Resp: 88121

Ion	Ratio	Lower	Upper
91	100		
106	45.7	19.5	79.5

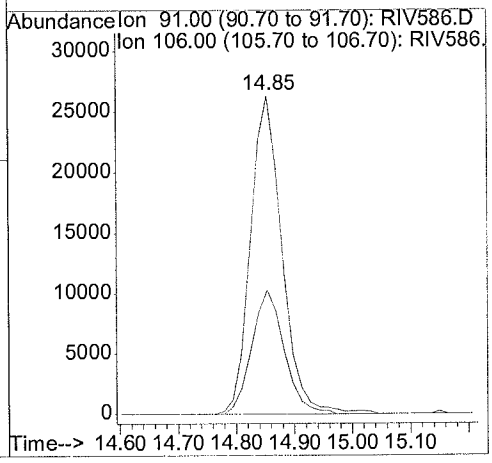




#69
o-Xylene
Concen: 1.04 ug/l
RT: 14.85 min Scan# 901
Delta R.T. 0.01 min
Lab File: RIV586.D
Acq: 24 Sep 2024 7:32 pm

Tgt Ion: 91 Resp: 99013

Ion	Ratio	Lower	Upper
91	100		
106	40.1	17.6	77.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/11/24 15:21
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 04:29
Sample ID	: EW01-GW091124	Date Analyzed:	09/24/24 04:29
Lab Samp ID:	24I061-15	Dilution Factor:	1
Lab File ID:	RIV556	Matrix:	WATER
Ext Btch ID:	VOOI121	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.44J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.4	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.93J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	67	1.0	0.15
Toluene	0.17J	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	1.0	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.6	10.0	106	70-130
Bromofluorobenzene	9.09	10.0	91	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV556.D Vial: 8
Acq On : 24 Sep 2024 4:29 am Operator: DNguye/CLingl
Sample : 24I061-15 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

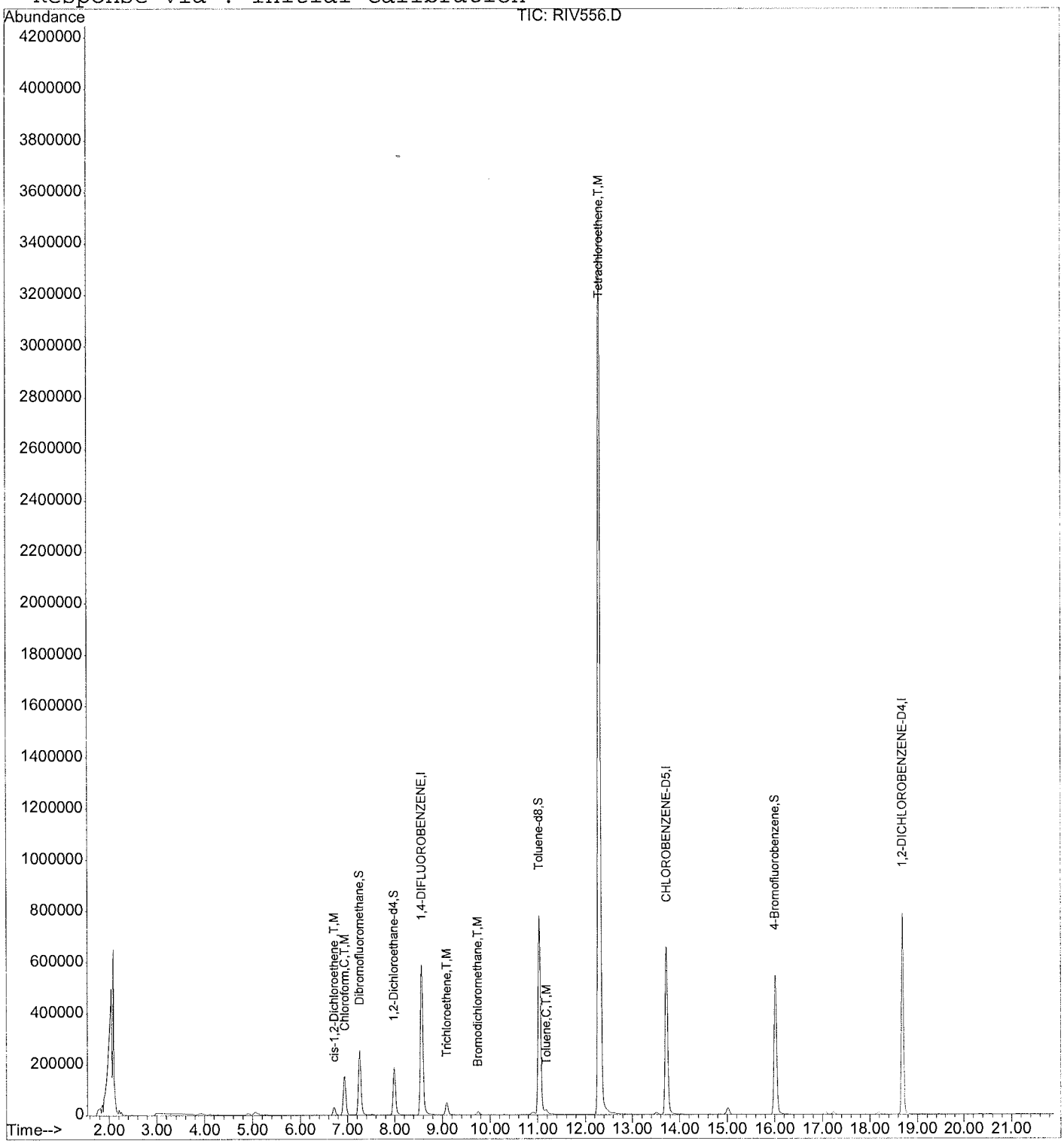
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	934072	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	800699	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	391817	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	297613	10.48	ug/l	0.01
Spiked Amount 10.000			Recovery = 104.80%			
41) 1,2-Dichloroethane-d4	7.98	65	266838	10.57	ug/l	0.00
Spiked Amount 10.000			Recovery = 105.70%			
54) Toluene-d8	11.03	98	1044168	10.67	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.70%			
76) 4-Bromofluorobenzene	16.01	95	451934	9.09	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.90%			
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.72	96	29597	0.93	ug/l	85
31) Chloroform	6.95	83	249038	4.38	ug/l	95
44) Trichloroethene	9.09	130	33843	1.03	ug/l	94
47) Bromodichloromethane	9.74	83	17929	0.44	ug/l	95
55) Toluene	11.18	91	19794	0.16	ug/l	99
61) Tetrachloroethene	12.31	164	1821676	66.85	ug/l	94

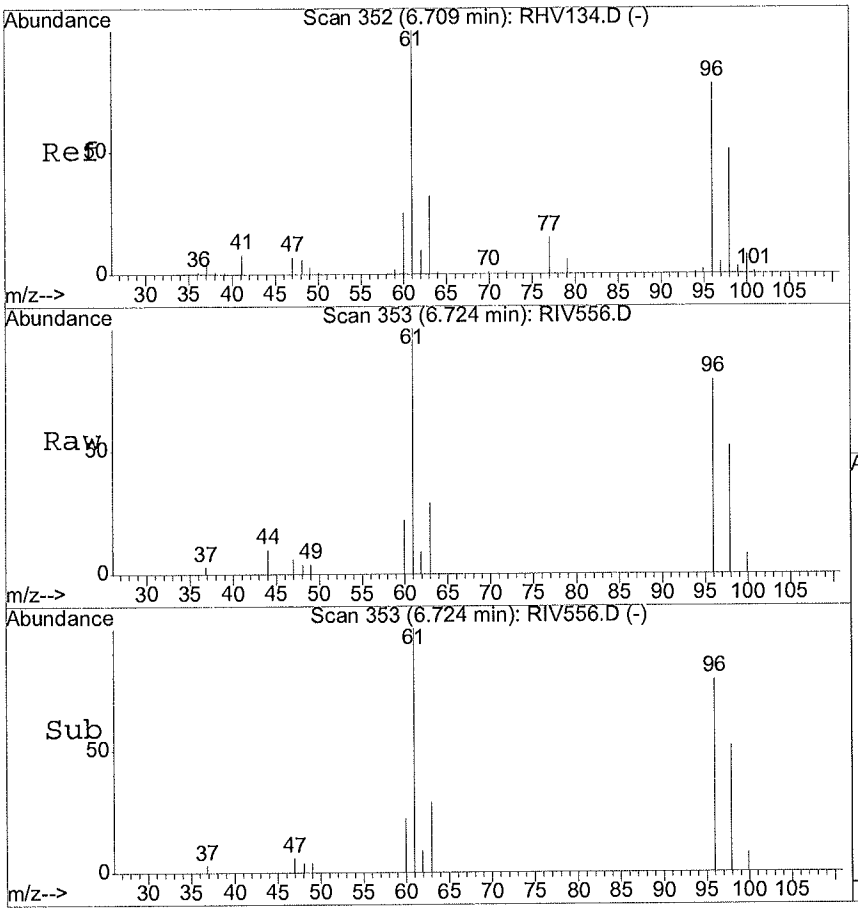
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV556.D Vial: 8
Acq On : 24 Sep 2024 4:29 am Operator: DNguye/CLing
Sample : 24I061-15 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:41 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

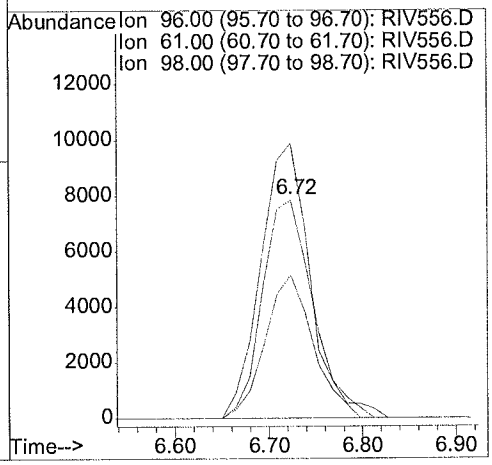


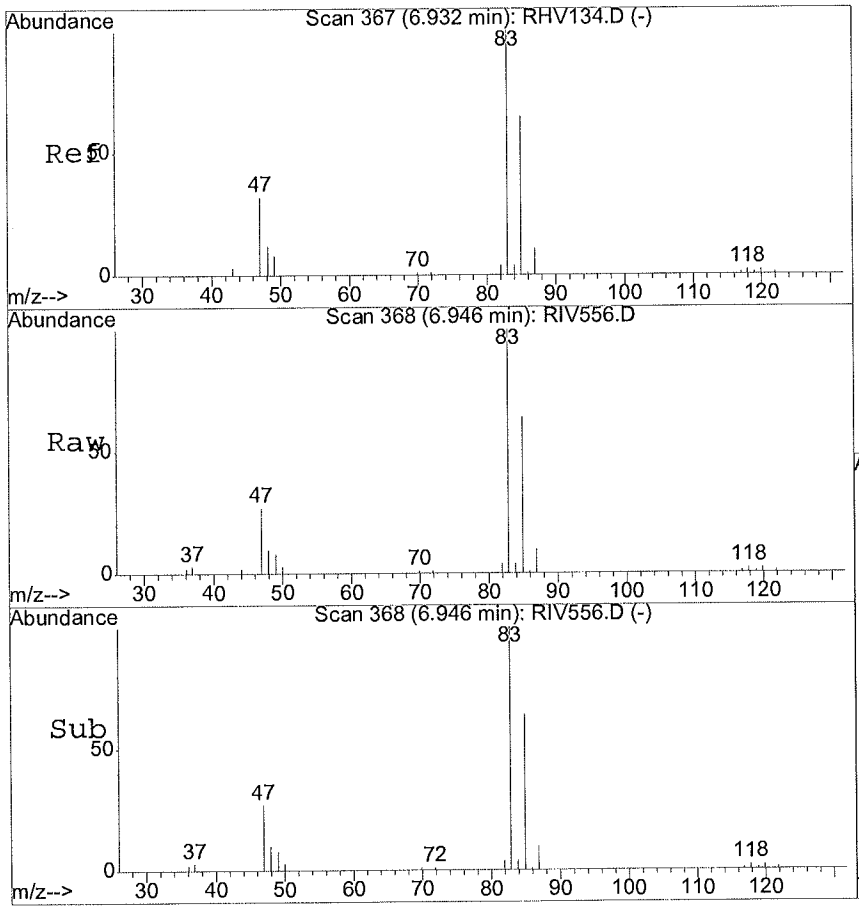


#30
cis-1,2-Dichloroethene
Concen: 0.93 ug/l
RT: 6.72 min Scan# 353
Delta R.T. 0.01 min
Lab File: RIV556.D
Acq: 24 Sep 2024 4:29 am

Tgt Ion: 96 Resp: 29597

Ion	Ratio	Lower	Upper
96	100		
61	123.2	119.2	179.2
98	62.3	35.1	95.1

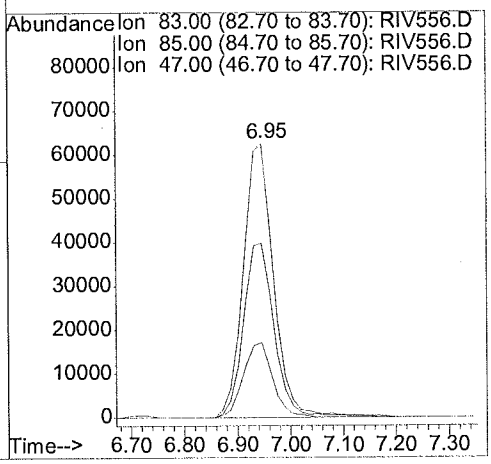


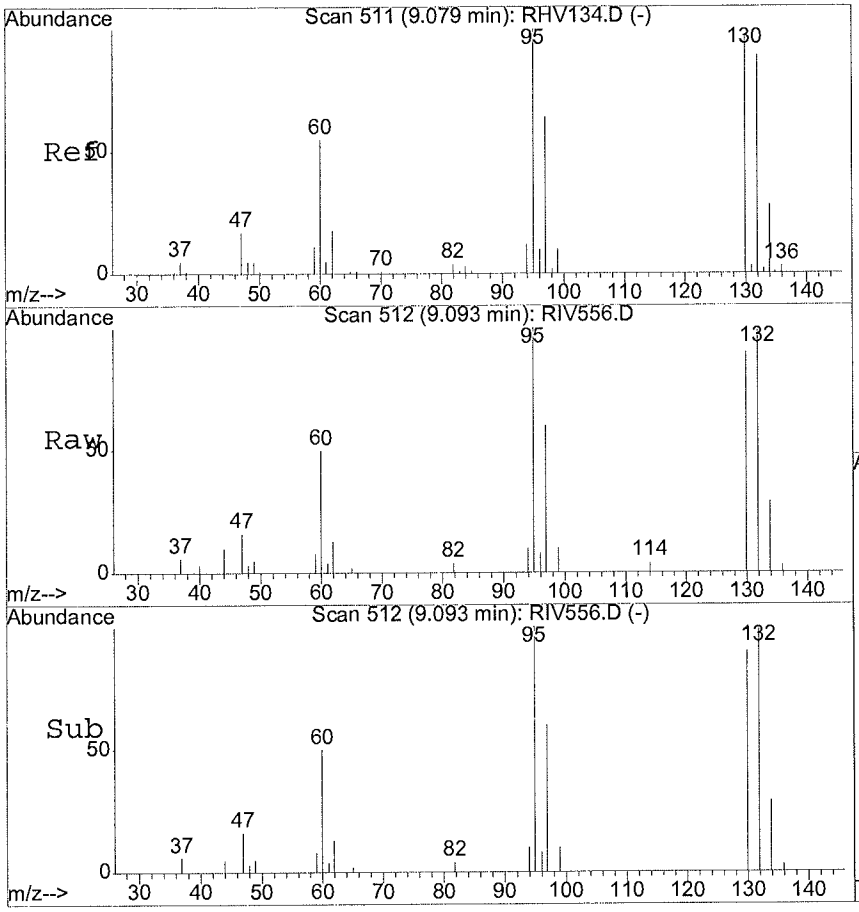


#31
Chloroform
Concen: 4.38 ug/l
RT: 6.95 min Scan# 368
Delta R.T. 0.01 min
Lab File: RIV556.D
Acq: 24 Sep 2024 4:29 am

Tgt Ion: 83 Resp: 249038

Ion	Ratio	Lower	Upper
83	100		
85	64.5	38.4	98.4
47	26.5	0.0	59.6

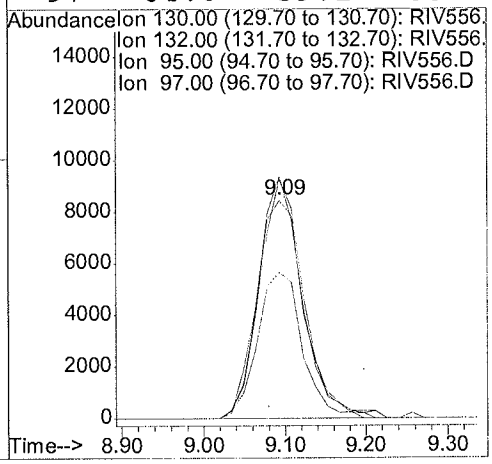


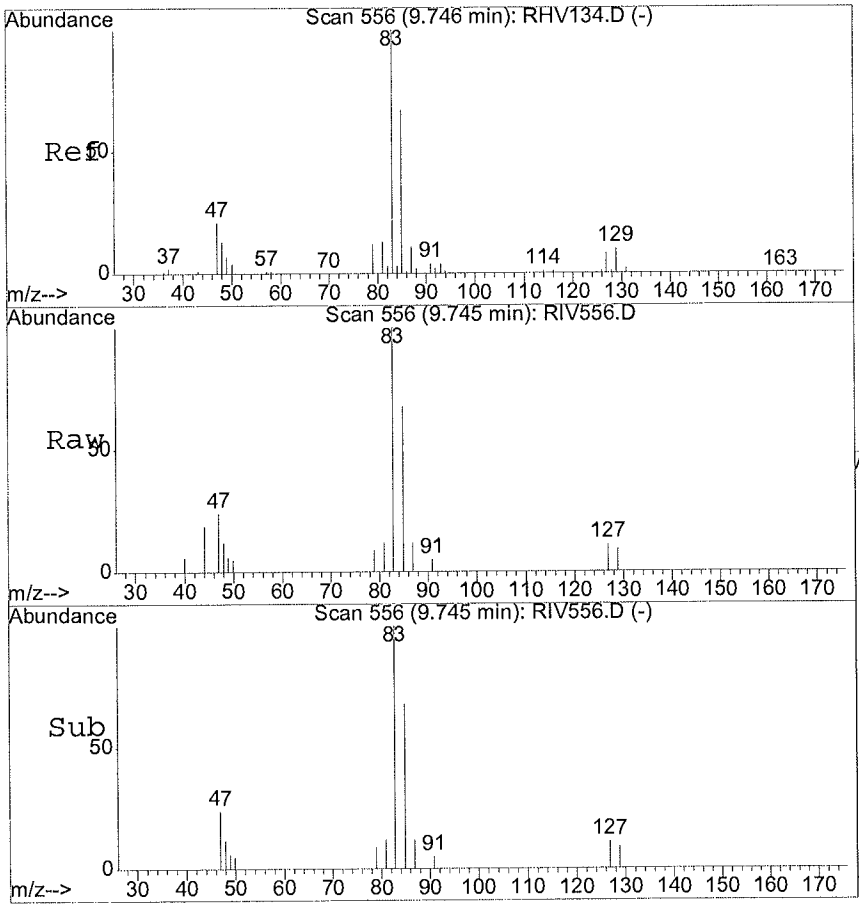


#44
Trichloroethene
Concen: 1.03 ug/l
RT: 9.09 min Scan# 512
Delta R.T. 0.01 min
Lab File: RIV556.D
Acq: 24 Sep 2024 4:29 am

Tgt Ion:130 Resp: 33843

Ion	Ratio	Lower	Upper
130	100		
132	103.2	62.7	122.7
95	104.2	72.0	132.0
97	64.0	39.1	99.1

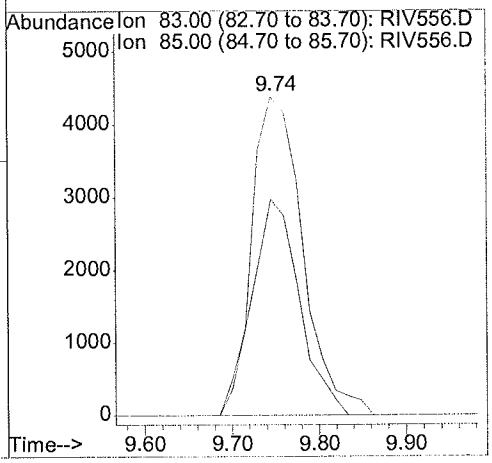


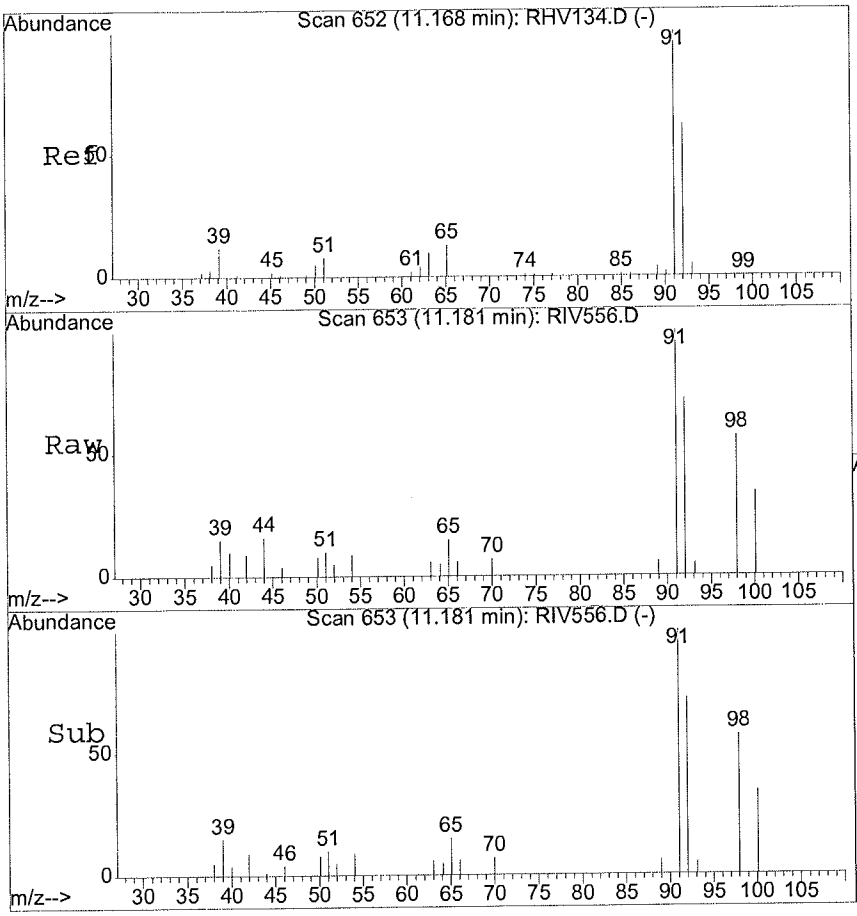


#47
Bromodichloromethane
Concen: 0.44 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RIV556.D
Acq: 24 Sep 2024 4:29 am

Tgt Ion: 83 Resp: 17929

Ion	Ratio	Lower	Upper
83	100		
85	62.8	36.5	96.5

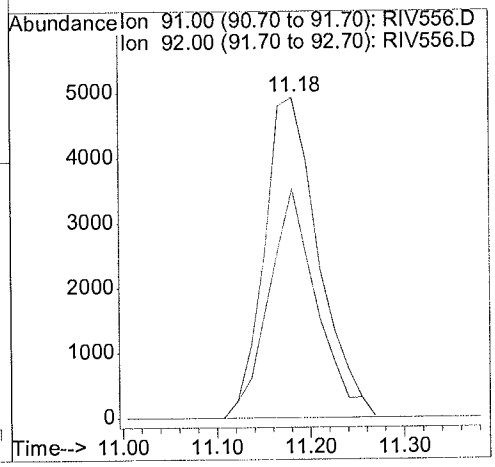


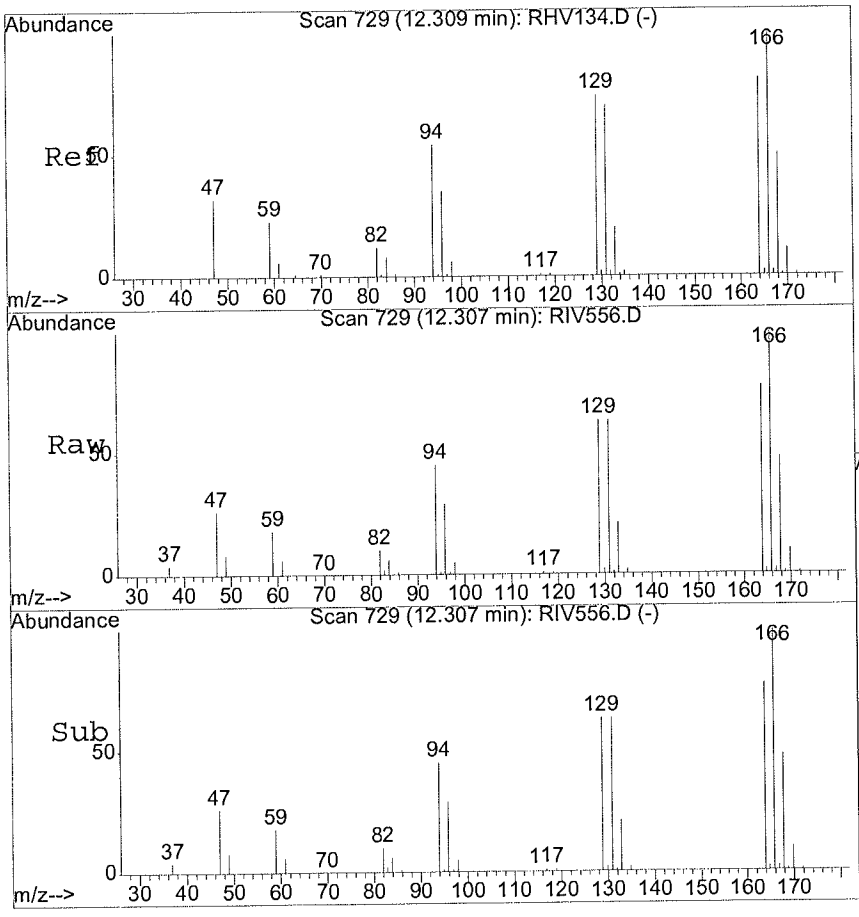


#55
Toluene
Concen: 0.16 ug/l
RT: 11.18 min Scan# 653
Delta R.T. 0.01 min
Lab File: RIV556.D
Acq: 24 Sep 2024 4:29 am

Tgt Ion: 91 Resp: 19794

Ion	Ratio	Lower	Upper
91	100		
92	63.4	32.4	92.4

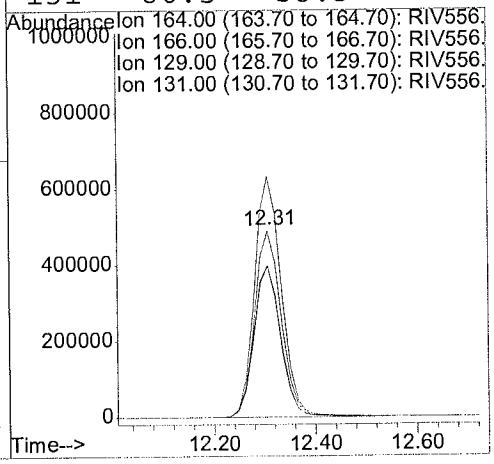




#61
Tetrachloroethene
Concen: 66.85 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV556.D
Acq: 24 Sep 2024 4:29 am

Tgt Ion:164 Resp: 1821676

Ion	Ratio	Lower	Upper
164	100		
166	129.4	98.2	158.2
129	81.5	62.8	122.8
131	80.5	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/11/24 16:20
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 04:58
Sample ID	: EB02-GW091124	Date Analyzed:	09/24/24 04:58
Lab Samp ID:	24I061-16	Dilution Factor:	1
Lab File ID:	RIV557	Matrix:	WATER
Ext Btch ID:	VOO1I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	2.9J	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.8	10.0	108	70-130
Bromofluorobenzene	8.97	10.0	90	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV557.D Vial: 9
Acq On : 24 Sep 2024 4:58 am Operator: DNguye/CLingl
Sample : 24I061-16 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

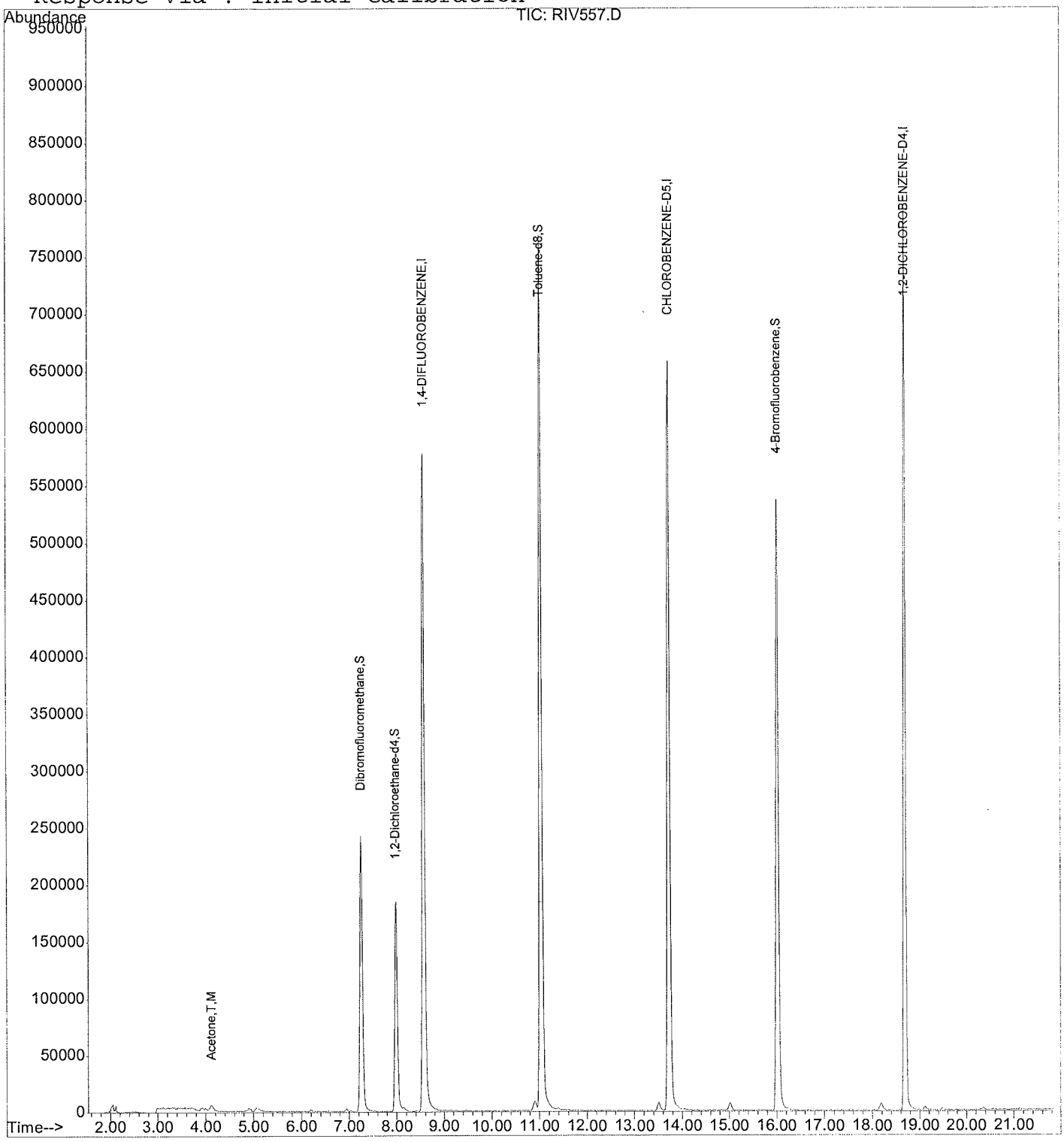
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	925278	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	780916	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	390786	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	292054	10.38	ug/l	0.01
Spiked Amount 10.000			Recovery = 103.80%			
41) 1,2-Dichloroethane-d4	7.98	65	270353	10.81	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.10%			
54) Toluene-d8	11.03	98	1024345	10.73	ug/l	0.00
Spiked Amount 10.000			Recovery = 107.30%			
76) 4-Bromofluorobenzene	16.01	95	444497	8.97	ug/l	0.00
Spiked Amount 10.000			Recovery = 89.70%			
Target Compounds						Qvalue
13) Acetone	4.12	43	21601	2.86	ug/l	91

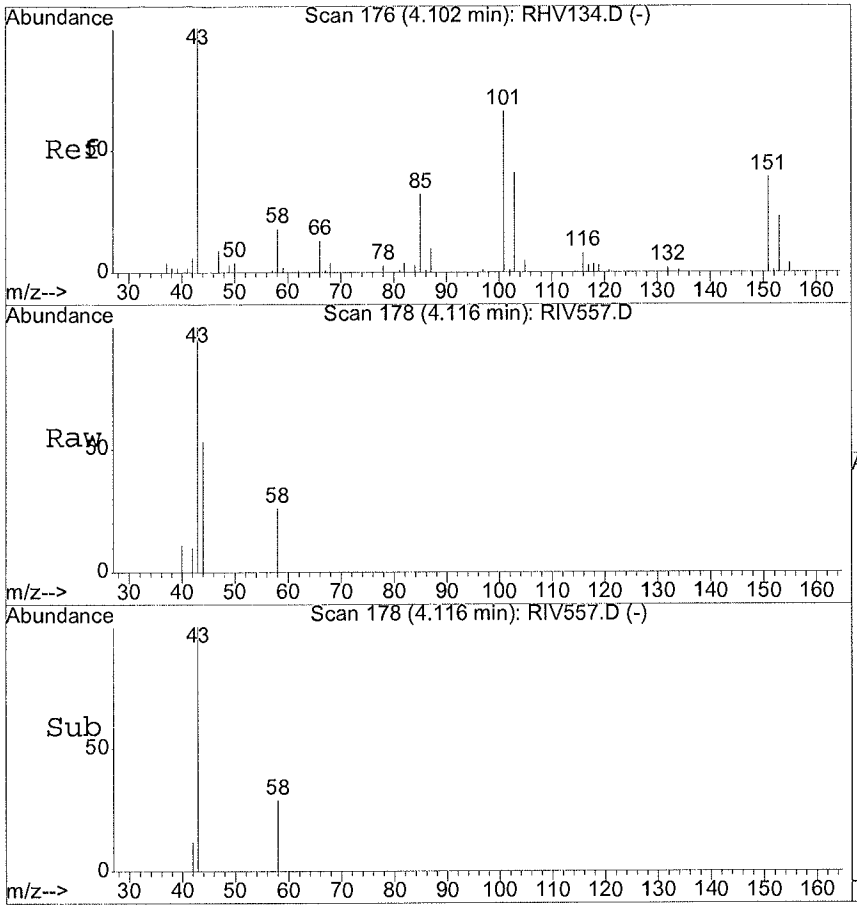
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV557.D Vial: 9
Acq On : 24 Sep 2024 4:58 am Operator: DNguye/CLing
Sample : 24I061-16 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:41 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

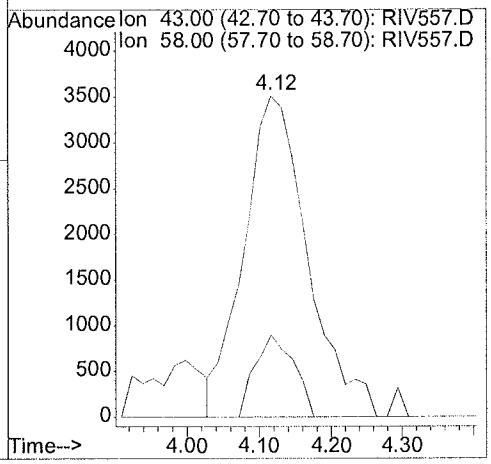




#13
Acetone
Concen: 2.86 ug/l
RT: 4.12 min Scan# 178
Delta R.T. 0.02 min
Lab File: RIV557.D
Acq: 24 Sep 2024 4:58 am

Tgt Ion: 43 Resp: 21601

Ion	Ratio	Lower	Upper
43	100		
58	15.5	0.0	49.5



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/11/24 17:20
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 04:00
Sample ID	: TB04-GW091124	Date Analyzed:	09/24/24 04:00
Lab Samp ID:	24I061-17	Dilution Factor:	1
Lab File ID:	RIV555	Matrix:	WATER
Ext Btch ID:	V001I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.3	10.0	103	70-130
Bromofluorobenzene	9.32	10.0	93	70-130
Toluene-d8	10.8	10.0	108	70-130
Dibromofluoromethane	10.2	10.0	102	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV555.D Vial: 7
Acq On : 24 Sep 2024 4:00 am Operator: DNguye/CLingl
Sample : 24I061-17 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:40 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	985199	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	828333	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	402033	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	306132	10.22	ug/l	0.01
Spiked Amount 10.000			Recovery =	102.20%		
41) 1,2-Dichloroethane-d4	7.98	65	275641	10.35	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.50%		
54) Toluene-d8	11.05	98	1093921	10.80	ug/l	0.01
Spiked Amount 10.000			Recovery =	108.00%		
76) 4-Bromofluorobenzene	16.01	95	475520	9.32	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.20%		

Target Compounds Qvalue

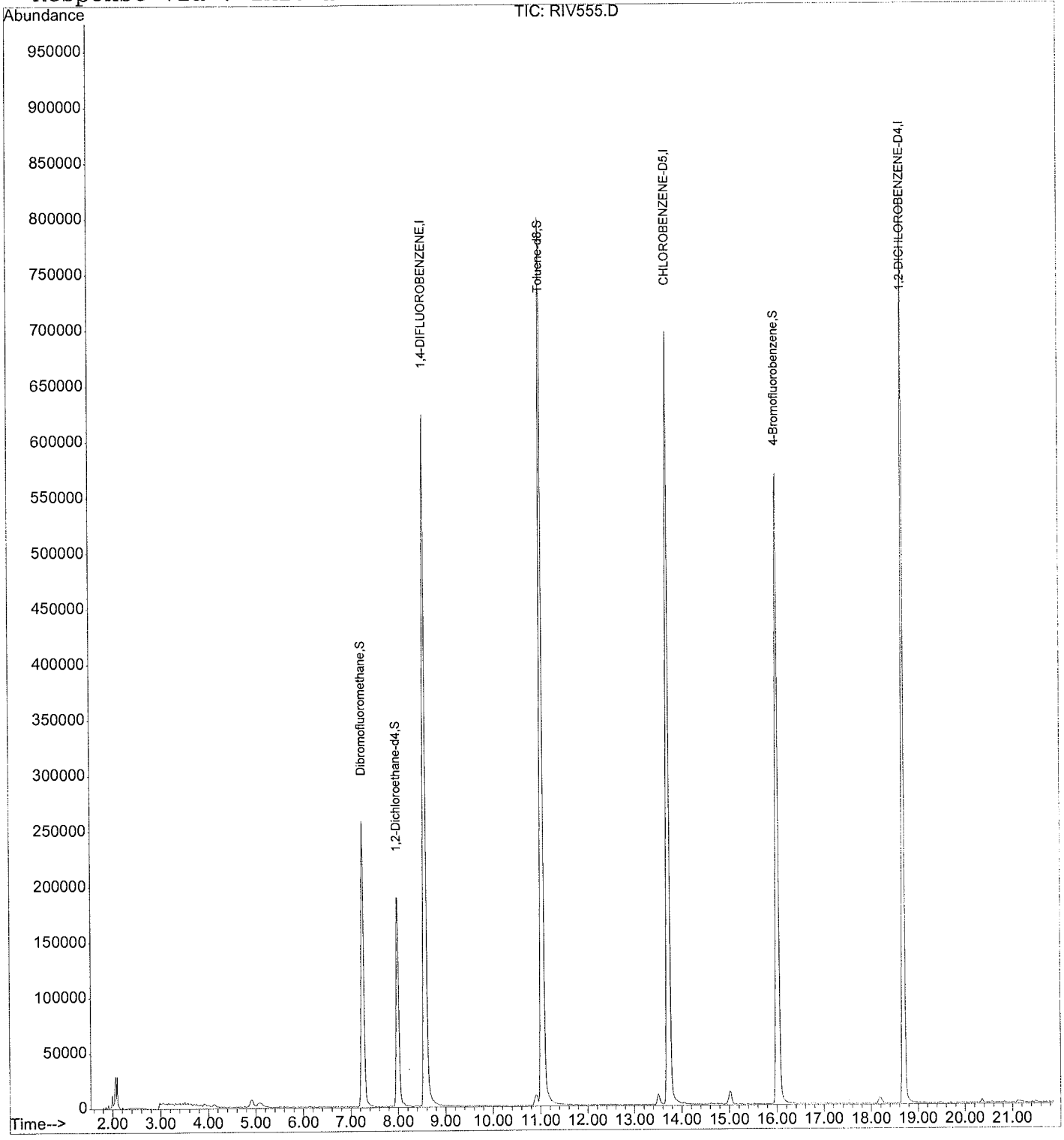
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV555.D
Acq On : 24 Sep 2024 4:00 am
Sample : 24I061-17
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 10:40 2024

Vial: 7
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/10/24 11:42
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 10:52
Sample ID	: MW08A-GW091024	Date Analyzed:	09/24/24 10:52
Lab Samp ID:	24I061-18	Dilution Factor:	1
Lab File ID:	RIV569	Matrix:	WATER
Ext Btch ID:	VOO1I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.40J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.38J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	5.8	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	51	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.36J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	12.0	10.0	120	70-130
Bromofluorobenzene	9.08	10.0	91	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	10.8	10.0	108	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV569.D Vial: 21
Acq On : 24 Sep 2024 10:52 am Operator: DNguye/CLingl
Sample : 24I061-18 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:56 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

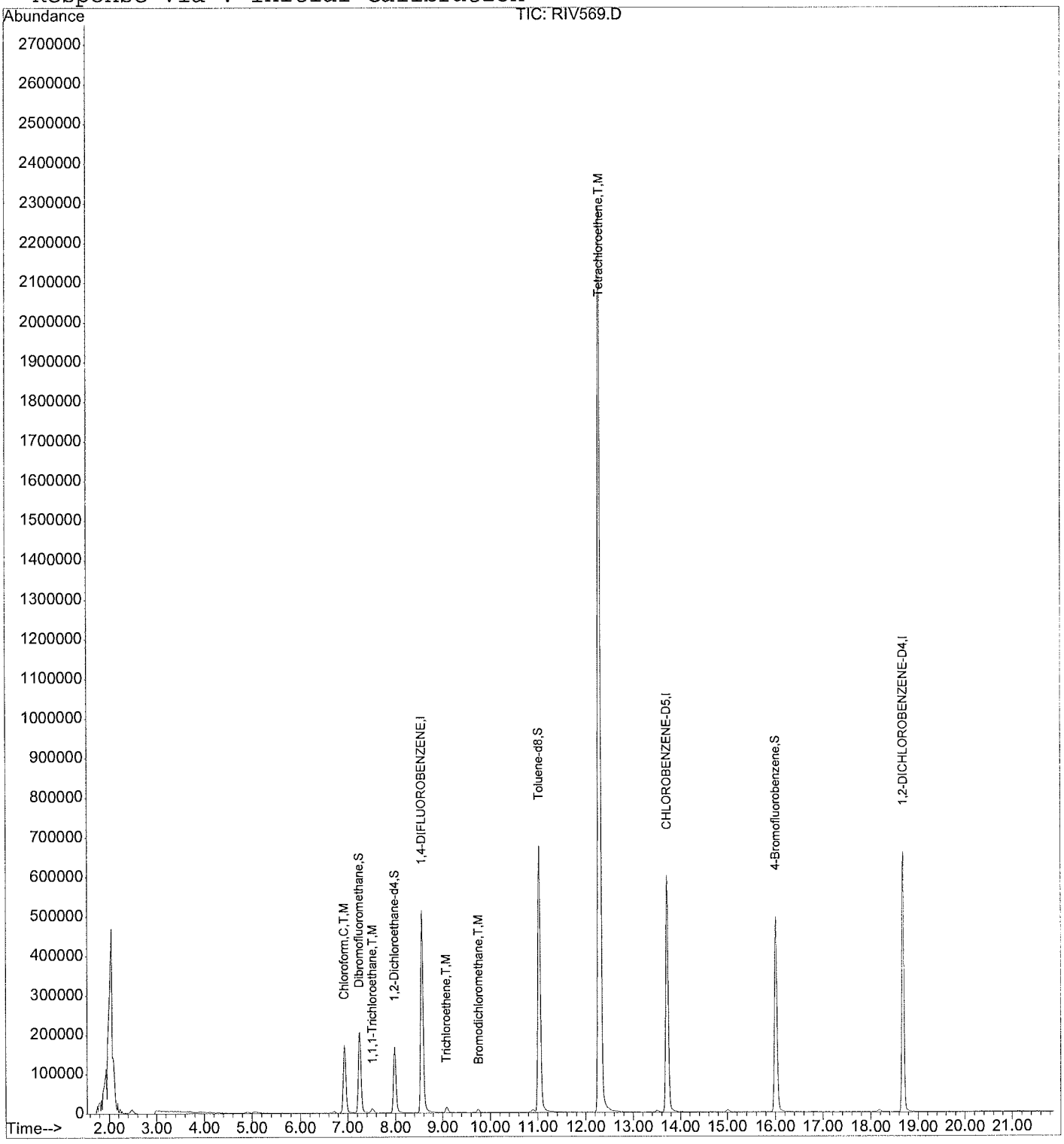
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	761273	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	675762	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	340320	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	250023	10.80	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.00%		
41) 1,2-Dichloroethane-d4	7.98	65	247411	12.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	120.20%		
54) Toluene-d8	11.03	98	883168	10.69	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.90%		
76) 4-Bromofluorobenzene	16.01	95	392141	9.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.80%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	270799	5.85	ug/l	94
35) 1,1,1-Trichloroethane	7.52	97	18360	0.40	ug/l	99
44) Trichloroethene	9.08	130	9559	0.36	ug/l	95
47) Bromodichloromethane	9.76	83	12718	0.38	ug/l	91
61) Tetrachloroethene	12.31	164	1177546	51.20	ug/l	95

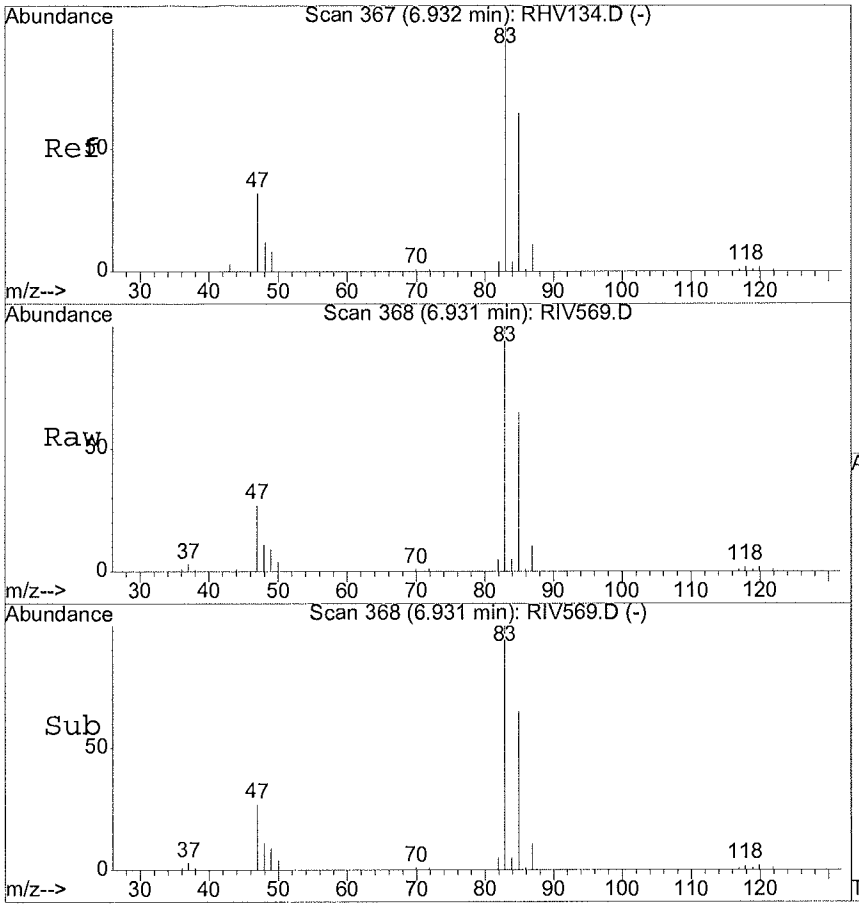
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV569.D Vial: 21
Acq On : 24 Sep 2024 10:52 am Operator: DNguye/CLing
Sample : 24I061-18 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:56 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

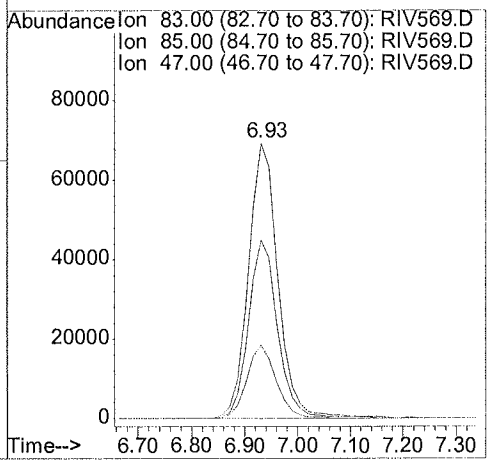


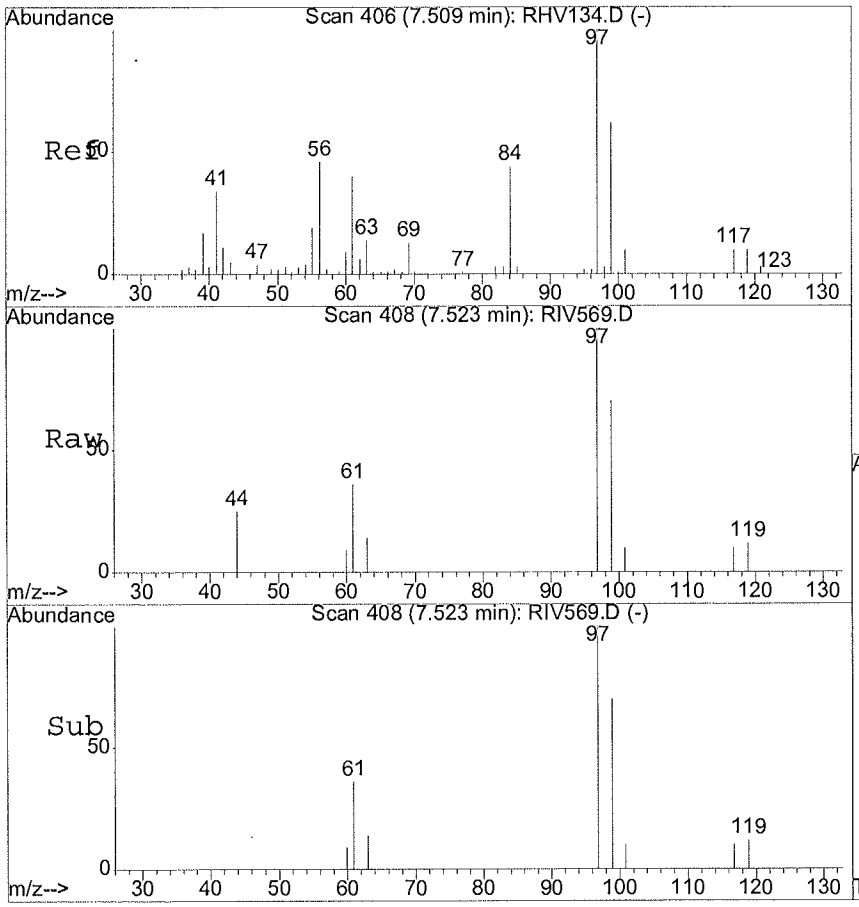


#31
Chloroform
Concen: 5.85 ug/l
RT: 6.93 min Scan# 368
Delta R.T. -0.00 min
Lab File: RIV569.D
Acq: 24 Sep 2024 10:52 am

Tgt Ion: 83 Resp: 270799

Ion	Ratio	Lower	Upper
83	100		
85	63.7	38.4	98.4
47	26.2	0.0	59.6

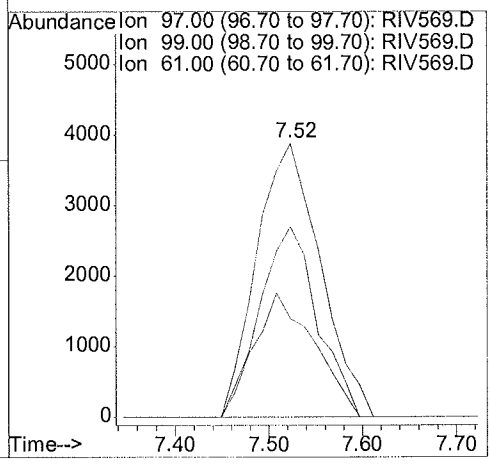


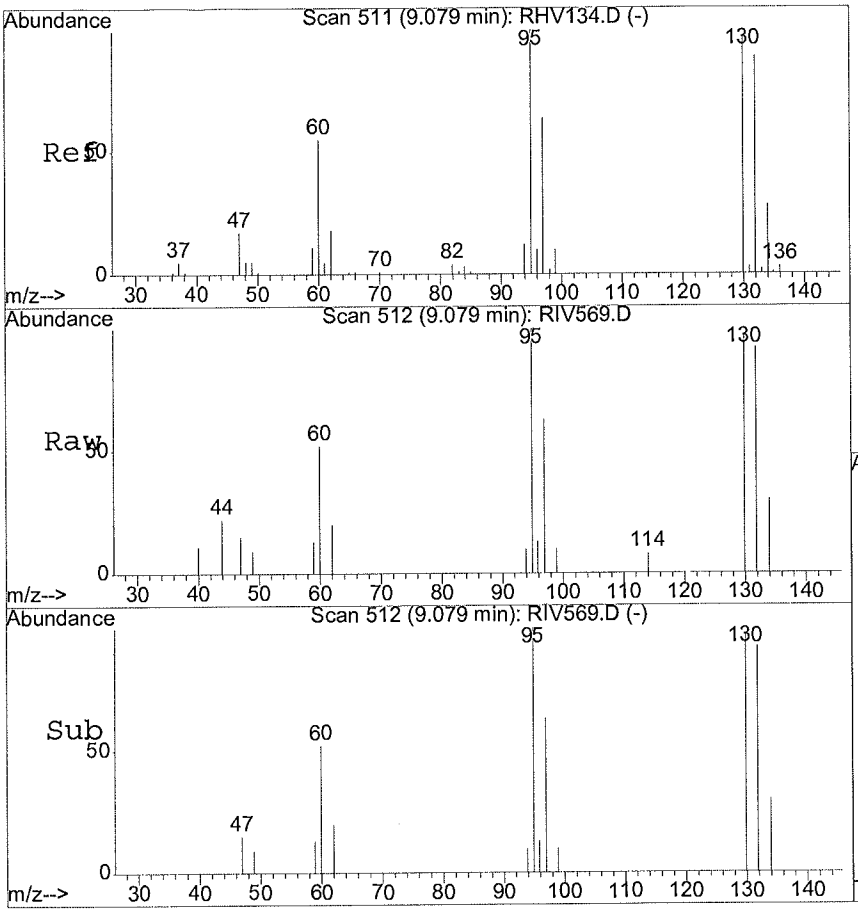


#35
1,1,1-Trichloroethane
Concen: 0.40 ug/l
RT: 7.52 min Scan# 408
Delta R.T. 0.01 min
Lab File: RIV569.D
Acq: 24 Sep 2024 10:52 am

Tgt Ion: 97 Resp: 18360

Ion	Ratio	Lower	Upper
97	100		
99	63.1	33.6	93.6
61	42.8	11.7	71.7

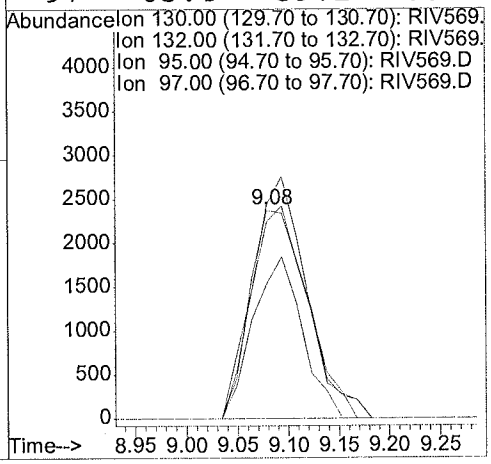


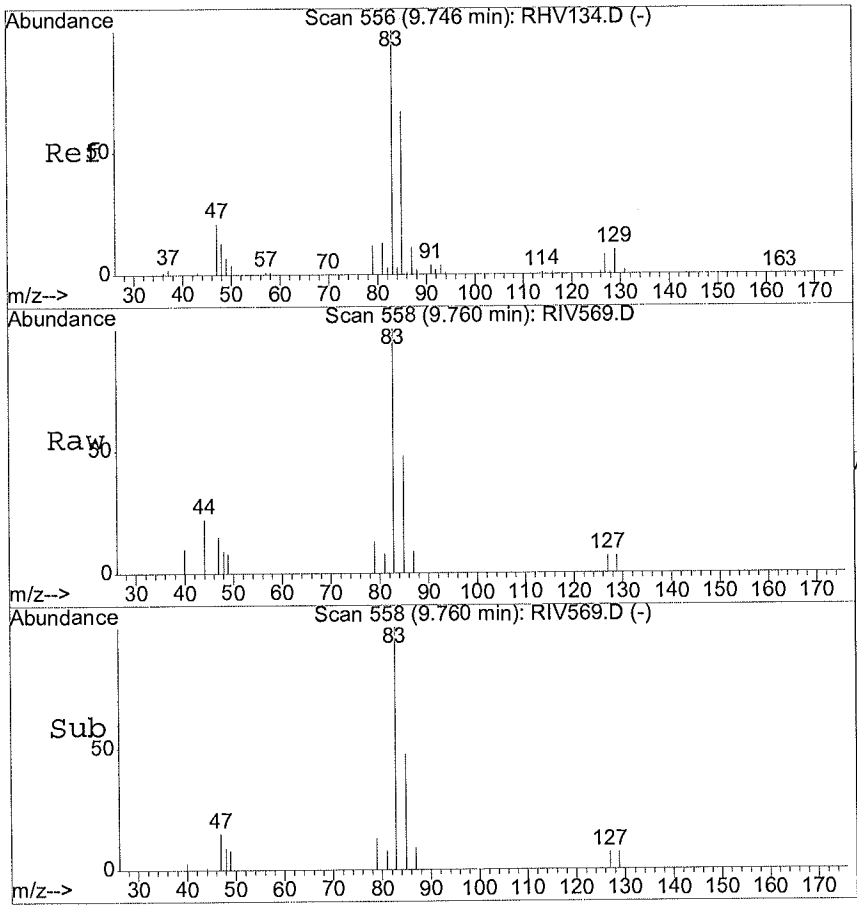


#44
Trichloroethene
Concen: 0.36 ug/l
RT: 9.08 min Scan# 512
Delta R.T. -0.00 min
Lab File: RIV569.D
Acq: 24 Sep 2024 10:52 am

Tgt Ion:130 Resp: 9559

Ion	Ratio	Lower	Upper
130	100		
132	97.6	62.7	122.7
95	107.4	72.0	132.0
97	65.4	39.1	99.1

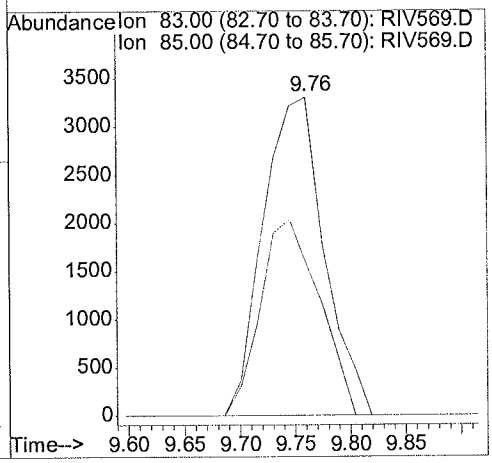


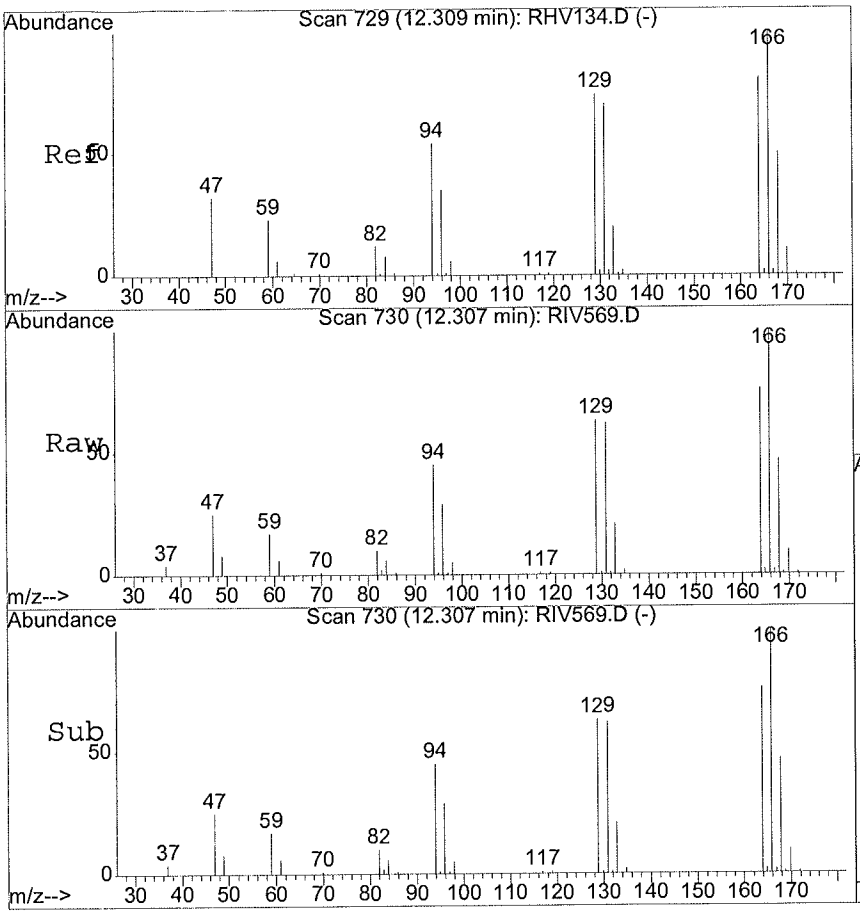


#47
Bromodichloromethane
Concen: 0.38 ug/l
RT: 9.76 min Scan# 558
Delta R.T. 0.01 min
Lab File: RIV569.D
Acq: 24 Sep 2024 10:52 am

Tgt Ion: 83 Resp: 12718

Ion	Ratio	Lower	Upper
83	100		
85	59.5	36.5	96.5

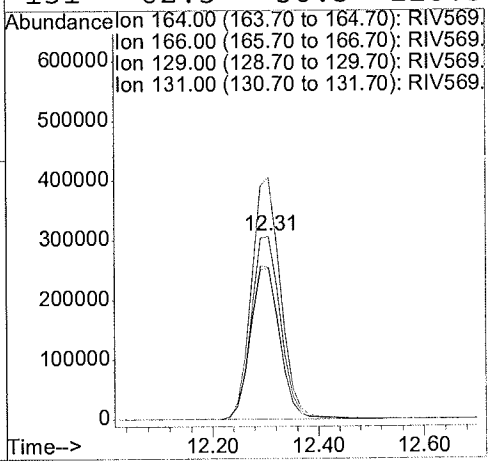




#61
Tetrachloroethene
Concen: 51.20 ug/l
RT: 12.31 min Scan# 730
Delta R.T. -0.00 min
Lab File: RIV569.D
Acq: 24 Sep 2024 10:52 am

Tgt Ion:164 Resp: 1177546

Ion	Ratio	Lower	Upper
164	100		
166	130.4	98.2	158.2
129	83.7	62.8	122.8
131	82.3	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/11/24 17:40
Project	: VA SALT LAKE CITY	Date Received:	09/13/24
Batch No.	: 24I061	Date Extracted:	09/24/24 22:00
Sample ID	: MW03RD-GW091124	Date Analyzed:	09/24/24 22:00
Lab Samp ID:	24I061-19	Dilution Factor:	1
Lab File ID:	RIV591	Matrix:	WATER
Ext Btch ID:	V001I22	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	0.36J	1.0	0.15
1,2,4-Trichlorobenzene	0.19J	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.21J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	1.2J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	1.2	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.8	10.0	108	70-130
Bromofluorobenzene	9.31	10.0	93	70-130
Toluene-d8	10.9	10.0	109	70-130
Dibromofluoromethane	10.6	10.0	106	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV591.D
Acq On : 24 Sep 2024 10:00 pm
Sample : 24I061-19
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 11:46 2024

Vial: 19
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	897588	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	752512	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	372842	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	290336	10.64	ug/l	0.01
Spiked Amount 10.000			Recovery =	106.40%		
41) 1,2-Dichloroethane-d4	7.98	65	261067	10.76	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.60%		
54) Toluene-d8	11.03	98	1001151	10.88	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.80%		
76) 4-Bromofluorobenzene	16.01	95	440420	9.31	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.10%		
Target Compounds						Qvalue
67) Ethylbenzene	13.89	91	29403	0.21	ug/l	94
68) m-Xylene & p-Xylene	14.02	91	129155	1.16	ug/l	94
69) o-Xylene	14.85	91	129726	1.21	ug/l	92
93) 1,2,4-Trichlorobenzene	20.82	180	8104	0.19	ug/l	94
95) Naphthalene	21.16	128	31897	0.54	ug/l	93
96) 1,2,3-Trichlorobenzene	21.49	180	11428	0.36	ug/l	94

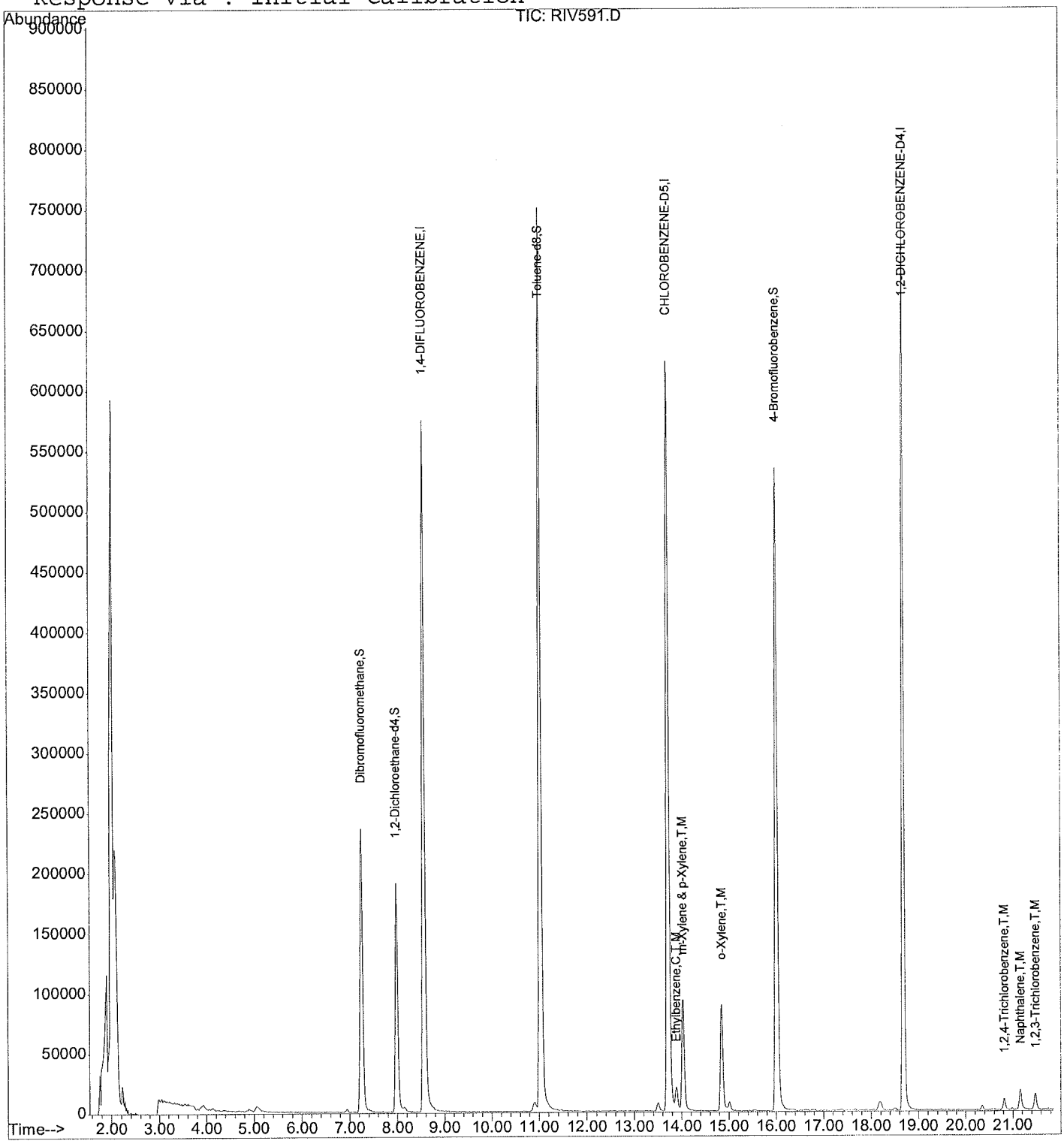
(#) = qualifier out of range (m) = manual integration

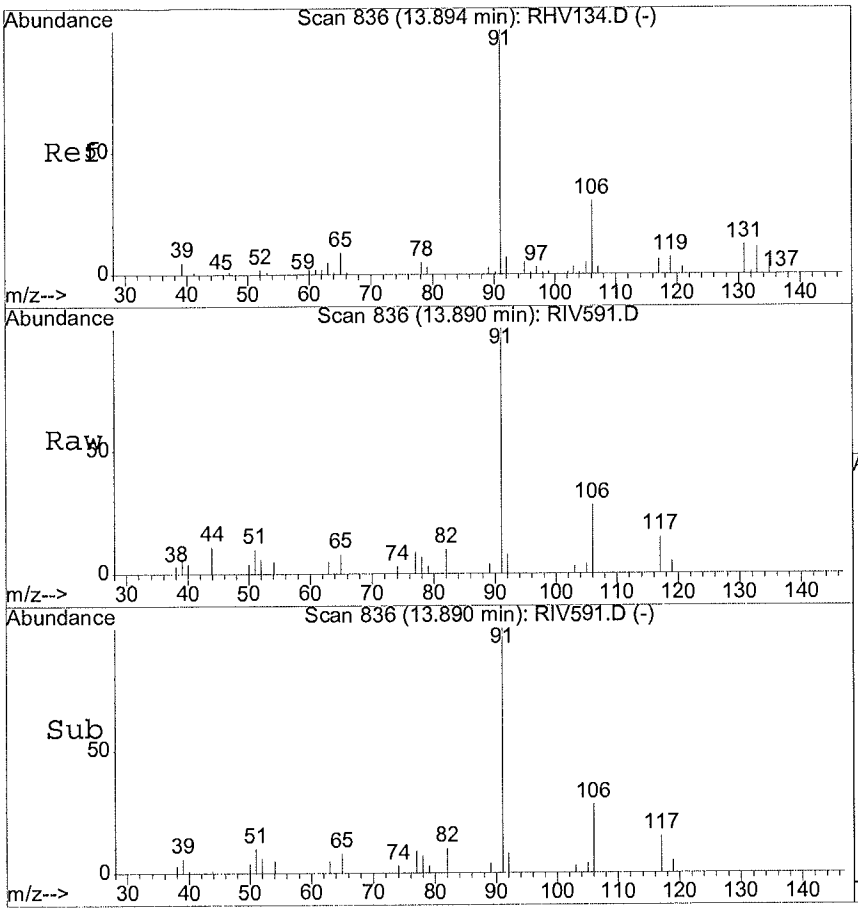
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I24\RIV591.D
Acq On : 24 Sep 2024 10:00 pm
Sample : 24I061-19
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 11:46 2024

Vial: 19
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

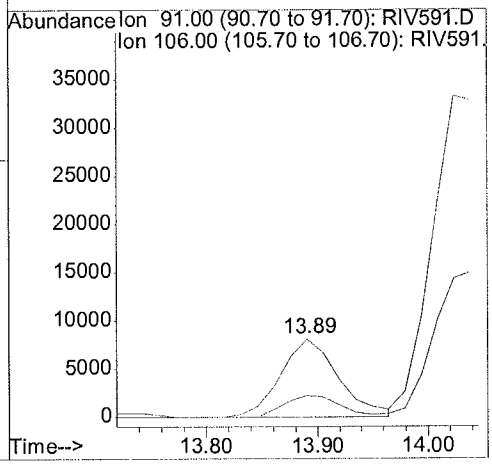


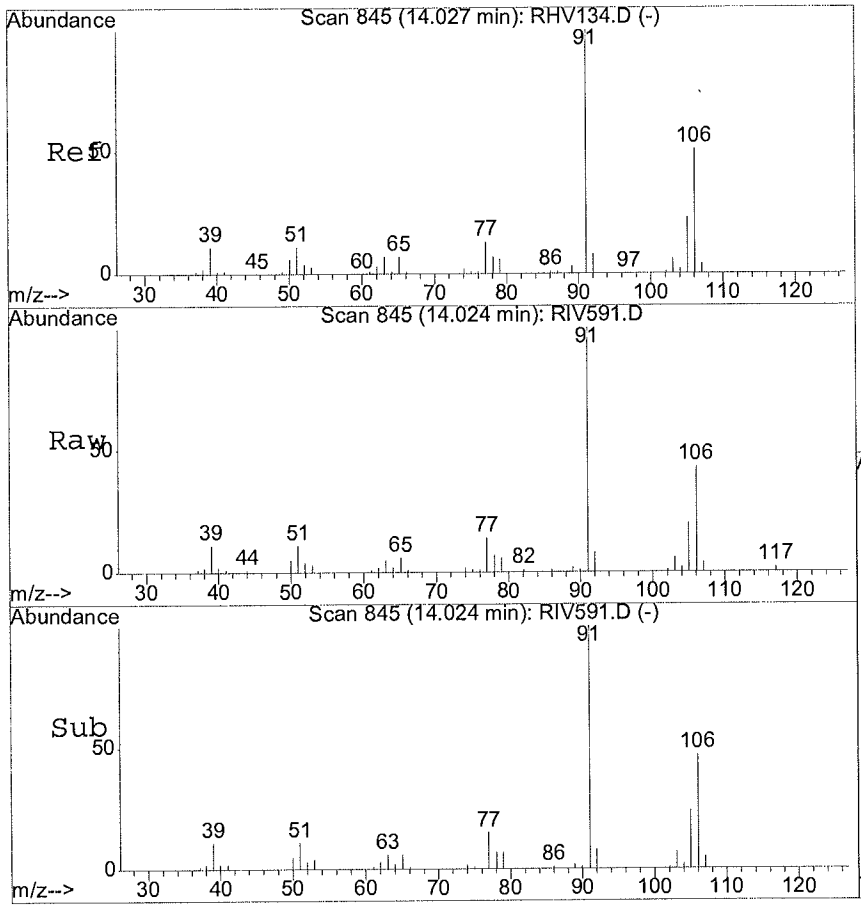


#67
Ethylbenzene
Concen: 0.21 ug/l
RT: 13.89 min Scan# 836
Delta R.T. -0.00 min
Lab File: RIV591.D
Acq: 24 Sep 2024 10:00 pm

Tgt Ion: 91 Resp: 29403

Ion	Ratio	Lower	Upper
91	100		
106	26.5	0.0	59.6

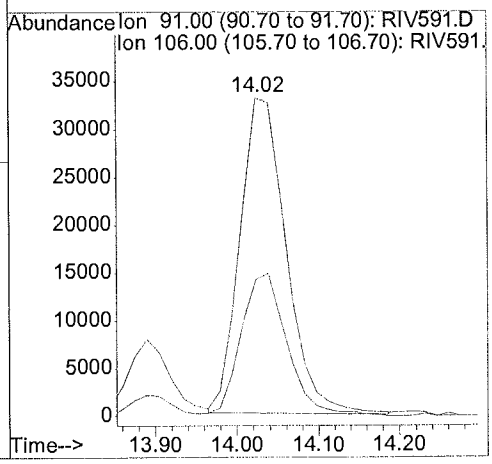


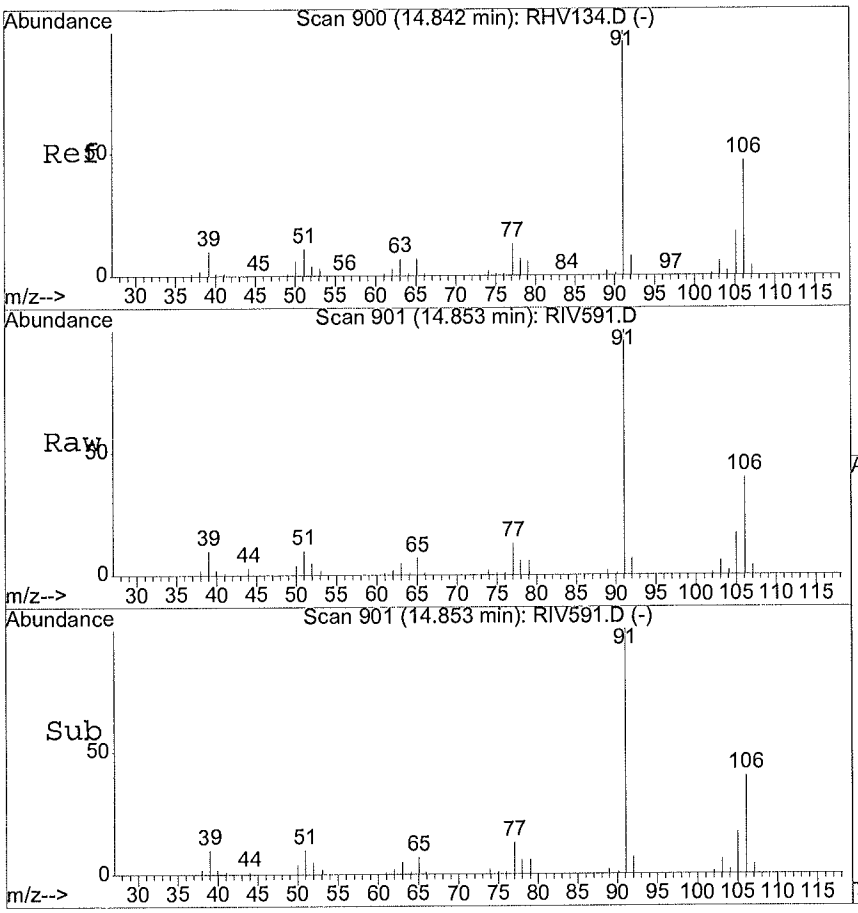


#68
m-Xylene & p-Xylene
Concen: 1.16 ug/l
RT: 14.02 min Scan# 845
Delta R.T. -0.00 min
Lab File: RIV591.D
Acq: 24 Sep 2024 10:00 pm

Tgt Ion: 91 Resp: 129155

Ion	Ratio	Lower	Upper
91	100		
106	45.4	19.5	79.5

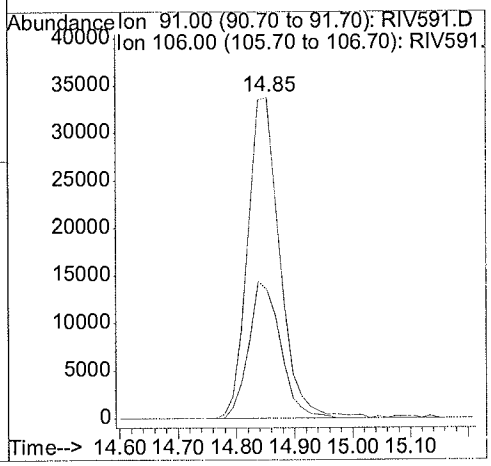


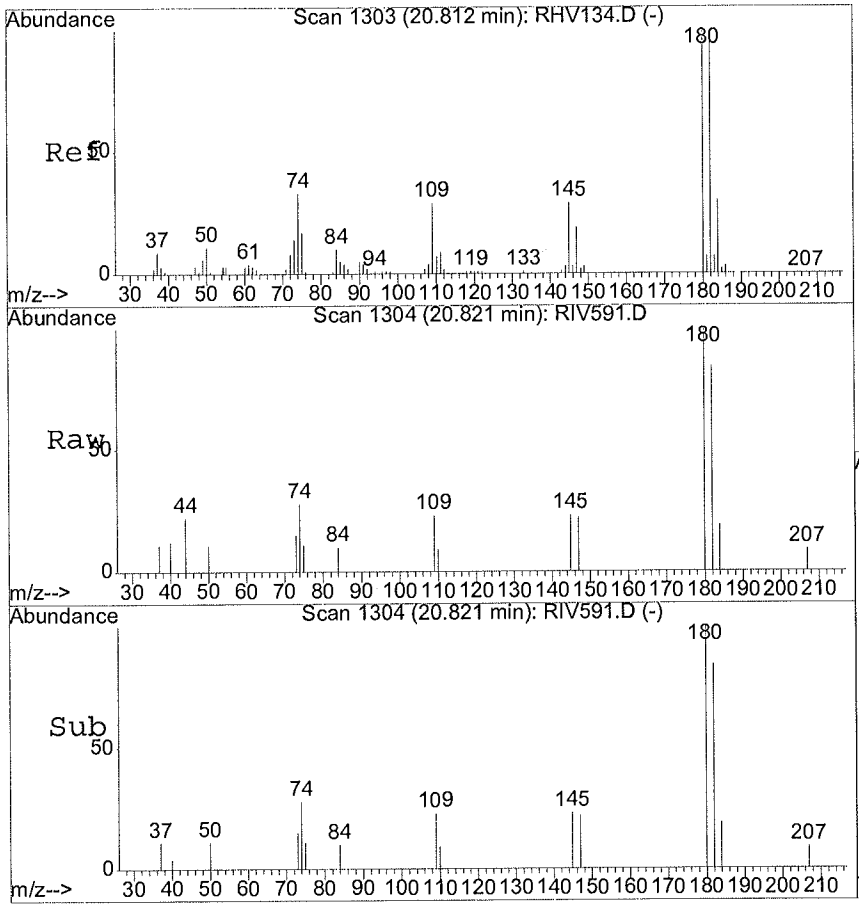


#69
o-Xylene
Concen: 1.21 ug/l
RT: 14.85 min Scan# 901
Delta R.T. 0.01 min
Lab File: RIV591.D
Acq: 24 Sep 2024 10:00 pm

Tgt Ion: 91 Resp: 129726

Ion	Ratio	Lower	Upper
91	100		
106	42.2	17.6	77.6

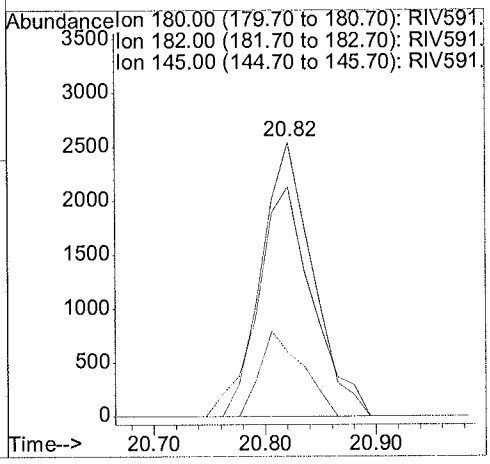


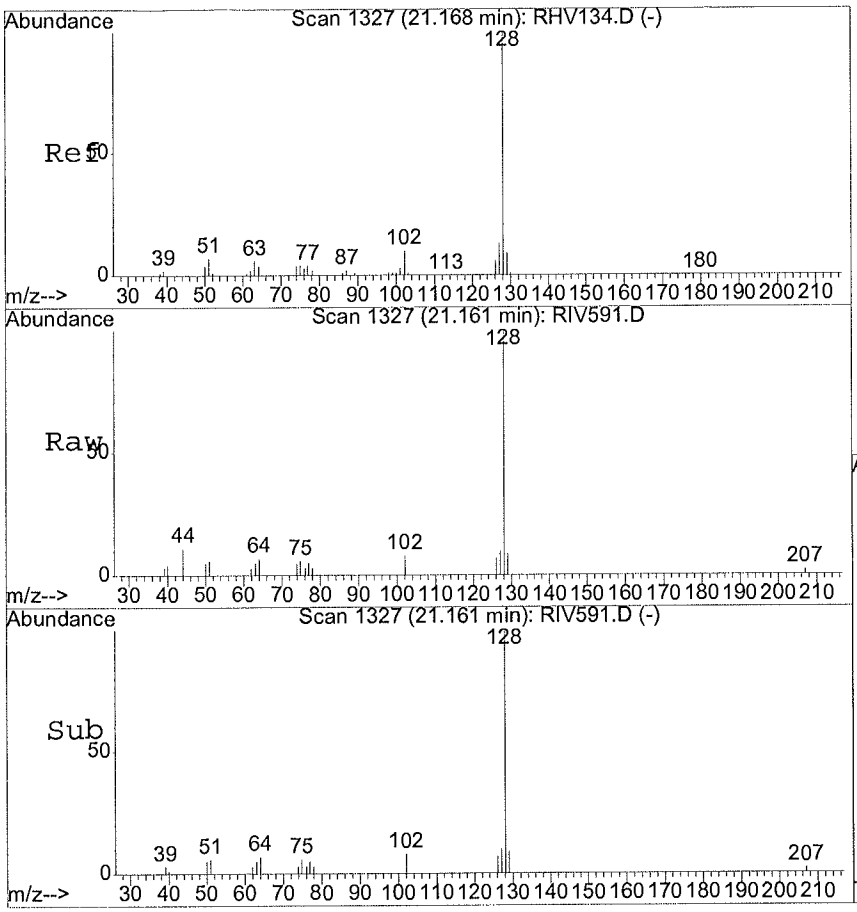


#93
1,2,4-Trichlorobenzene
Concen: 0.19 ug/l
RT: 20.82 min Scan# 1304
Delta R.T. 0.01 min
Lab File: RIV591.D
Acq: 24 Sep 2024 10:00 pm

Tgt Ion:180 Resp: 8104

Ion	Ratio	Lower	Upper
180	100		
182	91.5	67.7	127.7
145	26.2	0.0	59.3

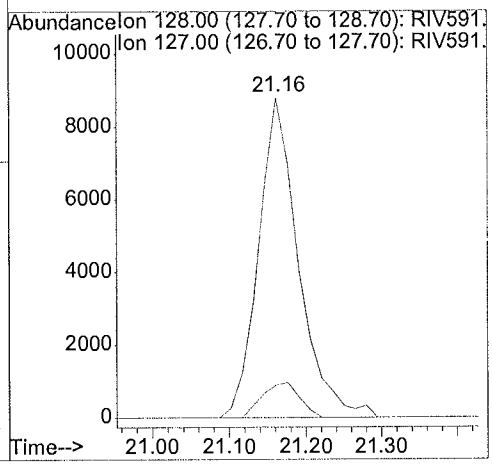


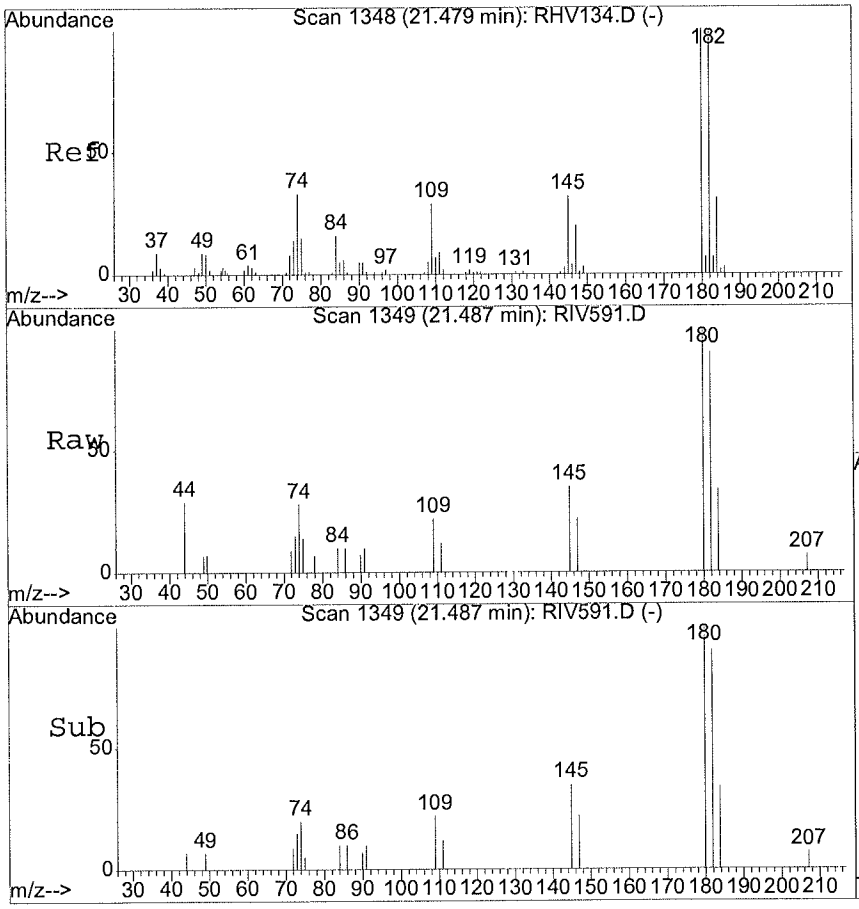


#95
Naphthalene
Concen: 0.54 ug/l
RT: 21.16 min Scan# 1327
Delta R.T. -0.01 min
Lab File: RIV591.D
Acq: 24 Sep 2024 10:00 pm

Tgt Ion:128 Resp: 31897

Ion	Ratio	Lower	Upper
128	100		
127	10.2	0.0	42.9

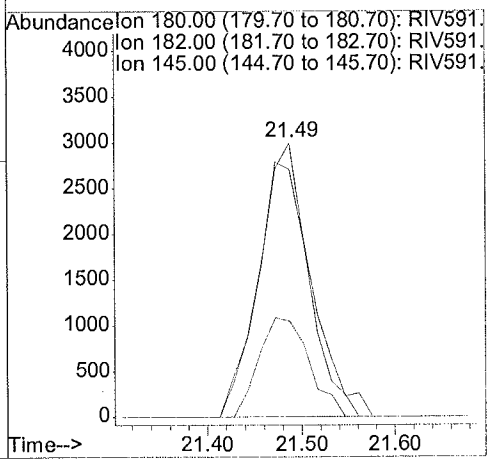




#96
1,2,3-Trichlorobenzene
Concen: 0.36 ug/l
RT: 21.49 min Scan# 1349
Delta R.T. 0.01 min
Lab File: RIV591.D
Acq: 24 Sep 2024 10:00 pm

Tgt Ion:180 Resp: 11428

Ion	Ratio	Lower	Upper
180	100		
182	93.1	68.5	128.5
145	35.1	1.7	61.7



QC SUMMARIES

METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/24/24 03:31
Project	: VA SALT LAKE CITY	Date Received:	09/24/24
Batch No.	: 24I061	Date Extracted:	09/24/24 03:31
Sample ID	: MBLK1W	Date Analyzed:	09/24/24 03:31
Lab Samp ID:	V001I21B	Dilution Factor:	1
Lab File ID:	RIV554	Matrix:	WATER
Ext Btch ID:	V001I21	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.99	10.0	100	70-130
Bromofluorobenzene	9.23	10.0	92	70-130
Toluene-d8	11.0	10.0	110	70-130
Dibromofluoromethane	10.2	10.0	102	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I061
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VO01I21B	VO01I21L	VO01I21C
LAB FILE ID	: RIV554	RIV551	RIV552
DATE PREPARED	: 09/24/24 03:31	09/24/24 02:02	09/24/24 02:32
DATE ANALYZED	: 09/24/24 03:31	09/24/24 02:02	09/24/24 02:32
PREP BATCH	: VO01I21	VO01I21	VO01I21
CALIBRATION REF	: RHV134	RHV134	RHV134

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	9.18	92	10.0	9.19	92	0	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.50	95	10.0	9.78	98	3	71-121	20
1,1,2-Trichloroethane	ND	10.0	12.3	123*	10.0	12.1	121*	2	80-119	20
1,1-Dichloroethane	ND	10.0	11.2	112	10.0	11.3	113	1	77-125	20
1,1-Dichloroethene	ND	10.0	8.67	87	10.0	8.85	89	2	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	8.40	84	10.0	8.20	82	2	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	7.94	79	10.0	7.78	78	2	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	7.40	74*	10.0	7.27	73*	2	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	9.96	100	10.0	9.72	97	2	62-138	20
1,2-Dichlorobenzene	ND	10.0	8.76	88	10.0	8.71	87	1	80-119	20
1,2-Dichloroethane	ND	10.0	10.3	103	10.0	10.3	103	0	73-128	20
1,2-Dichloropropane	ND	10.0	12.5	125*	10.0	12.7	127*	2	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	6.63	66*	10.0	7.02	70*	6	75-124	20
1,3-Dichlorobenzene	ND	10.0	8.58	86	10.0	8.50	85	1	80-119	20
1,4-Dichlorobenzene	ND	10.0	8.44	84	10.0	8.56	86	1	79-118	20
2-Butanone	ND	50.0	55.9	112	50.0	56.7	113	1	56-143	20
2-Hexanone	ND	50.0	58.4	117	50.0	57.0	114	2	57-139	20
Acetone	ND	50.0	50.8	102	50.0	51.7	103	2	39-160	20
Benzene	ND	10.0	11.5	115	10.0	11.7	117	2	79-120	20
Bromochloromethane	ND	10.0	11.0	110	10.0	11.3	113	3	78-120	20
Bromodichloromethane	ND	10.0	11.1	111	10.0	11.1	111	0	79-125	20
Bromoform	ND	10.0	8.39	84	10.0	8.25	83	2	66-130	20
Bromomethane	ND	10.0	10.6	106	10.0	10.6	106	0	53-141	20
Carbon Disulfide	ND	10.0	11.4	114	10.0	11.6	116	2	64-133	20
Carbon Tetrachloride	ND	10.0	8.22	82	10.0	8.25	83	0	72-136	20
Chlorobenzene	ND	10.0	10.6	106	10.0	10.4	104	2	82-118	20
Chloroethane	ND	10.0	12.3	123	10.0	12.4	124	1	60-138	20
Chloroform	ND	10.0	10.9	109	10.0	10.8	108	1	79-124	20
Chloromethane	ND	10.0	11.2	112	10.0	10.9	109	3	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	10.6	106	10.0	11.2	112	6	78-123	20
Dibromochloromethane	ND	10.0	12.0	120	10.0	11.6	116	3	74-126	20
Dichlorodifluoromethane	ND	10.0	10.6	106	10.0	9.75	98	8	32-152	20
Ethylbenzene	ND	10.0	10.8	108	10.0	10.6	106	2	79-121	20
Isopropylbenzene	ND	10.0	10.4	104	10.0	10.1	101	3	72-131	20
m,p-Xylene	ND	20.0	20.7	104	20.0	20.2	101	2	80-121	20
4-Methyl-2-Pentanone	ND	50.0	61.5	123	50.0	63.1	126	3	67-130	20
Methylene Chloride	ND	10.0	10.3	103	10.0	10.8	108	5	74-124	20
tert-Butyl Methyl Ether	ND	10.0	12.3	123	10.0	12.7	127*	3	71-124	20
o-Xylene	ND	10.0	11.5	115	10.0	11.1	111	4	78-122	20
Styrene	ND	10.0	11.8	118	10.0	11.7	117	1	78-123	20
Tetrachloroethene	ND	10.0	10.2	102	10.0	9.82	98	4	74-129	20
Toluene	ND	10.0	11.2	112	10.0	11.1	111	1	80-121	20
Trans-1,2-DCE	ND	10.0	9.43	94	10.0	9.60	96	2	75-124	20
cis-1,3-Dichloropropene	ND	10.0	11.6	116	10.0	11.8	118	2	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	11.8	118	10.0	11.4	114	3	73-127	20
TCE	ND	10.0	9.96	100	10.0	10.2	102	2	79-123	20
Trichlorofluoromethane	ND	10.0	8.53	85	10.0	7.48	75	13	65-141	20
Vinyl Chloride	ND	10.0	11.4	114	10.0	11.2	112	2	58-137	20
1,2-Dibromoethane	ND	10.0	11.1	111	10.0	10.8	108	3	77-121	20
Vinyl Acetate	ND	10.0	8.71	87	10.0	8.60	86	1	54-146	20
Trichlorotrifluoroethane	ND	10.0	10.5	105	10.0	10.6	106	1	70-136	20
Methyl Acetate	ND	10.0	11.4	114	10.0	10.8	108	5	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	10.2	102	10.0	10.5	105	70-130
Bromofluorobenzene	10.0	8.57	86	10.0	8.84	88	70-130
Toluene-d8	10.0	11.2	112	10.0	10.9	109	70-130
Dibromofluoromethane	10.0	10.1	101	10.0	10.3	103	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate
* Out of QC Limit

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/24/24 15:33
Project	: VA SALT LAKE CITY	Date Received:	09/24/24
Batch No.	: 24I061	Date Extracted:	09/24/24 15:33
Sample ID	: MBLK2W	Date Analyzed:	09/24/24 15:33
Lab Samp ID:	V001I22B	Dilution Factor:	1
Lab File ID:	RIV578	Matrix:	WATER
Ext Btch ID:	V001I22	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.1	10.0	101	70-130
Bromofluorobenzene	9.13	10.0	91	70-130
Toluene-d8	11.0	10.0	110	70-130
Dibromofluoromethane	10.3	10.0	103	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I061
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK2W	LCS2W	LCD2W
LAB SAMPLE ID	: VO01I22B	VO01I22L	VO01I22C
LAB FILE ID	: RIV578	RIV575	RIV576
DATE PREPARED	: 09/24/24 15:33	09/24/24 14:02	09/24/24 14:32
DATE ANALYZED	: 09/24/24 15:33	09/24/24 14:02	09/24/24 14:32
PREP BATCH	: VO01I22	VO01I22	VO01I22
CALIBRATION REF	: RHV134	RHV134	RHV134

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	9.50	95	10.0	9.42	94	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.24	92	10.0	10.1	101	9	71-121	20
1,1,2-Trichloroethane	ND	10.0	11.6	116	10.0	12.2	122*	5	80-119	20
1,1-Dichloroethane	ND	10.0	11.3	113	10.0	11.2	112	1	77-125	20
1,1-Dichloroethene	ND	10.0	9.07	91	10.0	9.09	91	0	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	8.89	89	10.0	8.61	86	3	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	8.68	87	10.0	8.39	84	3	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	7.55	76	10.0	7.36	74*	3	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	9.34	93	10.0	10.1	101	8	62-138	20
1,2-Dichlorobenzene	ND	10.0	8.69	87	10.0	8.84	88	2	80-119	20
1,2-Dichloroethane	ND	10.0	9.91	99	10.0	10.2	102	3	73-128	20
1,2-Dichloropropane	ND	10.0	12.5	125*	10.0	12.5	125*	0	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	7.10	71*	10.0	7.16	72*	1	75-124	20
1,3-Dichlorobenzene	ND	10.0	8.63	86	10.0	8.60	86	0	80-119	20
1,4-Dichlorobenzene	ND	10.0	8.64	86	10.0	8.65	87	0	79-118	20
2-Butanone	ND	50.0	54.1	108	50.0	53.7	107	1	56-143	20
2-Hexanone	ND	50.0	54.0	108	50.0	57.8	116	7	57-139	20
Acetone	ND	50.0	51.3	103	50.0	51.5	103	0	39-160	20
Benzene	ND	10.0	11.7	117	10.0	11.7	117	0	79-120	20
Bromochloromethane	ND	10.0	11.1	111	10.0	11.1	111	0	78-120	20
Bromodichloromethane	ND	10.0	10.9	109	10.0	11.2	112	3	79-125	20
Bromoform	ND	10.0	7.92	79	10.0	8.62	86	8	66-130	20
Bromomethane	ND	10.0	11.2	112	10.0	9.84	98	13	53-141	20
Carbon Disulfide	ND	10.0	12.1	121	10.0	11.8	118	3	64-133	20
Carbon Tetrachloride	ND	10.0	8.48	85	10.0	8.68	87	2	72-136	20
Chlorobenzene	ND	10.0	10.3	103	10.0	10.4	104	1	82-118	20
Chloroethane	ND	10.0	12.6	126	10.0	11.4	114	10	60-138	20
Chloroform	ND	10.0	11.2	112	10.0	10.9	109	3	79-124	20
Chloromethane	ND	10.0	11.6	116	10.0	10.1	101	14	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	11.1	111	10.0	10.9	109	2	78-123	20
Dibromochloromethane	ND	10.0	11.1	111	10.0	11.6	116	4	74-126	20
Dichlorodifluoromethane	ND	10.0	11.2	112	10.0	10.4	104	7	32-152	20
Ethylbenzene	ND	10.0	11.1	111	10.0	11.1	111	0	79-121	20
Isopropylbenzene	ND	10.0	10.9	109	10.0	11.2	112	3	72-131	20
m,p-Xylene	ND	20.0	20.9	105	20.0	20.7	104	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	58.1	116	50.0	62.4	125	7	67-130	20
Methylene Chloride	ND	10.0	10.9	109	10.0	10.5	105	4	74-124	20
tert-Butyl Methyl Ether	ND	10.0	12.0	120	10.0	12.5	125*	4	71-124	20
o-Xylene	ND	10.0	11.6	116	10.0	12.2	122	5	78-122	20
Styrene	ND	10.0	11.9	119	10.0	12.4	124*	4	78-123	20
Tetrachloroethene	ND	10.0	10.3	103	10.0	10.5	105	2	74-129	20
Toluene	ND	10.0	11.1	111	10.0	11.2	112	1	80-121	20
Trans-1,2-DCE	ND	10.0	9.86	99	10.0	9.75	98	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	11.8	118	10.0	12.0	120	2	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	11.2	112	10.0	11.9	119	6	73-127	20
TCE	ND	10.0	9.96	100	10.0	10.2	102	2	79-123	20
Trichlorofluoromethane	ND	10.0	9.52	95	10.0	8.44	84	12	65-141	20
Vinyl Chloride	ND	10.0	12.6	126	10.0	10.7	107	16	58-137	20
1,2-Dibromoethane	ND	10.0	10.2	102	10.0	10.6	106	4	77-121	20
Vinyl Acetate	ND	10.0	9.33	93	10.0	9.01	90	3	54-146	20
Trichlorotrifluoroethane	ND	10.0	11.8	118	10.0	11.7	117	1	70-136	20
Methyl Acetate	ND	10.0	10.8	108	10.0	10.8	108	0	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	10.2	102	10.0	10.1	101	70-130
Bromofluorobenzene	10.0	8.97	90	10.0	8.94	89	70-130
Toluene-d8	10.0	10.9	109	10.0	10.8	108	70-130
Dibromofluoromethane	10.0	10.1	101	10.0	10.4	104	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate
* Out of QC Limit

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/25/24 18:56
Project	: VA SALT LAKE CITY	Date Received:	09/25/24
Batch No.	: 24I061	Date Extracted:	09/25/24 18:56
Sample ID	: MBLK3W	Date Analyzed:	09/25/24 18:56
Lab Samp ID:	VO01I24B	Dilution Factor:	1
Lab File ID:	RIV633	Matrix:	WATER
Ext Btch ID:	VO01I24	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.3	10.0	103	70-130
Bromofluorobenzene	9.17	10.0	92	70-130
Toluene-d8	11.0	10.0	110	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I061
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK3W	LCS3W	LCD3W
LAB SAMPLE ID	: V001I24B	V001I24L	V001I24C
LAB FILE ID	: RIV633	RIV630	RIV631
DATE PREPARED	: 09/25/24 18:56	09/25/24 17:26	09/25/24 17:56
DATE ANALYZED	: 09/25/24 18:56	09/25/24 17:26	09/25/24 17:56
PREP BATCH	: V001I24	V001I24	V001I24
CALIBRATION REF	: RHV134	RHV134	RHV134

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	10.3	103	10.0	9.89	99	4	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	10.0	100	10.0	10.7	107	7	71-121	20
1,1,2-Trichloroethane	ND	10.0	12.8	128*	10.0	12.8	128*	0	80-119	20
1,1-Dichloroethane	ND	10.0	12.0	120	10.0	11.7	117	3	77-125	20
1,1-Dichloroethene	ND	10.0	10.1	101	10.0	9.53	95	6	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	9.36	94	10.0	8.83	88	6	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.24	92	10.0	8.50	85	8	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.19	82	10.0	7.71	77	6	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	10.3	103	10.0	10.3	103	0	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.45	95	10.0	8.99	90	5	80-119	20
1,2-Dichloroethane	ND	10.0	10.3	103	10.0	10.5	105	2	73-128	20
1,2-Dichloropropane	ND	10.0	12.9	129*	10.0	13.1	131*	2	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	7.80	78	10.0	7.48	75	4	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.51	95	10.0	8.79	88	8	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.58	96	10.0	8.98	90	6	79-118	20
2-Butanone	ND	50.0	55.7	111	50.0	57.4	115	3	56-143	20
2-Hexanone	ND	50.0	57.3	115	50.0	59.6	119	4	57-139	20
Acetone	ND	50.0	52.3	105	50.0	54.2	108	4	39-160	20
Benzene	ND	10.0	12.4	124*	10.0	12.1	121*	2	79-120	20
Bromochloromethane	ND	10.0	11.4	114	10.0	11.3	113	1	78-120	20
Bromodichloromethane	ND	10.0	11.5	115	10.0	11.6	116	1	79-125	20
Bromoform	ND	10.0	8.60	86	10.0	8.86	89	3	66-130	20
Bromomethane	ND	10.0	10.9	109	10.0	9.46	95	14	53-141	20
Carbon Disulfide	ND	10.0	13.2	132	10.0	12.7	127	4	64-133	20
Carbon Tetrachloride	ND	10.0	9.42	94	10.0	9.00	90	5	72-136	20
Chlorobenzene	ND	10.0	11.2	112	10.0	10.9	109	3	82-118	20
Chloroethane	ND	10.0	12.7	127	10.0	10.9	109	15	60-138	20
Chloroform	ND	10.0	11.6	116	10.0	11.4	114	2	79-124	20
Chloromethane	ND	10.0	11.1	111	10.0	9.35	94	17	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	11.5	115	10.0	11.3	113	2	78-123	20
Dibromochloromethane	ND	10.0	12.1	121	10.0	12.2	122	1	74-126	20
Dichlorodifluoromethane	ND	10.0	11.6	116	10.0	10.8	108	7	32-152	20
Ethylbenzene	ND	10.0	12.0	120	10.0	11.5	115	4	79-121	20
Isopropylbenzene	ND	10.0	11.9	119	10.0	12.2	122	2	72-131	20
m,p-Xylene	ND	20.0	22.7	114	20.0	22.1	111	3	80-121	20
4-Methyl-2-Pentanone	ND	50.0	60.5	121	50.0	62.9	126	4	67-130	20
Methylene Chloride	ND	10.0	11.6	116	10.0	11.0	110	5	74-124	20
tert-Butyl Methyl Ether	ND	10.0	12.3	123	10.0	13.0	130*	6	71-124	20
o-Xylene	ND	10.0	12.6	126*	10.0	11.8	118	7	78-122	20
Styrene	ND	10.0	12.8	128*	10.0	12.2	122	5	78-123	20
Tetrachloroethene	ND	10.0	11.4	114	10.0	11.1	111	3	74-129	20
Toluene	ND	10.0	12.2	122*	10.0	11.7	117	4	80-121	20
Trans-1,2-DCE	ND	10.0	10.3	103	10.0	10.0	100	3	75-124	20
cis-1,3-Dichloropropene	ND	10.0	12.5	125*	10.0	12.4	124	1	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	12.2	122	10.0	12.4	124	2	73-127	20
TCE	ND	10.0	10.8	108	10.0	10.5	105	3	79-123	20
Trichlorofluoromethane	ND	10.0	9.80	98	10.0	7.61	76	25*	65-141	20
Vinyl Chloride	ND	10.0	12.6	126	10.0	11.6	116	8	58-137	20
1,2-Dibromoethane	ND	10.0	11.3	113	10.0	11.3	113	0	77-121	20
Vinyl Acetate	ND	10.0	8.95	90	10.0	8.85	89	1	54-146	20
Trichlorotrifluoroethane	ND	10.0	13.3	133	10.0	12.6	126	5	70-136	20
Methyl Acetate	ND	10.0	11.0	110	10.0	11.1	111	1	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	9.86	99	10.0	10.2	102	70-130
Bromofluorobenzene	10.0	8.97	90	10.0	8.94	89	70-130
Toluene-d8	10.0	10.8	108	10.0	10.8	108	70-130
Dibromofluoromethane	10.0	9.81	98	10.0	10.1	101	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate
* Out of QC Limit

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I061
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MW03RA-GW091124	MW03RA-GW091124MS	MW03RA-GW091124MSD
LAB SAMPLE ID	: 24I061-11	24I061-11M	24I061-11S
LAB FILE ID	: RIV568	RIV570	RIV571
DATE PREPARED	: 09/24/24 10:23	09/24/24 11:22	09/24/24 11:53
DATE ANALYZED	: 09/24/24 10:23	09/24/24 11:22	09/24/24 11:53
PREP BATCH	: VO01I21	VO01I21	VO01I21
CALIBRATION REF	: RHV134	RHV134	RHV134

ACCESSION:

PARAMETERS	PSResult (ug/L)	SpikeAmt (ug/L)	MSResult (ug/L)	MSRec (%)	SpikeAmt (ug/L)	MSDResult (ug/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	9.87	99	10.0	9.24	92	7	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.16	92	10.0	9.98	100	9	71-121	20
1,1,2-Trichloroethane	ND	10.0	12.2	122*	10.0	12.4	124*	2	80-119	20
1,1-Dichloroethane	ND	10.0	11.3	113	10.0	11.1	111	2	77-125	20
1,1-Dichloroethene	ND	10.0	8.54	85	10.0	8.51	85	0	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	7.97	80	10.0	8.10	81	2	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	7.75	78	10.0	7.66	77	1	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	6.64	66*	10.0	6.66	67*	0	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	9.94	99	10.0	9.98	100	0	62-138	20
1,2-Dichlorobenzene	ND	10.0	8.83	88	10.0	8.63	86	2	80-119	20
1,2-Dichloroethane	ND	10.0	11.5	115	10.0	10.7	107	7	73-128	20
1,2-Dichloropropane	ND	10.0	12.5	125*	10.0	12.5	125*	0	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	6.49	65*	10.0	6.42	64*	1	75-124	20
1,3-Dichlorobenzene	ND	10.0	8.45	85	10.0	8.13	81	4	80-119	20
1,4-Dichlorobenzene	ND	10.0	8.58	86	10.0	8.18	82	5	79-118	20
2-Butanone	ND	50.0	55.2	110	50.0	55.4	111	0	56-143	20
2-Hexanone	ND	50.0	56.2	112	50.0	60.3	121	7	57-139	20
Acetone	ND	50.0	49.1	98	50.0	54.1	108	10	39-160	20
Benzene	ND	10.0	11.8	118	10.0	11.5	115	3	79-120	20
Bromochloromethane	ND	10.0	11.3	113	10.0	11.3	113	0	78-120	20
Bromodichloromethane	0.424J	10.0	12.5	121	10.0	11.8	114	6	79-125	20
Bromoform	ND	10.0	8.05	81	10.0	8.39	84	4	66-130	20
Bromomethane	ND	10.0	9.00	90	10.0	10.0	100	11	53-141	20
Carbon Disulfide	ND	10.0	10.5	105	10.0	10.6	106	1	64-133	20
Carbon Tetrachloride	ND	10.0	8.93	89	10.0	8.08	81	10	72-136	20
Chlorobenzene	ND	10.0	10.5	105	10.0	10.5	105	0	82-118	20
Chloroethane	ND	10.0	10.2	102	10.0	12.0	120	16	60-138	20
Chloroform	5.94	10.0	17.3	114	10.0	16.4	105	5	79-124	20
Chloromethane	ND	10.0	9.37	94	10.0	10.2	102	8	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	10.9	109	10.0	10.7	107	2	78-123	20
Dibromochloromethane	ND	10.0	12.0	120	10.0	11.8	118	2	74-126	20
Dichlorodifluoromethane	ND	10.0	9.78	98	10.0	9.65	97	1	32-152	20
Ethylbenzene	ND	10.0	11.0	110	10.0	10.9	109	1	79-121	20
Isopropylbenzene	ND	10.0	10.6	106	10.0	10.5	105	1	72-131	20
m,p-Xylene	ND	20.0	21.0	105	20.0	20.2	101	4	80-121	20
4-Methyl-2-Pentanone	ND	50.0	59.7	119	50.0	62.6	125	5	67-130	20
Methylene Chloride	ND	10.0	10.3	103	10.0	10.0	100	3	74-124	20
tert-Butyl Methyl Ether	ND	10.0	12.3	123	10.0	12.3	123	0	71-124	20
o-Xylene	ND	10.0	11.8	118	10.0	11.6	116	2	78-122	20
Styrene	ND	10.0	11.8	118	10.0	11.2	112	5	78-123	20
Tetrachloroethene	31.7	10.0	42.4	107	10.0	41.4	97	2	74-129	20
Toluene	ND	10.0	11.0	110	10.0	11.1	111	1	80-121	20
Trans-1,2-DCE	ND	10.0	9.47	95	10.0	9.37	94	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	11.6	116	10.0	11.3	113	3	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	11.4	114	10.0	11.2	112	2	73-127	20
TCE	0.164J	10.0	10.2	100	10.0	9.94	98	3	79-123	20
Trichlorofluoromethane	ND	10.0	8.77	88	10.0	8.25	83	6	65-141	20
Vinyl Chloride	ND	10.0	10.2	102	10.0	10.5	105	3	58-137	20
1,2-Dibromoethane	ND	10.0	10.9	109	10.0	11.1	111	2	77-121	20
Vinyl Acetate	ND	10.0	5.83	58	10.0	5.57	56	5	54-146	20
Trichlorotrifluoroethane	ND	10.0	10.3	103	10.0	9.97	100	3	70-136	20
Methyl Acetate	ND	10.0	6.98	70	10.0	7.31	73	5	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	MSResult (ug/L)	MSRec (%)	SpikeAmt (ug/L)	MSDResult (ug/L)	MSDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	11.4	114	10.0	10.7	107	70-130
Bromofluorobenzene	10.0	8.41	84	10.0	8.52	85	70-130
Toluene-d8	10.0	10.6	106	10.0	10.8	108	70-130
Dibromofluoromethane	10.0	10.6	106	10.0	10.4	104	70-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate
* Out of QC Limit

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I061
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MW03RC-GW091124	MW03RC-GW091124MS	MW03RC-GW091124MSD
LAB SAMPLE ID	: 24I061-14	24I061-14M	24I061-14S
LAB FILE ID	: RIV586	RIV589	RIV590
DATE PREPARED	: 09/24/24 19:32	09/24/24 21:01	09/24/24 21:31
DATE ANALYZED	: 09/24/24 19:32	09/24/24 21:01	09/24/24 21:31
PREP BATCH	: V001I22	V001I22	V001I22
CALIBRATION REF	: RHV134	RHV134	RHV134

ACCESSION:

PARAMETERS	PSResult (ug/L)	SpikeAmt (ug/L)	MSResult (ug/L)	MSRec (%)	SpikeAmt (ug/L)	MSDResult (ug/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	9.67	97	10.0	9.58	96	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.17	92	10.0	9.18	92	0	71-121	20
1,1,2-Trichloroethane	ND	10.0	11.9	119	10.0	11.9	119	0	80-119	20
1,1-Dichloroethane	ND	10.0	10.7	107	10.0	11.1	111	4	77-125	20
1,1-Dichloroethene	ND	10.0	8.36	84	10.0	8.84	88	6	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	7.56	76	10.0	8.33	83	10	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	7.42	74	10.0	7.97	80	7	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	6.70	67*	10.0	7.15	72*	6	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	9.35	94	10.0	10.2	102	9	62-138	20
1,2-Dichlorobenzene	ND	10.0	8.67	87	10.0	8.70	87	0	80-119	20
1,2-Dichloroethane	ND	10.0	11.0	110	10.0	10.5	105	5	73-128	20
1,2-Dichloropropane	ND	10.0	11.9	119	10.0	12.3	123*	3	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	6.39	64*	10.0	6.46	65*	1	75-124	20
1,3-Dichlorobenzene	ND	10.0	8.46	85	10.0	8.33	83	2	80-119	20
1,4-Dichlorobenzene	ND	10.0	8.49	85	10.0	8.37	84	1	79-118	20
2-Butanone	ND	50.0	52.4	105	50.0	57.2	114	9	56-143	20
2-Hexanone	ND	50.0	57.5	115	50.0	58.2	116	1	57-139	20
Acetone	ND	50.0	51.3	103	50.0	50.7	101	1	39-160	20
Benzene	ND	10.0	11.2	112	10.0	11.6	116	4	79-120	20
Bromochloromethane	ND	10.0	10.4	104	10.0	11.4	114	9	78-120	20
Bromodichloromethane	0.188J	10.0	11.5	113	10.0	11.6	114	1	79-125	20
Bromoform	ND	10.0	8.07	81	10.0	8.04	80	0	66-130	20
Bromomethane	ND	10.0	9.33	93	10.0	10.9	109	16	53-141	20
Carbon Disulfide	ND	10.0	10.8	108	10.0	10.6	106	2	64-133	20
Carbon Tetrachloride	ND	10.0	8.83	88	10.0	8.67	87	2	72-136	20
Chlorobenzene	ND	10.0	10.3	103	10.0	10.1	101	2	82-118	20
Chloroethane	ND	10.0	10.6	106	10.0	12.7	127	18	60-138	20
Chloroform	2.01	10.0	13.3	113	10.0	12.9	109	3	79-124	20
Chloromethane	ND	10.0	9.56	96	10.0	11.2	112	16	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	10.4	104	10.0	10.5	105	1	78-123	20
Dibromochloromethane	ND	10.0	11.7	117	10.0	11.5	115	2	74-126	20
Dichlorodifluoromethane	ND	10.0	10.4	104	10.0	11.2	112	7	32-152	20
Ethylbenzene	0.163J	10.0	10.9	107	10.0	10.8	106	1	79-121	20
Isopropylbenzene	ND	10.0	10.4	104	10.0	10.2	102	2	72-131	20
m,p-Xylene	0.895J	20.0	21.4	103	20.0	21.4	103	0	80-121	20
4-Methyl-2-Pentanone	ND	50.0	59.6	119	50.0	62.6	125	5	67-130	20
Methylene Chloride	ND	10.0	9.68	97	10.0	9.94	99	3	74-124	20
tert-Butyl Methyl Ether	ND	10.0	11.9	119	10.0	12.3	123	3	71-124	20
o-Xylene	1.04	10.0	12.5	115	10.0	12.1	111	3	78-122	20
Styrene	ND	10.0	11.5	115	10.0	11.2	112	3	78-123	20
Tetrachloroethene	6.20	10.0	15.7	95	10.0	15.9	97	1	74-129	20
Toluene	ND	10.0	10.8	108	10.0	10.8	108	0	80-121	20
Trans-1,2-DCE	ND	10.0	9.22	92	10.0	9.60	96	4	75-124	20
cis-1,3-Dichloropropene	ND	10.0	11.7	117	10.0	12.0	120	3	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	11.6	116	10.0	11.5	115	1	73-127	20
TCE	ND	10.0	9.71	97	10.0	9.61	96	1	79-123	20
Trichlorofluoromethane	ND	10.0	9.23	92	10.0	9.69	97	5	65-141	20
Vinyl Chloride	ND	10.0	10.4	104	10.0	12.1	121	15	58-137	20
1,2-Dibromoethane	ND	10.0	10.8	108	10.0	10.6	106	2	77-121	20
Vinyl Acetate	ND	10.0	7.86	79	10.0	8.77	88	11	54-146	20
Trichlorotrifluoroethane	ND	10.0	10.4	104	10.0	10.6	106	2	70-136	20
Methyl Acetate	ND	10.0	9.90	99	10.0	9.79	98	1	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	MSResult (ug/L)	MSRec (%)	SpikeAmt (ug/L)	MSDResult (ug/L)	MSDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	11.1	111	10.0	10.8	108	70-130
Bromofluorobenzene	10.0	8.53	85	10.0	8.56	86	70-130
Toluene-d8	10.0	10.5	105	10.0	10.7	107	70-130
Dibromofluoromethane	10.0	10.2	102	10.0	10.2	102	70-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate
* Out of QC Limit

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV554.D Vial: 6
Acq On : 24 Sep 2024 3:31 am Operator: DNguye/CLingl
Sample : VO01I21B Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:35 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.58	114	1014514	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	836242	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	412910	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	314088	10.18	ug/l	0.01
Spiked Amount 10.000			Recovery =	101.80%		
41) 1,2-Dichloroethane-d4	8.00	65	274073	9.99	ug/l	0.01
Spiked Amount 10.000			Recovery =	99.90%		
54) Toluene-d8	11.03	98	1120100	10.96	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.60%		
76) 4-Bromofluorobenzene	16.02	95	483492	9.23	ug/l	0.01
Spiked Amount 10.000			Recovery =	92.30%		

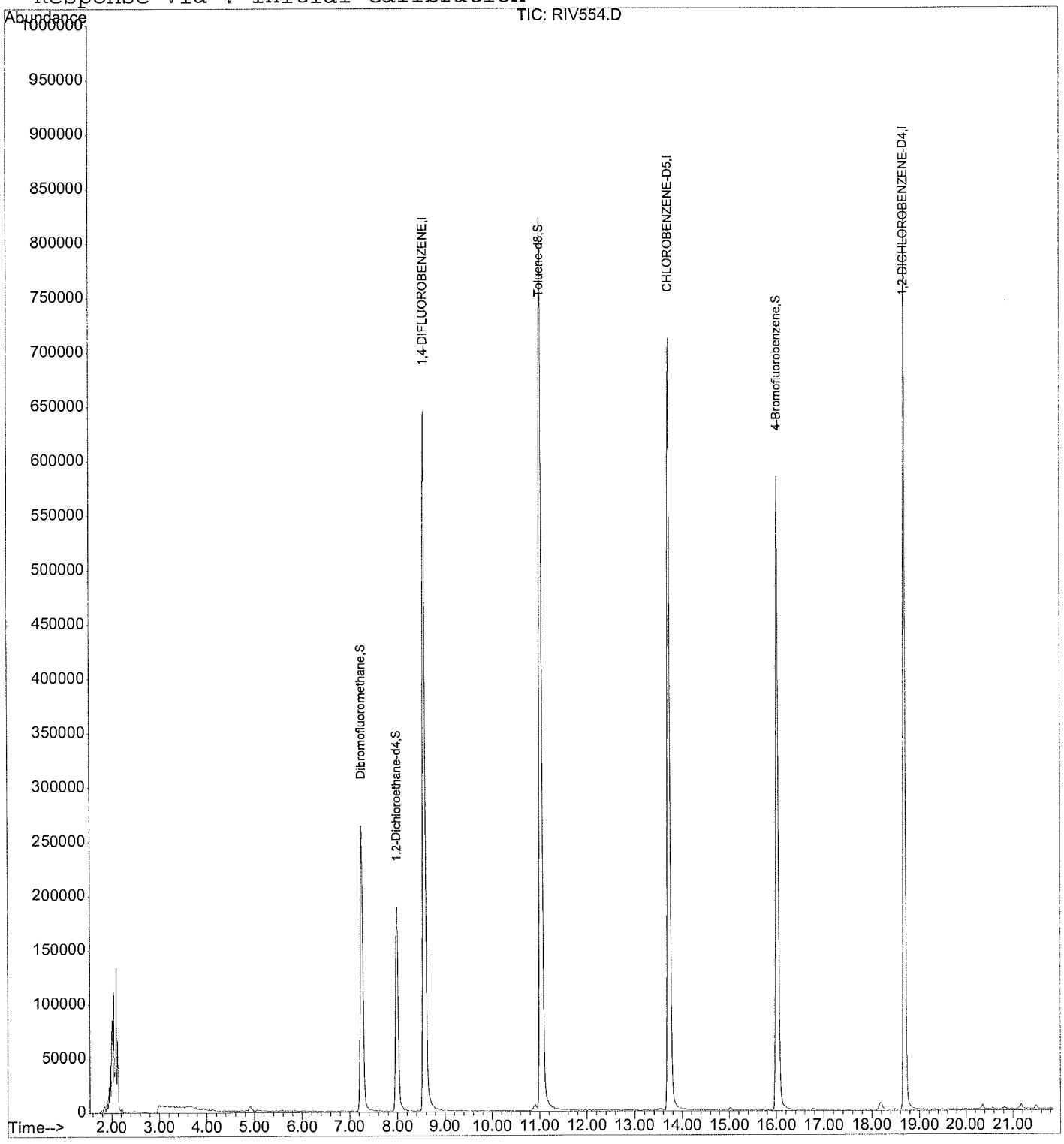
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RIV554.D VO01H09.M Wed Oct 02 10:35:14 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV554.D Vial: 6
Acq On : 24 Sep 2024 3:31 am Operator: DNguye/CLing
Sample : VO01I21B Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 10:35 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV551.D
Acq On : 24 Sep 2024 2:02 am
Sample : VO01I21L
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 24 2:24 2024

Vial: 3
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	982130	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	807900	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	450028	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	300547	10.06	ug/l	0.01
Spiked Amount 10.000			Recovery = 100.60%			
41) 1,2-Dichloroethane-d4	7.98	65	269857	10.16	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.60%			
54) Toluene-d8	11.03	98	1105001	11.19	ug/l	0.00
Spiked Amount 10.000			Recovery = 111.90%			
76) 4-Bromofluorobenzene	16.01	95	489521	8.57	ug/l	0.00
Spiked Amount 10.000			Recovery = 85.70%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	343242	10.62	ug/l	98
5) Chloromethane	2.57	50	262391	11.20	ug/l	98
6) Vinyl chloride	2.71	62	236024	11.42	ug/l	97
7) Bromomethane	3.24	94	193996	10.60	ug/l	95
8) Chloroethane	3.26	64	198050	12.34	ug/l	87
9) Dichlorofluoromethane	3.38	67	430851	12.18	ug/l	99
10) Trichlorofluoromethane	3.64	101	400477	8.53	ug/l	92
11) Acrolein	4.03	56	33506	33.85	ug/l	91
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	202348	10.52	ug/l	95
13) Acetone	4.10	43	223535	50.77	ug/l	89
14) 1,1-Dichloroethene	4.26	61	411874	8.67	ug/l	97
15) tert-Butyl alcohol	4.38	59	346079	261.89	ug/l	96
16) Iodomethane	4.68	142	433500	10.09	ug/l	84
17) Methyl acetate	4.69	43	116143	11.44	ug/l	97
18) Methylene chloride	4.90	49	340790	10.32	ug/l	90
19) Carbon disulfide	4.92	76	935600	11.37	ug/l	99
20) Acrylonitrile	5.06	53	225721	57.83	ug/l	98
21) tert-Butyl methyl ether (M	5.09	73	665717	12.32	ug/l	91
22) trans-1,2-Dichloroethene	5.29	61	408372	9.43	ug/l	99
23) Isopropyl ether (DIPE)	5.70	45	1061316	12.28	ug/l	99
24) Vinyl acetate	5.86	43	274895	8.71	ug/l	98
25) 1,1-Dichloroethane	5.86	63	593356	11.19	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	938540	11.75	ug/l	95
28) 2-Butanone	6.44	43	361214	55.86	ug/l	96
29) 2,2-Dichloropropane	6.65	77	470122	8.89	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	352648	10.56	ug/l	98
31) Chloroform	6.93	83	651430	10.91	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV551.D Vial: 3
Acq On : 24 Sep 2024 2:02 am Operator: DNguye/CLingl
Sample : VO01I21L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 2:24 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.18	49	223875	11.04	ug/l	99
33)	Tetrahydrofuran	7.23	42	34566	9.57	ug/l	89
35)	1,1,1-Trichloroethane	7.52	97	541183	9.18	ug/l	97
36)	Cyclohexane	7.55	84	444421	10.47	ug/l	99
38)	1,1-Dichloropropene	7.74	110	138474	8.58	ug/l	98
39)	Carbon tetrachloride	7.89	119	402497	8.22	ug/l	100
40)	tert-Amyl methyl ether (TA	7.91	73	735820	12.53	ug/l	99
42)	Benzene	8.14	78	1247044	11.53	ug/l	98
43)	1,2-Dichloroethane	8.13	62	349271	10.33	ug/l	100
44)	Trichloroethene	9.09	130	342819	9.96	ug/l	96
45)	Methylcyclohexane	9.18	83	497234	10.50	ug/l	91
46)	1,2-Dichloropropane	9.36	63	309595	12.54	ug/l	89
47)	Bromodichloromethane	9.74	83	477961	11.09	ug/l	97
48)	1,4-Dioxane	9.79	88	23759	194.41	ug/l	93
49)	Dibromomethane	9.83	93	145782	10.61	ug/l	91
50)	2-Chloroethyl vinyl ether	10.23	63	58143	7.52	ug/l	94
51)	4-Methyl-2-pentanone	10.28	43	908560	61.54	ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	506634	11.62	ug/l	97
55)	Toluene	11.17	91	1359606	11.23	ug/l	99
56)	Ethyl methacrylate	11.46	69	281471	13.79	ug/l	91
57)	trans-1,3-Dichloropropene	11.48	75	413152	11.77	ug/l	98
58)	1,1,2-Trichloroethane	11.76	97	218773	12.34	ug/l	95
59)	2-Hexanone	11.76	43	570644	58.44	ug/l	97
60)	1,3-Dichloropropane	12.20	76	408079	12.92	ug/l	99
61)	Tetrachloroethene	12.31	164	279245	10.16	ug/l	93
62)	Dibromochloromethane	12.68	129	280959	11.98	ug/l	99
63)	1,2-Dibromoethane	13.03	107	197937	11.09	ug/l	98
64)	1-Chlorohexane	13.31	91	554885	9.88	ug/l	100
65)	Chlorobenzene	13.79	112	877893	10.55	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.88	131	331292	11.92	ug/l	97
67)	Ethylbenzene	13.88	91	1639176	10.82	ug/l	97
68)	m-Xylene & p-Xylene	14.02	91	2476817	20.70	ug/l	97
69)	o-Xylene	14.84	91	1322664	11.47	ug/l	95
70)	Styrene	14.91	104	997501	11.82	ug/l	97
71)	Isopropylbenzene	15.52	105	1642299	10.39	ug/l	98
73)	Bromoform	15.56	173	138597	8.39	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.64	53	70672	7.03	ug/l	98
75)	1,1,2,2-Tetrachloroethane	15.86	83	255220	9.50	ug/l	96
77)	1,2,3-Trichloropropane	16.16	110	72276	7.31	ug/l	90
78)	n-Propylbenzene	16.31	91	2072712	7.25	ug/l	98
79)	Bromobenzene	16.39	156	366926	8.47	ug/l	96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I23\RIV551.D Vial: 3
Acq On : 24 Sep 2024 2:02 am Operator: DNguye/CLingl
Sample : VO01I21L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 2:24 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1252327	6.63	ug/l	97
81)	2-Chlorotoluene	16.65	91	1340405	7.14	ug/l	98
82)	4-Chlorotoluene	16.73	91	1162073	7.24	ug/l	96
83)	tert-Butylbenzene	17.30	134	330556	7.91	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	1335447	7.40	ug/l	98
85)	sec-Butylbenzene	17.65	105	1843504	7.23	ug/l	96
86)	p-Isopropyltoluene	17.87	119	1484298	6.84	ug/l	96
87)	1,3-Dichlorobenzene	18.04	146	769696	8.58	ug/l	92
88)	1,2,3-Trimethylbenzene	18.14	105	1310369	7.48	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	732166	8.44	ug/l	92
90)	n-Butylbenzene	18.50	91	1431123	7.21	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	646968	8.76	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.73	157	41459	9.96	ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	398743	7.94	ug/l	97
94)	Hexachlorobutadiene	20.98	225	232862	7.06	ug/l	98
95)	Naphthalene	21.16	128	589864	8.24	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	322467	8.40	ug/l	95

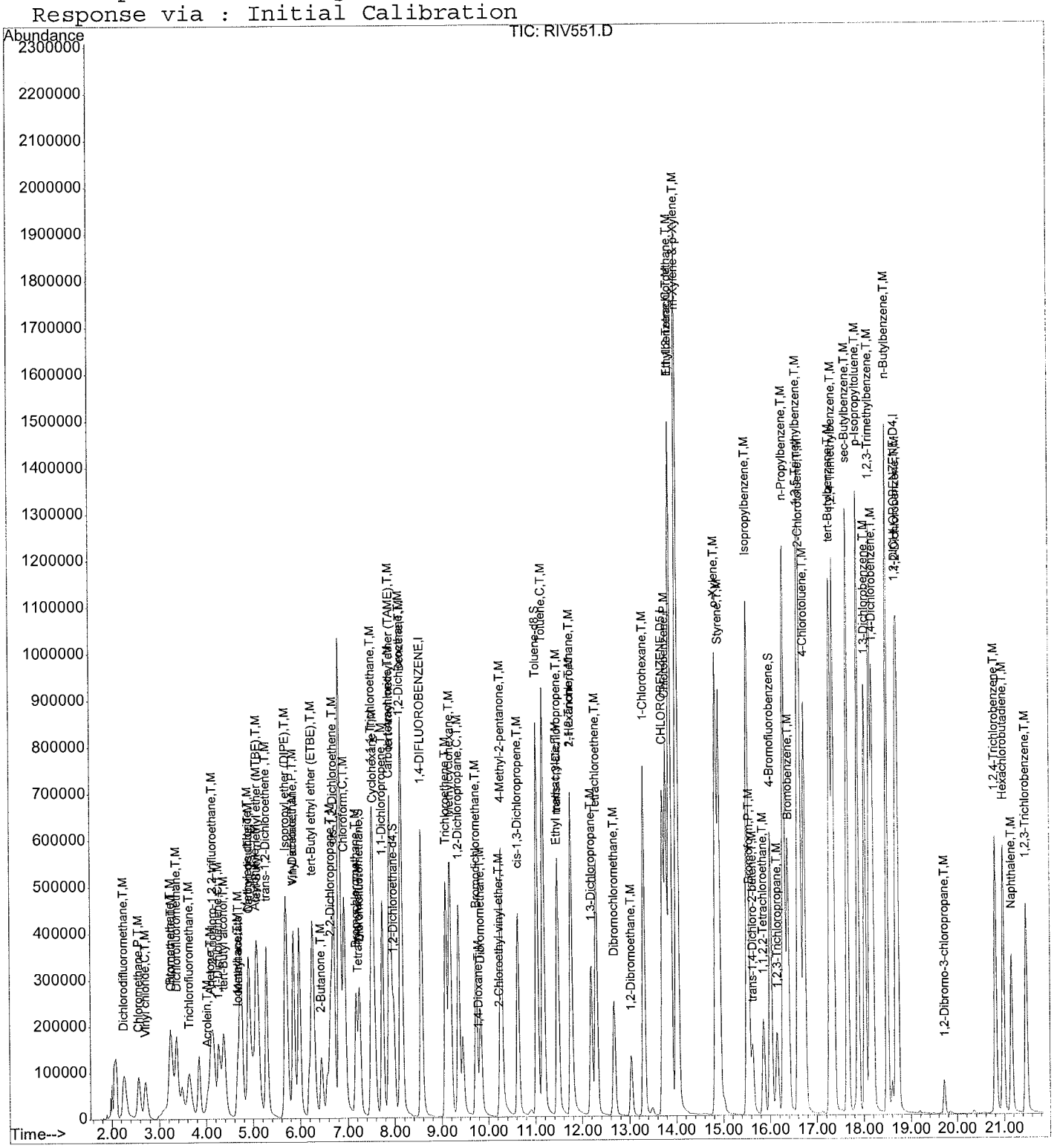
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I23\RIV551.D
Acq On : 24 Sep 2024 2:02 am
Sample : VO01I21L
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 24 2:24 2024

Vial: 3
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV552.D Vial: 4
Acq On : 24 Sep 2024 2:32 am Operator: DNguye/CLingl
Sample : VO01I21C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 2:54 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	1004015	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	857951	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	463684	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.25	111	315608	10.34	ug/l	0.01
Spiked Amount 10.000			Recovery =	103.40%		
41) 1,2-Dichloroethane-d4	7.98	65	283654	10.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.50%		
54) Toluene-d8	11.03	98	1146181	10.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.30%		
76) 4-Bromofluorobenzene	16.01	95	520274	8.84	ug/l	0.00
Spiked Amount 10.000			Recovery =	88.40%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	321989	9.75	ug/l	98
5) Chloromethane	2.57	50	261849	10.93	ug/l	99
6) Vinyl chloride	2.71	62	236363	11.19	ug/l	96
7) Bromomethane	3.24	94	198279	10.60	ug/l	95
8) Chloroethane	3.27	64	204057	12.44	ug/l	87
9) Dichlorofluoromethane	3.37	67	462090	12.77	ug/l	96
10) Trichlorofluoromethane	3.64	101	359302	7.48	ug/l	97
11) Acrolein	4.04	56	35220	34.81	ug/l	77
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	209178	10.64	ug/l	99
13) Acetone	4.12	43	232589	51.72	ug/l	88
14) 1,1-Dichloroethene	4.28	61	429777	8.85	ug/l	86
15) tert-Butyl alcohol	4.38	59	354591	262.48	ug/l	97
16) Iodomethane	4.68	142	460868	10.49	ug/l	83
17) Methyl acetate	4.69	43	111683	10.76	ug/l	96
18) Methylene chloride	4.90	49	364122	10.78	ug/l	91
19) Carbon disulfide	4.91	76	972445	11.56	ug/l	99
20) Acrylonitrile	5.06	53	246410	61.75	ug/l	98
21) tert-Butyl methyl ether (M	5.11	73	698993	12.65	ug/l	91
22) trans-1,2-Dichloroethene	5.29	61	424942	9.60	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	1119278	12.67	ug/l	98
24) Vinyl acetate	5.86	43	277583	8.60	ug/l	96
25) 1,1-Dichloroethane	5.86	63	611515	11.28	ug/l	99
27) tert-Butyl ethyl ether (ET	6.28	59	959179	11.74	ug/l	95
28) 2-Butanone	6.44	43	374564	56.66	ug/l	98
29) 2,2-Dichloropropane	6.65	77	488587	9.04	ug/l	100
30) cis-1,2-Dichloroethene	6.72	96	382597	11.21	ug/l	96
31) Chloroform	6.93	83	661486	10.83	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I23\RIV552.D Vial: 4
Acq On : 24 Sep 2024 2:32 am Operator: DNguye/CLingl
Sample : VO01I21C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 2:54 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.18	49	234496	11.31 ug/l	99
33)	Tetrahydrofuran	7.23	42	37541	10.17 ug/l	96
35)	1,1,1-Trichloroethane	7.52	97	553711	9.19 ug/l	98
36)	Cyclohexane	7.55	84	425450	9.81 ug/l	99
38)	1,1-Dichloropropene	7.74	110	143477	8.69 ug/l	99
39)	Carbon tetrachloride	7.89	119	413123	8.25 ug/l	98
40)	tert-Amyl methyl ether (TA	7.91	73	770160	12.83 ug/l	99
42)	Benzene	8.14	78	1295274	11.72 ug/l	97
43)	1,2-Dichloroethane	8.13	62	354961	10.27 ug/l	99
44)	Trichloroethene	9.09	130	359734	10.23 ug/l	97
45)	Methylcyclohexane	9.18	83	467918	9.67 ug/l	90
46)	1,2-Dichloropropane	9.36	63	320617	12.70 ug/l	89
47)	Bromodichloromethane	9.74	83	490941	11.15 ug/l	96
48)	1,4-Dioxane	9.79	88	24760	198.18 ug/l	90
49)	Dibromomethane	9.83	93	152896	10.89 ug/l	92
50)	2-Chloroethyl vinyl ether	10.23	63	63649	8.06 ug/l	93
51)	4-Methyl-2-pentanone	10.28	43	952458	63.11 ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	526234	11.81 ug/l	97
55)	Toluene	11.17	91	1422523	11.07 ug/l	100
56)	Ethyl methacrylate	11.46	69	295126	13.61 ug/l	92
57)	trans-1,3-Dichloropropene	11.48	75	425784	11.42 ug/l	98
58)	1,1,2-Trichloroethane	11.76	97	228173	12.12 ug/l	94
59)	2-Hexanone	11.76	43	590355	57.00 ug/l	97
60)	1,3-Dichloropropane	12.20	76	433025	12.91 ug/l	98
61)	Tetrachloroethene	12.31	164	286867	9.82 ug/l	92
62)	Dibromochloromethane	12.68	129	289683	11.63 ug/l	97
63)	1,2-Dibromoethane	13.03	107	204604	10.79 ug/l	99
64)	1-Chlorohexane	13.31	91	565549	9.49 ug/l	99
65)	Chlorobenzene	13.79	112	919840	10.41 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	343333	11.64 ug/l	96
67)	Ethylbenzene	13.88	91	1711256	10.63 ug/l	98
68)	m-Xylene & p-Xylene	14.02	91	2563376	20.17 ug/l	96
69)	o-Xylene	14.84	91	1356554	11.08 ug/l	96
70)	Styrene	14.91	104	1051241	11.73 ug/l	96
71)	Isopropylbenzene	15.52	105	1691095	10.08 ug/l	98
73)	Bromoform	15.56	173	140564	8.25 ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.62	53	69606	6.72 ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	270961	9.78 ug/l	96
77)	1,2,3-Trichloropropane	16.14	110	74941	7.35 ug/l	89
78)	n-Propylbenzene	16.30	91	2228641	7.56 ug/l	98
79)	Bromobenzene	16.39	156	400797	8.98 ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV552.D Vial: 4
Acq On : 24 Sep 2024 2:32 am Operator: DNguye/CLingl
Sample : VO01I21C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 2:54 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

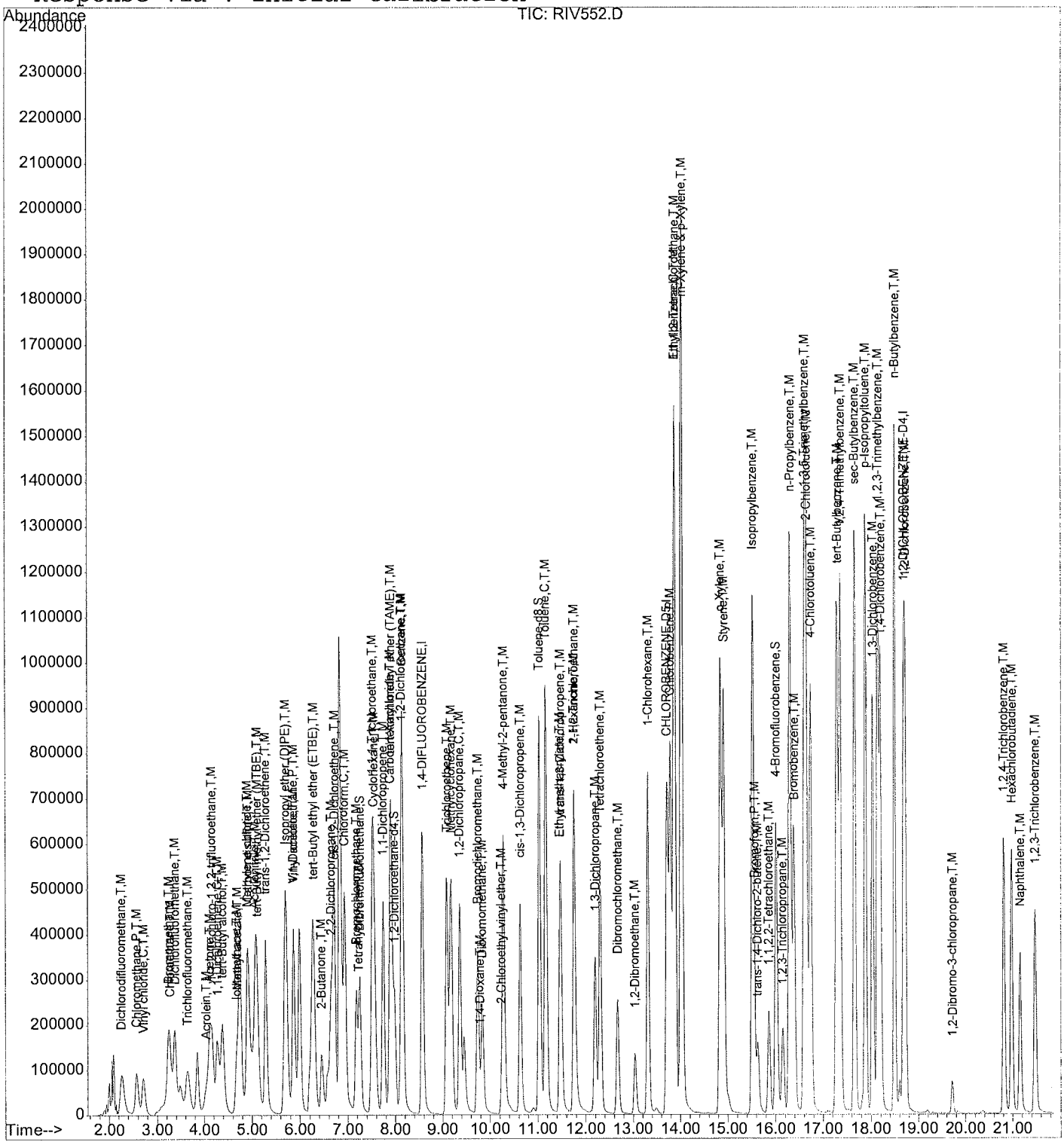
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1366993	7.02	ug/l	97
81)	2-Chlorotoluene	16.65	91	1441731	7.45	ug/l	97
82)	4-Chlorotoluene	16.73	91	1269819	7.68	ug/l	98
83)	tert-Butylbenzene	17.30	134	331865	7.71	ug/l	97
84)	1,2,4-Trimethylbenzene	17.36	105	1351931	7.27	ug/l	97
85)	sec-Butylbenzene	17.65	105	1876022	7.15	ug/l	97
86)	p-Isopropyltoluene	17.87	119	1499407	6.71	ug/l	96
87)	1,3-Dichlorobenzene	18.04	146	786130	8.50	ug/l	92
88)	1,2,3-Trimethylbenzene	18.14	105	1354697	7.51	ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	765012	8.56	ug/l	93
90)	n-Butylbenzene	18.50	91	1457068	7.12	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	663073	8.71	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.73	157	41710	9.72	ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	402534	7.78	ug/l	97
94)	Hexachlorobutadiene	20.98	225	231360	6.81	ug/l	99
95)	Naphthalene	21.16	128	605280	8.21	ug/l	97
96)	1,2,3-Trichlorobenzene	21.47	180	324030	8.20	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV552.D Vial: 4
Acq On : 24 Sep 2024 2:32 am Operator: DNguye/CLing
Sample : VO01I21C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 2:54 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV578.D
Acq On : 24 Sep 2024 3:33 pm
Sample : VO01I22B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 11:01 2024

Vial: 6
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.58	114	957336	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	790093	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	389616	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	299509	10.29	ug/l	0.01
Spiked Amount 10.000			Recovery = 102.90%			
41) 1,2-Dichloroethane-d4	8.00	65	260941	10.08	ug/l	0.01
Spiked Amount 10.000			Recovery = 100.80%			
54) Toluene-d8	11.05	98	1062273	11.00	ug/l	0.01
Spiked Amount 10.000			Recovery = 110.00%			
76) 4-Bromofluorobenzene	16.02	95	451179	9.13	ug/l	0.01
Spiked Amount 10.000			Recovery = 91.30%			

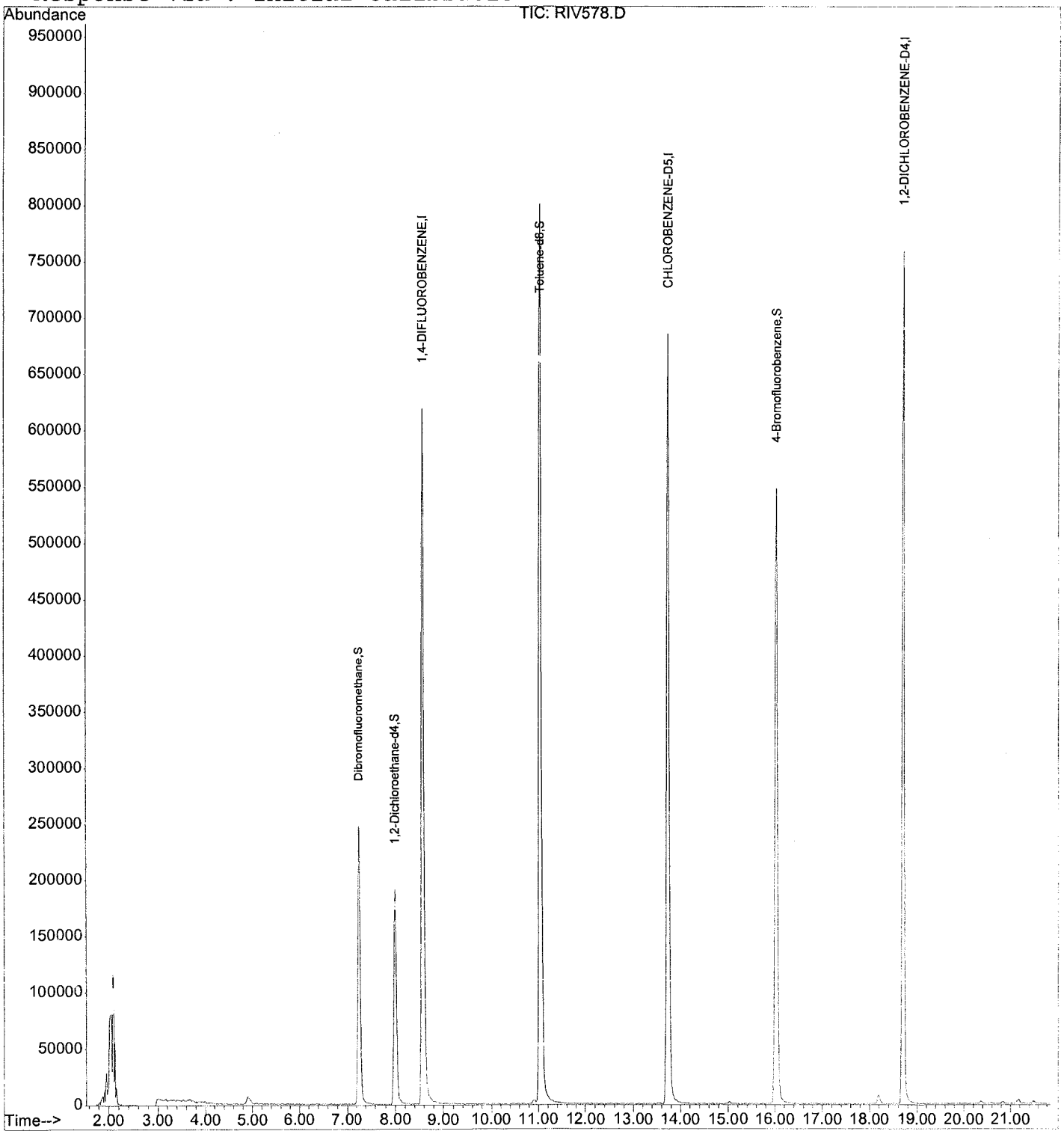
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I24\RIV578.D Vial: 6
Acq On : 24 Sep 2024 3:33 pm Operator: DNguye/CLing
Sample : VO01I22B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 11:01 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV575.D Vial: 3
Acq On : 24 Sep 2024 2:02 pm Operator: DNguye/CLingl
Sample : VO01I22L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 14:24 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	850428	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	725833	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	399763	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	260951	10.09	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.90%			
41) 1,2-Dichloroethane-d4	7.98	65	233948	10.18	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.80%			
54) Toluene-d8	11.03	98	965073	10.88	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.80%			
76) 4-Bromofluorobenzene	16.01	95	454853	8.97	ug/l	0.00
Spiked Amount 10.000			Recovery = 89.70%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.23	85	313334	11.20	ug/l	98
5) Chloromethane	2.54	50	235903	11.63	ug/l	97
6) Vinyl chloride	2.69	62	225354	12.59	ug/l	99
7) Bromomethane	3.23	94	177970	11.23	ug/l	94
8) Chloroethane	3.29	64	174494	12.56	ug/l	91
9) Dichlorofluoromethane	3.36	67	412415	13.46	ug/l	99
10) Trichlorofluoromethane	3.63	101	387339	9.52	ug/l	96
11) Acrolein	4.01	56	31969	37.30	ug/l	89
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	196522	11.80	ug/l	96
13) Acetone	4.09	43	195390	51.28	ug/l	88
14) 1,1-Dichloroethene	4.25	61	373179	9.07	ug/l	71
15) tert-Butyl alcohol	4.37	59	306913	268.22	ug/l	97
16) Iodomethane	4.65	142	379451	10.20	ug/l	84
17) Methyl acetate	4.68	43	95409	10.85	ug/l	96
18) Methylene chloride	4.87	49	312162	10.91	ug/l	92
19) Carbon disulfide	4.90	76	865242	12.15	ug/l	100
20) Acrylonitrile	5.05	53	195343	57.80	ug/l	98
21) tert-Butyl methyl ether (M	5.08	73	561248	11.99	ug/l	93
22) trans-1,2-Dichloroethene	5.27	61	369366	9.86	ug/l	99
23) Isopropyl ether (DIPE)	5.69	45	928880	12.42	ug/l	100
24) Vinyl acetate	5.85	43	254810	9.33	ug/l	95
25) 1,1-Dichloroethane	5.85	63	518115	11.28	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	775998	11.22	ug/l	96
28) 2-Butanone	6.44	43	302760	54.07	ug/l	99
29) 2,2-Dichloropropane	6.65	77	496244	10.84	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	319557	11.06	ug/l	98
31) Chloroform	6.93	83	577226	11.16	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV575.D Vial: 3
Acq On : 24 Sep 2024 2:02 pm Operator: DNguye/CLingl
Sample : VO01I22L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 14:24 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32) Bromochloromethane	7.17	49	195654	11.14	ug/l	99
33) Tetrahydrofuran	7.23	42	29077	9.30	ug/l	94
35) 1,1,1-Trichloroethane	7.51	97	484630	9.50	ug/l	96
36) Cyclohexane	7.54	84	423222	11.52	ug/l	98
38) 1,1-Dichloropropene	7.73	110	126872	9.07	ug/l	98
39) Carbon tetrachloride	7.89	119	359932	8.48	ug/l	98
40) tert-Amyl methyl ether (TA	7.91	73	618898	12.17	ug/l	98
42) Benzene	8.14	78	1095783	11.70	ug/l	98
43) 1,2-Dichloroethane	8.11	62	290186	9.91	ug/l	97
44) Trichloroethene	9.08	130	296694	9.96	ug/l	97
45) Methylcyclohexane	9.17	83	472951	11.54	ug/l	91
46) 1,2-Dichloropropane	9.36	63	266803	12.48	ug/l	89
47) Bromodichloromethane	9.73	83	407256	10.92	ug/l	97
48) 1,4-Dioxane	9.79	88	22072	208.57	ug/l	97
49) Dibromomethane	9.83	93	123616	10.39	ug/l	91
50) 2-Chloroethyl vinyl ether	10.23	63	44515	6.65	ug/l	95
51) 4-Methyl-2-pentanone	10.28	43	742187	58.06	ug/l	99
52) cis-1,3-Dichloropropene	10.63	75	444459	11.77	ug/l	96
55) Toluene	11.17	91	1203027	11.06	ug/l	99
56) Ethyl methacrylate	11.46	69	227327	12.39	ug/l	91
57) trans-1,3-Dichloropropene	11.48	75	353183	11.20	ug/l	97
58) 1,1,2-Trichloroethane	11.76	97	184040	11.55	ug/l	94
59) 2-Hexanone	11.76	43	472055	54.01	ug/l	98
60) 1,3-Dichloropropane	12.20	76	347180	12.24	ug/l	99
61) Tetrachloroethene	12.31	164	253300	10.25	ug/l	93
62) Dibromochloromethane	12.68	129	232878	11.06	ug/l	98
63) 1,2-Dibromoethane	13.03	107	163253	10.18	ug/l	98
64) 1-Chlorohexane	13.31	91	517089	10.25	ug/l	99
65) Chlorobenzene	13.79	112	770661	10.31	ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.88	131	294101	11.78	ug/l	98
67) Ethylbenzene	13.89	91	1508420	11.08	ug/l	96
68) m-Xylene & p-Xylene	14.02	91	2241561	20.85	ug/l	96
69) o-Xylene	14.84	91	1206977	11.65	ug/l	95
70) Styrene	14.91	104	898876	11.85	ug/l	97
71) Isopropylbenzene	15.53	105	1540590	10.85	ug/l	98
73) Bromoform	15.56	173	116272	7.92	ug/l	97
74) trans-1,4-Dichloro-2-buten	15.64	53	62719	7.02	ug/l	98
75) 1,1,2,2-Tetrachloroethane	15.86	83	220704	9.24	ug/l	97
77) 1,2,3-Trichloropropane	16.16	110	63093	7.18	ug/l	90
78) n-Propylbenzene	16.30	91	1966511	7.74	ug/l	98
79) Bromobenzene	16.39	156	330258	8.58	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I24\RIV575.D Vial: 3
Acq On : 24 Sep 2024 2:02 pm Operator: DNguye/CLingl
Sample : VO01I22L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 14:24 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

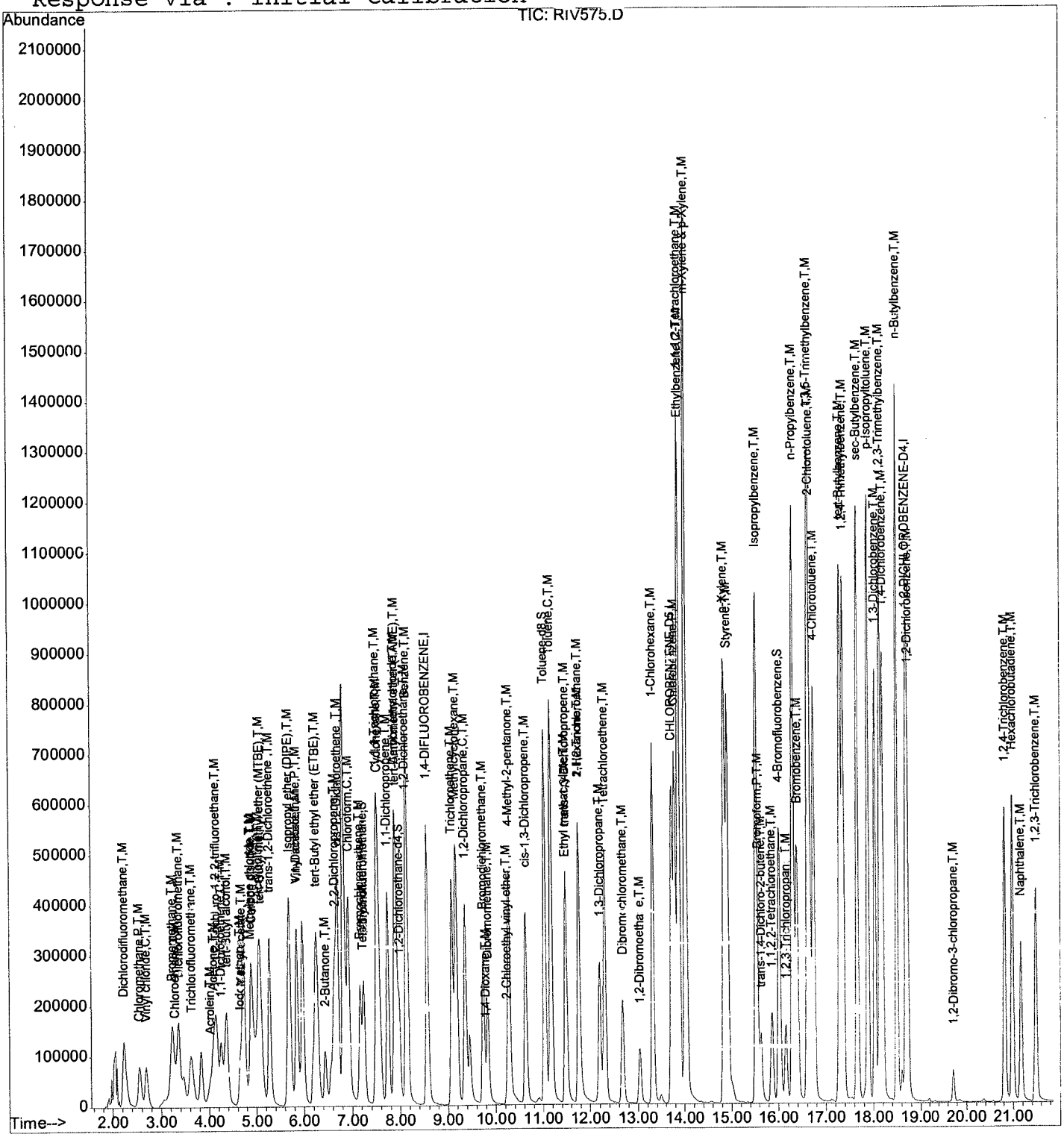
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	1190764	7.10	ug/l	97
81)	2-Chlorotoluene	16.65	91	1223751	7.34	ug/l	97
82)	4-Chlorotoluene	16.73	91	1136697	7.98	ug/l	97
83)	tert-Butylbenzene	17.30	134	305584	8.23	ug/l	94
84)	1,2,4-Trimethylbenzene	17.36	105	1210248	7.55	ug/l	97
85)	sec-Butylbenzene	17.67	105	1696946	7.50	ug/l	96
86)	p-Isopropyltoluene	17.89	119	1372140	7.12	ug/l	96
87)	1,3-Dichlorobenzene	18.04	146	688185	8.63	ug/l	92
88)	1,2,3-Trimethylbenzene	18.14	105	1174475	7.55	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	666334	8.64	ug/l	92
90)	n-Butylbenzene	18.50	91	1389897	7.88	ug/l	99
91)	1,2-Dichlorobenzene	18.73	146	570155	8.69	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.73	157	34522	9.34	ug/l	96
93)	1,2,4-Trichlorobenzene	20.82	180	386986	8.68	ug/l	97
94)	Hexachlorobutadiene	20.98	225	235906	8.06	ug/l	99
95)	Naphthalene	21.16	128	533922	8.40	ug/l	97
96)	1,2,3-Trichlorobenzene	21.49	180	302898	8.89	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I24\RIV575.D Vial: 3
Acq On : 24 Sep 2024 2:02 pm Operator: DNguye/CLing
Sample : VO01I22L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 14:24 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV576.D Vial: 4
Acq On : 24 Sep 2024 2:32 pm Operator: DNguye/CLingl
Sample : VO01I22C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 14:54 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	951936	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	812355	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	460145	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	300674	10.39	ug/l	0.01
Spiked Amount 10.000			Recovery =	103.90%		
41) 1,2-Dichloroethane-d4	7.98	65	260997	10.14	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.40%		
54) Toluene-d8	11.05	98	1076065	10.84	ug/l	0.01
Spiked Amount 10.000			Recovery =	108.40%		
76) 4-Bromofluorobenzene	16.02	95	521935	8.94	ug/l	0.01
Spiked Amount 10.000			Recovery =	89.40%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.27	85	325026	10.38	ug/l	98
5) Chloromethane	2.57	50	228624	10.07	ug/l	99
6) Vinyl chloride	2.71	62	214062	10.69	ug/l	95
7) Bromomethane	3.26	94	174596	9.84	ug/l	95
8) Chloroethane	3.30	64	177271	11.40	ug/l	88
9) Dichlorofluoromethane	3.38	67	451651	13.17	ug/l	99
10) Trichlorofluoromethane	3.64	101	384477	8.44	ug/l	87
11) Acrolein	4.04	56	34455	35.92	ug/l	93
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	219024	11.75	ug/l	95
13) Acetone	4.12	43	219626	51.50	ug/l	85
14) 1,1-Dichloroethene	4.28	61	418582	9.09	ug/l	77
15) tert-Butyl alcohol	4.38	59	342722	267.58	ug/l	98
16) Iodomethane	4.68	142	417305	10.02	ug/l	85
17) Methyl acetate	4.71	43	106168	10.79	ug/l	95
18) Methylene chloride	4.90	49	335621	10.48	ug/l	89
19) Carbon disulfide	4.92	76	937097	11.75	ug/l	99
20) Acrylonitrile	5.08	53	223395	59.05	ug/l	98
21) tert-Butyl methyl ether (M	5.09	73	653360	12.47	ug/l	91
22) trans-1,2-Dichloroethene	5.29	61	409026	9.75	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	1028166	12.28	ug/l	98
24) Vinyl acetate	5.86	43	275498	9.01	ug/l	96
25) 1,1-Dichloroethane	5.86	63	576769	11.22	ug/l	100
27) tert-Butyl ethyl ether (ET	6.26	59	901853	11.65	ug/l	95
28) 2-Butanone	6.46	43	336475	53.69	ug/l	94
29) 2,2-Dichloropropane	6.66	77	541895	10.57	ug/l	99
30) cis-1,2-Dichloroethene	6.72	96	353121	10.91	ug/l	98
31) Chloroform	6.94	83	628849	10.86	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV576.D Vial: 4
Acq On : 24 Sep 2024 2:32 pm Operator: DNguye/CLingl
Sample : VO01I22C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 14:54 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.18	49	218674	11.13 ug/l	98
33) Tetrahydrofuran	7.24	42	33515	9.58 ug/l	88
35) 1,1,1-Trichloroethane	7.52	97	537966	9.42 ug/l	97
36) Cyclohexane	7.55	84	456908	11.11 ug/l	100
38) 1,1-Dichloropropene	7.74	110	141855	9.06 ug/l	100
39) Carbon tetrachloride	7.91	119	412193	8.68 ug/l	99
40) tert-Amyl methyl ether (TA	7.92	73	723077	12.71 ug/l	99
42) Benzene	8.16	78	1220179	11.73 ug/l	98
43) 1,2-Dichloroethane	8.13	62	335969	10.25 ug/l	98
44) Trichloroethene	9.09	130	339270	10.17 ug/l	96
45) Methylcyclohexane	9.18	83	519884	11.33 ug/l	90
46) 1,2-Dichloropropane	9.36	63	298748	12.48 ug/l	90
47) Bromodichloromethane	9.74	83	467002	11.18 ug/l	95
48) 1,4-Dioxane	9.79	88	25594	216.06 ug/l	93
49) Dibromomethane	9.83	93	142828	10.73 ug/l	92
50) 2-Chloroethyl vinyl ether	10.23	63	53779	7.18 ug/l	93
51) 4-Methyl-2-pentanone	10.28	43	893583	62.45 ug/l	98
52) cis-1,3-Dichloropropene	10.63	75	508539	12.04 ug/l	96
55) Toluene	11.18	91	1358231	11.16 ug/l	99
56) Ethyl methacrylate	11.46	69	274419	13.37 ug/l	93
57) trans-1,3-Dichloropropene	11.49	75	418878	11.86 ug/l	99
58) 1,1,2-Trichloroethane	11.76	97	218193	12.24 ug/l	94
59) 2-Hexanone	11.77	43	567592	57.84 ug/l	97
60) 1,3-Dichloropropane	12.20	76	394216	12.42 ug/l	99
61) Tetrachloroethene	12.31	164	289777	10.48 ug/l	93
62) Dibromochloromethane	12.68	129	274282	11.63 ug/l	98
63) 1,2-Dibromoethane	13.05	107	190832	10.63 ug/l	100
64) 1-Chlorohexane	13.31	91	589073	10.43 ug/l	100
65) Chlorobenzene	13.80	112	867843	10.37 ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.88	131	329529	11.79 ug/l	97
67) Ethylbenzene	13.89	91	1689235	11.09 ug/l	97
68) m-Xylene & p-Xylene	14.02	91	2496117	20.75 ug/l	97
69) o-Xylene	14.85	91	1410537	12.16 ug/l	96
70) Styrene	14.91	104	1056364	12.45 ug/l	97
71) Isopropylbenzene	15.53	105	1778908	11.20 ug/l	98
73) Bromoform	15.56	173	145614	8.62 ug/l	98
74) trans-1,4-Dichloro-2-buten	15.64	53	78464	7.63 ug/l	99
75) 1,1,2,2-Tetrachloroethane	15.86	83	278193	10.12 ug/l	96
77) 1,2,3-Trichloropropane	16.16	110	77211	7.63 ug/l	89
78) n-Propylbenzene	16.31	91	2313585	7.91 ug/l	98
79) Bromobenzene	16.39	156	392313	8.86 ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV576.D Vial: 4
Acq On : 24 Sep 2024 2:32 pm Operator: DNguye/CLingl
Sample : VO01I22C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 14:54 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	1382480	7.16	ug/l	97
81)	2-Chlorotoluene	16.65	91	1416616	7.38	ug/l	97
82)	4-Chlorotoluene	16.73	91	1323733	8.07	ug/l	96
83)	tert-Butylbenzene	17.30	134	346312	8.11	ug/l	93
84)	1,2,4-Trimethylbenzene	17.36	105	1358021	7.36	ug/l	96
85)	sec-Butylbenzene	17.67	105	1911273	7.34	ug/l	96
86)	p-Isopropyltoluene	17.89	119	1565758	7.06	ug/l	96
87)	1,3-Dichlorobenzene	18.04	146	789066	8.60	ug/l	92
88)	1,2,3-Trimethylbenzene	18.14	105	1348172	7.53	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	767415	8.65	ug/l	93
90)	n-Butylbenzene	18.50	91	1563548	7.70	ug/l	98
91)	1,2-Dichlorobenzene	18.73	146	667773	8.84	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.73	157	42987	10.10	ug/l	98
93)	1,2,4-Trichlorobenzene	20.82	180	430762	8.39	ug/l	98
94)	Hexachlorobutadiene	20.98	225	256451	7.61	ug/l	99
95)	Naphthalene	21.16	128	616351	8.42	ug/l	97
96)	1,2,3-Trichlorobenzene	21.49	180	337887	8.61	ug/l	98

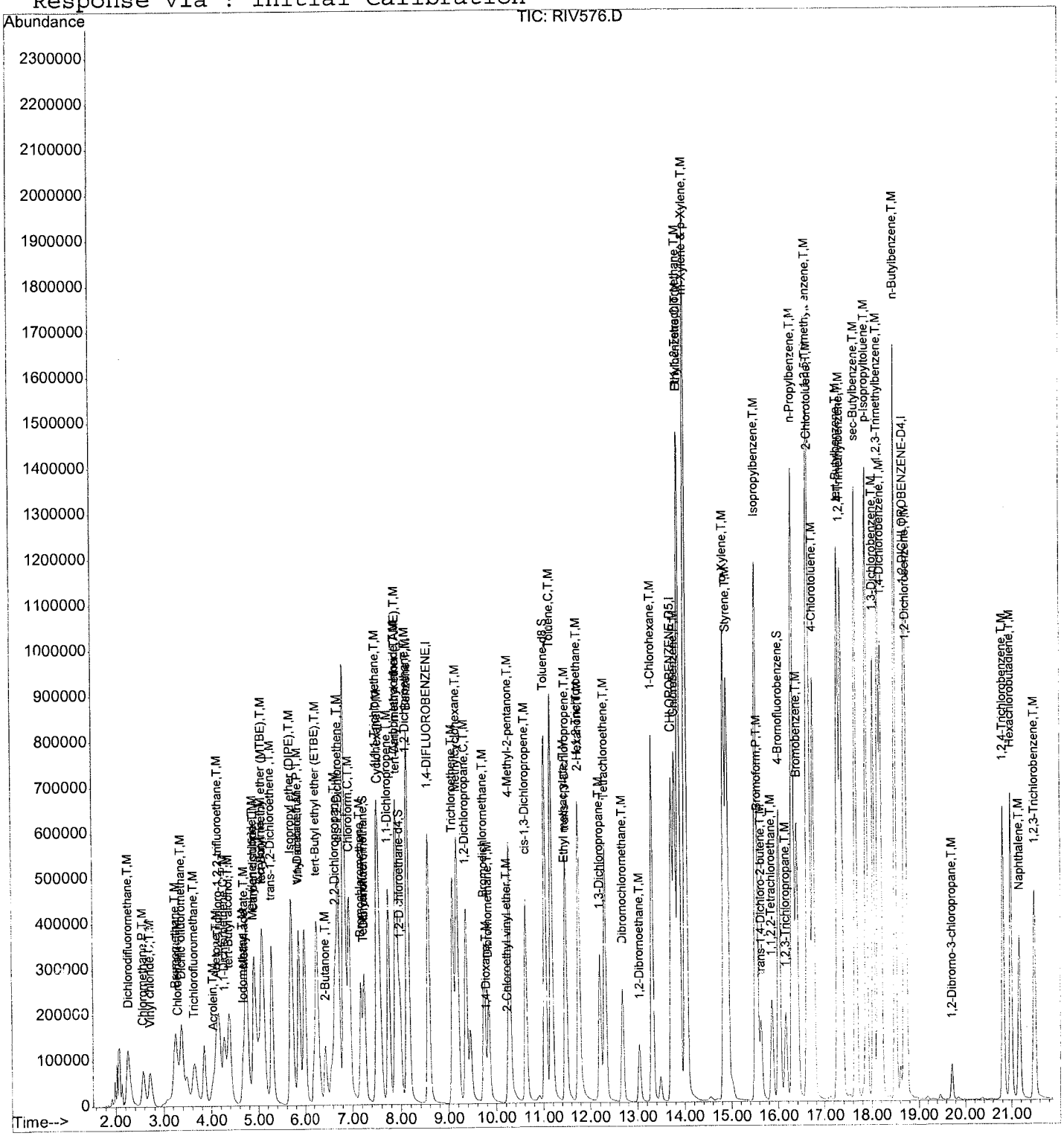
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I24\RIV576.D
Acq On : 24 Sep 2024 2:32 pm
Sample : VO01I22C
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 24 14:54 2024

Vial: 4
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV633.D Vial: 6
Acq On : 25 Sep 2024 6:56 pm Operator: DNguye/CLingl
Sample : VO01I24B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 2 13:07 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	966844	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	813116	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	405162	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	308292	10.49	ug/l	0.01
Spiked Amount 10.000			Recovery = 104.90%			
41) 1,2-Dichloroethane-d4	7.98	65	269163	10.30	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.00%			
54) Toluene-d8	11.03	98	1091656	10.98	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.80%			
76) 4-Bromofluorobenzene	16.02	95	471393	9.17	ug/l	0.01
Spiked Amount 10.000			Recovery = 91.70%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

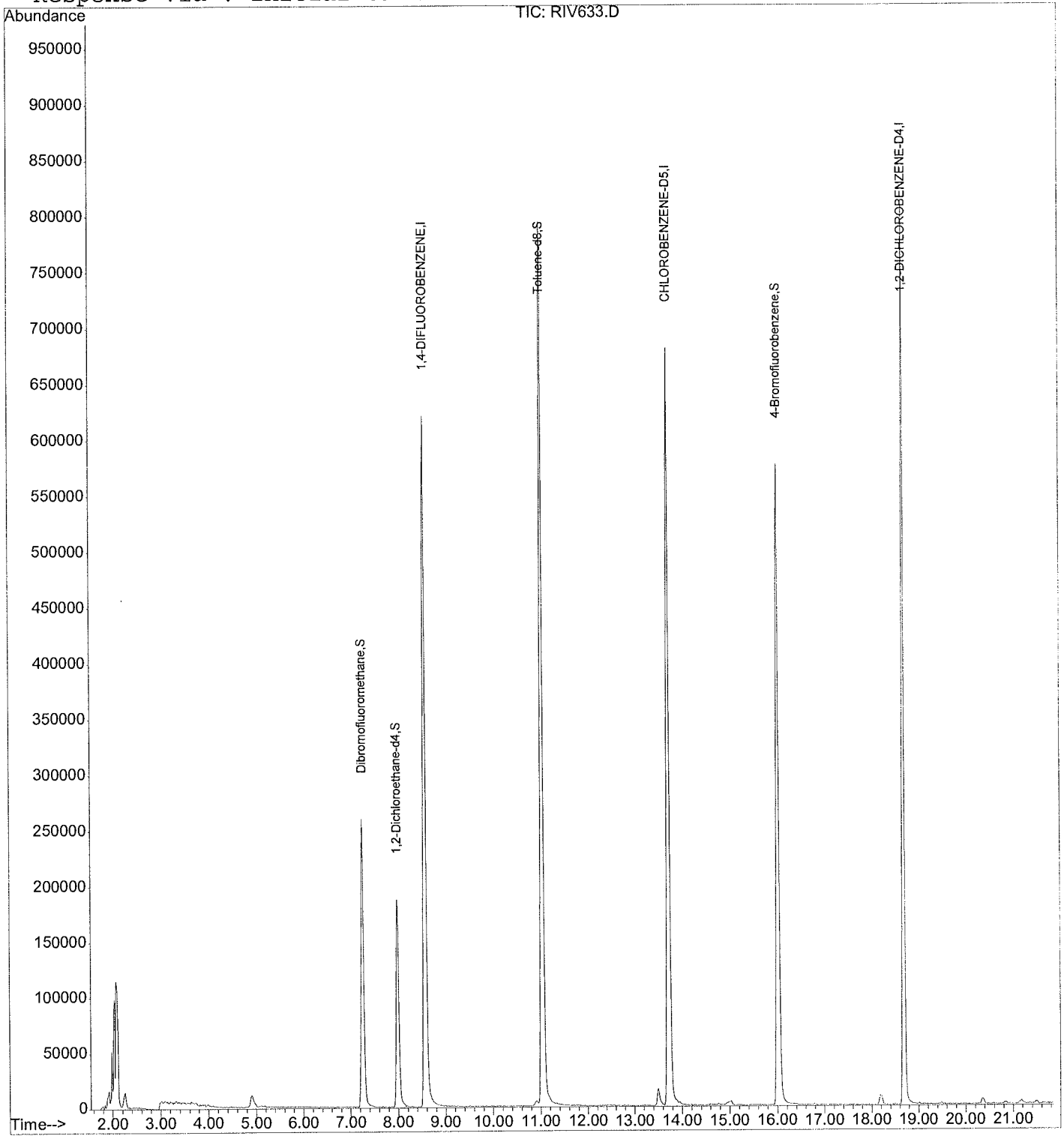
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV633.D
Acq On : 25 Sep 2024 6:56 pm
Sample : VO01I24B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 2 13:07 2024

Vial: 6
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV630.D
Acq On : 25 Sep 2024 5:26 pm
Sample : VO01I24L
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 25 17:48 2024

Vial: 3
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	895133	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	744563	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	408605	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	266926	9.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.10%		
41) 1,2-Dichloroethane-d4	7.98	65	238598	9.86	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.60%		
54) Toluene-d8	11.03	98	984340	10.82	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.20%		
76) 4-Bromofluorobenzene	16.02	95	464770	8.97	ug/l	0.01
Spiked Amount 10.000			Recovery =	89.70%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	340643	11.56	ug/l	98
5) Chloromethane	2.56	50	236090	11.06	ug/l	99
6) Vinyl chloride	2.69	62	237745	12.62	ug/l	99
7) Bromomethane	3.23	94	181590	10.89	ug/l	96
8) Chloroethane	3.29	64	185693	12.70	ug/l	89
9) Dichlorofluoromethane	3.36	67	470331	14.58	ug/l	100
10) Trichlorofluoromethane	3.61	101	419529	9.80	ug/l	97
11) Acrolein	4.03	56	32763	36.32	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	234055	13.35	ug/l	96
13) Acetone	4.09	43	209673	52.33	ug/l	90
14) 1,1-Dichloroethene	4.25	61	438425	10.12	ug/l	76
15) tert-Butyl alcohol	4.37	59	324911	269.77	ug/l	96
16) Iodomethane	4.65	142	422892	10.80	ug/l	83
17) Methyl acetate	4.68	43	101556	10.97	ug/l	95
18) Methylene chloride	4.89	49	348759	11.58	ug/l	94
19) Carbon disulfide	4.90	76	992935	13.24	ug/l	99
20) Acrylonitrile	5.05	53	210804	59.26	ug/l	98
21) tert-Butyl methyl ether (M	5.08	73	607047	12.32	ug/l	95
22) trans-1,2-Dichloroethene	5.27	61	407572	10.33	ug/l	99
23) Isopropyl ether (DIPE)	5.69	45	1030853	13.09	ug/l	100
24) Vinyl acetate	5.85	43	257396	8.95	ug/l	97
25) 1,1-Dichloroethane	5.85	63	581645	12.03	ug/l	100
27) tert-Butyl ethyl ether (ET	6.26	59	857408	11.78	ug/l	95
28) 2-Butanone	6.44	43	328187	55.69	ug/l	96
29) 2,2-Dichloropropane	6.65	77	557616	11.57	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	349066	11.47	ug/l	98
31) Chloroform	6.93	83	629480	11.56	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV630.D
Acq On : 25 Sep 2024 5:26 pm
Sample : VO01I24L
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 25 17:48 2024

Vial: 3
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32) Bromochloromethane	7.17	49	211033	11.42	ug/l	97
33) Tetrahydrofuran	7.21	42	31163	9.47	ug/l	94
35) 1,1,1-Trichloroethane	7.51	97	554734	10.33	ug/l	98
36) Cyclohexane	7.54	84	476146	12.31	ug/l	100
38) 1,1-Dichloropropene	7.73	110	144004	9.78	ug/l	99
39) Carbon tetrachloride	7.89	119	420716	9.42	ug/l	99
40) tert-Amyl methyl ether (TA	7.91	73	685142	12.80	ug/l	99
42) Benzene	8.14	78	1224118	12.42	ug/l	98
43) 1,2-Dichloroethane	8.11	62	317144	10.29	ug/l	97
44) Trichloroethene	9.08	130	337142	10.75	ug/l	96
45) Methylcyclohexane	9.17	83	538020	12.47	ug/l	90
46) 1,2-Dichloropropane	9.36	63	290256	12.90	ug/l	89
47) Bromodichloromethane	9.74	83	452134	11.51	ug/l	96
48) 1,4-Dioxane	9.79	88	23457	210.59	ug/l	96
49) Dibromomethane	9.83	93	134329	10.73	ug/l	89
50) 2-Chloroethyl vinyl ether	10.23	63	48908	6.94	ug/l	93
51) 4-Methyl-2-pentanone	10.28	43	814484	60.53	ug/l	98
52) cis-1,3-Dichloropropene	10.63	75	494743	12.45	ug/l	96
55) Toluene	11.17	91	1358993	12.18	ug/l	98
56) Ethyl methacrylate	11.46	69	259652	13.80	ug/l	92
57) trans-1,3-Dichloropropene	11.48	75	394043	12.18	ug/l	99
58) 1,1,2-Trichloroethane	11.76	97	209162	12.80	ug/l	94
59) 2-Hexanone	11.77	43	515020	57.28	ug/l	98
60) 1,3-Dichloropropane	12.20	76	385612	13.25	ug/l	99
61) Tetrachloroethene	12.31	164	289999	11.44	ug/l	94
62) Dibromochloromethane	12.68	129	260900	12.07	ug/l	100
63) 1,2-Dibromoethane	13.03	107	186024	11.31	ug/l	98
64) 1-Chlorohexane	13.31	91	599413	11.58	ug/l	100
65) Chlorobenzene	13.79	112	861781	11.24	ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.88	131	323223	12.62	ug/l	97
67) Ethylbenzene	13.89	91	1679677	12.03	ug/l	97
68) m-Xylene & p-Xylene	14.02	91	2504040	22.71	ug/l	97
69) o-Xylene	14.85	91	1336522	12.57	ug/l	95
70) Styrene	14.91	104	994059	12.78	ug/l	97
71) Isopropylbenzene	15.53	105	1738301	11.94	ug/l	98
73) Bromoform	15.56	173	129102	8.60	ug/l	98
74) trans-1,4-Dichloro-2-buten	15.64	53	69890	7.66	ug/l	96
75) 1,1,2,2-Tetrachloroethane	15.88	83	244611	10.02	ug/l	96
77) 1,2,3-Trichloropropane	16.16	110	70011	7.80	ug/l	94
78) n-Propylbenzene	16.30	91	2214751	8.53	ug/l	98
79) Bromobenzene	16.39	156	361029	9.18	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV630.D Vial: 3
Acq On : 25 Sep 2024 5:26 pm Operator: DNguye/CLingl
Sample : VO01I24L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 25 17:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.62	105	1337856	7.80	ug/l	97
81) 2-Chlorotoluene	16.65	91	1357965	7.96	ug/l	97
82) 4-Chlorotoluene	16.73	91	1249258	8.58	ug/l	97
83) tert-Butylbenzene	17.30	134	346499	9.14	ug/l	93
84) 1,2,4-Trimethylbenzene	17.36	105	1342455	8.19	ug/l	96
85) sec-Butylbenzene	17.67	105	1925523	8.32	ug/l	95
86) p-Isopropyltoluene	17.89	119	1566762	7.96	ug/l	96
87) 1,3-Dichlorobenzene	18.04	146	774993	9.51	ug/l	92
88) 1,2,3-Trimethylbenzene	18.14	105	1296485	8.16	ug/l	99
89) 1,4-Dichlorobenzene	18.20	146	755108	9.58	ug/l	92
90) n-Butylbenzene	18.50	91	1567637	8.69	ug/l	98
91) 1,2-Dichlorobenzene	18.73	146	634110	9.45	ug/l	96
92) 1,2-Dibromo-3-chloropropan	19.73	157	38905	10.29	ug/l	94
93) 1,2,4-Trichlorobenzene	20.82	180	421166	9.24	ug/l	97
94) Hexachlorobutadiene	20.98	225	262412	8.77	ug/l	96
95) Naphthalene	21.16	128	573979	8.83	ug/l	97
96) 1,2,3-Trichlorobenzene	21.49	180	325950	9.36	ug/l	97

(#) = qualifier out of range (m) = manual integration

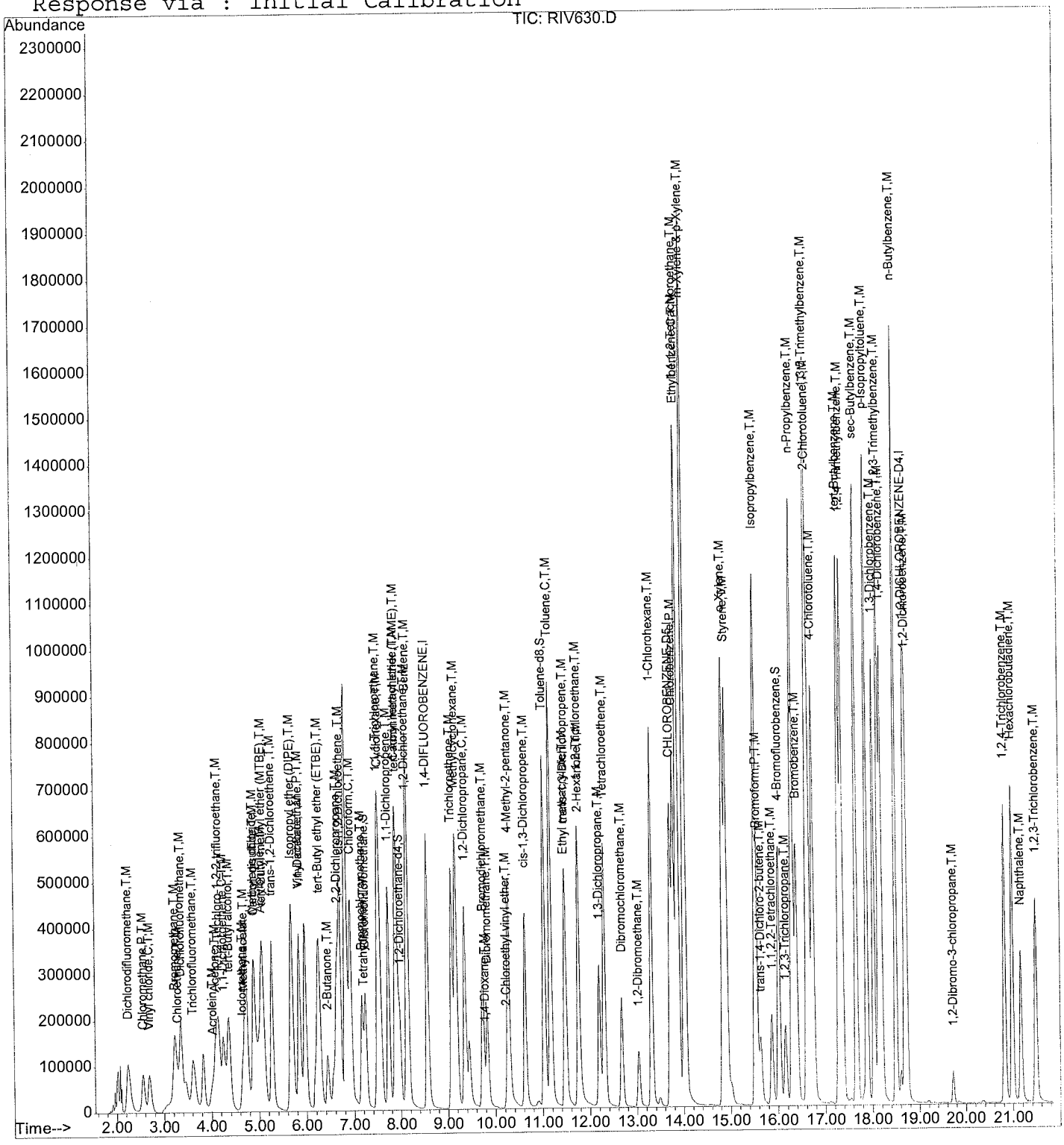
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV630.D
Acq On : 25 Sep 2024 5:26 pm
Sample : VO01I24L
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 25 17:48 2024

Vial: 3
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV631.D Vial: 4
Acq On : 25 Sep 2024 5:56 pm Operator: DNguye/CLingl
Sample : VO01I24C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 25 18:18 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.58	114	974342	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	818125	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	477843	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	300153	10.13	ug/l	0.01
Spiked Amount 10.000			Recovery =	101.30%		
41) 1,2-Dichloroethane-d4	7.98	65	269048	10.21	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.10%		
54) Toluene-d8	11.03	98	1078195	10.78	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.80%		
76) 4-Bromofluorobenzene	16.01	95	542083	8.94	ug/l	0.00
Spiked Amount 10.000			Recovery =	89.40%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.27	85	345602	10.78	ug/l	97
5) Chloromethane	2.58	50	217398	9.35	ug/l	96
6) Vinyl chloride	2.71	62	237500	11.58	ug/l	100
7) Bromomethane	3.26	94	171779	9.46	ug/l	96
8) Chloroethane	3.29	64	173401	10.89	ug/l	89
9) Dichlorofluoromethane	3.38	67	464836	13.24	ug/l	99
10) Trichlorofluoromethane	3.64	101	354742	7.61	ug/l	91
11) Acrolein	4.04	56	37203	37.89	ug/l	89
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	240911	12.62	ug/l	97
13) Acetone	4.12	43	236095	54.22	ug/l	88
14) 1,1-Dichloroethene	4.28	61	449189	9.53	ug/l	80
15) tert-Butyl alcohol	4.38	59	377512	287.96	ug/l	98
16) Iodomethane	4.68	142	448166	10.51	ug/l	85
17) Methyl acetate	4.71	43	112193	11.13	ug/l	96
18) Methylene chloride	4.90	49	360759	11.01	ug/l	90
19) Carbon disulfide	4.93	76	1040239	12.75	ug/l	99
20) Acrylonitrile	5.08	53	238290	61.54	ug/l	98
21) tert-Butyl methyl ether (M	5.09	73	699100	13.04	ug/l	91
22) trans-1,2-Dichloroethene	5.29	61	429878	10.01	ug/l	99
23) Isopropyl ether (DIPE)	5.72	45	1112583	12.98	ug/l	99
24) Vinyl acetate	5.86	43	277002	8.85	ug/l	94
25) 1,1-Dichloroethane	5.86	63	614606	11.68	ug/l	99
27) tert-Butyl ethyl ether (ET	6.28	59	968387	12.22	ug/l	94
28) 2-Butanone	6.46	43	368419	57.43	ug/l	95
29) 2,2-Dichloropropane	6.66	77	590327	11.25	ug/l	99
30) cis-1,2-Dichloroethene	6.72	96	373053	11.26	ug/l	97
31) Chloroform	6.94	83	676436	11.42	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV631.D
Acq On : 25 Sep 2024 5:56 pm
Sample : VO01I24C
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 25 18:18 2024

Vial: 4
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.18	49	227894	11.33	ug/l	99
33)	Tetrahydrofuran	7.23	42	36928	10.31	ug/l	88
35)	1,1,1-Trichloroethane	7.52	97	578482	9.89	ug/l	97
36)	Cyclohexane	7.54	84	514924	12.23	ug/l	99
38)	1,1-Dichloropropene	7.74	110	153218	9.56	ug/l	98
39)	Carbon tetrachloride	7.91	119	437422	9.00	ug/l	99
40)	tert-Amyl methyl ether (TA	7.92	73	753168	12.93	ug/l	99
42)	Benzene	8.16	78	1300161	12.12	ug/l	98
43)	1,2-Dichloroethane	8.13	62	351986	10.49	ug/l	97
44)	Trichloroethene	9.09	130	357946	10.49	ug/l	96
45)	Methylcyclohexane	9.18	83	581605	12.38	ug/l	88
46)	1,2-Dichloropropane	9.36	63	320525	13.09	ug/l	89
47)	Bromodichloromethane	9.75	83	495645	11.60	ug/l	97
48)	1,4-Dioxane	9.79	88	25845	213.16	ug/l	100
49)	Dibromomethane	9.83	93	152508	11.19	ug/l	90
50)	2-Chloroethyl vinyl ether	10.25	63	56286	7.34	ug/l	96
51)	4-Methyl-2-pentanone	10.28	43	921156	62.89	ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	537826	12.44	ug/l	97
55)	Toluene	11.18	91	1432045	11.68	ug/l	99
56)	Ethyl methacrylate	11.46	69	294481	14.24	ug/l	92
57)	trans-1,3-Dichloropropene	11.49	75	440444	12.39	ug/l	98
58)	1,1,2-Trichloroethane	11.76	97	230229	12.82	ug/l	94
59)	2-Hexanone	11.77	43	589681	59.59	ug/l	98
60)	1,3-Dichloropropane	12.20	76	431310	13.49	ug/l	98
61)	Tetrachloroethene	12.31	164	308784	11.09	ug/l	93
62)	Dibromochloromethane	12.68	129	290074	12.22	ug/l	98
63)	1,2-Dibromoethane	13.05	107	203955	11.28	ug/l	99
64)	1-Chlorohexane	13.31	91	638069	11.22	ug/l	99
65)	Chlorobenzene	13.80	112	916340	10.88	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.88	131	346945	12.33	ug/l	95
67)	Ethylbenzene	13.89	91	1763080	11.49	ug/l	97
68)	m-Xylene & p-Xylene	14.02	91	2674630	22.07	ug/l	96
69)	o-Xylene	14.85	91	1379095	11.81	ug/l	95
70)	Styrene	14.91	104	1044928	12.22	ug/l	98
71)	Isopropylbenzene	15.54	105	1945146	12.16	ug/l	98
73)	Bromoform	15.57	173	155439	8.86	ug/l	96
74)	trans-1,4-Dichloro-2-buten	15.64	53	84089	7.88	ug/l	94
75)	1,1,2,2-Tetrachloroethane	15.86	83	306315	10.73	ug/l	95
77)	1,2,3-Trichloropropane	16.16	110	85841	8.17	ug/l	96
78)	n-Propylbenzene	16.31	91	2478245	8.16	ug/l	98
79)	Bromobenzene	16.39	156	419026	9.11	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I25\RIV631.D Vial: 4
Acq On : 25 Sep 2024 5:56 pm Operator: DNguye/CLingl
Sample : VO01I24C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 25 18:18 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	1500596	7.48	ug/l	97
81)	2-Chlorotoluene	16.65	91	1538072	7.71	ug/l	97
82)	4-Chlorotoluene	16.73	91	1387151	8.14	ug/l	96
83)	tert-Butylbenzene	17.30	134	385232	8.68	ug/l	93
84)	1,2,4-Trimethylbenzene	17.36	105	1477696	7.71	ug/l	96
85)	sec-Butylbenzene	17.67	105	2101973	7.77	ug/l	96
86)	p-Isopropyltoluene	17.89	119	1709781	7.42	ug/l	96
87)	1,3-Dichlorobenzene	18.04	146	837915	8.79	ug/l	93
88)	1,2,3-Trimethylbenzene	18.14	105	1427070	7.68	ug/l	97
89)	1,4-Dichlorobenzene	18.20	146	827754	8.98	ug/l	92
90)	n-Butylbenzene	18.50	91	1668353	7.91	ug/l	98
91)	1,2-Dichlorobenzene	18.73	146	705278	8.99	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.73	157	45400	10.27	ug/l	97
93)	1,2,4-Trichlorobenzene	20.82	180	453266	8.50	ug/l	97
94)	Hexachlorobutadiene	20.99	225	273046	7.80	ug/l	99
95)	Naphthalene	21.16	128	656257	8.63	ug/l	97
96)	1,2,3-Trichlorobenzene	21.49	180	359918	8.83	ug/l	96

(#) = qualifier out of range (m) = manual integration

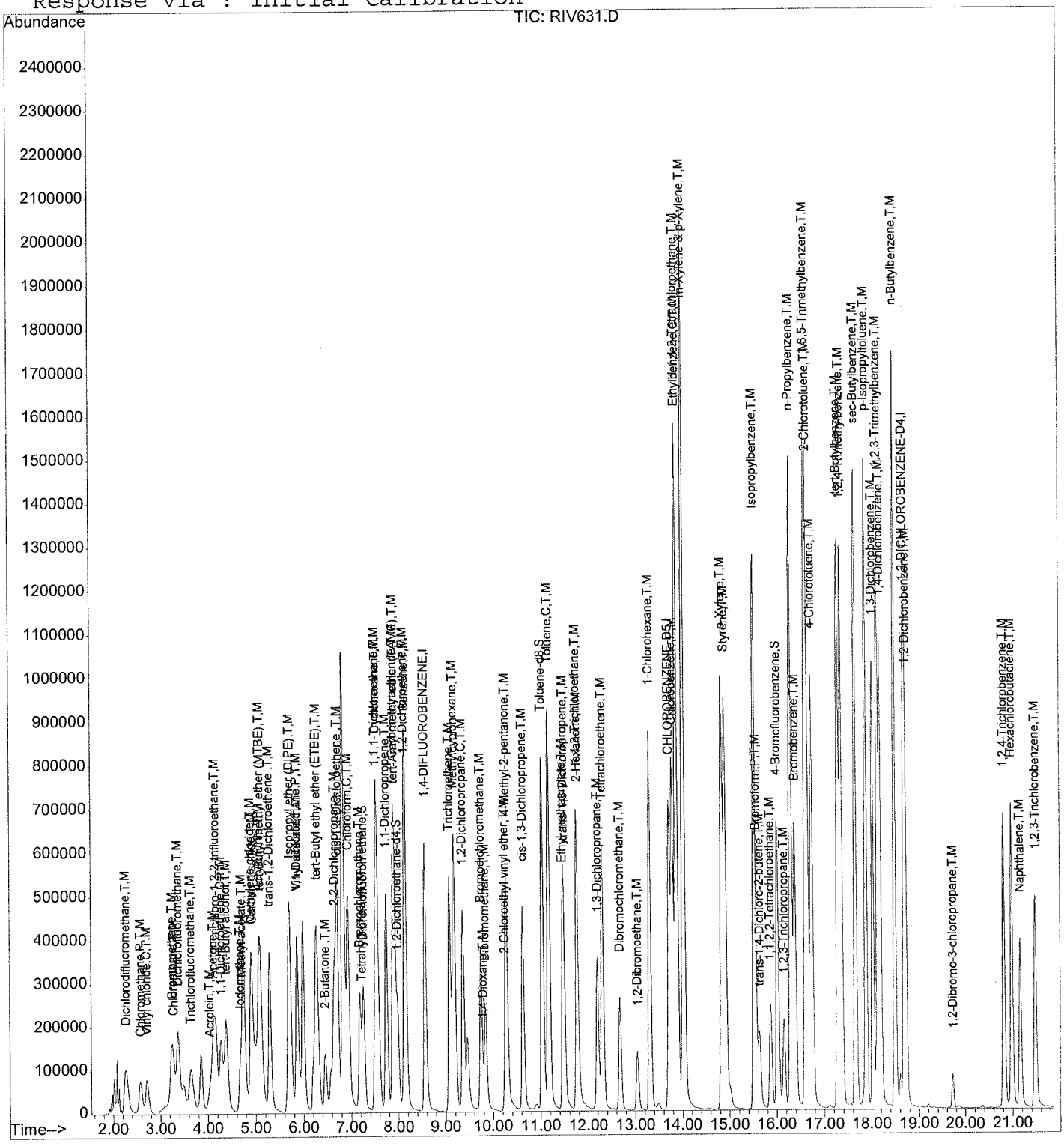
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV631.D
Acq On : 25 Sep 2024 5:56 pm
Sample : VO01I24C
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 25 18:18 2024

Vial: 4
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV570.D
Acq On : 24 Sep 2024 11:22 am
Sample : 24I061-11M
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 24 11:44 2024

Vial: 22
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	746707	10.00 ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	659780	10.00 ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	388141	10.00 ug/l	0.00
System Monitoring Compounds					
34) Dibromofluoromethane	7.26	111	240914	10.61 ug/l	0.01
Spiked Amount 10.000			Recovery =	106.10%	
41) 1,2-Dichloroethane-d4	7.98	65	229996	11.39 ug/l	0.00
Spiked Amount 10.000			Recovery =	113.90%	
54) Toluene-d8	11.03	98	854517	10.60 ug/l	0.00
Spiked Amount 10.000			Recovery =	106.00%	
76) 4-Bromofluorobenzene	16.01	95	414224	8.41 ug/l	0.00
Spiked Amount 10.000			Recovery =	84.10%	
Target Compounds					Qvalue
3) Dichlorodifluoromethane	2.26	85	240291	9.78 ug/l	98
5) Chloromethane	2.59	50	166890	9.37 ug/l	100
6) Vinyl chloride	2.71	62	160617	10.22 ug/l	100
7) Bromomethane	3.26	94	125274	9.00 ug/l	96
8) Chloroethane	3.27	64	124453	10.20 ug/l	64
9) Dichlorofluoromethane	3.38	67	325730	12.11 ug/l	99
10) Trichlorofluoromethane	3.66	101	313296	8.77 ug/l	98
11) Acrolein	4.03	56	20142	26.77 ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.18	151	149929	10.25 ug/l	96
13) Acetone	4.12	43	164717	49.13 ug/l	93
14) 1,1-Dichloroethene	4.26	61	308434	8.54 ug/l	80
15) tert-Butyl alcohol	4.38	59	293435	292.06 ug/l	97
16) Iodomethane	4.68	142	325863	9.98 ug/l	90
17) Methyl acetate	4.69	43	53922	6.98 ug/l	91
18) Methylene chloride	4.90	49	258707	10.30 ug/l	92
19) Carbon disulfide	4.92	76	659662	10.55 ug/l	99
20) Acrylonitrile	5.06	53	162027	54.60 ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	504607	12.28 ug/l	97
22) trans-1,2-Dichloroethene	5.29	61	311685	9.47 ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	779536	11.87 ug/l	98
24) Vinyl acetate	5.86	43	139824	5.83 ug/l	95
25) 1,1-Dichloroethane	5.86	63	454026	11.26 ug/l	100
27) tert-Butyl ethyl ether (ET	6.26	59	699098	11.51 ug/l	96
28) 2-Butanone	6.44	43	271276	55.18 ug/l	96
29) 2,2-Dichloropropane	6.65	77	319310	7.94 ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	277288	10.93 ug/l	97
31) Chloroform	6.93	83	783752	17.26 ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV570.D
Acq On : 24 Sep 2024 11:22 am
Sample : 24I061-11M
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 24 11:44 2024

Vial: 22
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.18	49	173989	11.29	ug/l		99
33)	Tetrahydrofuran	7.23	42	24726	9.01	ug/l		89
35)	1,1,1-Trichloroethane	7.52	97	442395	9.87	ug/l		98
36)	Cyclohexane	7.54	84	320963	9.95	ug/l		99
38)	1,1-Dichloropropene	7.74	110	105042	8.56	ug/l		99
39)	Carbon tetrachloride	7.89	119	332673	8.93	ug/l		100
40)	tert-Amyl methyl ether (TA	7.91	73	554242	12.42	ug/l		99
42)	Benzene	8.14	78	968981	11.79	ug/l		98
43)	1,2-Dichloroethane	8.13	62	294522	11.45	ug/l		98
44)	Trichloroethene	9.08	130	266699	10.20	ug/l		97
45)	Methylcyclohexane	9.18	83	366486	10.18	ug/l		90
46)	1,2-Dichloropropane	9.36	63	234923	12.52	ug/l		94
47)	Bromodichloromethane	9.74	83	407990	12.46	ug/l		95
48)	1,4-Dioxane	9.79	88	20354	219.05	ug/l		95
49)	Dibromomethane	9.83	93	117172	11.22	ug/l		95
50)	2-Chloroethyl vinyl ether	10.28	63	652	0.11	ug/l	#	1
51)	4-Methyl-2-pentanone	10.28	43	669581	59.65	ug/l		97
52)	cis-1,3-Dichloropropene	10.63	75	385894	11.64	ug/l		96
55)	Toluene	11.17	91	1088648	11.01	ug/l		98
56)	Ethyl methacrylate	11.46	69	223436	13.40	ug/l		92
57)	trans-1,3-Dichloropropene	11.48	75	327948	11.44	ug/l		97
58)	1,1,2-Trichloroethane	11.76	97	177271	12.24	ug/l		93
59)	2-Hexanone	11.76	43	447027	56.16	ug/l		100
60)	1,3-Dichloropropane	12.20	76	337342	13.08	ug/l		98
61)	Tetrachloroethene	12.31	164	953174	42.45	ug/l		94
62)	Dibromochloromethane	12.68	129	228930	11.96	ug/l		100
63)	1,2-Dibromoethane	13.03	107	158528	10.87	ug/l		97
64)	1-Chlorohexane	13.31	91	430315	9.39	ug/l		99
65)	Chlorobenzene	13.79	112	710689	10.46	ug/l		99
66)	1,1,1,2-Tetrachloroethane	13.86	131	281800	12.42	ug/l		98
67)	Ethylbenzene	13.88	91	1363023	11.01	ug/l		97
68)	m-Xylene & p-Xylene	14.02	91	2055435	21.03	ug/l		95
69)	o-Xylene	14.84	91	1112377	11.81	ug/l		95
70)	Styrene	14.91	104	816679	11.85	ug/l		98
71)	Isopropylbenzene	15.52	105	1371224	10.63	ug/l		98
73)	Bromoform	15.56	173	114678	8.05	ug/l		97
74)	trans-1,4-Dichloro-2-buten	15.64	53	54205	6.25	ug/l		95
75)	1,1,2,2-Tetrachloroethane	15.86	83	212433	9.16	ug/l		95
77)	1,2,3-Trichloropropane	16.14	110	61984	7.27	ug/l		93
78)	n-Propylbenzene	16.29	91	1738557	7.05	ug/l		98
79)	Bromobenzene	16.38	156	307669	8.23	ug/l		96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I23\RIV570.D Vial: 22
Acq On : 24 Sep 2024 11:22 am Operator: DNguye/CLingl
Sample : 24I061-11M Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 11:44 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1057777	6.49	ug/l	98
81)	2-Chlorotoluene	16.63	91	1162486	7.18	ug/l	98
82)	4-Chlorotoluene	16.73	91	968558	7.00	ug/l	97
83)	tert-Butylbenzene	17.28	134	258968	7.19	ug/l	99
84)	1,2,4-Trimethylbenzene	17.36	105	1033321	6.64	ug/l	98
85)	sec-Butylbenzene	17.65	105	1488101	6.77	ug/l	95
86)	p-Isopropyltoluene	17.87	119	1245840	6.66	ug/l	96
87)	1,3-Dichlorobenzene	18.02	146	654207	8.45	ug/l	92
88)	1,2,3-Trimethylbenzene	18.14	105	1126803	7.46	ug/l	99
89)	1,4-Dichlorobenzene	18.18	146	642035	8.58	ug/l	93
90)	n-Butylbenzene	18.50	91	1205531	7.04	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	562579	8.83	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.72	157	35676	9.94	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	335866	7.75	ug/l	96
94)	Hexachlorobutadiene	20.98	225	195059	6.86	ug/l	96
95)	Naphthalene	21.16	128	489624	7.93	ug/l	97
96)	1,2,3-Trichlorobenzene	21.47	180	263798	7.97	ug/l	96

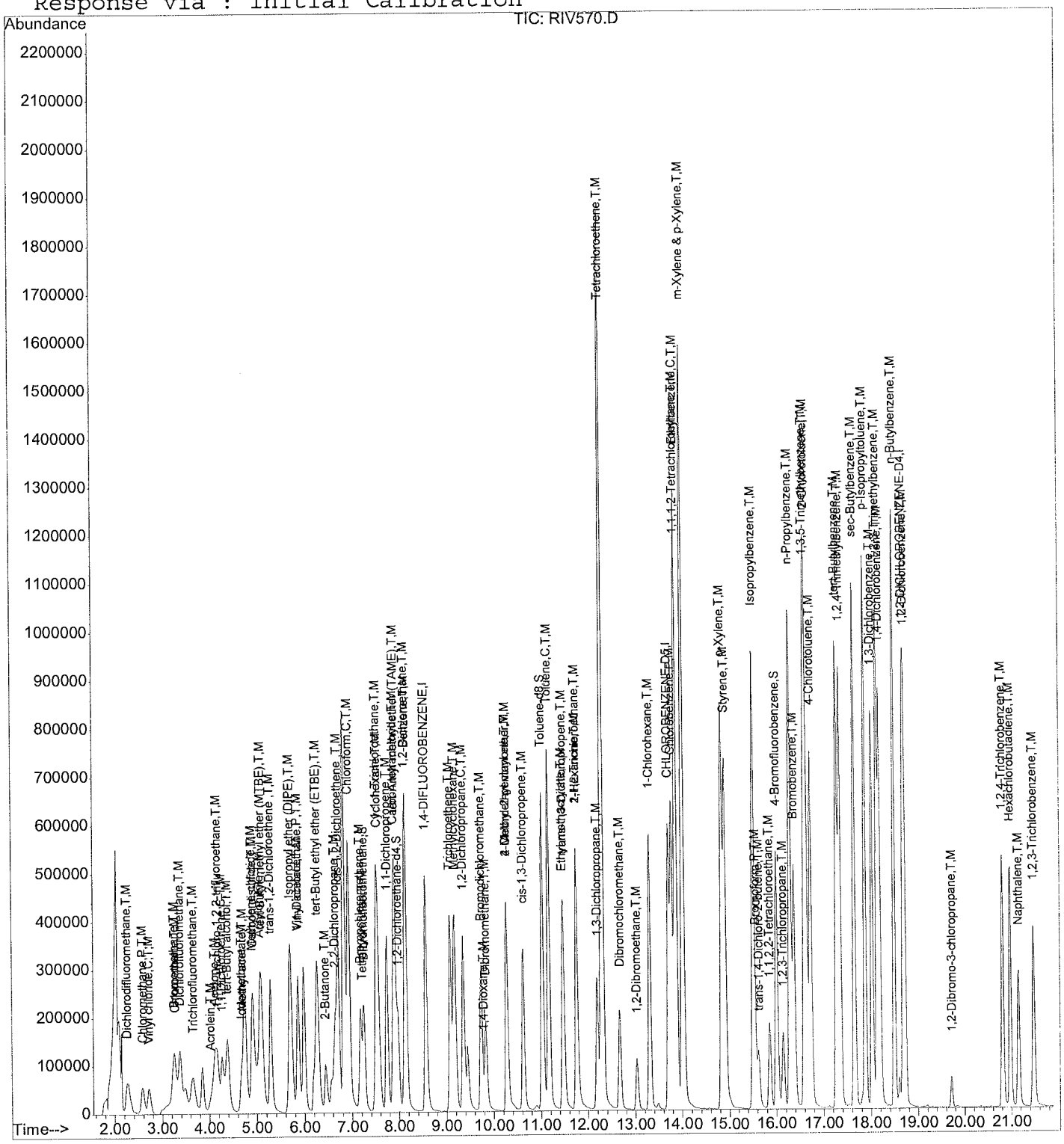
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I23\RIV570.D
Acq On : 24 Sep 2024 11:22 am
Sample : 24I061-11M
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 24 11:44 2024

Vial: 22
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV571.D
Acq On : 24 Sep 2024 11:53 am
Sample : 24I061-11S
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 24 12:15 2024

Vial: 23
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	867565	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	727495	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	426381	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	274348	10.40	ug/l	0.01
Spiked Amount 10.000			Recovery = 104.00%			
41) 1,2-Dichloroethane-d4	7.98	65	251065	10.70	ug/l	0.00
Spiked Amount 10.000			Recovery = 107.00%			
54) Toluene-d8	11.03	98	959053	10.79	ug/l	0.00
Spiked Amount 10.000			Recovery = 107.90%			
76) 4-Bromofluorobenzene	16.01	95	460984	8.52	ug/l	0.00
Spiked Amount 10.000			Recovery = 85.20%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.27	85	275590	9.65	ug/l	98
5) Chloromethane	2.57	50	210065	10.15	ug/l	95
6) Vinyl chloride	2.72	62	191404	10.48	ug/l	98
7) Bromomethane	3.24	94	162222	10.03	ug/l	99
8) Chloroethane	3.27	64	169628	11.97	ug/l	91
9) Dichlorofluoromethane	3.38	67	385391	12.33	ug/l	98
10) Trichlorofluoromethane	3.64	101	342456	8.25	ug/l	97
11) Acrolein	4.03	56	29905	34.20	ug/l	87
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	169425	9.97	ug/l	95
13) Acetone	4.10	43	209708	54.08	ug/l	93
14) 1,1-Dichloroethene	4.27	61	357383	8.51	ug/l	82
15) tert-Butyl alcohol	4.38	59	341950	292.94	ug/l	97
16) Iodomethane	4.68	142	379638	10.00	ug/l	86
17) Methyl acetate	4.71	43	65570	7.31	ug/l	93
18) Methylene chloride	4.90	49	291807	10.00	ug/l	88
19) Carbon disulfide	4.92	76	768520	10.58	ug/l	98
20) Acrylonitrile	5.07	53	206853	59.99	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	587230	12.30	ug/l	92
22) trans-1,2-Dichloroethene	5.29	61	358420	9.37	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	931051	12.20	ug/l	98
24) Vinyl acetate	5.86	43	155301	5.57	ug/l	94
25) 1,1-Dichloroethane	5.86	63	521967	11.14	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	817665	11.59	ug/l	95
28) 2-Butanone	6.44	43	316719	55.45	ug/l	95
29) 2,2-Dichloropropane	6.65	77	338360	7.24	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	316826	10.74	ug/l	96
31) Chloroform	6.93	83	865265	16.40	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV571.D
Acq On : 24 Sep 2024 11:53 am
Sample : 24I061-11S
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 24 12:15 2024

Vial: 23
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.17	49	201522	11.25	ug/l		99
33)	Tetrahydrofuran	7.23	42	36080	11.31	ug/l		96
35)	1,1,1-Trichloroethane	7.52	97	481110	9.24	ug/l		98
36)	Cyclohexane	7.54	84	359681	9.59	ug/l		99
38)	1,1-Dichloropropene	7.75	110	120378	8.44	ug/l		99
39)	Carbon tetrachloride	7.89	119	349647	8.08	ug/l		99
40)	tert-Amyl methyl ether (TA	7.91	73	645683	12.45	ug/l		99
42)	Benzene	8.15	78	1093897	11.45	ug/l		98
43)	1,2-Dichloroethane	8.13	62	318551	10.66	ug/l		98
44)	Trichloroethene	9.08	130	302118	9.94	ug/l		97
45)	Methylcyclohexane	9.18	83	404881	9.68	ug/l		90
46)	1,2-Dichloropropane	9.36	63	272199	12.48	ug/l		92
47)	Bromodichloromethane	9.74	83	450222	11.83	ug/l		97
48)	1,4-Dioxane	9.79	88	24083	223.08	ug/l		93
49)	Dibromomethane	9.83	93	129940	10.71	ug/l		88
50)	2-Chloroethyl vinyl ether	10.26	63	1086	0.16	ug/l	#	1
51)	4-Methyl-2-pentanone	10.28	43	816262	62.59	ug/l		96
52)	cis-1,3-Dichloropropene	10.63	75	433803	11.27	ug/l		95
55)	Toluene	11.17	91	1208362	11.08	ug/l		99
56)	Ethyl methacrylate	11.46	69	249255	13.56	ug/l		92
57)	trans-1,3-Dichloropropene	11.48	75	355522	11.24	ug/l		97
58)	1,1,2-Trichloroethane	11.76	97	198327	12.42	ug/l		95
59)	2-Hexanone	11.76	43	530655	60.27	ug/l		100
60)	1,3-Dichloropropane	12.19	76	374303	13.16	ug/l		99
61)	Tetrachloroethene	12.31	164	1024903	41.39	ug/l		94
62)	Dibromochloromethane	12.66	129	248648	11.78	ug/l		99
63)	1,2-Dibromoethane	13.03	107	178816	11.12	ug/l		99
64)	1-Chlorohexane	13.31	91	468404	9.27	ug/l		99
65)	Chlorobenzene	13.79	112	785021	10.48	ug/l		99
66)	1,1,1,2-Tetrachloroethane	13.86	131	303020	12.11	ug/l		97
67)	Ethylbenzene	13.88	91	1487600	10.90	ug/l		96
68)	m-Xylene & p-Xylene	14.02	91	2181821	20.25	ug/l		96
69)	o-Xylene	14.84	91	1204706	11.60	ug/l		95
70)	Styrene	14.91	104	848549	11.16	ug/l		98
71)	Isopropylbenzene	15.52	105	1493011	10.49	ug/l		98
73)	Bromoform	15.56	173	131406	8.39	ug/l		96
74)	trans-1,4-Dichloro-2-buten	15.62	53	62544	6.57	ug/l		97
75)	1,1,2,2-Tetrachloroethane	15.86	83	254071	9.98	ug/l		97
77)	1,2,3-Trichloropropane	16.14	110	70985	7.57	ug/l		88
78)	n-Propylbenzene	16.29	91	1906559	7.03	ug/l		98
79)	Bromobenzene	16.38	156	352639	8.59	ug/l		96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I23\RIV571.D
Acq On : 24 Sep 2024 11:53 am
Sample : 24I061-11S
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 24 12:15 2024

Vial: 23
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.60	105	1148202	6.42	ug/l	97
81) 2-Chlorotoluene	16.64	91	1280508	7.20	ug/l	98
82) 4-Chlorotoluene	16.73	91	1071869	7.05	ug/l	97
83) tert-Butylbenzene	17.28	134	300195	7.58	ug/l	100
84) 1,2,4-Trimethylbenzene	17.36	105	1139582	6.66	ug/l	97
85) sec-Butylbenzene	17.65	105	1614893	6.69	ug/l	95
86) p-Isopropyltoluene	17.87	119	1297773	6.32	ug/l	96
87) 1,3-Dichlorobenzene	18.02	146	691212	8.13	ug/l	92
88) 1,2,3-Trimethylbenzene	18.14	105	1167572	7.04	ug/l	98
89) 1,4-Dichlorobenzene	18.18	146	672457	8.18	ug/l	93
90) n-Butylbenzene	18.50	91	1248501	6.64	ug/l	98
91) 1,2-Dichlorobenzene	18.72	146	604194	8.63	ug/l	98
92) 1,2-Dibromo-3-chloropropan	19.72	157	39353	9.98	ug/l	97
93) 1,2,4-Trichlorobenzene	20.82	180	364647	7.66	ug/l	97
94) Hexachlorobutadiene	20.98	225	207953	6.66	ug/l	99
95) Naphthalene	21.16	128	555554	8.19	ug/l	98
96) 1,2,3-Trichlorobenzene	21.47	180	294294	8.10	ug/l	96

(#) = qualifier out of range (m) = manual integration

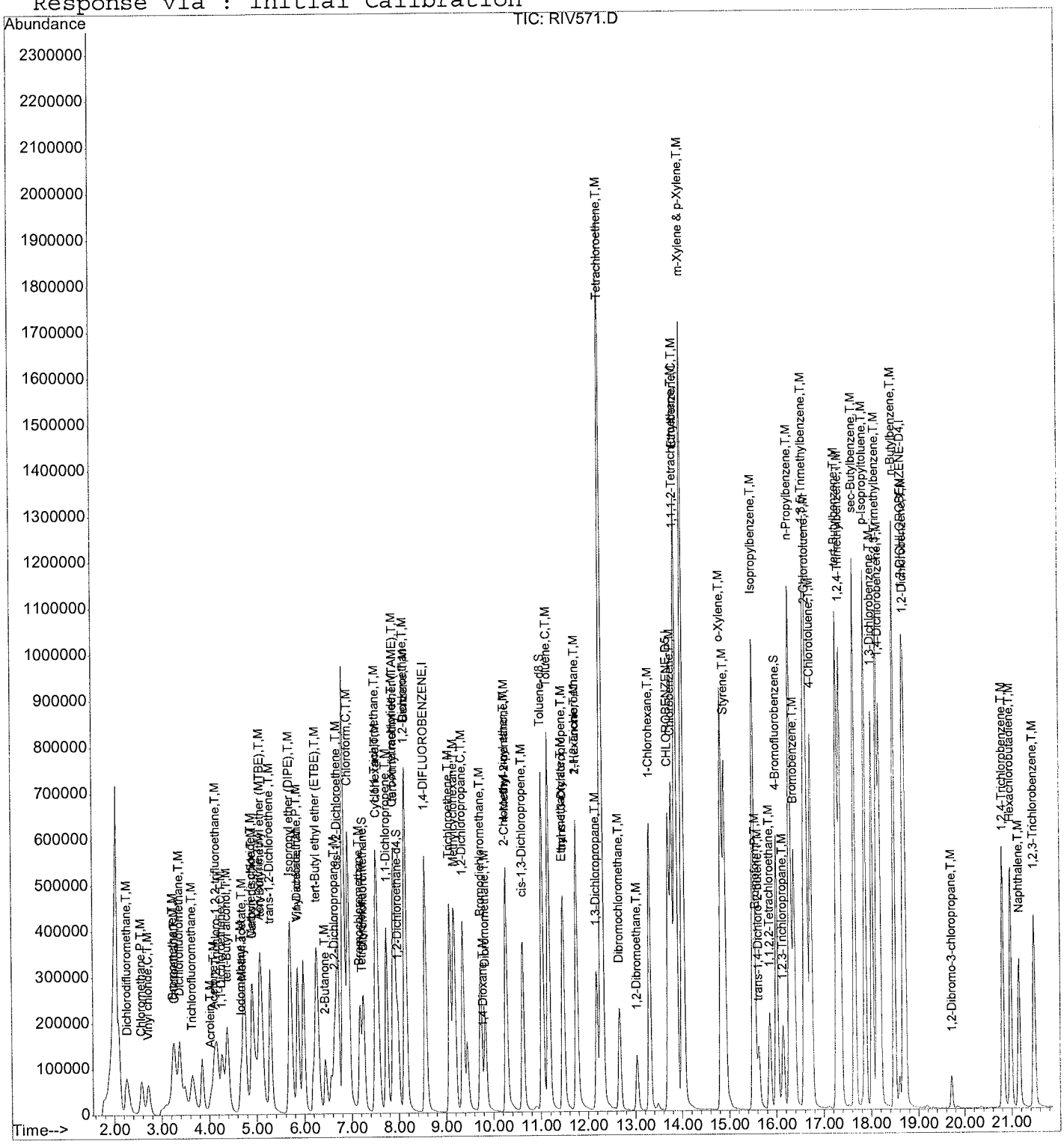
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV571.D
Acq On : 24 Sep 2024 11:53 am
Sample : 24I061-11S
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 24 12:15 2024

Vial: 23
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV589.D Vial: 17
Acq On : 24 Sep 2024 9:01 pm Operator: DNguye/CLingl
Sample : 24I061-14M Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 25 9:21 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	762613	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	656093	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	379142	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	237523	10.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.40%		
41) 1,2-Dichloroethane-d4	7.98	65	227910	11.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.50%		
54) Toluene-d8	11.03	98	845064	10.54	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.40%		
76) 4-Bromofluorobenzene	16.01	95	410498	8.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	85.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.27	85	261362	10.41	ug/l	97
5) Chloromethane	2.57	50	173895	9.56	ug/l	100
6) Vinyl chloride	2.69	62	167579	10.44	ug/l	100
7) Bromomethane	3.24	94	132624	9.33	ug/l	99
8) Chloroethane	3.26	64	132090	10.60	ug/l	93
9) Dichlorofluoromethane	3.36	67	309712	11.27	ug/l	100
10) Trichlorofluoromethane	3.64	101	336557	9.23	ug/l	97
11) Acrolein	4.04	56	25191	32.78	ug/l	79
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	154849	10.37	ug/l	96
13) Acetone	4.12	43	175145	51.26	ug/l	96
14) 1,1-Dichloroethene	4.27	61	308475	8.36	ug/l	78
15) tert-Butyl alcohol	4.38	59	262616	255.94	ug/l	94
16) Iodomethane	4.67	142	318021	9.53	ug/l	89
17) Methyl acetate	4.70	43	78035	9.90	ug/l	97
18) Methylene chloride	4.90	49	248258	9.68	ug/l	91
19) Carbon disulfide	4.92	76	692369	10.84	ug/l	100
20) Acrylonitrile	5.07	53	167926	55.41	ug/l	98
21) tert-Butyl methyl ether (M	5.09	73	498734	11.88	ug/l	97
22) trans-1,2-Dichloroethene	5.29	61	309930	9.22	ug/l	96
23) Isopropyl ether (DIPE)	5.70	45	755509	11.26	ug/l	99
24) Vinyl acetate	5.87	43	192564	7.86	ug/l	96
25) 1,1-Dichloroethane	5.87	63	439331	10.67	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	668916	10.78	ug/l	95
28) 2-Butanone	6.44	43	263315	52.44	ug/l	97
29) 2,2-Dichloropropane	6.65	77	403128	9.82	ug/l	98
30) cis-1,2-Dichloroethene	6.71	96	269562	10.40	ug/l	98
31) Chloroform	6.93	83	614696	13.25	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I24\RIV589.D
Acq On : 24 Sep 2024 9:01 pm
Sample : 24I061-14M
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 25 9:21 2024

Vial: 17
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.17	49	163642	10.39	ug/l		97
33)	Tetrahydrofuran	7.23	42	30315	10.81	ug/l		94
35)	1,1,1-Trichloroethane	7.52	97	442507	9.67	ug/l		98
36)	Cyclohexane	7.54	84	345047	10.47	ug/l		100
38)	1,1-Dichloropropene	7.75	110	105236	8.39	ug/l		98
39)	Carbon tetrachloride	7.89	119	336064	8.83	ug/l		100
40)	tert-Amyl methyl ether (TA	7.91	73	538331	11.81	ug/l		99
42)	Benzene	8.15	78	943407	11.24	ug/l		98
43)	1,2-Dichloroethane	8.13	62	289335	11.02	ug/l		98
44)	Trichloroethene	9.08	130	259296	9.71	ug/l		97
45)	Methylcyclohexane	9.18	83	393669	10.71	ug/l		91
46)	1,2-Dichloropropane	9.36	63	228969	11.94	ug/l		95
47)	Bromodichloromethane	9.74	83	385175	11.51	ug/l		97
48)	1,4-Dioxane	9.79	88	21018	221.48	ug/l		95
49)	Dibromomethane	9.83	93	114401	10.72	ug/l		91
50)	2-Chloroethyl vinyl ether	10.29	63	761	0.13	ug/l	#	1
51)	4-Methyl-2-pentanone	10.28	43	683418	59.62	ug/l		96
52)	cis-1,3-Dichloropropene	10.63	75	394736	11.66	ug/l		96
55)	Toluene	11.17	91	1061070	10.79	ug/l		99
56)	Ethyl methacrylate	11.46	69	216389	13.05	ug/l		95
57)	trans-1,3-Dichloropropene	11.48	75	331711	11.63	ug/l		95
58)	1,1,2-Trichloroethane	11.76	97	170927	11.87	ug/l		94
59)	2-Hexanone	11.76	43	455233	57.45	ug/l		100
60)	1,3-Dichloropropane	12.20	76	327957	12.79	ug/l		99
61)	Tetrachloroethene	12.31	164	349735	15.66	ug/l		95
62)	Dibromochloromethane	12.68	129	223177	11.72	ug/l		98
63)	1,2-Dibromoethane	13.03	107	156284	10.78	ug/l		96
64)	1-Chlorohexane	13.31	91	435834	9.56	ug/l		98
65)	Chlorobenzene	13.79	112	693716	10.27	ug/l		98
66)	1,1,1,2-Tetrachloroethane	13.88	131	271278	12.02	ug/l		97
67)	Ethylbenzene	13.88	91	1343262	10.91	ug/l		97
68)	m-Xylene & p-Xylene	14.02	91	2081559	21.42	ug/l		95
69)	o-Xylene	14.84	91	1170392	12.49	ug/l		94
70)	Styrene	14.91	104	785156	11.45	ug/l		98
71)	Isopropylbenzene	15.52	105	1330230	10.37	ug/l		98
73)	Bromoform	15.56	173	112373	8.07	ug/l		99
74)	trans-1,4-Dichloro-2-buten	15.62	53	62226	7.35	ug/l		98
75)	1,1,2,2-Tetrachloroethane	15.86	83	207687	9.17	ug/l		95
77)	1,2,3-Trichloropropane	16.14	110	57832	6.94	ug/l		90
78)	n-Propylbenzene	16.29	91	1675096	6.95	ug/l		98
79)	Bromobenzene	16.39	156	294967	8.08	ug/l		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV589.D Vial: 17
Acq On : 24 Sep 2024 9:01 pm Operator: DNguye/CLingl
Sample : 24I061-14M Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 25 9:21 2024 Quant Results File: VO01H09.RES

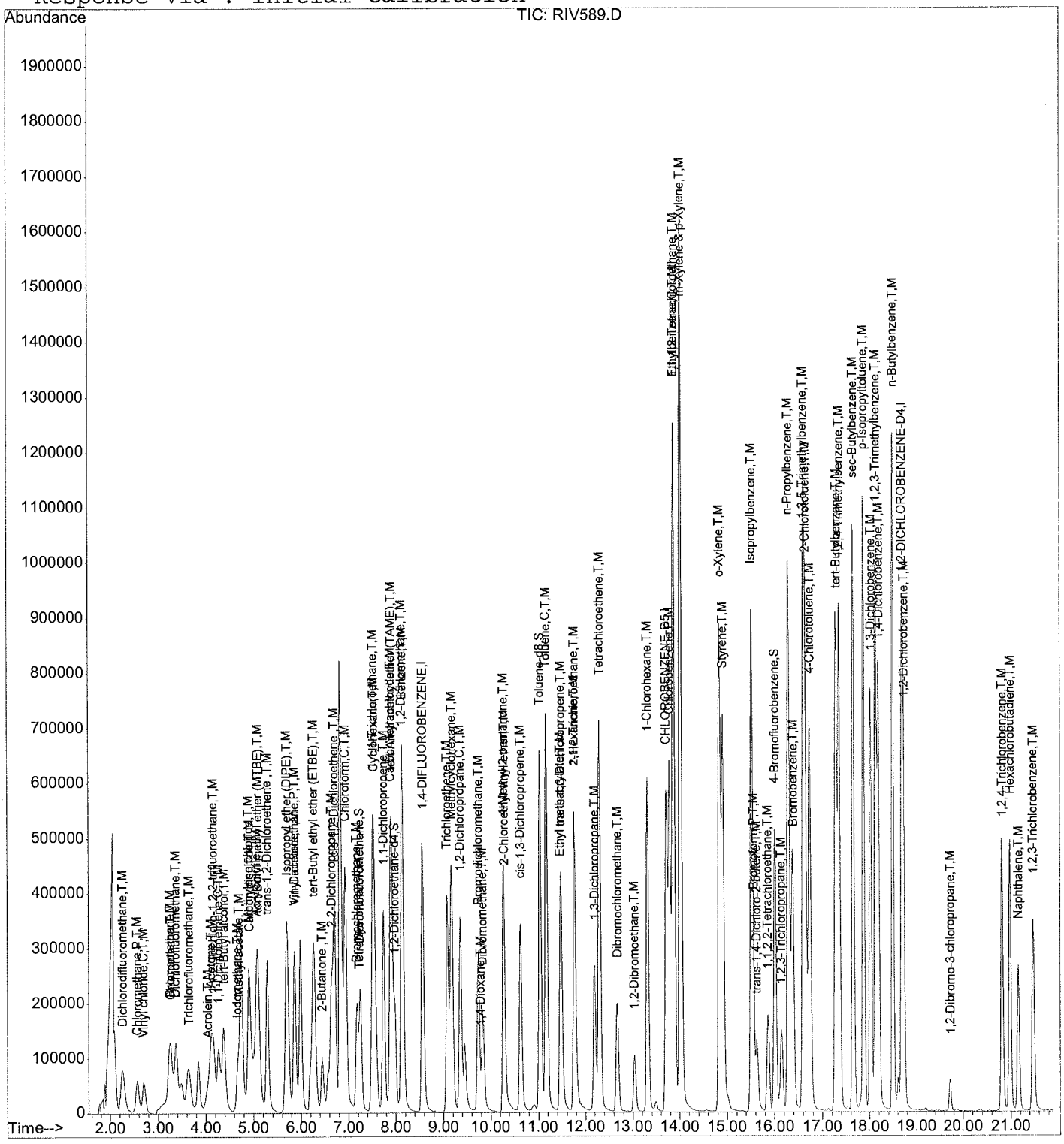
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1016940	6.39	ug/l	97
81)	2-Chlorotoluene	16.65	91	1094118	6.92	ug/l	97
82)	4-Chlorotoluene	16.73	91	947966	7.01	ug/l	98
83)	tert-Butylbenzene	17.30	134	253792	7.21	ug/l	99
84)	1,2,4-Trimethylbenzene	17.36	105	1018408	6.70	ug/l	99
85)	sec-Butylbenzene	17.65	105	1472259	6.86	ug/l	96
86)	p-Isopropyltoluene	17.87	119	1249854	6.84	ug/l	96
87)	1,3-Dichlorobenzene	18.04	146	639371	8.46	ug/l	93
88)	1,2,3-Trimethylbenzene	18.14	105	1069791	7.25	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	620344	8.49	ug/l	93
90)	n-Butylbenzene	18.50	91	1210747	7.24	ug/l	99
91)	1,2-Dichlorobenzene	18.73	146	539495	8.67	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.73	157	32784	9.35	ug/l	99
93)	1,2,4-Trichlorobenzene	20.82	180	313885	7.42	ug/l	99
94)	Hexachlorobutadiene	20.98	225	192342	6.93	ug/l	100
95)	Naphthalene	21.16	128	442437	7.34	ug/l	97
96)	1,2,3-Trichlorobenzene	21.47	180	244523	7.56	ug/l	96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I24\RIV589.D Vial: 17
Acq On : 24 Sep 2024 9:01 pm Operator: DNguye/CLing
Sample : 24I061-14M Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 25 9:21 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV590.D Vial: 18
Acq On : 24 Sep 2024 9:31 pm Operator: DNguye/CLingl
Sample : 24I061-14S Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 25 9:21 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	845305	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	732767	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	412726	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	261751	10.18	ug/l	0.01
Spiked Amount 10.000			Recovery = 101.80%			
41) 1,2-Dichloroethane-d4	7.98	65	246381	10.78	ug/l	0.00
Spiked Amount 10.000			Recovery = 107.80%			
54) Toluene-d8	11.03	98	961194	10.73	ug/l	0.00
Spiked Amount 10.000			Recovery = 107.30%			
76) 4-Bromofluorobenzene	16.01	95	448271	8.56	ug/l	0.00
Spiked Amount 10.000			Recovery = 85.60%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.27	85	311240	11.19	ug/l	99
5) Chloromethane	2.57	50	225381	11.18	ug/l	97
6) Vinyl chloride	2.71	62	214523	12.06	ug/l	99
7) Bromomethane	3.26	94	171026	10.86	ug/l	96
8) Chloroethane	3.30	64	175642	12.72	ug/l	89
9) Dichlorofluoromethane	3.38	67	395637	12.99	ug/l	97
10) Trichlorofluoromethane	3.64	101	391661	9.69	ug/l	97
11) Acrolein	4.04	56	29664	34.82	ug/l	91
12) 1,1,2-Trichloro-1,2,2-trif	4.18	151	175852	10.62	ug/l	97
13) Acetone	4.12	43	192236	50.73	ug/l	93
14) 1,1-Dichloroethene	4.28	61	361441	8.84	ug/l	74
15) tert-Butyl alcohol	4.38	59	318855	280.35	ug/l	94
16) Iodomethane	4.68	142	363143	9.82	ug/l	87
17) Methyl acetate	4.69	43	85573	9.79	ug/l	100
18) Methylene chloride	4.90	49	282636	9.94	ug/l	90
19) Carbon disulfide	4.92	76	750937	10.61	ug/l	99
20) Acrylonitrile	5.06	53	197891	58.90	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	570882	12.27	ug/l	95
22) trans-1,2-Dichloroethene	5.29	61	357619	9.60	ug/l	95
23) Isopropyl ether (DIPE)	5.70	45	894011	12.02	ug/l	99
24) Vinyl acetate	5.86	43	238213	8.77	ug/l	97
25) 1,1-Dichloroethane	5.86	63	505290	11.07	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	784778	11.41	ug/l	95
28) 2-Butanone	6.44	43	318119	57.16	ug/l	97
29) 2,2-Dichloropropane	6.65	77	440707	9.68	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	300707	10.47	ug/l	98
31) Chloroform	6.93	83	662084	12.88	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I24\RIV590.D
Acq On : 24 Sep 2024 9:31 pm
Sample : 24I061-14S
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 25 9:21 2024

Vial: 18
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.18	49	198125	11.35	ug/l		98
33)	Tetrahydrofuran	7.23	42	31098	10.01	ug/l		91
35)	1,1,1-Trichloroethane	7.52	97	486166	9.58	ug/l		97
36)	Cyclohexane	7.54	84	386792	10.59	ug/l		98
38)	1,1-Dichloropropene	7.74	110	120041	8.64	ug/l		99
39)	Carbon tetrachloride	7.89	119	365609	8.67	ug/l		100
40)	tert-Amyl methyl ether (TA	7.91	73	620601	12.28	ug/l		100
42)	Benzene	8.14	78	1082495	11.63	ug/l		98
43)	1,2-Dichloroethane	8.13	62	306362	10.53	ug/l		97
44)	Trichloroethene	9.09	130	284490	9.61	ug/l		96
45)	Methylcyclohexane	9.18	83	442656	10.86	ug/l		91
46)	1,2-Dichloropropane	9.37	63	262310	12.34	ug/l		92
47)	Bromodichloromethane	9.74	83	430807	11.62	ug/l		96
48)	1,4-Dioxane	9.79	88	22441	213.34	ug/l		95
49)	Dibromomethane	9.83	93	125003	10.57	ug/l		92
50)	2-Chloroethyl vinyl ether	10.26	63	749	0.11	ug/l	#	1
51)	4-Methyl-2-pentanone	10.28	43	795702	62.62	ug/l		97
52)	cis-1,3-Dichloropropene	10.63	75	449497	11.98	ug/l		95
55)	Toluene	11.17	91	1189457	10.83	ug/l		99
56)	Ethyl methacrylate	11.46	69	240516	12.99	ug/l		96
57)	trans-1,3-Dichloropropene	11.49	75	366647	11.51	ug/l		97
58)	1,1,2-Trichloroethane	11.76	97	190596	11.85	ug/l		94
59)	2-Hexanone	11.76	43	515779	58.25	ug/l		99
60)	1,3-Dichloropropane	12.20	76	363553	12.69	ug/l		100
61)	Tetrachloroethene	12.31	164	396140	15.88	ug/l		94
62)	Dibromochloromethane	12.68	129	244801	11.51	ug/l		99
63)	1,2-Dibromoethane	13.03	107	170880	10.55	ug/l		98
64)	1-Chlorohexane	13.31	91	499535	9.81	ug/l		99
65)	Chlorobenzene	13.79	112	764154	10.13	ug/l		98
66)	1,1,1,2-Tetrachloroethane	13.88	131	288327	11.44	ug/l		97
67)	Ethylbenzene	13.88	91	1481811	10.78	ug/l		96
68)	m-Xylene & p-Xylene	14.02	91	2317726	21.36	ug/l		95
69)	o-Xylene	14.84	91	1268726	12.13	ug/l		94
70)	Styrene	14.91	104	857781	11.20	ug/l		99
71)	Isopropylbenzene	15.52	105	1455722	10.16	ug/l		98
73)	Bromoform	15.56	173	121790	8.04	ug/l		97
74)	trans-1,4-Dichloro-2-buten	15.64	53	67492	7.32	ug/l		95
75)	1,1,2,2-Tetrachloroethane	15.86	83	226337	9.18	ug/l		96
77)	1,2,3-Trichloropropane	16.16	110	63182	6.96	ug/l		88
78)	n-Propylbenzene	16.29	91	1876099	7.15	ug/l		98
79)	Bromobenzene	16.38	156	322057	8.11	ug/l		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV590.D Vial: 18
Acq On : 24 Sep 2024 9:31 pm Operator: DNguye/CLingl
Sample : 24I061-14S Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 25 9:21 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1118778	6.46	ug/l	98
81)	2-Chlorotoluene	16.64	91	1193219	6.93	ug/l	98
82)	4-Chlorotoluene	16.73	91	1046908	7.12	ug/l	97
83)	tert-Butylbenzene	17.30	134	303075	7.91	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	1184163	7.15	ug/l	98
85)	sec-Butylbenzene	17.65	105	1697475	7.26	ug/l	96
86)	p-Isopropyltoluene	17.87	119	1348832	6.78	ug/l	96
87)	1,3-Dichlorobenzene	18.04	146	685643	8.33	ug/l	93
88)	1,2,3-Trimethylbenzene	18.14	105	1167774	7.27	ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	666336	8.37	ug/l	92
90)	n-Butylbenzene	18.50	91	1341286	7.37	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	589826	8.70	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.72	157	38797	10.16	ug/l	96
93)	1,2,4-Trichlorobenzene	20.81	180	367187	7.97	ug/l	98
94)	Hexachlorobutadiene	20.98	225	220957	7.31	ug/l	99
95)	Naphthalene	21.16	128	536115	8.17	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	293040	8.33	ug/l	95

(#) = qualifier out of range (m) = manual integration

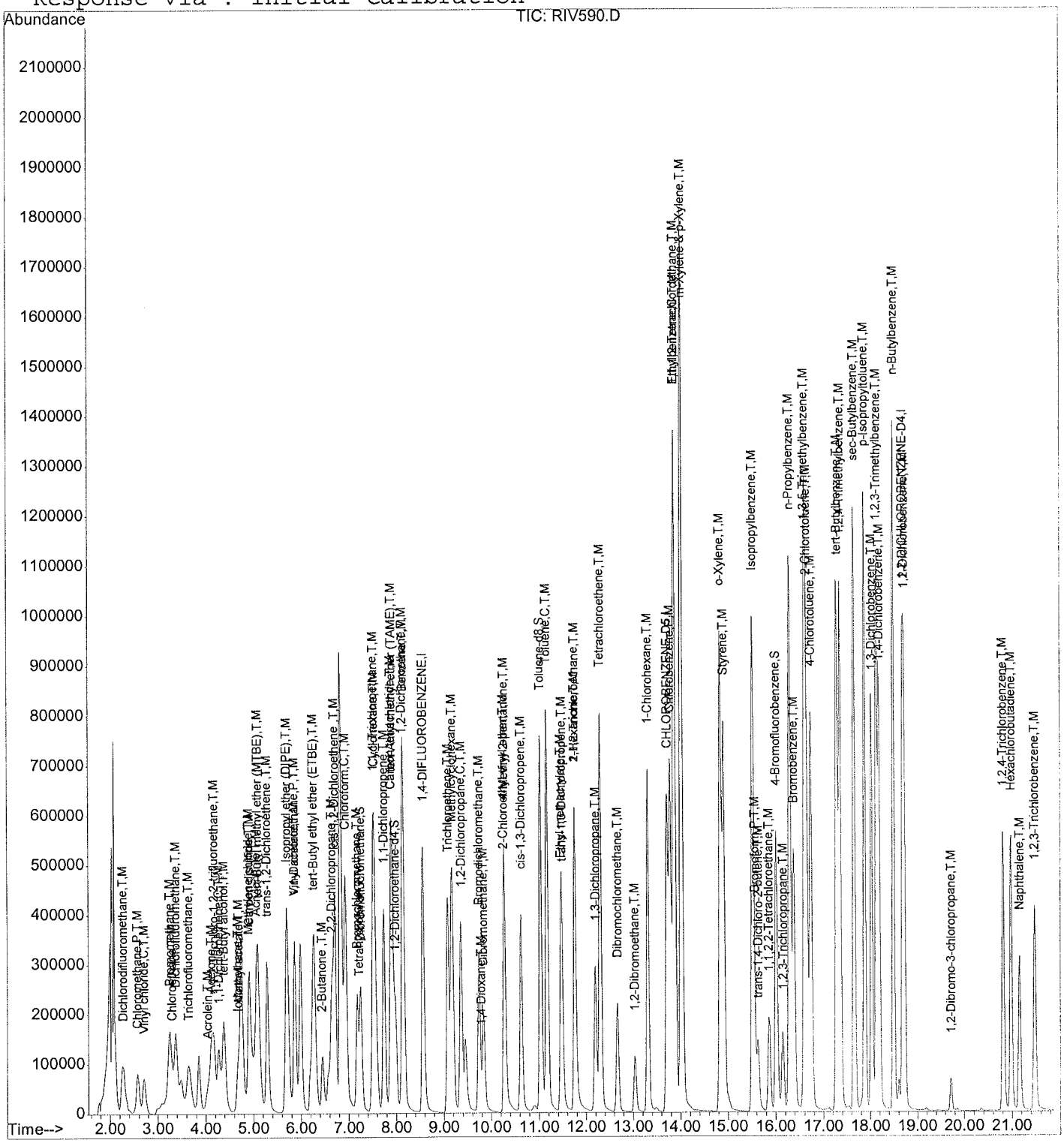
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I24\RIV590.D
Acq On : 24 Sep 2024 9:31 pm
Sample : 24I061-14S
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Sep 25 9:21 2024

Vial: 18
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



INITIAL CALIBRATIONS

FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RHV128 BFB Injection Date: 08/09/24

Instrument ID: 01New BFB Injection Time: 08:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	22.371
75	30 - 60% of mass 95	48.380
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.009
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	63.433
175	5 - 9% of mass 174	4.766(7.51)1
176	95 - 101% % of mass 174	63.900(100.74)1
177	5 - 9% % of mass 176	3.518(5.51)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	VO01H091	RHV129	08/09/24	17:28
2	VSTD0.5	VO01H092	RHV130	08/09/24	18:14
3	VSTD1	VO01H093	RHV131	08/09/24	18:45
4	VSTD2	VO01H094	RHV132	08/09/24	19:15
5	VSTD5	VO01H095	RHV133	08/09/24	19:46
6	VSTD10	VO01H096	RHV134	08/09/24	20:17
7	VSTD20	VO01H097	RHV135	08/09/24	20:47
8	VSTD30	VO01H098	RHV136	08/09/24	21:17
9	VSTD50	VO01H099	RHV137	08/09/24	21:47
10	VSTD100	VO01H0910	RHV138	08/09/24	22:17
11	VSTD50	IVO01H0901	RHV141	08/09/24	23:47

SC 9/6/24

Instrument ID :01New
Beginning DateTime :08/09/24 17:28
Spike Units :PPB
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09

M	IDX	Parameters	.3 17:28 RHV129	.5 18:14 RHV130	1 18:45 RHV131	2 19:15 RHV132	5 19:46 RHV133	10 20:17 RHV134	20 20:47 RHV135	30 21:17 RHV136	50 21:47 RHV137	100 22:17 RHV138	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5598
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	0.294	0.267	0.306	0.355	0.373	0.382	0.341	0.302	0.303	0.367	0.329	12.04	2.2409
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	------	------	0.198	0.243	0.240	0.256	0.235	0.215	0.227	0.293	0.239	11.82	2.5406
	6	Vinyl chloride	------	0.156	0.190	0.208	0.226	0.239	0.223	0.215	0.226	------	0.210	12.57	2.6789
	7	Bromomethane	------	0.184	0.164	0.185	0.189	0.191	0.184	0.176	0.180	0.224	0.186	8.61	3.2215
	8	Chloroethane	------	------	0.130	0.152	0.155	0.167	0.164	0.160	0.172	0.207	0.163	13.37	3.2780
	9	Dichlorofluoromethane	0.318	0.396	0.330	0.390	0.368	0.364	0.359	0.325	0.333	0.419	0.360	9.43	3.3422
	10	Trichlorofluoromethane	0.445	0.411	0.467	0.538	0.487	0.548	0.458	0.439	0.451	0.539	0.478	9.99	3.5541
5	11	Acrolein	------	------	0.008	0.009	0.010	0.010	0.010	0.010	0.011	0.013	0.010	14.81	4.0169
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.177	0.172	0.193	0.214	0.204	0.203	0.196	0.188	0.185	0.227	0.196	8.61	4.1334
5	13	Acetone	------	------	0.064	0.060	0.047	0.045	0.044	0.040	0.038	0.046	0.048	19.26	4.0965
	14	1,1-Dichloroethene	0.488	0.489	0.449	0.487	0.508	0.496	0.473	0.450	0.449	0.550	0.484	6.44	4.2548
25	15	tert-Butyl alcohol	------	0.014	0.010	0.013	0.015	0.014	0.014	0.012	0.013	0.015	0.013	12.10	4.3721
	16	Iodomethane	------	------	0.377	0.458	0.445	0.458	0.447	0.437	0.441	------	0.437	6.31	4.6629
	17	Methyl acetate	------	------	0.099	0.113	0.100	0.102	0.099	0.097	0.099	0.118	0.103	7.37	4.6835
	18	Methylene chloride	------	------	0.313	0.346	0.348	0.331	0.330	0.318	0.316	0.388	0.336	7.35	4.8854
	19	Carbon disulfide	------	------	0.758	0.794	0.829	0.885	0.883	0.876	------	------	0.838	6.33	4.9044
5	20	Acrylonitrile	------	0.040	0.035	0.034	0.038	0.039	0.041	0.041	0.040	0.049	0.040	11.32	5.0586
	21	tert-Butyl methyl ether (MTBE)	0.484	0.584	0.504	0.567	0.597	0.569	0.561	0.524	0.503	0.609	0.550	7.89	5.0949
	22	trans-1,2-Dichloroethene	0.408	0.450	0.410	0.451	0.467	0.453	0.433	0.421	0.418	0.496	0.441	6.34	5.2756
	23	Isopropyl ether (DIPE)	0.747	0.914	0.786	0.930	0.929	0.892	0.899	0.876	0.850	0.974	0.880	7.83	5.6919
	24	Vinyl acetate	------	------	0.258	0.297	0.326	0.339	0.338	0.309	0.320	0.385	0.321	11.40	5.8521
	25	1,1-Dichloroethane	0.494	0.584	0.490	0.548	0.556	0.540	0.541	0.523	0.517	0.608	0.540	6.83	5.8534
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	0.693	0.887	0.762	0.890	0.871	0.841	0.824	0.770	0.732	0.864	0.813	8.56	6.2652
5	28	2-Butanone	------	0.078	0.064	0.059	0.064	0.064	0.068	0.063	0.061	0.073	0.066	9.12	6.4397
	29	2,2-Dichloropropane	0.523	0.593	0.540	0.575	0.569	0.560	0.533	0.475	0.460	0.554	0.538	7.93	6.6504
	30	cis-1,2-Dichloroethene	0.281	0.356	0.307	0.348	0.348	0.349	0.337	0.334	0.333	0.405	0.340	9.52	6.7052
	31	Chloroform	------	0.746	0.623	0.657	0.642	0.622	0.573	0.518	0.501	0.590	0.608	12.21	6.9302
	32	Bromochloromethane	0.170	0.219	0.191	0.214	0.210	0.209	0.214	0.201	0.199	0.239	0.206	8.79	7.1690
	33	Tetrahydrofuran	------	------	------	0.040	0.044	0.033	0.036	0.032	0.033	0.039	0.037	11.65	7.2154
	34	Dibromofluoromethane	------	------	0.228	0.300	0.331	0.330	0.333	0.303	------	------	0.304	13.19	7.2427
	35	1,1,1-Trichloroethane	0.567	0.600	0.589	0.677	0.668	0.643	0.598	0.534	0.514	0.612	0.600	8.89	7.5186
	36	Cyclohexane	------	0.377	0.404	0.405	0.431	0.451	0.422	0.448	0.435	0.518	0.432	9.21	7.5376
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	0.164	0.155	0.141	0.172	0.165	0.165	0.165	0.163	0.159	0.195	0.164	8.22	7.7393
	39	Carbon tetrachloride	0.455	0.526	0.473	0.559	0.547	0.537	0.502	0.445	0.428	0.517	0.499	9.16	7.8934
	40	tert-Amyl methyl ether (TAME)	0.537	0.641	0.550	0.622	0.638	0.616	0.625	0.569	0.542	0.638	0.598	7.20	7.9082
	41	1,2-Dichloroethane-d4	------	0.236	0.244	0.281	0.295	0.299	0.295	0.244	------	------	0.270	10.30	7.9794
	42	Benzene	1.010	1.115	1.033	1.169	1.166	1.150	1.146	1.089	1.041	1.093	1.101	5.25	8.1453
	43	1,2-Dichloroethane	0.260	0.363	0.331	0.403	0.390	0.380	0.358	0.310	0.296	0.353	0.344	13.08	8.1201
	44	Trichloroethene	0.357	0.373	0.311	0.361	0.353	0.358	0.348	0.331	0.321	0.389	0.350	6.77	9.0827
	45	Methylcyclohexane	0.332	0.439	0.466	0.481	0.513	0.508	0.482	0.520	0.505	0.576	0.482	13.31	9.1761
	46	1,2-Dichloropropane	0.236	0.244	0.212	0.250	0.260	0.259	0.261	0.248	0.248	0.295	0.251	8.42	9.3642
	47	Bromodichloromethane	0.496	0.542	0.423	0.460	0.442	0.440	0.420	0.374	0.359	0.431	0.439	12.12	9.7405
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	11.23	9.7789
	49	Dibromomethane	------	0.150	0.129	0.149	0.143	0.144	0.142	0.128	0.124	0.150	0.140	7.18	9.8339
	50	2-Chloroethyl vinyl ether	------	------	0.062	0.068	0.080	0.077	0.085	0.081	0.080	0.096	0.079	13.01	10.2376
5	51	4-Methyl-2-pentanone	------	0.131	0.117	0.143	0.166	0.164	0.171	0.154	0.145	0.162	0.150	11.85	10.2833
	52	cis-1,3-Dichloropropene	0.400	0.436	0.389	0.461	0.477	0.469	0.467	0.434	0.418	0.488	0.444	7.60	10.6294
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7258
	54	Toluene-d8	------	1.100	1.053	1.248	1.330	1.303	1.278	1.245	------	------	1.222	8.56	11.0382
	55	Toluene	1.555	1.555	1.437	1.605	1.638	1.573	1.453	1.455	1.346	1.369	1.498	6.69	11.1731
	56	Ethyl methacrylate	------	------	0.177	0.245	0.276	0.269	0.273	0.267	0.263	------	0.253	13.78	11.4743
	57	trans-1,3-Dichloropropene	0.363	0.427	0.376	0.459	0.489	0.467	0.444	0.420	0.413	0.488	0.435	10.00	11.4902
	58	1,1,2-Trichloroethane	0.194	0.236	0.189	0.205	0.244	0.222	0.220	0.215	0.212	0.258	0.219	9.84	11.7598
5	59	2-Hexanone	------	------	0.068	0.092	0.120	0.123	0.125	0.118	0.113	0.133	0.111	19.21	11.7765
	60	1,3-Dichloropropane	0.339	0.404	0.332	0.401	0.422	0.401	0.399	0.377	0.379	0.453	0.391	9.24	12.2013
	61	Tetrachloroethene	0.370	0.377	0.312	0.341	0.357	0.333	0.312	0.315	0.311	0.376	0.340	8.13	12.3080
	62	Dibromochloromethane	0.268	0.307	0.274	0.302	0.305	0.302	0.288	0.268	0.265	0.323	0.290	7.03	12.6754
	63	1,2-Dibromoethane	0.214	0.207	0.192	0.234	0.237	0.222	0.222	0.216	0.209	0.257	0.221	8.26	13.0428
	64	1-Chlorohexane	0.751	0.724	0.651	0.718	0.720	0.688	0.661	0.660	0.640	0.735	0.695	5.71	13.3198
	65	Chlorobenzene	1.082	1.040	0.928	1.089	1.115	1.066	1.014	0.972	0.937	1.054	1.030	6.31	13.7954
	66	1,1,1,2-Tetrachloroethane	0.290	0.328	0.314	0.370	0.376	0.366	0.345	0.332	0.323	0.397	0.344	9.54	13.8724
	67	Ethylbenzene	2.008	1.922	1.791	2.055	2.067	1.983	1.821	1.697	1.538	------	1.876	9.54	13.8900
2	68	m-Xylene & p-Xylene	1.528	1.571	1.410	1.591	1.626	1.518	1.367	1.237	------	------	1.481	8.93	14.0303
	69	o-Xylene	1.498	1.486	1.362	1.570	1.624	1.537	1.412	1.334	1.209	1.246	1.428	9.71	14.8487
	70	Styrene	0.963	1.019	0.935	1.109	1.170	1.098	1.067	1.033	0.983	1.072	1.045	6.93	14.9213
	71	Isopropylbenzene	1.985	1.917	1.830	2.078	2.181	2.057	1.872	1.728	------	------	1.956	7.56	15.5303
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6932
	73	Bromoform	------	0.376	0.269	0.348	0.402	0.377	0.377	0.379	0.410	------	0.367	11.93	15.5692
	74	trans-1,4-Dichloro-2-butene	------	------	------	0.191	0.231	0.224	0.232	0.225	0.238	------	0.223	7.51	15.6316
	75	1,1,2,2-Tetrachloroethane	0.460	0.561	0.535	0.610	0.661	0.606	0.639	0.639	0.664	------	0.597	11.29	15.8686
	76	4-Bromofluorobenzene	------	1.390	1.021	1.263	1.333	1.267	1.303	1.304	------	------	1.269	9.24	16.0203
	77	1,2,3-Trichloropropane	------	0.244	0.179	0.227	0.239	0.210	0.219	0.210	0.231	------	0.220	9.42	16.1618
	78	n-Propylbenzene	7.567	6.929	6.113	6.581	6.854	6.362	5.996	5.951	5.583	5.634	6.357	9.90	16.3050
	79	Bromobenzene	0.894	0.895	0.868	0.938	0.992	0.935	0.922	0.936	0.976	1.272	0.963	11.94	16.3939
	80	1,3,5-Trimethylbenzene	4.576	4.567	3.999	4.333	4.564	4.102	3.906	3.860	3.838	4.232	4.198	7.15	16.6132
	81	2-Chlorotoluene	4.564	4.597	3.970	4.164	4.382	4.089	3.890	3.789	3.894	4.392	4.173	7.05	16.6487
	82	4-Chlorotoluene	3.871	3.608	3.320	3.679	3.843	3.527	3.314	3.363	3.295	3.827	3.565	6.57	16.7421
	83	tert-Butylbenzene	0.948	0.959	0.791	0.928	0.917	0.882	0.875	0.886	0.933	1.164	0.928	10.33	17.3006
	84	1,2,4-Trimethylbenzene	4.447	4.090	3.741	4.254	4.366	4.041	3.776	3.749	3.634	4.005	4.010	7.06	17.3643
	85	sec-Butylbenzene	6.545	6.419	5.647	5.896	6.288	5.756	5.371	5.189	4.780	4.731	5.662	11.41	17.6621
	86	p-Isopropyltoluene	5.535	5.175	4.648	5.172	5.348	4.885	4.630	4.432	4.129	4.240	4.820	9.96	17.8887
	87	1,3-Dichlorobenzene	2.269	2.110	1.787	1.923	2.095	1.957	1.882	1.851	1.844	2.222	1.994	8.46	18.0384
	88	1,2,3-Trimethylbenzene	4.048	4.258	3.772	4.188	4.333	4.012	3.750	3.534	3.376	3.632	3.890	8.36	18.1451
	89	1,4-Dichlorobenzene	2.157	2.027	1.747	1.944	1.979	1.894	1.841	1.773	1.783	2.137	1.928	7.64	18.1999
	90	n-Butylbenzene	5.407	5.018	4.310	4.829	4.796	4.561	4.150	3.867	3.573	3.613	4.412	13.97	18.5006
	91	1,2-Dichlorobenzene	1.635	1.734	1.465	1.679	1.775	1.646	1.608	1.513	1.521	1.844	1.642	7.38	18.7273
	92	1,2-Dibromo-3-chloropropane	------	0.074	0.073	0.093	0.103	0.100	0.104	0.094	0.098	------	0.093	13.33	19.7229
	93	1,2,4-Trichlorobenzene	1.191	1.246	0.938	1.132	1.163	1.119	1.109	1.030	1.009	1.220	1.116	8.77	20.8162
	94	Hexachlorobutadiene	0.799	0.758	0.701	0.716	0.764	0.746	0.711	0.672	0.658	0.800	0.732	6.72	20.9895
	95	Naphthalene	1.491	1.639	1.286	1.575	1.681	1.652	1.661	1.527	1.541	1.852	1.591	9.31	21.1673
	96	1,2,3-Trichlorobenzene	0.847	0.845	0.759	0.897	0.903	0.875	0.850	0.800	0.789	0.960	0.853	7.02	21.4829

Spike Amount = Nominal Amount * M
Ave_%RSD : 9.5 Max_%RSD : 19.3

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
13	Acetone	0.01114	0.04263	0.9952
59	2-Hexanone	-0.03118	0.12619	0.9976

SW
9/6/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :01New
Beginning DateTime :08/09/24 17:28
Spike Units :PPB
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25
Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09

M	IDX	Parameters	.3 17:28 RHV129	.5 18:14 RHV130	1 18:45 RHV131	2 19:15 RHV132	5 19:46 RHV133	10 20:17 RHV134	20 20:47 RHV135	30 21:17 RHV136	50 21:47 RHV137	100 22:17 RHV138	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5598
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	89	81	93	108	113	116	104	92	92	112	10.5	12.04	2.2409
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	------	------	83	102	100	107	98	90	95	123	8.2	11.82	2.5406
	6	Vinyl chloride	------	74	90	99	108	114	106	102	108	------	9.2	12.57	2.6789
	7	Bromomethane	------	99	88	99	102	103	99	95	97	120	5.3	8.61	3.2215
	8	Chloroethane	------	------	80	93	95	102	101	98	106	127	8.7	13.37	3.2780
	9	Dichlorofluoromethane	88	110	92	108	102	101	100	90	92	116	7.6	9.43	3.3422
	10	Trichlorofluoromethane	93	86	98	113	102	115	96	92	94	113	8.3	9.99	3.5541
5	11	Acrolein	------	------	80	90	100	100	100	100	110	130	8.8	14.81	4.0169
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	90	88	98	109	104	104	100	96	94	116	6.6	8.61	4.1334
5	13	Acetone	------	------	97	115	101	100	101	91	88	109	14.6	19.26	4.0965
	14	1,1-Dichloroethene	101	101	93	101	105	102	98	93	93	114	4.7	6.44	4.2548
25	15	tert-Butyl alcohol	------	108	77	100	115	108	108	92	100	115	9.4	12.10	4.3721
	16	Iodomethane	------	------	86	105	102	105	102	100	101	------	4.1	6.31	4.6629
	17	Methyl acetate	------	------	96	110	97	99	96	94	96	115	5.7	7.37	4.6835
	18	Methylene chloride	------	------	93	103	104	99	98	95	94	115	5.4	7.35	4.8854
	19	Carbon disulfide	------	------	90	95	99	106	105	105	------	------	5.2	6.33	4.9044
5	20	Acrylonitrile	------	100	88	85	95	98	102	102	100	122	6.9	11.32	5.0586
	21	tert-Butyl methyl ether (MTBE)	88	106	92	103	109	103	102	95	91	111	6.8	7.89	5.0949
	22	trans-1,2-Dichloroethene	93	102	93	102	106	103	98	95	95	112	5.1	6.34	5.2756
	23	Isopropyl ether (DIPE)	85	104	89	106	106	101	102	100	97	111	5.9	7.83	5.6919
	24	Vinyl acetate	------	------	80	93	102	106	105	96	100	120	7.9	11.40	5.8521
	25	1,1-Dichloroethane	91	108	91	101	103	100	100	97	96	113	5.1	6.83	5.8534
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	85	109	94	109	107	103	101	95	90	106	7.3	8.56	6.2652
5	28	2-Butanone	------	118	97	89	97	97	103	95	92	111	7.1	9.12	6.4397
	29	2,2-Dichloropropane	97	110	100	107	106	104	99	88	86	103	6	7.93	6.6504
	30	cis-1,2-Dichloroethene	83	105	90	102	102	103	99	98	98	119	6.3	9.52	6.7052
	31	Chloroform	------	123	102	108	106	102	94	85	82	97	9.1	12.21	6.9302
	32	Bromochloromethane	83	106	93	104	102	101	104	98	97	116	6.4	8.79	7.1690
	33	Tetrahydrofuran	------	------	------	108	119	99	97	86	89	105	10	11.65	7.2154
	34	Dibromofluoromethane	------	------	75	99	109	99	110	100	------	------	8.9	13.19	7.2427
	35	1,1,1-Trichloroethane	94	100	98	113	111	107	100	89	86	102	6.6	8.89	7.5186
	36	Cyclohexane	------	87	94	94	100	104	98	104	101	120	6.3	9.21	7.5376
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	10^	95	86	105	101	101	101	99	97	119	4.9	8.22	7.7395
	39	Carbon tetrachloride	91	105	95	112	110	108	101	89	89	104	7.8	9.16	7.8934
	40	tert-Amyl methyl ether (TAME)	90	107	92	104	107	103	105	95	91	107	6.5	7.20	7.9082
	41	1,2-Dichloroethane-d4	------	87	90	104	109	111	109	90	------	------	9.3	10.30	7.9794
	42	Benzene	92	101	94	106	106	104	104	99	95	99	4.4	5.25	8.1453
	43	1,2-Dichloroethane	76	106	96	117	113	110	104	90	86	103	10.5	13.08	8.1201
	44	Trichloroethene	102	107	89	103	101	102	99	95	92	111	5.1	6.77	9.0827
	45	Methylcyclohexane	69	91	97	100	106	105	100	108	105	120	8.8	13.31	9.1761
	46	1,2-Dichloropropane	94	97	84	100	104	103	104	99	99	118	5.5	8.42	9.3642
	47	Bromodichloromethane	113	123	96	105	101	100	96	85	82	98	8.5	12.12	9.7405
20	48	1,4-Dioxane	------	------	------	85	93	102	104	93	103	120	0	11.23	9.7789
	49	Dibromomethane	------	107	92	106	102	103	101	91	89	107	6.1	7.18	9.8339
	50	2-Chloroethyl vinyl ether	------	------	78	86	101	97	108	103	101	122	9	13.01	10.2376
5	51	4-Methyl-2-pentanone	------	87	78	95	111	109	114	103	97	108	9.7	11.85	10.2833
	52	cis-1,3-Dichloropropene	90	98	88	104	107	106	105	98	94	110	6.4	7.60	10.6294
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7258
	54	Toluene-d8	------	90	86	102	109	107	105	102	------	------	6.8	8.56	11.0382
	55	Toluene	104	104	96	107	109	105	97	97	90	91	5.8	6.69	11.1731
	56	Ethyl methacrylate	------	------	70	97	109	106	108	106	104	------	9.4	13.78	11.4743
	57	trans-1,3-Dichloropropene	83	98	86	106	112	107	102	97	95	112	8	10.00	11.4902
	58	1,1,2-Trichloroethane	89	108	86	94	111	101	100	98	97	118	7.5	9.84	11.7598
5	59	2-Hexanone	------	------	103	97	105	102	102	95	90	106	14.4	19.21	11.7765
	60	1,3-Dichloropropane	87	103	85	103	108	103	102	96	97	116	6.9	9.24	12.2013
	61	Tetrachloroethene	109	111	92	100	105	98	92	93	91	111	7	8.13	12.3080
	62	Dibromochloromethane	92	106	94	104	105	104	99	92	91	111	6.1	7.03	12.6754
	63	1,2-Dibromoethane	97	94	87	106	107	100	100	98	95	116	6.1	8.26	13.0428
	64	1-Chlorohexane	108	104	94	103	104	99	95	95	92	106	5	5.71	13.3198
	65	Chlorobenzene	105	101	90	106	108	103	98	94	91	102	5.2	6.31	13.7954
	66	1,1,1,2-Tetrachloroethane	84	95	91	108	109	106	100	97	94	115	7.8	9.54	13.8724
	67	Ethylbenzene	107	102	95	110	110	106	97	90	82	------	7.8	9.54	13.8900
2	68	m-Xylene & p-Xylene	103	106	95	107	110	102	92	84	------	------	7.2	8.93	14.0303
	69	o-Xylene	105	104	95	110	114	108	99	93	85	87	8.1	9.71	14.8487
	70	Styrene	92	98	89	106	112	105	102	99	94	103	5.6	6.93	14.9213
	71	Isopropylbenzene	101	98	94	106	112	105	96	88	------	------	6.1	7.56	15.5303
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6932
	73	Bromoform	------	102	73	95	110	103	103	103	112	------	8	11.93	15.5692
	74	trans-1,4-Dichloro-2-butene	------	------	------	86	104	100	104	101	107	------	5	7.51	15.6316
	75	1,1,2,2-Tetrachloroethane	77	94	90	102	111	102	107	107	111	------	8.8	11.29	15.8686
	76	4-Bromofluorobenzene	------	110	80	100	105	100	103	103	------	------	5.7	9.24	16.0203
	77	1,2,3-Trichloropropane	------	111	81	103	109	95	100	95	105	------	7	9.42	16.1618
	78	n-Propylbenzene	119	109	96	104	108	100	94	94	88	89	7.9	9.90	16.3050
	79	Bromobenzene	93	93	90	97	103	97	96	97	101	132	7.3	11.94	16.3939
	80	1,3,5-Trimethylbenzene	109	109	95	103	109	98	93	92	91	101	6.1	7.15	16.6132
	81	2-Chlorotoluene	109	110	95	100	105	98	93	91	93	105	6	7.05	16.6487
	82	4-Chlorotoluene	109	101	93	103	108	99	93	94	92	107	5.6	6.57	16.7421
	83	tert-Butylbenzene	102	103	85	100	99	95	94	95	101	125	6.3	10.33	17.3006
	84	1,2,4-Trimethylbenzene	111	102	93	106	109	102	94	93	91	100	5.7	7.06	17.3643
	85	sec-Butylbenzene	116	113	100	104	111	102	95	92	84	84	9.2	11.41	17.6621
	86	p-Isopropyltoluene	115	107	96	107	111	101	96	92	86	88	8.4	9.96	17.8887
	87	1,3-Dichlorobenzene	114	106	90	96	105	98	94	93	92	111	7.2	8.46	18.0384
	88	1,2,3-Trimethylbenzene	104	109	97	108	111	103	96	91	87	93	7.1	8.36	18.1451
	89	1,4-Dichlorobenzene	112	105	91	101	103	98	95	92	92	111	6.3	7.64	18.1999
	90	n-Butylbenzene	12[illegible]	114	98	109	109	103	94	88	81	82	11.6	13.27	18.5006
	91	1,2-Dichlorobenzene	100	106	89	102	108	100	98	93	93	112	5.7	7.38	18.7273
	92	1,2-Dibromo-3-chloropropane	------	80	78	100	111	108	112	101	105	------	9.8	13.33	19.7229
	93	1,2,4-Trichlorobenzene	107	112	84	101	104	100	99	92	90	109	6.7	8.77	20.8162
	94	Hexachlorobutadiene	109	104	96	98	104	102	97	92	90	109	5.6	6.72	20.9895
	95	Naphthalene	94	103	81	99	106	104	104	96	97	116	6.7	9.31	21.1673
	96	1,2,3-Trichlorobenzene	99	99	89	105	106	103	100	94	92	113	5.3	7.02	21.4829

For 8260C
See
916/25f

Compound List Report 01New

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
Total Cpnds : 96

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-DIFLUOROBENZENE	114	8.56	1.000	A	1	A	B
2	T	Chlorotrifluoroethylene	116	2.08	0.242	A	2	A	B
3	T	Dichlorodifluoromethane	85	2.24	0.262	A	1	A	B
4	T	2-Chloro-1,1,1-trifluoroethane	118	2.53	0.296	A	2	A	B
5	T	Chloromethane	50	2.54	0.297	A	1	A	B
6	T	Vinyl chloride	62	2.68	0.313	A	1	A	B
7	T	Bromomethane	94	3.21	0.375	A	1	A	B
8	T	Chloroethane	64	3.27	0.382	A	1	A	B
9	T	Dichlorofluoromethane	67	3.35	0.391	A	1	A	B
10	T	Trichlorofluoromethane	101	3.48	0.406	A	1	A	B
11	T	Acrolein	56	4.01	0.469	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	4.15	0.484	A	1	A	B
13	T	Acetone	43	4.10	0.479	L	1	A	B
14	T	1,1-Dichloroethene	61	4.25	0.496	A	2	A	B
15	T	tert-Butyl alcohol	59	4.37	0.510	A	1	A	B
16	T	Iodomethane	142	4.66	0.545	A	1	A	B
17	T	Methyl acetate	43	4.68	0.547	A	1	A	B
18	T	Methylene chloride	49	4.89	0.571	A	2	A	B
19	T	Carbon disulfide	76	4.90	0.573	A	1	A	B
20	T	Acrylonitrile	53	5.05	0.590	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	5.09	0.595	A	1	A	B
22	T	trans-1,2-Dichloroethene	61	5.27	0.616	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	5.69	0.664	A	1	A	B
24	T	Vinyl acetate	43	5.85	0.683	A	1	A	B
25	T	1,1-Dichloroethane	63	5.85	0.683	A	2	A	B
26	T	2-Butanol	45	6.17	0.721	L	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.26	0.732	A	1	A	B
28	T	2-Butanone	43	6.44	0.753	A	1	A	B
29	T	2,2-Dichloropropane	77	6.65	0.777	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	6.71	0.784	A	2	A	B
31	T	Chloroform	83	6.93	0.810	A	2	A	B
32	T	Bromochloromethane	49	7.17	0.837	A	2	A	B
33	T	Tetrahydrofuran	42	7.21	0.843	A	2	A	B
34	S	Dibromofluoromethane	111	7.24	0.846	A	2	A	B
35	T	1,1,1-Trichloroethane	97	7.51	0.877	A	2	A	B
36	T	Cyclohexane	84	7.54	0.881	A	1	A	B
37	T	2,2,4-Trimethylpentane	57	7.55	0.882	A	1	A	B
38	T	1,1-Dichloropropene	110	7.73	0.903	A	1	A	B
39	T	Carbon tetrachloride	119	7.89	0.922	A	1	A	B
40	T	tert-Amyl methyl ether (TAME)	73	7.91	0.924	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	7.98	0.933	A	1	A	B
42	T	Benzene	78	8.15	0.952	A	2	A	B
43	T	1,2-Dichloroethane	62	8.12	0.948	A	1	A	B
44	T	Trichloroethene	130	9.08	1.061	A	3	A	B
45	T	Methylcyclohexane	83	9.18	1.073	A	2	A	B
46	T	1,2-Dichloropropane	63	9.36	1.093	A	1	A	B
47	T	Bromodichloromethane	83	9.74	1.138	A	1	A	B
48	T	1,4-Dioxane	88	9.78	1.142	A	1	A	B
49	T	Dibromomethane	93	9.83	1.149	A	2	A	B
50	T	2-Chloroethyl vinyl ether	63	10.23	1.196	A	2	A	B
51	T	4-Methyl-2-pentanone	43	10.28	1.201	A	3	A	B
52	T	cis-1,3-Dichloropropene	75	10.63	1.242	A	1	A	B

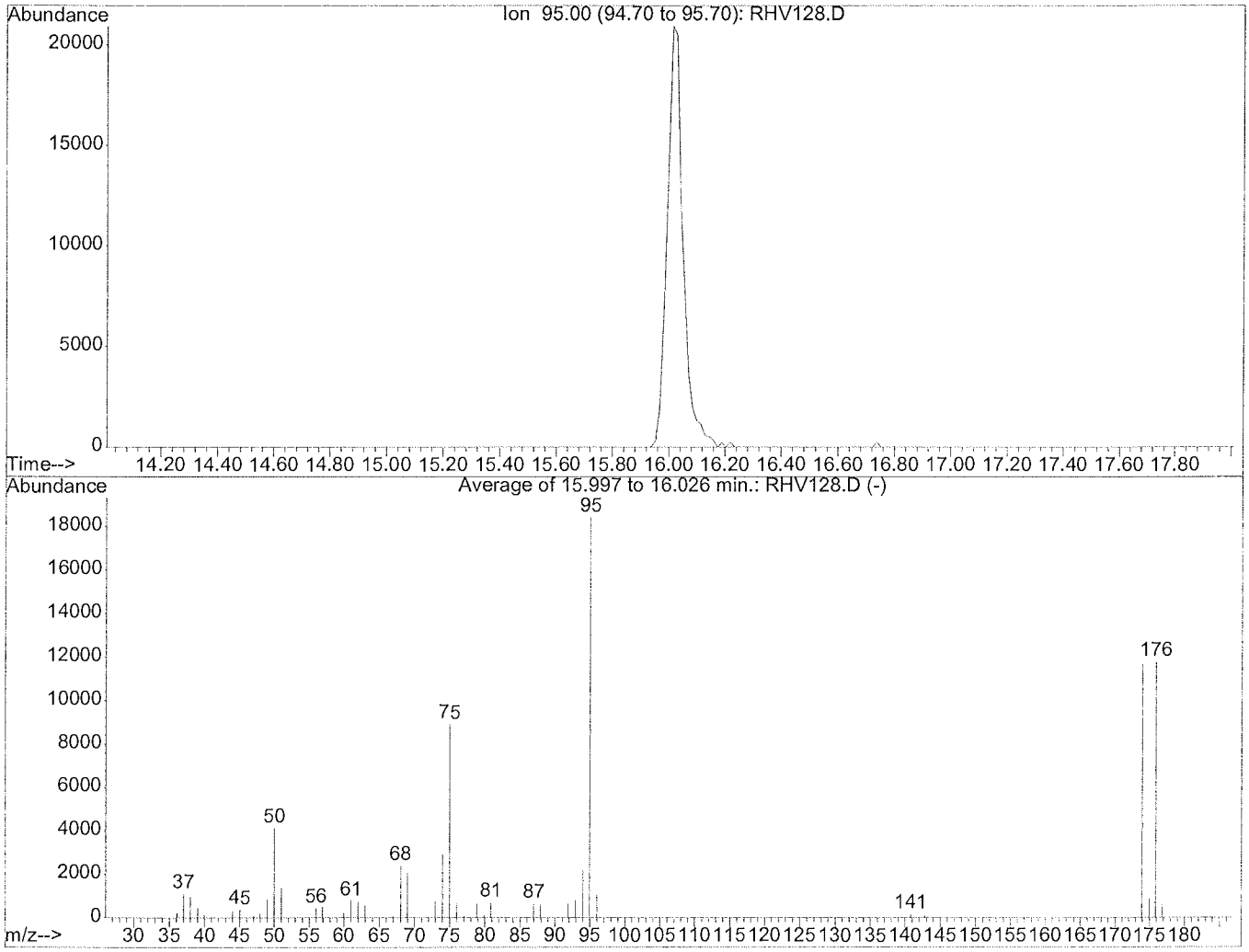
53	I	CHLOROBENZENE-D5	117	13.73	1.000	A	2	A	B
54	S	Toluene-d8	98	11.03	0.804	A	1	A	B
55	T	Toluene	91	11.17	0.813	A	1	A	B
56	T	Ethyl methacrylate	69	11.46	0.835	A	1	A	B
57	T	trans-1,3-Dichloropropene	75	11.48	0.836	A	1	A	B
58	T	1,1,2-Trichloroethane	97	11.76	0.856	A	2	A	B
59	T	2-Hexanone	43	11.76	0.856	L	1	A	B
60	T	1,3-Dichloropropane	76	12.20	0.889	A	1	A	B
61	T	Tetrachloroethene	164	12.31	0.896	A	3	A	B
62	T	Dibromochloromethane	129	12.68	0.923	A	1	A	B
63	T	1,2-Dibromoethane	107	13.03	0.949	A	1	A	B
64	T	1-Chlorohexane	91	13.32	0.970	A	1	A	B
65	P,M	Chlorobenzene	112	13.79	1.004	A	1	A	B
66	T	1,1,1,2-Tetrachloroethane	131	13.86	1.010	A	1	A	B
67	T	Ethylbenzene	91	13.89	1.012	A	1	A	B
68	T	m-Xylene & p-Xylene	91	14.03	1.022	A	1	A	B
69	T	o-Xylene	91	14.84	1.081	A	1	A	B
70	T	Styrene	104	14.92	1.086	A	2	A	B
71	T	Isopropylbenzene	105	15.52	1.131	A	3	A	B
72	I	1,2-DICHLOROBENZENE-D4	152	18.69	1.000	A	1	A	B
73	T	Bromoform	173	15.57	0.833	A	1	A	B
74	T	trans-1,4-Dichloro-2-butene	53	15.63	0.836	A	1	A	B
75	T	1,1,2,2-Tetrachloroethane	83	15.86	0.849	A	1	A	B
76	S	4-Bromofluorobenzene	95	16.01	0.857	A	2	A	B
77	T	1,2,3-Trichloropropane	110	16.16	0.864	A	1	A	B
78	T	n-Propylbenzene	91	16.31	0.872	A	2	A	B
79	T	Bromobenzene	156	16.40	0.877	A	1	A	B
80	T	1,3,5-Trimethylbenzene	105	16.60	0.888	A	2	A	B
81	T	2-Chlorotoluene	91	16.65	0.891	A	1	A	B
82	T	4-Chlorotoluene	91	16.74	0.895	A	1	A	B
83	T	tert-Butylbenzene	134	17.30	0.926	A	1	A	B
84	T	1,2,4-Trimethylbenzene	105	17.36	0.929	A	1	A	B
85	T	sec-Butylbenzene	105	17.66	0.945	A	1	A	B
86	T	p-Isopropyltoluene	119	17.88	0.956	A	2	A	B
87	T	1,3-Dichlorobenzene	146	18.04	0.965	A	2	A	B
88	T	1,2,3-Trimethylbenzene	105	18.15	0.971	A	2	A	B
89	T	1,4-Dichlorobenzene	146	18.19	0.973	A	2	A	B
90	T	n-Butylbenzene	91	18.50	0.990	A	2	A	B
91	T	1,2-Dichlorobenzene	146	18.72	1.002	A	1	A	B
92	T	1,2-Dibromo-3-chloropropane	157	19.72	1.055	A	1	A	B
93	T	1,2,4-Trichlorobenzene	180	20.81	1.113	A	2	A	B
94	T	Hexachlorobutadiene	225	20.99	1.123	A	1	A	B
95	T	Naphthalene	128	21.17	1.132	A	1	A	B
96	T	1,2,3-Trichlorobenzene	180	21.48	1.149	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO01H09.M Mon Aug 26 20:22:50 2024

SV
8/26/24

Data File : D:\HPCHEM\1\DATA\24H09\RHV128.D Vial: 1
Acq On : 9 Aug 2024 8:08 am Operator: DNguye
Sample : BFB01H09 Inst : 01New
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls



AutoFind: Scans 979, 980, 981; Background Corrected with Scan 973

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	4121	PASS
75	95	30	60	48.4	8912	PASS
95	95	100	100	100.0	18421	PASS
96	95	5	9	6.0	1107	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	63.4	11685	PASS
175	174	5	9	7.5	878	PASS
176	174	95	101	100.7	11771	PASS
177	176	5	9	5.5	648	PASS

RHV128.D VO01H09.M Tue Aug 27 13:41:53 2024 Su 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1105194	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	899301	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	307129	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	5367	0.16	ug/l	-0.01
Spiked Amount 10.000			Recovery =	1.60%		
41) 1,2-Dichloroethane-d4	7.98	65	4275	0.14	ug/l	0.00
Spiked Amount 10.000			Recovery =	1.40%		
54) Toluene-d8	11.05	98	18909	0.17	ug/l	0.01
Spiked Amount 10.000			Recovery =	1.70%		
76) 4-Bromofluorobenzene	16.04	95	6868	0.18	ug/l	0.03
Spiked Amount 10.000			Recovery =	1.80%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.22	85	9737	0.27	ug/l	92
5) Chloromethane	2.55	50	7112	0.27	ug/l	76
6) Vinyl chloride	2.68	62	5866	0.25	ug/l	57
9) Dichlorofluoromethane	3.33	67	10549	0.26	ug/l	85
10) Trichlorofluoromethane	3.60	101	14770	0.28	ug/l	62
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	5882	0.27	ug/l	99
13) Acetone	4.09	43	20215	1.68	ug/l	93
14) 1,1-Dichloroethene	4.25	61	16192	0.30	ug/l	75
15) tert-Butyl alcohol	4.37	59	4486	3.02	ug/l	81
16) Iodomethane	4.67	142	12285	0.25	ug/l	93
18) Methylene chloride	4.87	49	12150	0.33	ug/l	91
20) Acrylonitrile	5.07	53	5456	1.24	ug/l	83
21) tert-Butyl methyl ether (M	5.10	73	16045	0.26	ug/l	99
22) trans-1,2-Dichloroethene	5.27	61	13527	0.28	ug/l	89
23) Isopropyl ether (DIPE)	5.69	45	24782	0.25	ug/l	94
25) 1,1-Dichloroethane	5.85	63	16379	0.27	ug/l	94
27) tert-Butyl ethyl ether (ET	6.27	59	22976	0.26	ug/l	97
28) 2-Butanone	6.47	43	9400	1.29	ug/l	70
29) 2,2-Dichloropropane	6.64	77	17336	0.29	ug/l	96
30) cis-1,2-Dichloroethene	6.70	96	9302	0.25	ug/l	92
31) Chloroform	6.92	83	27892	0.41	ug/l	95
32) Bromochloromethane	7.17	49	5648	0.25	ug/l	99
35) 1,1,1-Trichloroethane	7.53	97	18811	0.28	ug/l	93
36) Cyclohexane	7.54	84	8269	0.17	ug/l	89
38) 1,1-Dichloropropene	7.73	110	5427	0.30	ug/l	97
39) Carbon tetrachloride	7.88	119	15091	0.27	ug/l	89
40) tert-Amyl methyl ether (TA	7.90	73	17816	0.27	ug/l	92

(#) = qualifier out of range (m) = manual integration

SU 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42)	Benzene	8.15	78	33490	0.28 ug/l	96
43)	1,2-Dichloroethane	8.12	62	8604	0.23 ug/l	96
44)	Trichloroethene	9.09	130	11845	0.31 ug/l	92
45)	Methylcyclohexane	9.17	83	10995	0.21 ug/l	97
46)	1,2-Dichloropropane	9.36	63	7817	0.28 ug/l	93
47)	Bromodichloromethane	9.74	83	16439	0.34 ug/l	93
49)	Dibromomethane	9.83	93	3658	0.24 ug/l	87
51)	4-Methyl-2-pentanone	10.34	43	11071	0.67 ug/l	76
52)	cis-1,3-Dichloropropene	10.63	75	13250	0.27 ug/l	94
55)	Toluene	11.18	91	41950	0.31 ug/l	95
57)	trans-1,3-Dichloropropene	11.51	75	9783	0.25 ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	5233	0.27 ug/l	91
59)	2-Hexanone	11.94	43	3190	2.75 ug/l	67
60)	1,3-Dichloropropane	12.20	76	9156	0.26 ug/l	84
61)	Tetrachloroethene	12.31	164	9983	0.33 ug/l	98
62)	Dibromochloromethane	12.69	129	7234	0.28 ug/l	95
63)	1,2-Dibromoethane	13.05	107	5763	0.29 ug/l	81
64)	1-Chlorohexane	13.33	91	20274	0.32 ug/l	98
65)	Chlorobenzene	13.80	112	29198	0.32 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.88	131	7815	0.25 ug/l	90
67)	Ethylbenzene	13.89	91	54163	0.32 ug/l	99
68)	m-Xylene & p-Xylene	14.04	91	82438	0.62 ug/l	97
69)	o-Xylene	14.86	91	40424	0.31 ug/l	98
70)	Styrene	14.93	104	25970	0.28 ug/l	95
71)	Isopropylbenzene	15.54	105	53542	0.30 ug/l	97
73)	Bromoform	15.58	173	2273	0.20 ug/l	84
75)	1,1,2,2-Tetrachloroethane	15.88	83	4235	0.23 ug/l	100
78)	n-Propylbenzene	16.31	91	69725	0.36 ug/l	97
79)	Bromobenzene	16.40	156	8237	0.28 ug/l	96
80)	1,3,5-Trimethylbenzene	16.62	105	42163	0.33 ug/l	97
81)	2-Chlorotoluene	16.65	91	42056	0.33 ug/l	98
82)	4-Chlorotoluene	16.75	91	35667	0.33 ug/l	96
83)	tert-Butylbenzene	17.30	134	8739	0.31 ug/l	91
84)	1,2,4-Trimethylbenzene	17.37	105	40975	0.33 ug/l	98
85)	sec-Butylbenzene	17.67	105	60303	0.35 ug/l	97
86)	p-Isopropyltoluene	17.89	119	51002	0.34 ug/l	98
87)	1,3-Dichlorobenzene	18.04	146	20909	0.34 ug/l	95
88)	1,2,3-Trimethylbenzene	18.14	105	37294	0.31 ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	19871	0.34 ug/l	97
90)	n-Butylbenzene	18.50	91	49822	0.37 ug/l	98
91)	1,2-Dichlorobenzene	18.74	146	15061	0.30 ug/l	94

(#) = qualifier out of range (m) = manual integration
RHV129.D VO01H09.M Fri Aug 30 17:58:28 2024 Su 9/6/24 Page 2

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
93)	1,2,4-Trichlorobenzene	20.81	180	10971	0.32	ug/l	89
94)	Hexachlorobutadiene	20.99	225	7363	0.33	ug/l	97
95)	Naphthalene	21.17	128	13737	0.28	ug/l	95
96)	1,2,3-Trichlorobenzene	21.49	180	7807	0.30	ug/l	98

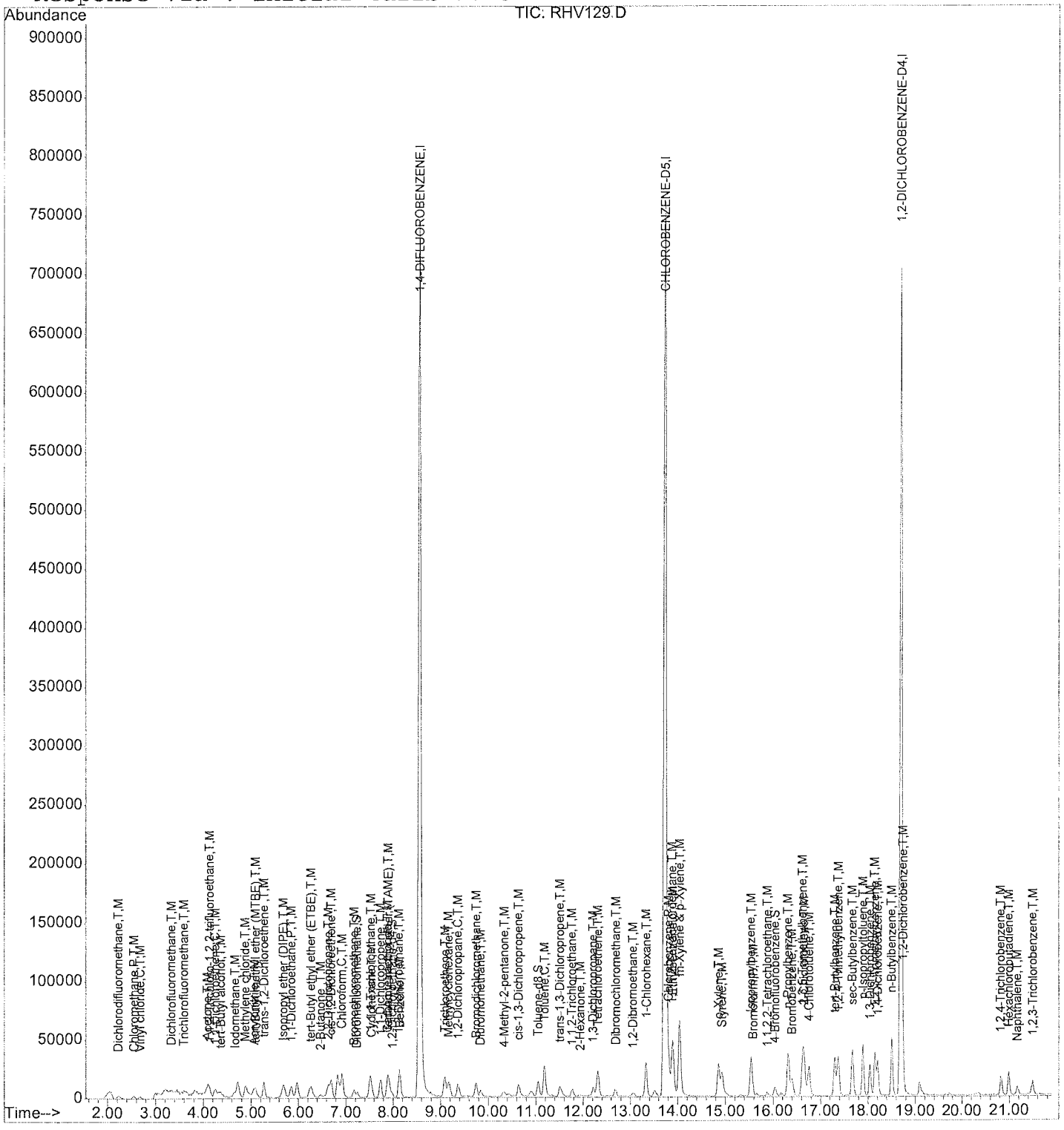
SV 9/6/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	926593	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	791295	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	271625	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	11707	0.42	ug/l	0.02
Spiked Amount 10.000			Recovery = 4.20%			
41) 1,2-Dichloroethane-d4	7.97	65	10946	0.44	ug/l	-0.01
Spiked Amount 10.000			Recovery = 4.40%			
54) Toluene-d8	11.05	98	43520	0.45	ug/l	0.01
Spiked Amount 10.000			Recovery = 4.50%			
76) 4-Bromofluorobenzene	16.04	95	18873	0.55	ug/l	0.03
Spiked Amount 10.000			Recovery = 5.50%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	12363	0.41	ug/l	66
5) Chloromethane	2.54	50	7558	0.34	ug/l	77
6) Vinyl chloride	2.67	62	7222	0.37	ug/l	54
7) Bromomethane	3.21	94	8517	0.49	ug/l	81
8) Chloroethane	3.29	64	4728	0.31	ug/l	70
9) Dichlorofluoromethane	3.33	67	18350	0.55	ug/l	92
10) Trichlorofluoromethane	3.60	101	19043	0.43	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	7946	0.44	ug/l	98
13) Acetone	4.09	43	26960	4.21	ug/l	88
14) 1,1-Dichloroethene	4.25	61	22648	0.51	ug/l	78
15) tert-Butyl alcohol	4.37	59	16148	12.95	ug/l	98
16) Iodomethane	4.65	142	12433	0.31	ug/l	61
18) Methylene chloride	4.89	49	16675	0.54	ug/l	95
20) Acrylonitrile	5.07	53	9172	2.49	ug/l	96
21) tert-Butyl methyl ether (M	5.10	73	27071	0.53	ug/l	95
22) trans-1,2-Dichloroethene	5.27	61	20852	0.51	ug/l	100
23) Isopropyl ether (DIPE)	5.69	45	42344	0.52	ug/l	91
25) 1,1-Dichloroethane	5.85	63	27035	0.54	ug/l	96
27) tert-Butyl ethyl ether (ET	6.27	59	41112	0.55	ug/l	99
28) 2-Butanone	6.46	43	17957	2.94	ug/l	73
29) 2,2-Dichloropropane	6.65	77	27492	0.55	ug/l	95
30) cis-1,2-Dichloroethene	6.70	96	16499	0.52	ug/l	95
31) Chloroform	6.93	83	34568	0.61	ug/l	99
32) Bromochloromethane	7.17	49	10138	0.53	ug/l	92
35) 1,1,1-Trichloroethane	7.53	97	27785	0.50	ug/l	96
36) Cyclohexane	7.53	84	17446	0.44	ug/l	97
38) 1,1-Dichloropropene	7.75	110	7189	0.47	ug/l	95

(#) = qualifier out of range (m) = manual integration

SC 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Carbon tetrachloride	7.90	119	24352	0.53 ug/l	97
40)	tert-Amyl methyl ether (TA	7.91	73	29675	0.54 ug/l	100
42)	Benzene	8.15	78	51640	0.51 ug/l	96
43)	1,2-Dichloroethane	8.12	62	16819	0.53 ug/l	98
44)	Trichloroethene	9.09	130	17293	0.53 ug/l	94
45)	Methylcyclohexane	9.18	83	20321	0.45 ug/l	97
46)	1,2-Dichloropropane	9.37	63	11309	0.49 ug/l	92
47)	Bromodichloromethane	9.74	83	25096	0.62 ug/l	88
49)	Dibromomethane	9.85	93	6954	0.54 ug/l	93
51)	4-Methyl-2-pentanone	10.32	43	30397	2.18 ug/l	86
52)	cis-1,3-Dichloropropene	10.63	75	20197	0.49 ug/l	100
55)	Toluene	11.18	91	61515	0.52 ug/l	97
56)	Ethyl methacrylate	11.55	69	7690	0.38 ug/l	100
57)	trans-1,3-Dichloropropene	11.51	75	16890	0.49 ug/l	93
58)	1,1,2-Trichloroethane	11.77	97	9327	0.54 ug/l	94
59)	2-Hexanone	11.86	43	12268	3.70 ug/l	93
60)	1,3-Dichloropropane	12.20	76	15985	0.52 ug/l	97
61)	Tetrachloroethene	12.31	164	14906	0.55 ug/l	95
62)	Dibromochloromethane	12.68	129	12139	0.53 ug/l	89
63)	1,2-Dibromoethane	13.06	107	8192	0.47 ug/l	86
64)	1-Chlorohexane	13.33	91	28655	0.52 ug/l	97
65)	Chlorobenzene	13.80	112	41164	0.51 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	12966	0.48 ug/l	92
67)	Ethylbenzene	13.89	91	76034	0.51 ug/l	100
68)	m-Xylene & p-Xylene	14.04	91	124345	1.06 ug/l	95
69)	o-Xylene	14.86	91	58801	0.52 ug/l	98
70)	Styrene	14.93	104	40335	0.49 ug/l	99
71)	Isopropylbenzene	15.54	105	75865	0.49 ug/l	98
73)	Bromoform	15.58	173	5106	0.51 ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.67	53	2227	0.37 ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.88	83	7625	0.47 ug/l	100
77)	1,2,3-Trichloropropane	16.19	110	3311	0.55 ug/l	80
78)	n-Propylbenzene	16.31	91	94099	0.54 ug/l	98
79)	Bromobenzene	16.40	156	12161	0.47 ug/l	95
80)	1,3,5-Trimethylbenzene	16.62	105	62021	0.54 ug/l	99
81)	2-Chlorotoluene	16.65	91	62439	0.55 ug/l	99
82)	4-Chlorotoluene	16.75	91	49002	0.51 ug/l	94
83)	tert-Butylbenzene	17.30	134	13024	0.52 ug/l	95
84)	1,2,4-Trimethylbenzene	17.37	105	55543	0.51 ug/l	100
85)	sec-Butylbenzene	17.67	105	87172	0.57 ug/l	98
86)	p-Isopropyltoluene	17.89	119	70281	0.54 ug/l	98

(#) = qualifier out of range (m) = manual integration

SC 9/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
87)	1,3-Dichlorobenzene	18.04	146	28650	0.53	ug/l	95
88)	1,2,3-Trimethylbenzene	18.14	105	57835	0.55	ug/l	96
89)	1,4-Dichlorobenzene	18.20	146	27530	0.53	ug/l	96
90)	n-Butylbenzene	18.50	91	68146	0.57	ug/l	95
91)	1,2-Dichlorobenzene	18.74	146	23552	0.53	ug/l	95
92)	1,2-Dibromo-3-chloropropan	19.73	157	1003	0.40	ug/l	93
93)	1,2,4-Trichlorobenzene	20.83	180	16918	0.56	ug/l	96
94)	Hexachlorobutadiene	20.99	225	10289	0.52	ug/l	97
95)	Naphthalene	21.18	128	22266	0.52	ug/l	100
96)	1,2,3-Trichlorobenzene	21.49	180	11480	0.50	ug/l	94

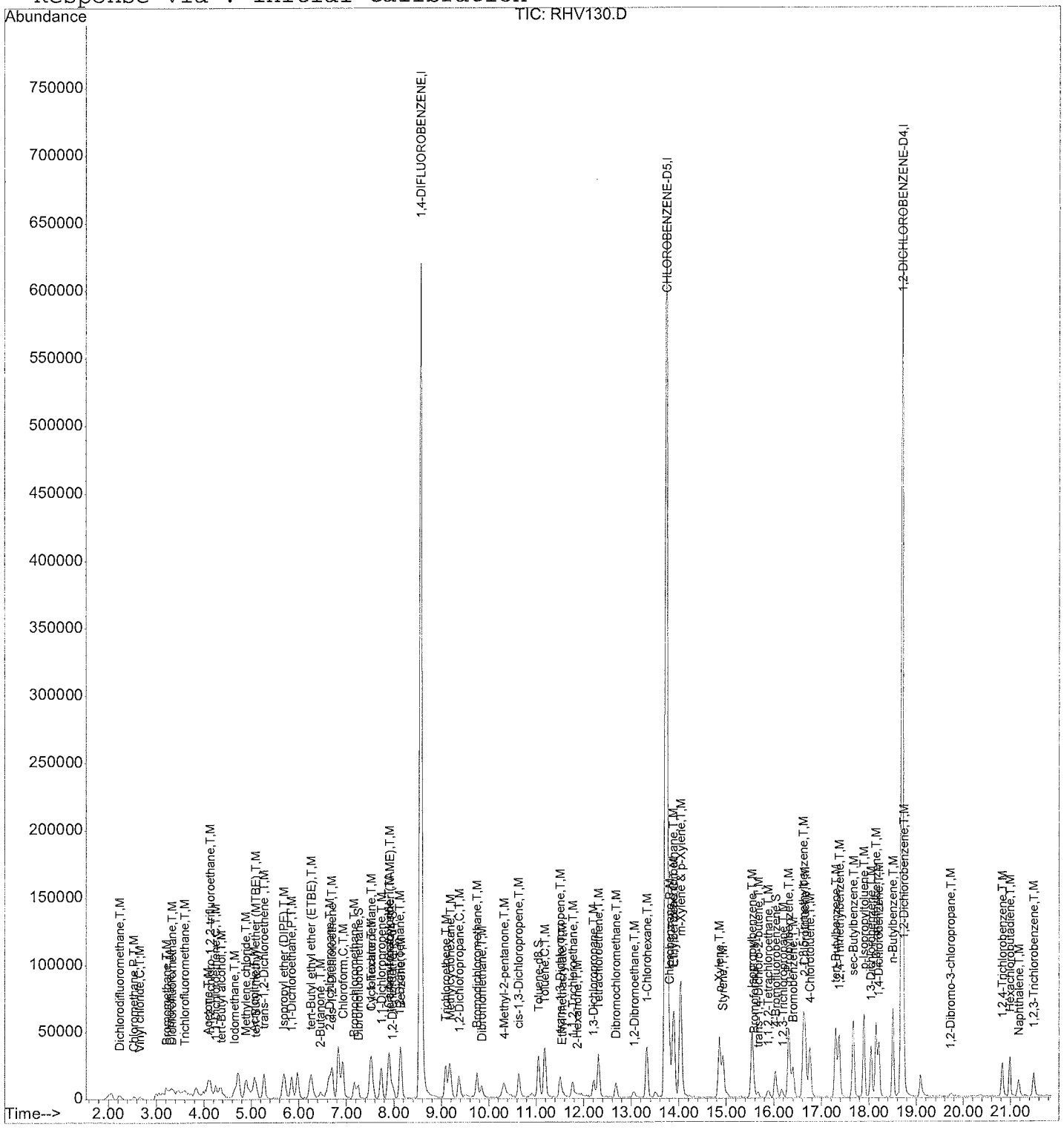
9/16/24

(#) = qualifier out of range (m) = manual integration
RHV130.D VO01H09.M Fri Aug 30 18:00:22 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Sa 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D Vial: 4
Acq On : 9 Aug 2024 6:45 pm Operator: DNguye
Sample : VO01H093 0.1/0.5 Inst : 01New
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	995321	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	821998	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	293785	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	22673	0.75	ug/l	0.00
Spiked Amount 10.000			Recovery =	7.50%		
41) 1,2-Dichloroethane-d4	7.98	65	24240	0.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.00%		
54) Toluene-d8	11.05	98	86586	0.86	ug/l	0.01
Spiked Amount 10.000			Recovery =	8.60%		
76) 4-Bromofluorobenzene	16.03	95	30002	0.80	ug/l	0.01
Spiked Amount 10.000			Recovery =	8.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	30466	0.93	ug/l	98
5) Chloromethane	2.56	50	19736	0.83	ug/l	91
6) Vinyl chloride	2.69	62	18921	0.90	ug/l	81
7) Bromomethane	3.23	94	16363	0.88	ug/l	90
8) Chloroethane	3.27	64	12940	0.80	ug/l	54
9) Dichlorofluoromethane	3.35	67	32855	0.92	ug/l	93
10) Trichlorofluoromethane	3.48	101	46525	0.98	ug/l	97
11) Acrolein	4.01	56	4025	4.01	ug/l	83
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	19202	0.98	ug/l	94
13) Acetone	4.10	43	31614	4.84	ug/l	92
14) 1,1-Dichloroethene	4.26	61	44721	0.93	ug/l	98
15) tert-Butyl alcohol	4.40	59	24804	18.52	ug/l	72
16) Iodomethane	4.66	142	37572	0.86	ug/l	96
17) Methyl acetate	4.69	43	9826	0.95	ug/l	74
18) Methylene chloride	4.89	49	31152	0.93	ug/l	96
19) Carbon disulfide	4.90	76	75491	0.91	ug/l	93
20) Acrylonitrile	5.06	53	17253	4.36	ug/l	94
21) tert-Butyl methyl ether (M	5.11	73	50189	0.92	ug/l	97
22) trans-1,2-Dichloroethene	5.29	61	40795	0.93	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	78248	0.89	ug/l	95
24) Vinyl acetate	5.86	43	25648	0.80	ug/l	92
25) 1,1-Dichloroethane	5.86	63	48765	0.91	ug/l	97
27) tert-Butyl ethyl ether (ET	6.28	59	75845	0.94	ug/l	99
28) 2-Butanone	6.46	43	31758	4.85	ug/l	83
29) 2,2-Dichloropropane	6.65	77	53766	1.00	ug/l	94
30) cis-1,2-Dichloroethene	6.71	96	30582	0.90	ug/l	97
31) Chloroform	6.93	83	61990	1.02	ug/l	99

(#) = qualifier out of range (m) = manual integration

RHV131.D VO01H09.M Fri Aug 30 18:01:02 2024 Page 1

SV 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D Vial: 4
Acq On : 9 Aug 2024 6:45 pm Operator: DNguye
Sample : VO01H093 0.1/0.5 Inst : 01New
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	18968	0.92 ug/l	91
35)	1,1,1-Trichloroethane	7.52	97	58634	0.98 ug/l	99
36)	Cyclohexane	7.54	84	40214	0.93 ug/l	95
38)	1,1-Dichloropropene	7.75	110	14068	0.86 ug/l	93
39)	Carbon tetrachloride	7.89	119	47111	0.95 ug/l	94
40)	tert-Amyl methyl ether (TA	7.91	73	54707	0.92 ug/l	97
42)	Benzene	8.15	78	102789	0.94 ug/l	98
43)	1,2-Dichloroethane	8.13	62	32983	0.96 ug/l	97
44)	Trichloroethene	9.09	130	30949	0.89 ug/l	97
45)	Methylcyclohexane	9.17	83	46423	0.97 ug/l	97
46)	1,2-Dichloropropane	9.37	63	21104	0.84 ug/l	98
47)	Bromodichloromethane	9.74	83	42128	0.96 ug/l	91
49)	Dibromomethane	9.85	93	12851	0.92 ug/l	96
50)	2-Chloroethyl vinyl ether	10.26	63	6191	0.79 ug/l	90
51)	4-Methyl-2-pentanone	10.31	43	58311	3.90 ug/l	96
52)	cis-1,3-Dichloropropene	10.63	75	38746	0.88 ug/l	95
55)	Toluene	11.18	91	118137	0.96 ug/l	99
56)	Ethyl methacrylate	11.52	69	14561	0.70 ug/l	90
57)	trans-1,3-Dichloropropene	11.51	75	30877	0.86 ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	15565	0.86 ug/l	96
59)	2-Hexanone	11.83	43	27746	5.15 ug/l	98
60)	1,3-Dichloropropane	12.22	76	27325	0.85 ug/l	99
61)	Tetrachloroethene	12.31	164	25662	0.92 ug/l	95
62)	Dibromochloromethane	12.68	129	22491	0.94 ug/l	99
63)	1,2-Dibromoethane	13.05	107	15774	0.87 ug/l	91
64)	1-Chlorohexane	13.33	91	53523	0.94 ug/l	97
65)	Chlorobenzene	13.80	112	76255	0.90 ug/l	97
66)	1,1,1,2-Tetrachloroethane	13.88	131	25787	0.91 ug/l	94
67)	Ethylbenzene	13.89	91	147217	0.95 ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	231851	1.90 ug/l	99
69)	o-Xylene	14.86	91	111932	0.95 ug/l	99
70)	Styrene	14.93	104	76846	0.89 ug/l	99
71)	Isopropylbenzene	15.54	105	150424	0.94 ug/l	99
73)	Bromoform	15.57	173	7909	0.73 ug/l	94
74)	trans-1,4-Dichloro-2-buten	15.66	53	3855	0.59 ug/l	75
75)	1,1,2,2-Tetrachloroethane	15.86	83	15709	0.90 ug/l	95
77)	1,2,3-Trichloropropane	16.17	110	5246	0.81 ug/l	100
78)	n-Propylbenzene	16.31	91	179592	0.96 ug/l	99
79)	Bromobenzene	16.41	156	25486	0.90 ug/l	96
80)	1,3,5-Trimethylbenzene	16.62	105	117474	0.95 ug/l	98
81)	2-Chlorotoluene	16.65	91	116646	0.95 ug/l	98

(#) = qualifier out of range (m) = manual integration

SW 8/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D
Acq On : 9 Aug 2024 6:45 pm
Sample : VO01H093 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024

Vial: 4
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	4-Chlorotoluene	16.75	91	97550	0.93	ug/l	97
83)	tert-Butylbenzene	17.30	134	23224	0.85	ug/l	97
84)	1,2,4-Trimethylbenzene	17.37	105	109893	0.93	ug/l	97
85)	sec-Butylbenzene	17.67	105	165895	1.00	ug/l	98
86)	p-Isopropyltoluene	17.89	119	136562	0.96	ug/l	100
87)	1,3-Dichlorobenzene	18.04	146	52499	0.90	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	110813	0.97	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	51315	0.91	ug/l	95
90)	n-Butylbenzene	18.50	91	126614	0.98	ug/l	98
91)	1,2-Dichlorobenzene	18.74	146	43042	0.89	ug/l	96
92)	1,2-Dibromo-3-chloropropan	19.72	157	2154	0.79	ug/l	89
93)	1,2,4-Trichlorobenzene	20.83	180	27564	0.84	ug/l	94
94)	Hexachlorobutadiene	20.99	225	20598	0.96	ug/l	95
95)	Naphthalene	21.17	128	37775	0.81	ug/l	97
96)	1,2,3-Trichlorobenzene	21.49	180	22299	0.89	ug/l	98

(#) = qualifier out of range (m) = manual integration

SM 9/6/24

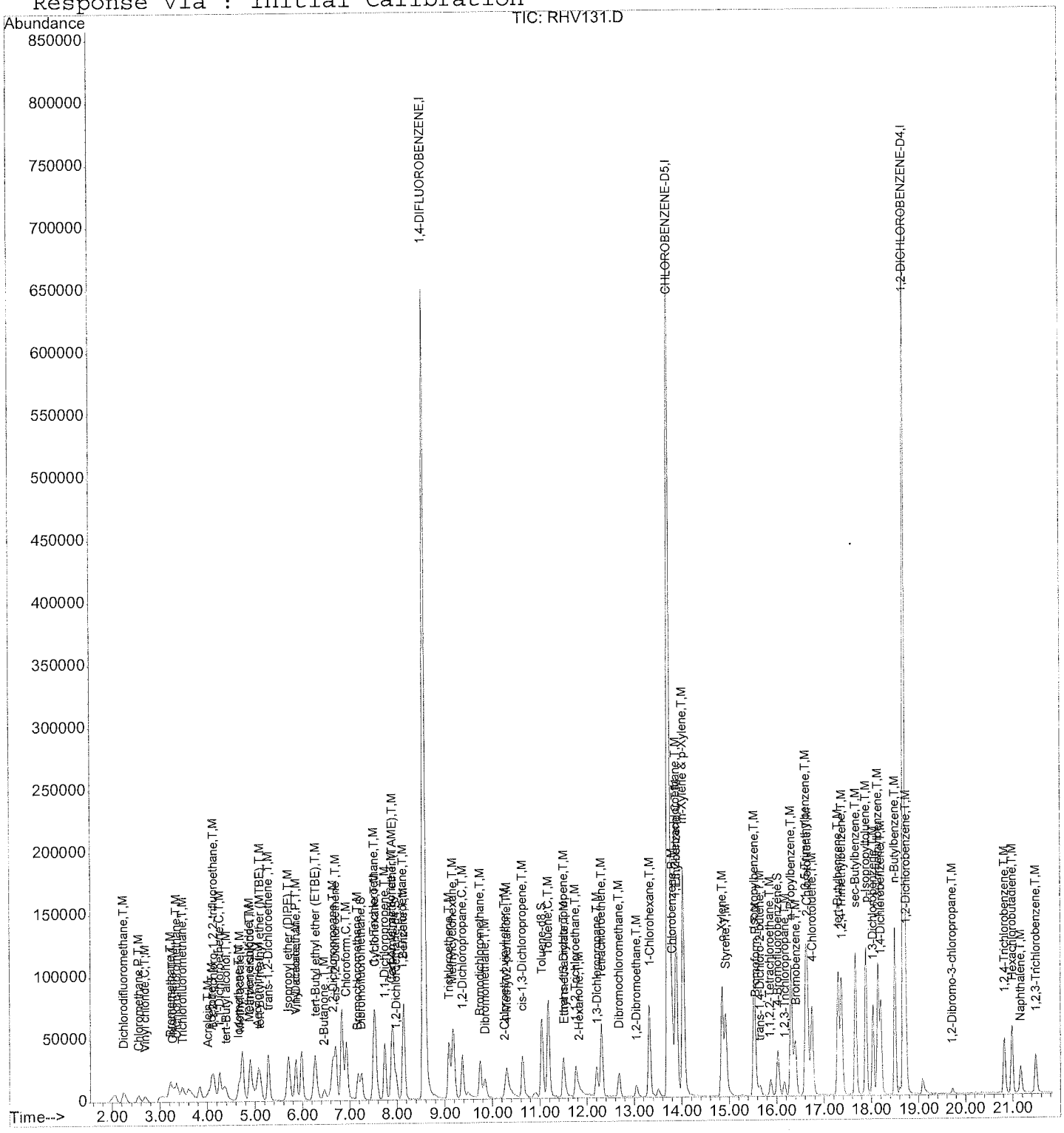
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D
Acq On : 9 Aug 2024 6:45 pm
Sample : VO01H093 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024

Vial: 4
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SM 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D Vial: 5
Acq On : 9 Aug 2024 7:15 pm Operator: DNguye
Sample : VO01H094 0.2/1.0 Inst : 01New
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	929341	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	773979	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	292349	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	55807	1.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	19.70%		
41) 1,2-Dichloroethane-d4	7.98	65	52153	2.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.80%		
54) Toluene-d8	11.03	98	193146	2.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.40%		
76) 4-Bromofluorobenzene	16.03	95	73870	1.99	ug/l	0.02
Spiked Amount 10.000			Recovery =	19.90%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	65972	2.16	ug/l	100
5) Chloromethane	2.54	50	45109	2.03	ug/l	88
6) Vinyl chloride	2.68	62	38629	1.98	ug/l	97
7) Bromomethane	3.23	94	34323	1.98	ug/l	92
8) Chloroethane	3.29	64	28277	1.86	ug/l	95
9) Dichlorofluoromethane	3.35	67	72578	2.17	ug/l	93
10) Trichlorofluoromethane	3.61	101	99914	2.25	ug/l	95
11) Acrolein	4.03	56	8713	9.30	ug/l	80
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	39758	2.18	ug/l	99
13) Acetone	4.10	43	56023	11.53	ug/l	94
14) 1,1-Dichloroethene	4.27	61	90464	2.01	ug/l	97
15) tert-Butyl alcohol	4.38	59	61420	49.12	ug/l	89
16) Iodomethane	4.67	142	85074	2.09	ug/l	100
17) Methyl acetate	4.71	43	21017	2.19	ug/l	88
18) Methylene chloride	4.89	49	64331	2.06	ug/l	98
19) Carbon disulfide	4.90	76	147578	1.90	ug/l	99
20) Acrylonitrile	5.08	53	31410	8.50	ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	105459	2.06	ug/l	93
22) trans-1,2-Dichloroethene	5.27	61	83911	2.05	ug/l	96
23) Isopropyl ether (DIPE)	5.69	45	172878	2.11	ug/l	95
24) Vinyl acetate	5.87	43	55134	1.85	ug/l	93
25) 1,1-Dichloroethane	5.85	63	101890	2.03	ug/l	98
27) tert-Butyl ethyl ether (ET	6.27	59	165369	2.19	ug/l	96
28) 2-Butanone	6.44	43	54809	8.96	ug/l	97
29) 2,2-Dichloropropane	6.65	77	106854	2.14	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	64694	2.05	ug/l	97
31) Chloroform	6.93	83	122203	2.16	ug/l	99

(#) = qualifier out of range (m) = manual integration

SC 9/4/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D Vial: 5
Acq On : 9 Aug 2024 7:15 pm Operator: DNguye
Sample : VO01H094 0.2/1.0 Inst : 01New
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	39762	2.07	ug/l	95
33)	Tetrahydrofuran	7.23	42	7343	2.15	ug/l	76
35)	1,1,1-Trichloroethane	7.52	97	125916	2.26	ug/l	97
36)	Cyclohexane	7.55	84	75239	1.87	ug/l	97
38)	1,1-Dichloropropene	7.75	110	32014	2.10	ug/l	97
39)	Carbon tetrachloride	7.89	119	103890	2.24	ug/l	98
40)	tert-Amyl methyl ether (TA	7.91	73	115634	2.08	ug/l	99
42)	Benzene	8.15	78	217291	2.12	ug/l	98
43)	1,2-Dichloroethane	8.13	62	74934	2.34	ug/l	94
44)	Trichloroethene	9.08	130	67124	2.06	ug/l	98
45)	Methylcyclohexane	9.18	83	89414	2.00	ug/l	99
46)	1,2-Dichloropropane	9.38	63	46427	1.99	ug/l	89
47)	Bromodichloromethane	9.75	83	85439	2.10	ug/l	97
48)	1,4-Dioxane	9.82	88	3945	34.11	ug/l	99
49)	Dibromomethane	9.82	93	27628	2.13	ug/l	97
50)	2-Chloroethyl vinyl ether	10.25	63	12684	1.73	ug/l	94
51)	4-Methyl-2-pentanone	10.29	43	132706	9.50	ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	85667	2.08	ug/l	100
55)	Toluene	11.18	91	248416	2.14	ug/l	100
56)	Ethyl methacrylate	11.49	69	37895	1.94	ug/l	94
57)	trans-1,3-Dichloropropene	11.49	75	71080	2.11	ug/l	99
58)	1,1,2-Trichloroethane	11.78	97	31742	1.87	ug/l	90
59)	2-Hexanone	11.81	43	70967	9.74	ug/l	95
60)	1,3-Dichloropropane	12.21	76	62124	2.05	ug/l	97
61)	Tetrachloroethene	12.31	164	52731	2.00	ug/l	98
62)	Dibromochloromethane	12.68	129	46698	2.08	ug/l	94
63)	1,2-Dibromoethane	13.05	107	36203	2.12	ug/l	98
64)	1-Chlorohexane	13.32	91	111167	2.07	ug/l	97
65)	Chlorobenzene	13.81	112	168518	2.11	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	57260	2.15	ug/l	96
67)	Ethylbenzene	13.89	91	318134	2.19	ug/l	100
68)	m-Xylene & p-Xylene	14.03	91	492634	4.30	ug/l	98
69)	o-Xylene	14.86	91	243021	2.20	ug/l	100
70)	Styrene	14.93	104	171716	2.12	ug/l	97
71)	Isopropylbenzene	15.54	105	321702	2.12	ug/l	100
73)	Bromoform	15.57	173	20333	1.89	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.64	53	11156	1.71	ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.88	83	35677	2.04	ug/l	95
77)	1,2,3-Trichloropropane	16.16	110	13275	2.07	ug/l	93
78)	n-Propylbenzene	16.31	91	384796	2.07	ug/l	100
79)	Bromobenzene	16.40	156	54854	1.95	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D
Acq On : 9 Aug 2024 7:15 pm
Sample : VO01H094 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 5
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.62	105	253323	2.06 ug/l	98
81) 2-Chlorotoluene	16.65	91	243448	2.00 ug/l	99
82) 4-Chlorotoluene	16.74	91	215125	2.06 ug/l	100
83) tert-Butylbenzene	17.30	134	54261	2.00 ug/l	100
84) 1,2,4-Trimethylbenzene	17.36	105	248740	2.12 ug/l	98
85) sec-Butylbenzene	17.67	105	344731	2.08 ug/l	99
86) p-Isopropyltoluene	17.89	119	302431	2.15 ug/l	99
87) 1,3-Dichlorobenzene	18.04	146	112458	1.93 ug/l	95
88) 1,2,3-Trimethylbenzene	18.15	105	244867	2.15 ug/l	98
89) 1,4-Dichlorobenzene	18.21	146	113654	2.02 ug/l	98
90) n-Butylbenzene	18.50	91	282361	2.19 ug/l	98
91) 1,2-Dichlorobenzene	18.72	146	98168	2.05 ug/l	97
92) 1,2-Dibromo-3-chloropropan	19.73	157	5426	2.01 ug/l	80
93) 1,2,4-Trichlorobenzene	20.83	180	66203	2.03 ug/l	97
94) Hexachlorobutadiene	20.99	225	41854	1.95 ug/l	94
95) Naphthalene	21.17	128	92074	1.98 ug/l	94
96) 1,2,3-Trichlorobenzene	21.48	180	52448	2.10 ug/l	92

(#) = qualifier out of range (m) = manual integration

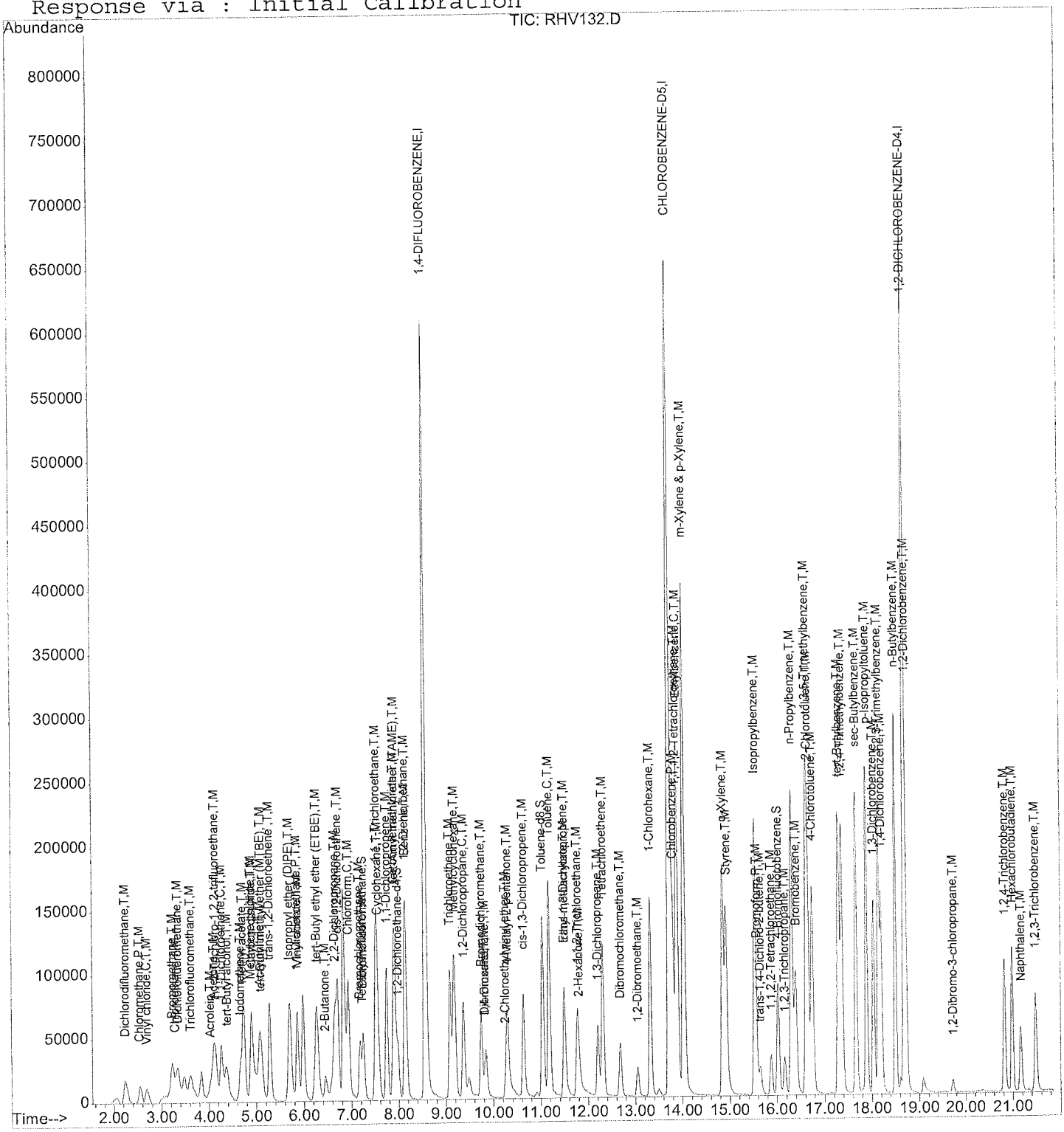
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D
Acq On : 9 Aug 2024 7:15 pm
Sample : VO01H094 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 5
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Sca 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D
Acq On : 9 Aug 2024 7:46 pm
Sample : VO01H095 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 6
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	944867	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	782335	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	297857	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	156156	5.43	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.30%		
41) 1,2-Dichloroethane-d4	7.98	65	139228	5.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.50%		
54) Toluene-d8	11.03	98	520164	5.44	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.40%		
76) 4-Bromofluorobenzene	16.01	95	198471	5.25	ug/l	0.00
Spiked Amount 10.000			Recovery =	52.50%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	176344	5.67	ug/l	97
5) Chloromethane	2.55	50	113480	5.03	ug/l	96
6) Vinyl chloride	2.68	62	106845	5.37	ug/l	95
7) Bromomethane	3.23	94	89457	5.08	ug/l	93
8) Chloroethane	3.29	64	73010	4.73	ug/l	99
9) Dichlorofluoromethane	3.35	67	173930	5.11	ug/l	97
10) Trichlorofluoromethane	3.48	101	229883	5.09	ug/l	99
11) Acrolein	4.01	56	23263	24.43	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	96485	5.21	ug/l	100
13) Acetone	4.10	43	111900	25.17	ug/l	97
14) 1,1-Dichloroethene	4.26	61	240030	5.25	ug/l	99
15) tert-Butyl alcohol	4.37	59	179705	141.35	ug/l	99
16) Iodomethane	4.66	142	210193	5.09	ug/l	96
17) Methyl acetate	4.68	43	47344	4.85	ug/l	94
18) Methylene chloride	4.89	49	164275	5.17	ug/l	96
19) Carbon disulfide	4.92	76	391595	4.95	ug/l	98
20) Acrylonitrile	5.06	53	90738	24.16	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	282100	5.43	ug/l	100
22) trans-1,2-Dichloroethene	5.29	61	220434	5.29	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	438709	5.28	ug/l	99
24) Vinyl acetate	5.85	43	153880	5.07	ug/l	99
25) 1,1-Dichloroethane	5.86	63	262745	5.15	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	411440	5.35	ug/l	100
28) 2-Butanone	6.44	43	150643	24.22	ug/l	99
29) 2,2-Dichloropropane	6.66	77	268946	5.29	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	164584	5.12	ug/l	98
31) Chloroform	6.93	83	303402	5.28	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D
Acq On : 9 Aug 2024 7:46 pm
Sample : VO01H095 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 6
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	99406	5.10	ug/l	100
33)	Tetrahydrofuran	7.21	42	20729	5.97	ug/l	82
35)	1,1,1-Trichloroethane	7.52	97	315591	5.57	ug/l	99
36)	Cyclohexane	7.54	84	203812	4.99	ug/l	97
38)	1,1-Dichloropropene	7.75	110	77861	5.01	ug/l	98
39)	Carbon tetrachloride	7.89	119	258209	5.48	ug/l	98
40)	tert-Amyl methyl ether (TA	7.91	73	301526	5.34	ug/l	99
42)	Benzene	8.15	78	550624	5.29	ug/l	99
43)	1,2-Dichloroethane	8.12	62	184098	5.66	ug/l	100
44)	Trichloroethene	9.08	130	166925	5.04	ug/l	97
45)	Methylcyclohexane	9.18	83	242377	5.32	ug/l	99
46)	1,2-Dichloropropane	9.36	63	122908	5.17	ug/l	97
47)	Bromodichloromethane	9.74	83	208845	5.04	ug/l	99
48)	1,4-Dioxane	9.79	88	10959	93.21	ug/l	95
49)	Dibromomethane	9.83	93	67341	5.09	ug/l	92
50)	2-Chloroethyl vinyl ether	10.25	63	37832	5.09	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	392237	27.62	ug/l	99
52)	cis-1,3-Dichloropropene	10.63	75	225216	5.37	ug/l	100
55)	Toluene	11.17	91	640556	5.46	ug/l	99
56)	Ethyl methacrylate	11.48	69	108013	5.46	ug/l	99
57)	trans-1,3-Dichloropropene	11.49	75	191369	5.63	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	95428	5.56	ug/l	97
59)	2-Hexanone	11.77	43	234467	26.22	ug/l	97
60)	1,3-Dichloropropane	12.20	76	165246	5.40	ug/l	99
61)	Tetrachloroethene	12.31	164	139666	5.25	ug/l	98
62)	Dibromochloromethane	12.68	129	119480	5.26	ug/l	99
63)	1,2-Dibromoethane	13.05	107	92674	5.36	ug/l	100
64)	1-Chlorohexane	13.32	91	281821	5.18	ug/l	99
65)	Chlorobenzene	13.79	112	436346	5.42	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.88	131	146983	5.46	ug/l	99
67)	Ethylbenzene	13.89	91	808736	5.51	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	1271852	10.98	ug/l	100
69)	o-Xylene	14.86	91	635102	5.69	ug/l	97
70)	Styrene	14.92	104	457496	5.60	ug/l	100
71)	Isopropylbenzene	15.52	105	853174	5.58	ug/l	100
73)	Bromoform	15.57	173	59824	5.47	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	34382	5.17	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	98436	5.53	ug/l	98
77)	1,2,3-Trichloropropane	16.16	110	35532	5.43	ug/l	92
78)	n-Propylbenzene	16.31	91	1020830	5.39	ug/l	100
79)	Bromobenzene	16.40	156	147713	5.15	ug/l	99

(#) = qualifier out of range (m) = manual integration

SC 09/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D Vial: 6
Acq On : 9 Aug 2024 7:46 pm Operator: DNguye
Sample : VO01H095 0.5/2.5 Inst : 01New
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

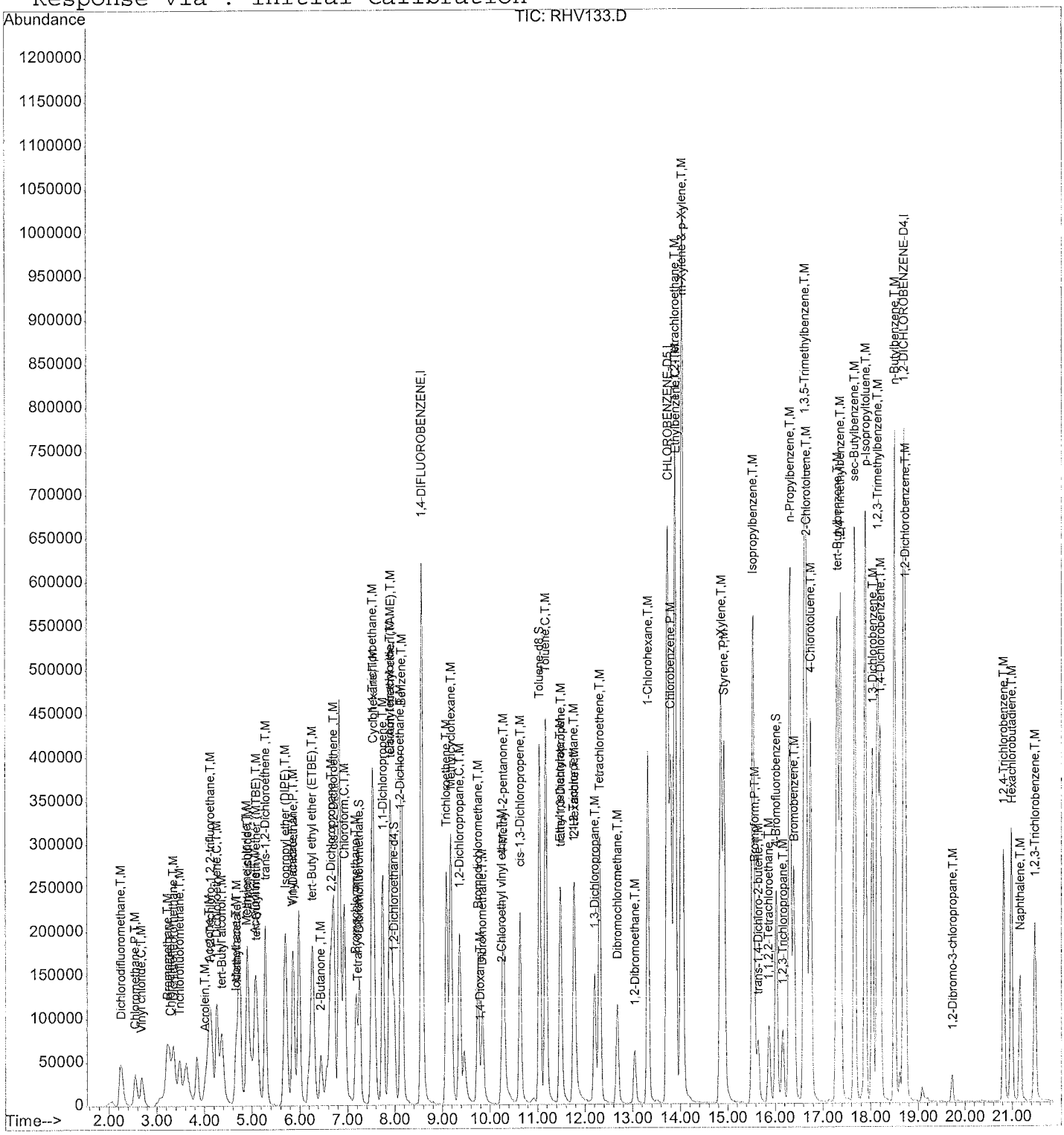
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	679737	5.44	ug/l	98
81)	2-Chlorotoluene	16.65	91	652654	5.25	ug/l	100
82)	4-Chlorotoluene	16.74	91	572332	5.39	ug/l	98
83)	tert-Butylbenzene	17.30	134	136532	4.94	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	650237	5.44	ug/l	100
85)	sec-Butylbenzene	17.66	105	936507	5.55	ug/l	100
86)	p-Isopropyltoluene	17.89	119	796468	5.55	ug/l	99
87)	1,3-Dichlorobenzene	18.04	146	312015	5.25	ug/l	99
88)	1,2,3-Trimethylbenzene	18.15	105	645332	5.57	ug/l	100
89)	1,4-Dichlorobenzene	18.20	146	294724	5.13	ug/l	97
90)	n-Butylbenzene	18.50	91	714305	5.43	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	264324	5.40	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.73	157	15407	5.59	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	173273	5.21	ug/l	99
94)	Hexachlorobutadiene	20.99	225	113734	5.21	ug/l	99
95)	Naphthalene	21.17	128	250291	5.28	ug/l	97
96)	1,2,3-Trichlorobenzene	21.48	180	134434	5.29	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D Vial: 6
Acq On : 9 Aug 2024 7:46 pm Operator: DNguye
Sample : VO01H095 0.5/2.5 Inst : 01New
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SM 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D
Acq On : 9 Aug 2024 8:17 pm
Sample : VO01H096 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 7
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	962079	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	831588	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	320498	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	317917	10.87	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.70%		
41) 1,2-Dichloroethane-d4	7.98	65	287348	11.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.50%		
54) Toluene-d8	11.03	98	1083309	10.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.60%		
76) 4-Bromofluorobenzene	16.01	95	405953	9.98	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.80%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	367558	11.61	ug/l	100
5) Chloromethane	2.54	50	246286	10.73	ug/l	100
6) Vinyl chloride	2.68	62	230246	11.37	ug/l	100
7) Bromomethane	3.21	94	183985	10.26	ug/l	100
8) Chloroethane	3.27	64	161113	10.25	ug/l	100
9) Dichlorofluoromethane	3.35	67	350297	10.11	ug/l	100
10) Trichlorofluoromethane	3.48	101	526820	11.45	ug/l	100
11) Acrolein	4.01	56	46359	47.82	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	195663	10.38	ug/l	100
13) Acetone	4.10	43	215012	49.81	ug/l	100
14) 1,1-Dichloroethene	4.25	61	476924	10.24	ug/l	100
15) tert-Butyl alcohol	4.37	59	335001	258.79	ug/l	100
16) Iodomethane	4.66	142	440198	10.46	ug/l	100
17) Methyl acetate	4.68	43	98398	9.89	ug/l	100
18) Methylene chloride	4.89	49	318119	9.83	ug/l	100
19) Carbon disulfide	4.90	76	851870	10.57	ug/l	100
20) Acrylonitrile	5.05	53	187795	49.11	ug/l	100
21) tert-Butyl methyl ether (M	5.09	73	547466	10.34	ug/l	100
22) trans-1,2-Dichloroethene	5.27	61	435508	10.27	ug/l	100
23) Isopropyl ether (DIPE)	5.69	45	857937	10.14	ug/l	100
24) Vinyl acetate	5.85	43	325682	10.54	ug/l	100
25) 1,1-Dichloroethane	5.85	63	519607	10.00	ug/l	100
27) tert-Butyl ethyl ether (ET	6.26	59	808757	10.33	ug/l	100
28) 2-Butanone	6.44	43	305798	48.28	ug/l	100
29) 2,2-Dichloropropane	6.65	77	538863	10.40	ug/l	100
30) cis-1,2-Dichloroethene	6.71	96	335591	10.26	ug/l	100
31) Chloroform	6.93	83	598324	10.23	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D Vial: 7
Acq On : 9 Aug 2024 8:17 pm Operator: DNguye
Sample : VO01H096 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	200895	10.11	ug/l	100
33)	Tetrahydrofuran	7.21	42	32034	9.06	ug/l	100
35)	1,1,1-Trichloroethane	7.51	97	618367	10.71	ug/l	100
36)	Cyclohexane	7.54	84	433940	10.44	ug/l	100
38)	1,1-Dichloropropene	7.73	110	158741	10.04	ug/l	100
39)	Carbon tetrachloride	7.89	119	516332	10.76	ug/l	100
40)	tert-Amyl methyl ether (TA	7.91	73	592996	10.31	ug/l	100
42)	Benzene	8.15	78	1106697	10.45	ug/l	100
43)	1,2-Dichloroethane	8.12	62	365537	11.03	ug/l	100
44)	Trichloroethene	9.08	130	344897	10.23	ug/l	100
45)	Methylcyclohexane	9.18	83	488415	10.53	ug/l	100
46)	1,2-Dichloropropane	9.36	63	249523	10.32	ug/l	100
47)	Bromodichloromethane	9.75	83	423474	10.03	ug/l	100
48)	1,4-Dioxane	9.78	88	24332	203.24	ug/l	100
49)	Dibromomethane	9.83	93	138344	10.28	ug/l	100
50)	2-Chloroethyl vinyl ether	10.23	63	73857	9.76	ug/l	100
51)	4-Methyl-2-pentanone	10.28	43	788348	54.51	ug/l	100
52)	cis-1,3-Dichloropropene	10.63	75	451018	10.56	ug/l	100
55)	Toluene	11.17	91	1307968	10.50	ug/l	100
56)	Ethyl methacrylate	11.46	69	223328	10.63	ug/l	100
57)	trans-1,3-Dichloropropene	11.48	75	388371	10.75	ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	184365	10.10	ug/l	100
59)	2-Hexanone	11.76	43	509587	51.03	ug/l	100
60)	1,3-Dichloropropane	12.20	76	333447	10.26	ug/l	100
61)	Tetrachloroethene	12.31	164	277290	9.80	ug/l	100
62)	Dibromochloromethane	12.68	129	250854	10.39	ug/l	100
63)	1,2-Dibromoethane	13.03	107	184590	10.04	ug/l	100
64)	1-Chlorohexane	13.32	91	572517	9.91	ug/l	100
65)	Chlorobenzene	13.79	112	886613	10.35	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	304261	10.64	ug/l	100
67)	Ethylbenzene	13.89	91	1648829	10.57	ug/l	100
68)	m-Xylene & p-Xylene	14.03	91	2525052	20.50	ug/l	100
69)	o-Xylene	14.84	91	1277808	10.76	ug/l	100
70)	Styrene	14.92	104	912792	10.50	ug/l	100
71)	Isopropylbenzene	15.52	105	1710871	10.52	ug/l	100
73)	Bromoform	15.57	173	120818	10.26	ug/l	100
74)	trans-1,4-Dichloro-2-buten	15.63	53	71724	10.02	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.86	83	194330	10.15	ug/l	100
77)	1,2,3-Trichloropropane	16.16	110	67329	9.56	ug/l	100
78)	n-Propylbenzene	16.31	91	2038997	10.01	ug/l	100
79)	Bromobenzene	16.40	156	299740	9.71	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D Vial: 7
Acq On : 9 Aug 2024 8:17 pm Operator: DNguye
Sample : VO01H096 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1314569	9.77 ug/l	100
81)	2-Chlorotoluene	16.65	91	1310655	9.80 ug/l	100
82)	4-Chlorotoluene	16.74	91	1130456	9.89 ug/l	100
83)	tert-Butylbenzene	17.30	134	282803	9.51 ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	1295259	10.08 ug/l	100
85)	sec-Butylbenzene	17.66	105	1844631	10.16 ug/l	100
86)	p-Isopropyltoluene	17.88	119	1565765	10.14 ug/l	100
87)	1,3-Dichlorobenzene	18.04	146	627224	9.81 ug/l	100
88)	1,2,3-Trimethylbenzene	18.15	105	1285939	10.31 ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	607095	9.82 ug/l	100
90)	n-Butylbenzene	18.50	91	1461921	10.34 ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	527594	10.03 ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	32206	10.86 ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	358763	10.03 ug/l	100
94)	Hexachlorobutadiene	20.99	225	239251	10.19 ug/l	100
95)	Naphthalene	21.17	128	529576	10.39 ug/l	100
96)	1,2,3-Trichlorobenzene	21.48	180	280464	10.26 ug/l	100

SC 09/6/24

(#) = qualifier out of range (m) = manual integration

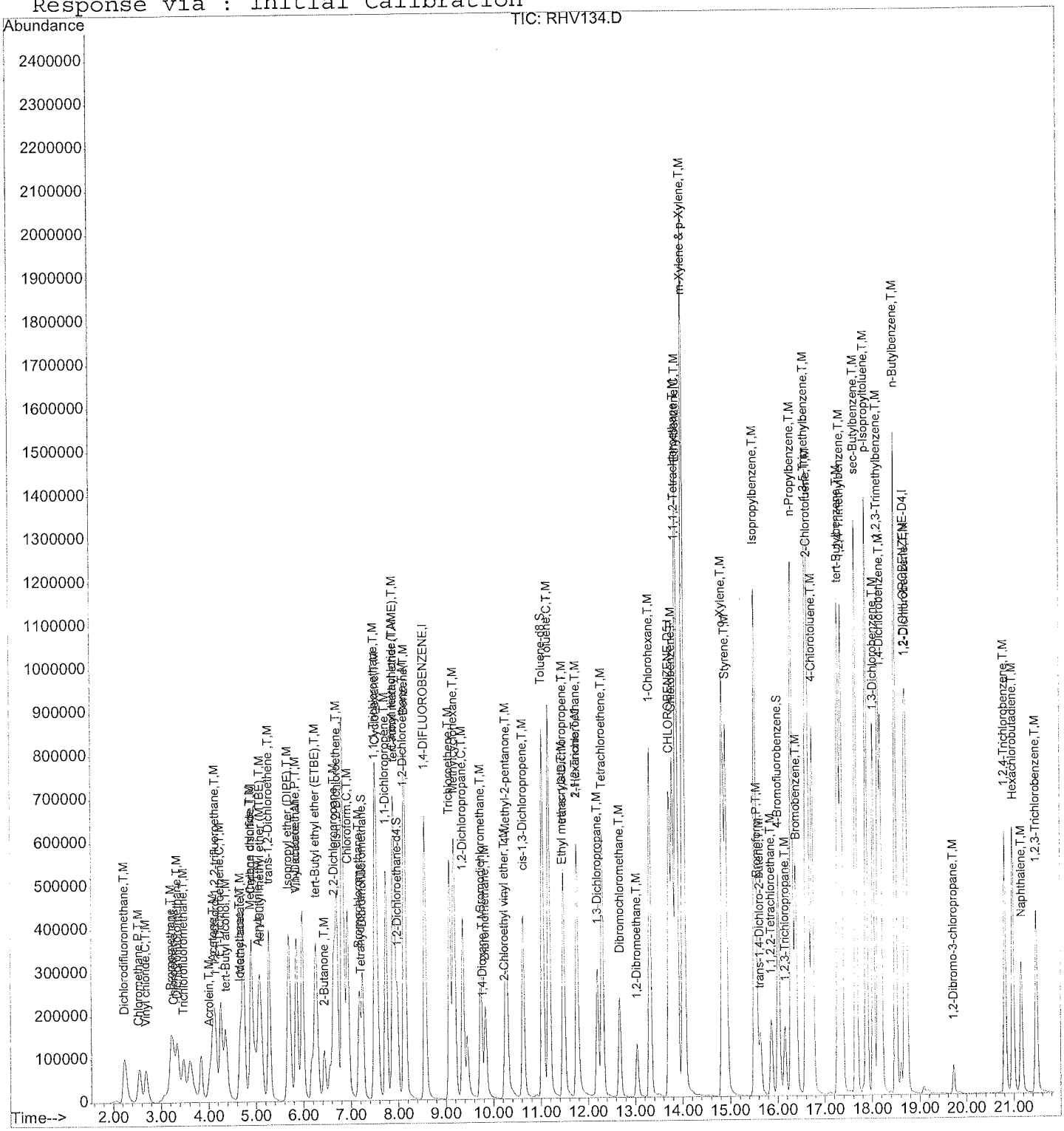
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D
Acq On : 9 Aug 2024 8:17 pm
Sample : VO01H096 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 7
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SM 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1150883	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1018537	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	384694	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	765356	21.87	ug/l	0.00
Spiked Amount 10.000			Recovery = 218.70%			
41) 1,2-Dichloroethane-d4	7.97	65	677959	21.79	ug/l	-0.01
Spiked Amount 10.000			Recovery = 217.90%			
54) Toluene-d8	11.03	98	2602667	20.91	ug/l	0.00
Spiked Amount 10.000			Recovery = 209.10%			
76) 4-Bromofluorobenzene	16.01	95	1002851	20.55	ug/l	0.00
Spiked Amount 10.000			Recovery = 205.50%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	785678	20.75	ug/l	97
5) Chloromethane	2.54	50	541646	19.73	ug/l	98
6) Vinyl chloride	2.67	62	513628	21.21	ug/l	94
7) Bromomethane	3.23	94	422952	19.72	ug/l	97
8) Chloroethane	3.27	64	377247	20.07	ug/l	97
9) Dichlorofluoromethane	3.35	67	827118	19.95	ug/l	99
10) Trichlorofluoromethane	3.60	101	1055028	19.17	ug/l	94
11) Acrolein	4.01	56	111080	95.77	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	450807	20.00	ug/l	98
13) Acetone	4.09	43	506208	100.56	ug/l	96
14) 1,1-Dichloroethene	4.25	61	1089229	19.56	ug/l	97
15) tert-Butyl alcohol	4.37	59	830279	536.18	ug/l	97
16) Iodomethane	4.67	142	1029215	20.44	ug/l	96
17) Methyl acetate	4.68	43	228998	19.24	ug/l	99
18) Methylene chloride	4.89	49	759786	19.63	ug/l	98
19) Carbon disulfide	4.90	76	2032344	21.08	ug/l	100
20) Acrylonitrile	5.05	53	476585	104.20	ug/l	99
21) tert-Butyl methyl ether (M	5.08	73	1291834	20.40	ug/l	98
22) trans-1,2-Dichloroethene	5.27	61	997435	19.67	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	2069096	20.44	ug/l	98
24) Vinyl acetate	5.85	43	777719	21.03	ug/l	97
25) 1,1-Dichloroethane	5.85	63	1245038	20.03	ug/l	99
27) tert-Butyl ethyl ether (ET	6.27	59	1896011	20.25	ug/l	99
28) 2-Butanone	6.43	43	776970	102.54	ug/l	100
29) 2,2-Dichloropropane	6.65	77	1227491	19.81	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	776590	19.85	ug/l	97
31) Chloroform	6.93	83	1319238	18.85	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	491878	20.70	ug/l	98
33)	Tetrahydrofuran	7.21	42	81729	19.32	ug/l	94
35)	1,1,1-Trichloroethane	7.51	97	1375586	19.92	ug/l	99
36)	Cyclohexane	7.54	84	970280	19.51	ug/l	99
38)	1,1-Dichloropropene	7.73	110	379669	20.07	ug/l	100
39)	Carbon tetrachloride	7.90	119	1155219	20.12	ug/l	100
40)	tert-Amyl methyl ether (TA	7.91	73	1437980	20.90	ug/l	100
42)	Benzene	8.15	78	2636933	20.81	ug/l	100
43)	1,2-Dichloroethane	8.12	62	823275	20.77	ug/l	97
44)	Trichloroethene	9.08	130	802073	19.89	ug/l	99
45)	Methylcyclohexane	9.17	83	1109057	19.99	ug/l	98
46)	1,2-Dichloropropane	9.36	63	601312	20.78	ug/l	97
47)	Bromodichloromethane	9.73	83	966732	19.15	ug/l	99
48)	1,4-Dioxane	9.77	88	59642	416.46	ug/l	88
49)	Dibromomethane	9.83	93	326433	20.27	ug/l	98
50)	2-Chloroethyl vinyl ether	10.23	63	196401	21.69	ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	1965955	113.64	ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	1075089	21.05	ug/l	99
55)	Toluene	11.17	91	2960512	19.40	ug/l	99
56)	Ethyl methacrylate	11.46	69	556104	21.61	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	903478	20.41	ug/l	99
58)	1,1,2-Trichloroethane	11.76	97	448543	20.06	ug/l	99
59)	2-Hexanone	11.76	43	1275894	101.74	ug/l	97
60)	1,3-Dichloropropane	12.19	76	812582	20.41	ug/l	99
61)	Tetrachloroethene	12.31	164	635772	18.34	ug/l	99
62)	Dibromochloromethane	12.66	129	586615	19.85	ug/l	100
63)	1,2-Dibromoethane	13.03	107	453234	20.14	ug/l	99
64)	1-Chlorohexane	13.32	91	1346564	19.02	ug/l	99
65)	Chlorobenzene	13.79	112	2065952	19.69	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	703194	20.07	ug/l	99
67)	Ethylbenzene	13.88	91	3709861	19.42	ug/l	97
68)	m-Xylene & p-Xylene	14.03	91	5569365	36.92	ug/l	97
69)	o-Xylene	14.84	91	2875405	19.77	ug/l	100
70)	Styrene	14.92	104	2174056	20.43	ug/l	97
71)	Isopropylbenzene	15.52	105	3813167	19.14	ug/l	99
73)	Bromoform	15.57	173	289936	20.52	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	178121	20.73	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	491863	21.41	ug/l	96
77)	1,2,3-Trichloropropane	16.14	110	168364	19.91	ug/l	96
78)	n-Propylbenzene	16.29	91	4613231	18.86	ug/l	99
79)	Bromobenzene	16.38	156	709263	19.15	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	3005426	18.61	ug/l	97
81)	2-Chlorotoluene	16.65	91	2992664	18.64	ug/l	98
82)	4-Chlorotoluene	16.74	91	2549486	18.59	ug/l	98
83)	tert-Butylbenzene	17.30	134	673296	18.85	ug/l	99
84)	1,2,4-Trimethylbenzene	17.36	105	2904957	18.83	ug/l	97
85)	sec-Butylbenzene	17.66	105	4132246	18.97	ug/l	99
86)	p-Isopropyltoluene	17.88	119	3562034	19.21	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	1447912	18.88	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	2885446	19.28	ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	1416710	19.10	ug/l	99
90)	n-Butylbenzene	18.50	91	3192652	18.81	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	1237082	19.58	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	79839	22.44	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	853446	19.88	ug/l	100
94)	Hexachlorobutadiene	20.99	225	547118	19.42	ug/l	100
95)	Naphthalene	21.17	128	1278083	20.89	ug/l	98
96)	1,2,3-Trichlorobenzene	21.48	180	653907	19.94	ug/l	99

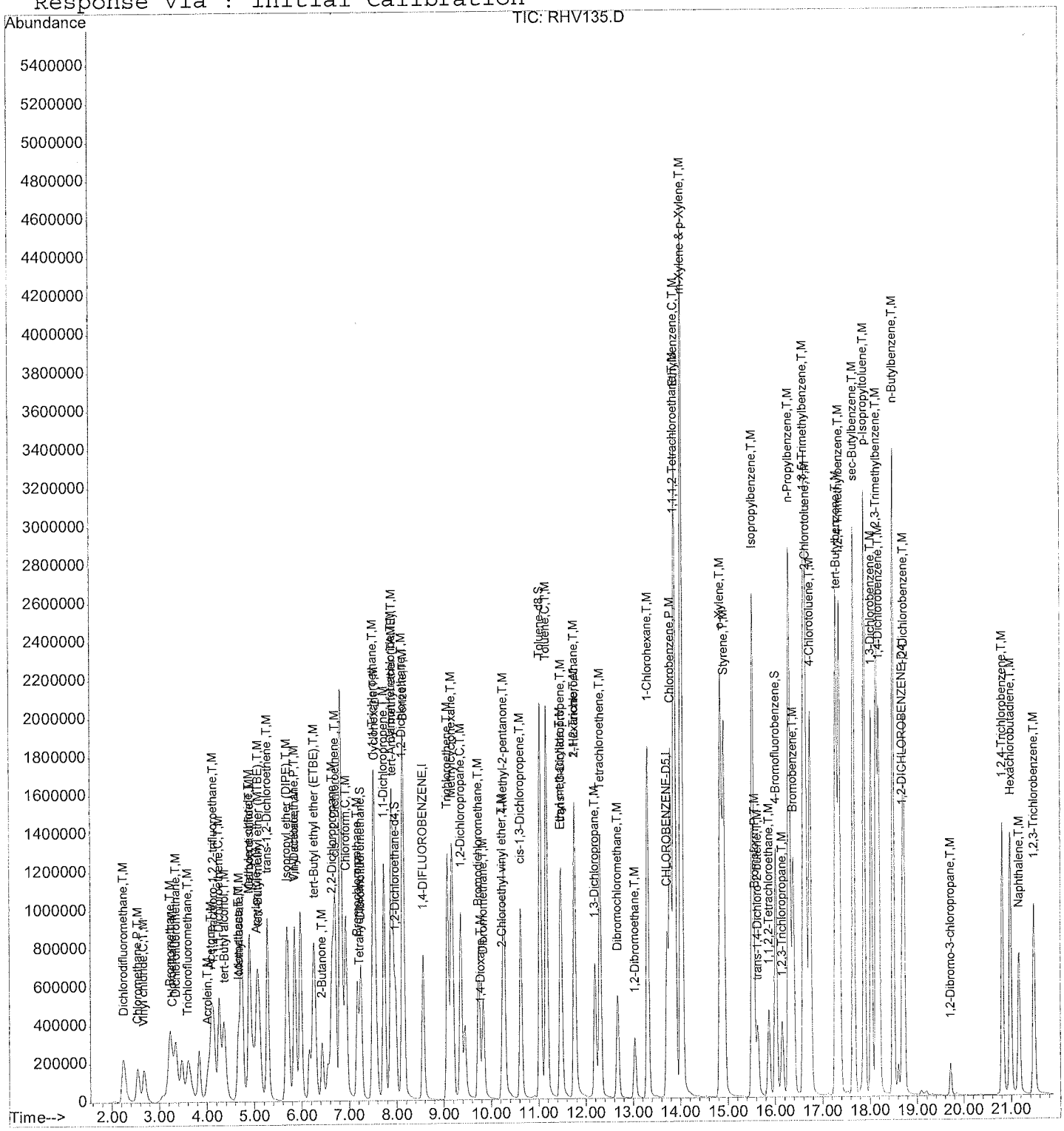
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D
Acq On : 9 Aug 2024 8:47 pm
Sample : VO01H097 2.0/10
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 8
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1461385	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	1212032	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	417210	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	1328233	29.89	ug/l	0.00
Spiked Amount 10.000			Recovery =	298.90%		
41) 1,2-Dichloroethane-d4	7.98	65	1070237	27.09	ug/l	0.00
Spiked Amount 10.000			Recovery =	270.90%		
54) Toluene-d8	11.03	98	4525292	30.55	ug/l	0.00
Spiked Amount 10.000			Recovery =	305.50%		
76) 4-Bromofluorobenzene	16.01	95	1632018	30.83	ug/l	0.00
Spiked Amount 10.000			Recovery =	308.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	1325069	27.55	ug/l	99
5) Chloromethane	2.54	50	944572	27.10	ug/l	98
6) Vinyl chloride	2.69	62	942460	30.65	ug/l	99
7) Bromomethane	3.23	94	770930	28.31	ug/l	94
8) Chloroethane	3.29	64	700835	29.36	ug/l	92
9) Dichlorofluoromethane	3.35	67	1425385	27.07	ug/l	99
10) Trichlorofluoromethane	3.48	101	1922790	27.51	ug/l	99
11) Acrolein	4.03	56	217539	147.71	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	822034	28.72	ug/l	98
13) Acetone	4.10	43	866792	136.51	ug/l	94
14) 1,1-Dichloroethene	4.25	61	1973543	27.91	ug/l	95
15) tert-Butyl alcohol	4.37	59	1338284	680.61	ug/l	99
16) Iodomethane	4.66	142	1915115	29.96	ug/l	91
17) Methyl acetate	4.68	43	425400	28.15	ug/l	98
18) Methylene chloride	4.89	49	1394981	28.38	ug/l	97
19) Carbon disulfide	4.90	76	3839603	31.37	ug/l	100
20) Acrylonitrile	5.05	53	901212	155.17	ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	2295214	28.54	ug/l	94
22) trans-1,2-Dichloroethene	5.27	61	1846052	28.66	ug/l	96
23) Isopropyl ether (DIPE)	5.70	45	3839771	29.87	ug/l	99
24) Vinyl acetate	5.85	43	1354892	28.85	ug/l	96
25) 1,1-Dichloroethane	5.85	63	2294729	29.08	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	3377877	28.42	ug/l	99
28) 2-Butanone	6.43	43	1385103	143.96	ug/l	99
29) 2,2-Dichloropropane	6.65	77	2083192	26.48	ug/l	98
30) cis-1,2-Dichloroethene	6.71	96	1462643	29.45	ug/l	94
31) Chloroform	6.93	83	2272439	25.57	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	881140	29.20	ug/l	99
33)	Tetrahydrofuran	7.21	42	141560	26.35	ug/l	93
35)	1,1,1-Trichloroethane	7.52	97	2341349	26.70	ug/l	99
36)	Cyclohexane	7.54	84	1962879	31.08	ug/l	100
38)	1,1-Dichloropropene	7.75	110	712914	29.67	ug/l	99
39)	Carbon tetrachloride	7.89	119	1951070	26.76	ug/l	99
40)	tert-Amyl methyl ether (TA	7.91	73	2495207	28.56	ug/l	100
42)	Benzene	8.15	78	4773208	29.66	ug/l	99
43)	1,2-Dichloroethane	8.12	62	1359635	27.02	ug/l	99
44)	Trichloroethene	9.08	130	1450073	28.32	ug/l	98
45)	Methylcyclohexane	9.18	83	2278446	32.34	ug/l	97
46)	1,2-Dichloropropane	9.36	63	1087666	29.61	ug/l	92
47)	Bromodichloromethane	9.75	83	1641626	25.61	ug/l	100
48)	1,4-Dioxane	9.77	88	101171	556.34	ug/l	88
49)	Dibromomethane	9.83	93	563077	27.54	ug/l	97
50)	2-Chloroethyl vinyl ether	10.23	63	353243	30.72	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	3374776	153.63	ug/l	97
52)	cis-1,3-Dichloropropene	10.63	75	1903847	29.35	ug/l	97
55)	Toluene	11.17	91	5289587	29.13	ug/l	97
56)	Ethyl methacrylate	11.45	69	969178	31.64	ug/l	93
57)	trans-1,3-Dichloropropene	11.48	75	1528669	29.02	ug/l	97
58)	1,1,2-Trichloroethane	11.76	97	782516	29.41	ug/l	98
59)	2-Hexanone	11.76	43	2150018	143.04	ug/l	96
60)	1,3-Dichloropropane	12.20	76	1372065	28.96	ug/l	99
61)	Tetrachloroethene	12.31	164	1145792	27.78	ug/l	97
62)	Dibromochloromethane	12.68	129	974891	27.72	ug/l	99
63)	1,2-Dibromoethane	13.03	107	784356	29.28	ug/l	98
64)	1-Chlorohexane	13.32	91	2398148	28.47	ug/l	99
65)	Chlorobenzene	13.79	112	3536039	28.33	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	1207456	28.97	ug/l	99
67)	Ethylbenzene	13.89	91	6169157	27.14	ug/l	95
68)	m-Xylene & p-Xylene	14.03	91	8994205	50.10	ug/l	91
69)	o-Xylene	14.84	91	4849057	28.02	ug/l	97
70)	Styrene	14.92	104	3756223	29.66	ug/l	96
71)	Isopropylbenzene	15.52	105	6282009	26.50	ug/l	98
73)	Bromoform	15.57	173	474486	30.97	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	281511	30.21	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	799846	32.10	ug/l	97
77)	1,2,3-Trichloropropane	16.16	110	263192	28.70	ug/l	97
78)	n-Propylbenzene	16.31	91	7448579	28.08	ug/l	97
79)	Bromobenzene	16.40	156	1170949	29.15	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	4831297	27.59	ug/l	95
81)	2-Chlorotoluene	16.65	91	4742897	27.24	ug/l	97
82)	4-Chlorotoluene	16.74	91	4208682	28.30	ug/l	96
83)	tert-Butylbenzene	17.30	134	1108973	28.63	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	4692017	28.04	ug/l	95
85)	sec-Butylbenzene	17.66	105	6494824	27.49	ug/l	98
86)	p-Isopropyltoluene	17.89	119	5547663	27.59	ug/l	98
87)	1,3-Dichlorobenzene	18.04	146	2316340	27.84	ug/l	99
88)	1,2,3-Trimethylbenzene	18.15	105	4423835	27.26	ug/l	95
89)	1,4-Dichlorobenzene	18.20	146	2218767	27.58	ug/l	99
90)	n-Butylbenzene	18.50	91	4839886	26.29	ug/l	96
91)	1,2-Dichlorobenzene	18.72	146	1893356	27.64	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.73	157	117545	30.46	ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	1289347	27.70	ug/l	99
94)	Hexachlorobutadiene	20.99	225	840674	27.51	ug/l	99
95)	Naphthalene	21.17	128	1911419	28.80	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	1000796	28.14	ug/l	98

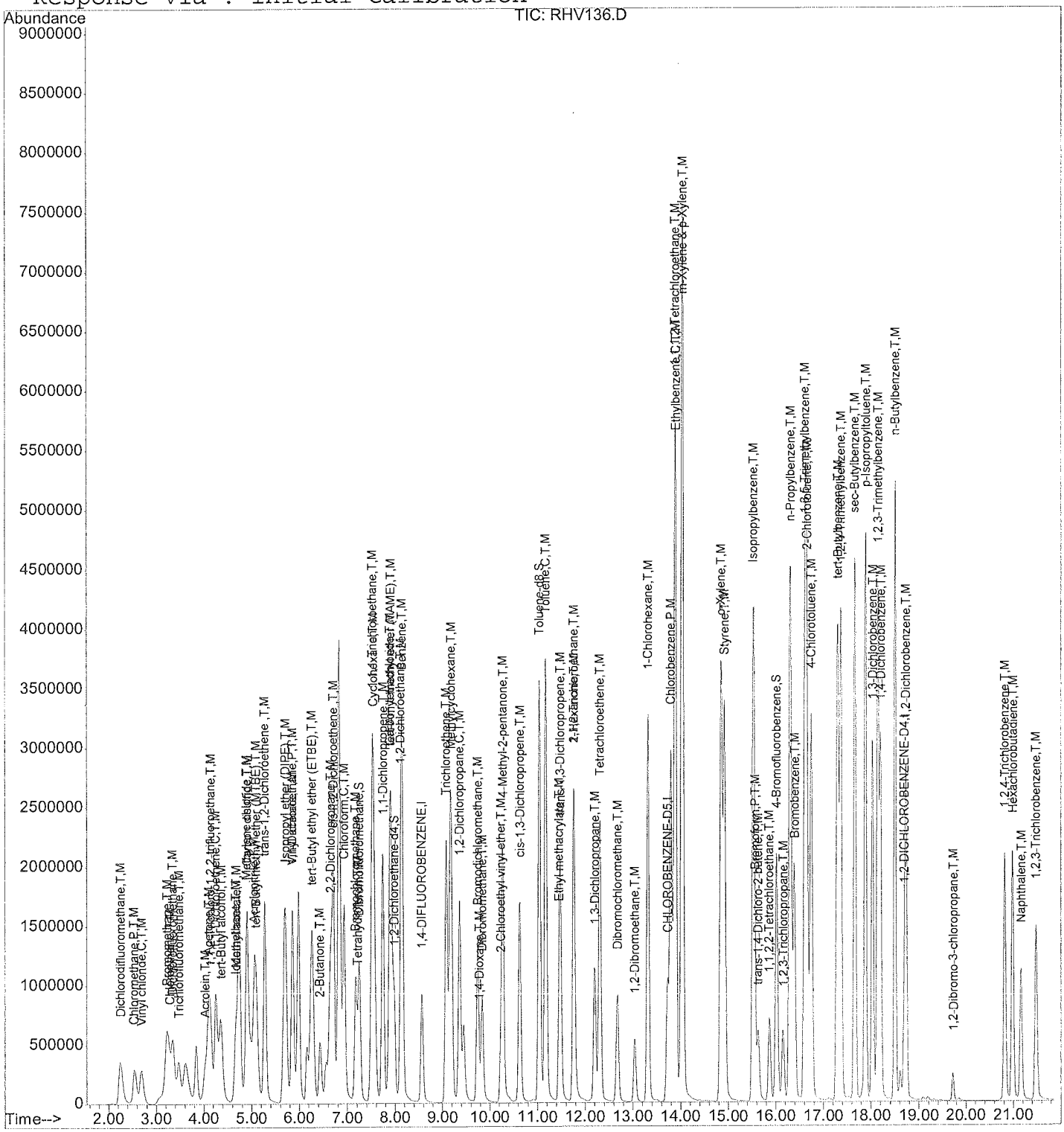
SC

(#) = qualifier out of range (m) = manual integration
RHV136.D VO01H09.M Fri Aug 30 18:37:29 2024 9/6/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



8/26/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1550082	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1272626	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	398203	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	551	0.01	ug/l	-0.01
Spiked Amount 10.000			Recovery =	0.10%		
41) 1,2-Dichloroethane-d4	0.00	65	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
54) Toluene-d8	11.03	98	13898	0.09	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.90%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.23	85	2346897	46.01	ug/l	95
5) Chloromethane	2.53	50	1762845	47.68	ug/l	98
6) Vinyl chloride	2.67	62	1751063	53.69	ug/l	97
7) Bromomethane	3.21	94	1398868	48.43	ug/l	95
8) Chloroethane	3.27	64	1331488	52.58	ug/l	90
9) Dichlorofluoromethane	3.33	67	2577952	46.16	ug/l	99
10) Trichlorofluoromethane	3.60	101	3493896	47.13	ug/l	98
11) Acrolein	4.01	56	420047	268.90	ug/l	90
12) 1,1,2-Trichloro-1,2,2-trif	4.12	151	1433660	47.22	ug/l	100
13) Acetone	4.09	43	1465054	219.08	ug/l	93
14) 1,1-Dichloroethene	4.25	61	3480047	46.40	ug/l	94
15) tert-Butyl alcohol	4.35	59	2530967	1213.52	ug/l	97
16) Iodomethane	4.65	142	3415106	50.36	ug/l	89
17) Methyl acetate	4.67	43	765906	47.78	ug/l	96
18) Methylene chloride	4.87	49	2452149	47.04	ug/l	96
20) Acrylonitrile	5.05	53	1559155	253.09	ug/l	98
21) tert-Butyl methyl ether (M	5.10	73	3901741	45.74	ug/l	93
22) trans-1,2-Dichloroethene	5.27	61	3241205	47.45	ug/l	93
23) Isopropyl ether (DIPE)	5.69	45	6590087	48.33	ug/l	100
24) Vinyl acetate	5.84	43	2483809	49.87	ug/l	96
25) 1,1-Dichloroethane	5.85	63	4004425	47.83	ug/l	99
27) tert-Butyl ethyl ether (ET	6.25	59	5674608	45.01	ug/l	98
28) 2-Butanone	6.43	43	2357347	230.99	ug/l	99
29) 2,2-Dichloropropane	6.65	77	3567287	42.75	ug/l	98
30) cis-1,2-Dichloroethene	6.70	96	2584295	49.05	ug/l	92
31) Chloroform	6.92	83	3884727	41.21	ug/l	97
32) Bromochloromethane	7.17	49	1538605	48.08	ug/l	99

(#) = qualifier out of range (m) = manual integration

RHV137.D VO01H09.M Fri Aug 30 18:39:11 2024 Page 1

SL 09/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D
Acq On : 9 Aug 2024 9:47 pm
Sample : VO01H099 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024

Vial: 10
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) Tetrahydrofuran	7.21	42	258978	45.45 ug/l	93
35) 1,1,1-Trichloroethane	7.51	97	3980715	42.79 ug/l	98
36) Cyclohexane	7.52	84	3368126	50.28 ug/l	99
38) 1,1-Dichloropropene	7.73	110	1234976	48.46 ug/l	99
39) Carbon tetrachloride	7.90	119	3320517	42.94 ug/l	98
40) tert-Amyl methyl ether (TA	7.91	73	4201292	45.33 ug/l	99
42) Benzene	8.13	78	8069673	47.28 ug/l	98
43) 1,2-Dichloroethane	8.12	62	2294253	42.98 ug/l	98
44) Trichloroethene	9.08	130	2486450	45.79 ug/l	97
45) Methylcyclohexane	9.17	83	3912492	52.36 ug/l	97
46) 1,2-Dichloropropane	9.36	63	1922116	49.33 ug/l	89
47) Bromodichloromethane	9.73	83	2782210	40.92 ug/l	99
48) 1,4-Dioxane	9.76	88	198113	1027.09 ug/l	93
49) Dibromomethane	9.82	93	963297	44.42 ug/l	95
50) 2-Chloroethyl vinyl ether	10.22	63	623578	51.12 ug/l	98
51) 4-Methyl-2-pentanone	10.26	43	5634001	241.80 ug/l	96
52) cis-1,3-Dichloropropene	10.62	75	3238872	47.08 ug/l	97
55) Toluene	11.17	91	8563343	44.91 ug/l	93
56) Ethyl methacrylate	11.45	69	1671329	51.97 ug/l	94
57) trans-1,3-Dichloropropene	11.48	75	2629177	47.54 ug/l	96
58) 1,1,2-Trichloroethane	11.74	97	1347520	48.24 ug/l	99
59) 2-Hexanone	11.76	43	3580157	225.40 ug/l	94
60) 1,3-Dichloropropane	12.19	76	2409049	48.43 ug/l	100
61) Tetrachloroethene	12.31	164	1975797	45.62 ug/l	97
62) Dibromochloromethane	12.66	129	1687823	45.70 ug/l	99
63) 1,2-Dibromoethane	13.03	107	1330569	47.31 ug/l	96
64) 1-Chlorohexane	13.32	91	4073611	46.06 ug/l	98
65) Chlorobenzene	13.79	112	5965334	45.51 ug/l	97
66) 1,1,1,2-Tetrachloroethane	13.86	131	2052970	46.90 ug/l	100
67) Ethylbenzene	13.88	91	9788973	41.01 ug/l	90
69) o-Xylene	14.84	91	7695449	42.35 ug/l	94
70) Styrene	14.92	104	6256463	47.05 ug/l	97
73) Bromoform	15.57	173	817115	55.88 ug/l	98
74) trans-1,4-Dichloro-2-buten	15.63	53	474241	53.32 ug/l	98
75) 1,1,2,2-Tetrachloroethane	15.86	83	1321811	55.58 ug/l	98
77) 1,2,3-Trichloropropane	16.14	110	460433	52.61 ug/l	94
78) n-Propylbenzene	16.29	91	11115890	43.91 ug/l	93
79) Bromobenzene	16.38	156	1942250	50.66 ug/l	100
80) 1,3,5-Trimethylbenzene	16.60	105	7640705	45.71 ug/l	92
81) 2-Chlorotoluene	16.65	91	7752421	46.65 ug/l	94
82) 4-Chlorotoluene	16.74	91	6559965	46.21 ug/l	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83)	tert-Butylbenzene	17.30	134	1857054	50.24	ug/l	97
84)	1,2,4-Trimethylbenzene	17.36	105	7235456	45.31	ug/l	90
85)	sec-Butylbenzene	17.66	105	9517579	42.21	ug/l	93
86)	p-Isopropyltoluene	17.88	119	8220752	42.84	ug/l	95
87)	1,3-Dichlorobenzene	18.03	146	3672185	46.25	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	6721285	43.39	ug/l	93
89)	1,4-Dichlorobenzene	18.19	146	3550594	46.24	ug/l	99
90)	n-Butylbenzene	18.50	91	7113798	40.49	ug/l	91
91)	1,2-Dichlorobenzene	18.72	146	3029323	46.33	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	196035	53.22	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	2009206	45.22	ug/l	100
94)	Hexachlorobutadiene	20.99	225	1310067	44.92	ug/l	99
95)	Naphthalene	21.17	128	3067753	48.44	ug/l	98
96)	1,2,3-Trichlorobenzene	21.48	180	1571867	46.30	ug/l	97

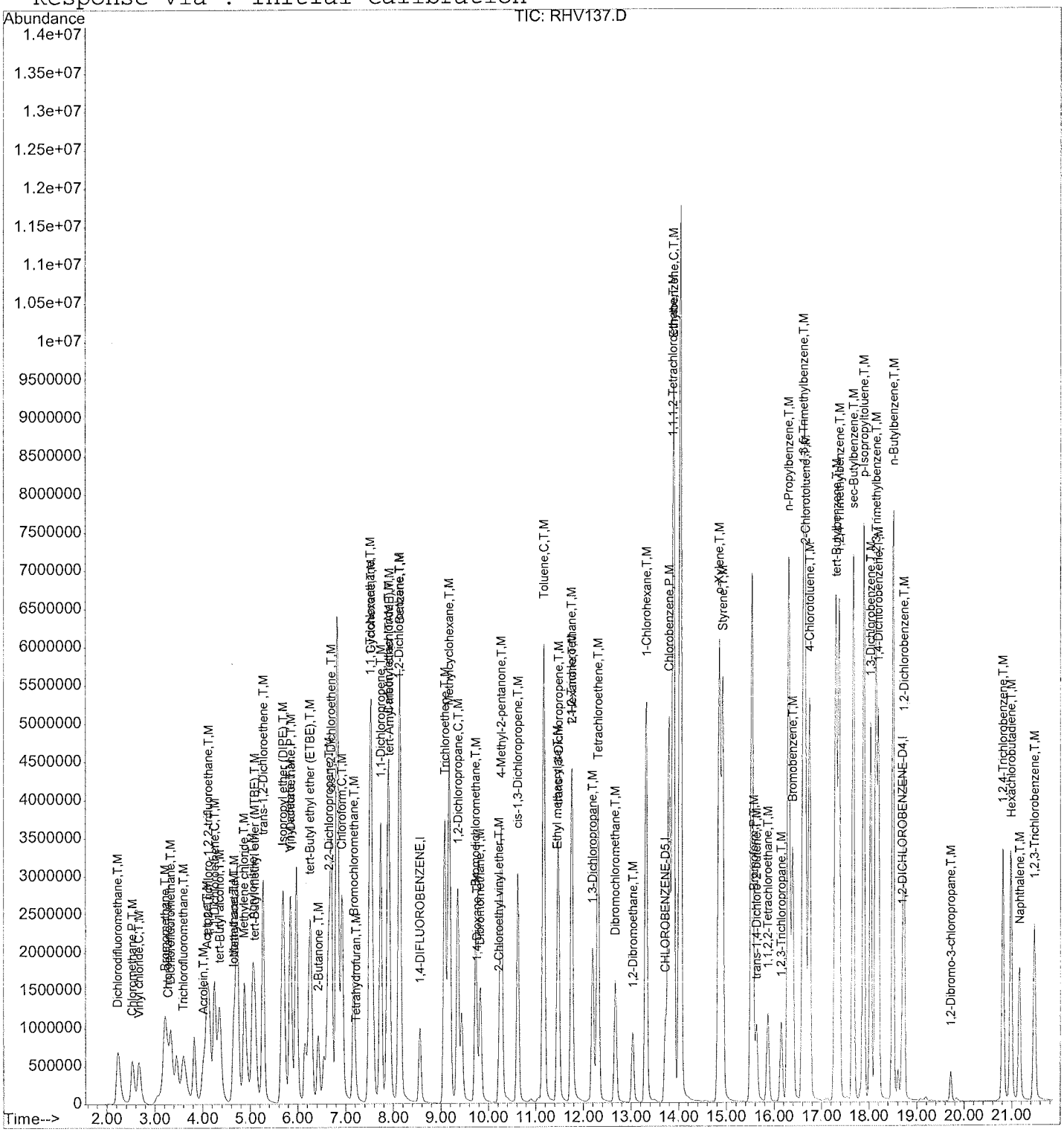
(#) = qualifier out of range (m) = manual integration
RHV137.D VO01H09.M Fri Aug 30 18:39:12 2024 Page 3

SC 9/6/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1270873	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	1026209	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	289170	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	0.00	111	0	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
41) 1,2-Dichloroethane-d4	0.00	65	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
54) Toluene-d8	11.05	98	4989	0.04	ug/l	0.01
Spiked Amount 10.000			Recovery =	0.40%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	4670381	111.67	ug/l	96
5) Chloromethane	2.53	50	3722515	122.79	ug/l	98
7) Bromomethane	3.21	94	2840980	119.96	ug/l	97
8) Chloroethane	3.27	64	2633367	126.84	ug/l	91
9) Dichlorofluoromethane	3.35	67	5323040	116.25	ug/l	100
10) Trichlorofluoromethane	3.61	101	6852447	112.74	ug/l	98
11) Acrolein	4.01	56	842414	657.76	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	2886728	115.96	ug/l	99
13) Acetone	4.09	43	2953626	542.52	ug/l	92
14) 1,1-Dichloroethene	4.25	61	6983489	113.56	ug/l	94
15) tert-Butyl alcohol	4.37	59	4804777	2809.87	ug/l	99
17) Methyl acetate	4.68	43	1495299	113.78	ug/l	95
18) Methylene chloride	4.89	49	4936369	115.49	ug/l	95
20) Acrylonitrile	5.05	53	3140183	621.71	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	7734124	110.59	ug/l	94
22) trans-1,2-Dichloroethene	5.27	61	6301340	112.51	ug/l	91
23) Isopropyl ether (DIPE)	5.69	45	12384481	110.77	ug/l	95
24) Vinyl acetate	5.85	43	4887040	119.68	ug/l	95
25) 1,1-Dichloroethane	5.85	63	7723208	112.53	ug/l	98
27) tert-Butyl ethyl ether (ET	6.27	59	10982001	106.24	ug/l	96
28) 2-Butanone	6.43	43	4661661	557.14	ug/l	99
29) 2,2-Dichloropropane	6.65	77	7038809	102.88	ug/l	97
30) cis-1,2-Dichloroethene	6.71	96	5150285	119.23	ug/l	90
31) Chloroform	6.93	83	7500896	97.05	ug/l	94
32) Bromochloromethane	7.17	49	3031909	115.55	ug/l	99
33) Tetrahydrofuran	7.21	42	500929	107.23	ug/l	95
35) 1,1,1-Trichloroethane	7.51	97	7775386	101.94	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
36)	Cyclohexane	7.54	84	6580294	119.81	ug/l		99
38)	1,1-Dichloropropene	7.73	110	2477702	118.58	ug/l		98
39)	Carbon tetrachloride	7.89	119	6568334	103.61	ug/l		99
40)	tert-Amyl methyl ether (TA	7.91	73	8112654	106.77	ug/l		98
42)	Benzene	8.15	78	13888654	99.25	ug/l		93
43)	1,2-Dichloroethane	8.12	62	4483500	102.46	ug/l		97
44)	Trichloroethene	9.08	130	4941326	110.99	ug/l		97
45)	Methylcyclohexane	9.18	83	7314408	119.40	ug/l		96
46)	1,2-Dichloropropane	9.36	63	3752082	117.45	ug/l		92
47)	Bromodichloromethane	9.73	83	5473913	98.19	ug/l		99
48)	1,4-Dioxane	9.76	88	380626	2406.83	ug/l		90
49)	Dibromomethane	9.83	93	1910399	107.45	ug/l		96
50)	2-Chloroethyl vinyl ether	10.22	63	1218626	121.85	ug/l		99
51)	4-Methyl-2-pentanone	10.26	43	10267105	537.45	ug/l		92
52)	cis-1,3-Dichloropropene	10.62	75	6202577	109.96	ug/l		94
55)	Toluene	11.17	91	14043908	91.33	ug/l		84
57)	trans-1,3-Dichloropropene	11.48	75	5011355	112.36	ug/l		94
58)	1,1,2-Trichloroethane	11.74	97	2647712	117.55	ug/l		99
59)	2-Hexanone	11.76	43	6801833	527.70	ug/l		92
60)	1,3-Dichloropropane	12.19	76	4651210	115.96	ug/l		98
61)	Tetrachloroethene	12.31	164	3854409	110.36	ug/l		97
62)	Dibromochloromethane	12.66	129	3318617	111.43	ug/l		97
63)	1,2-Dibromoethane	13.03	107	2639320	116.39	ug/l		97
64)	1-Chlorohexane	13.31	91	7538336	105.71	ug/l		95
65)	Chlorobenzene	13.79	112	10817556	102.35	ug/l		91
66)	1,1,1,2-Tetrachloroethane	13.88	131	4072316	115.38	ug/l		100
69)	o-Xylene	14.84	91	12785500	87.27	ug/l		83
70)	Styrene	14.91	104	10999980	102.59	ug/l		97
78)	n-Propylbenzene	16.31	91	16291269	88.62	ug/l		80
79)	Bromobenzene	16.38	156	3679164	132.16	ug/l		98
80)	1,3,5-Trimethylbenzene	16.62	105	12237227	100.82	ug/l		84
81)	2-Chlorotoluene	16.65	91	12699107	105.23	ug/l		87
82)	4-Chlorotoluene	16.74	91	11067133	107.36	ug/l		85
83)	tert-Butylbenzene	17.30	134	3365411	125.37	ug/l		94
84)	1,2,4-Trimethylbenzene	17.36	105	11581107	99.87	ug/l		79
85)	sec-Butylbenzene	17.66	105	13681920	83.56	ug/l		80
86)	p-Isopropyltoluene	17.89	119	12260360	87.97	ug/l		85
87)	1,3-Dichlorobenzene	18.04	146	6425754	111.44	ug/l		96
88)	1,2,3-Trimethylbenzene	18.14	105	10502610	93.36	ug/l	#	84
89)	1,4-Dichlorobenzene	18.20	146	6178768	110.82	ug/l		95
90)	n-Butylbenzene	18.50	91	10448826	81.89	ug/l		82

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
91)	1,2-Dichlorobenzene	18.72	146	5331830	112.29	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	3527937	109.34	ug/l	99
94)	Hexachlorobutadiene	20.99	225	2314021	109.25	ug/l	99
95)	Naphthalene	21.15	128	5355694	116.45	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	2776515	112.62	ug/l	98

(#) = qualifier out of range (m) = manual integration

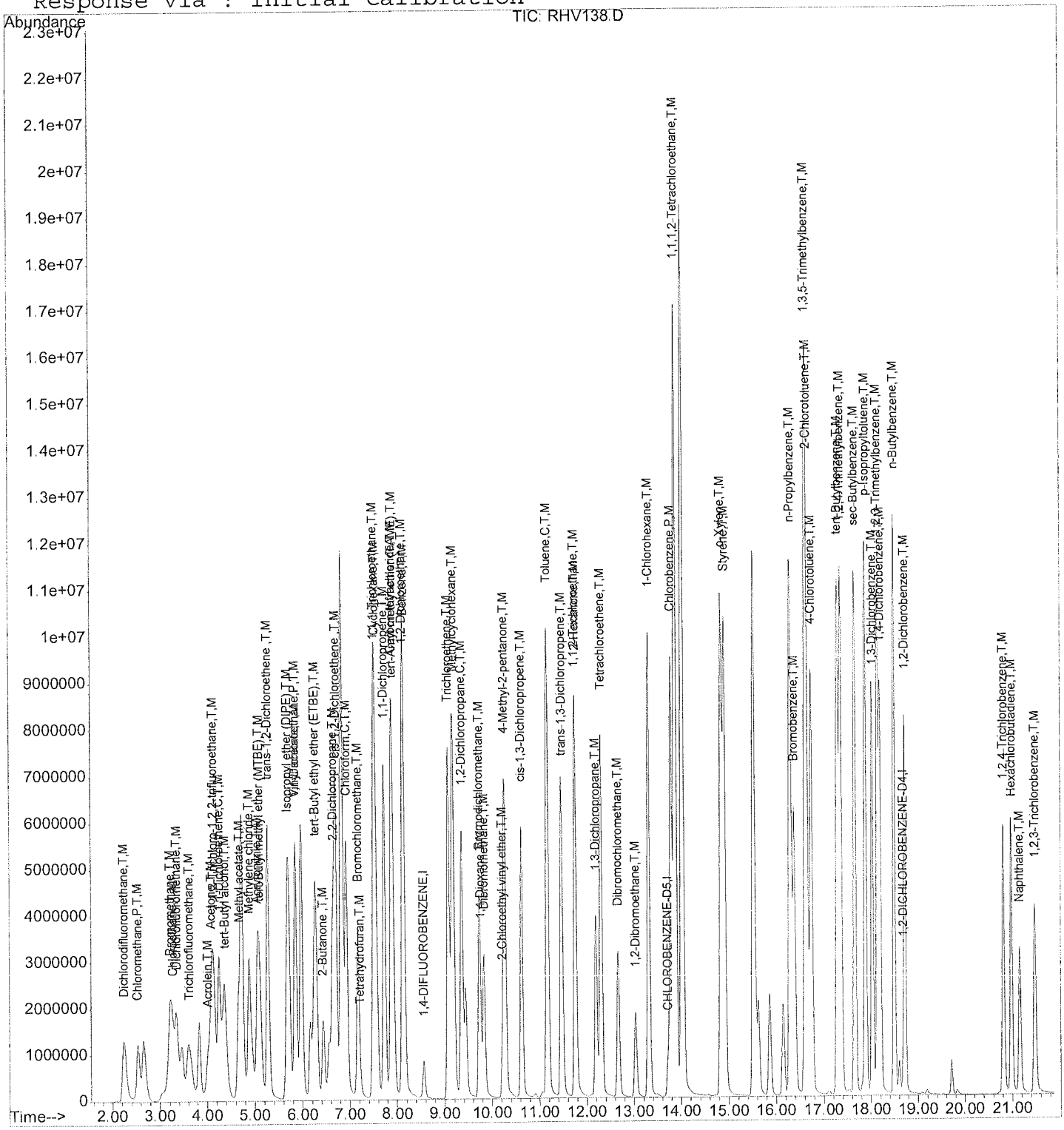
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D
Acq On : 9 Aug 2024 10:17 pm
Sample : VO01H0910 10/50
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024

Vial: 11
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01New
IC_Beginning DateTime :08/09/24 17:28
Spike Amount :10 PPB
CC/CV File :RHV141
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09
Date_Time :08/09/24 23:47

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1458016	1	1	8.561	8.560	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane	8.562	-14.4	410825	0.282	0.329	2.239	2.241	12.04				
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane	11.811	18.1	410805	0.282	0.239	2.553	2.541	11.82				
	6	Vinyl chloride	11.830	18.3	362949	0.249	0.210	2.695	2.679	12.57				
	7	Bromomethane	11.618	16.2	315660	0.216	0.186	3.227	3.221	8.61				
	8	Chloroethane	12.384	23.8	294990	0.202	0.163	3.272	3.278	13.37				
	9	Dichlorofluoromethane	9.814	-1.9	515590	0.354	0.360	3.346	3.342	9.43				
	10	Trichlorofluoromethane	9.253	-7.5	645259	0.443	0.478	3.613	3.554	9.99				
5	11	Acrolein	56.857	13.7	83543	0.011	0.010	4.027	4.017	14.81				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	8.849	-11.5	252752	0.173	0.196	4.131	4.133	8.61				
5	13	Acetone	45.730	-8.5	300505	0.041	0.048	4.102	4.096	19.26	0.0111	0.0426		0.9952
	14	1,1-Dichloroethene	9.776	-2.2	689726	0.473	0.484	4.264	4.255	6.44				
25	15	tert-Butyl alcohol	222.068	-11.2	435647	0.012	0.013	4.368	4.372	12.10				
	16	Iodomethane	11.013	10.1	702444	0.482	0.437	4.664	4.663	6.31				
	17	Methyl acetate	10.258	2.6	154672	0.106	0.103	4.679	4.683	7.37				
	18	Methylene chloride	10.356	3.6	507851	0.348	0.336	4.887	4.885	7.35				
	19	Carbon disulfide	10.975	9.8	1340359	0.919	0.838	4.902	4.904	6.33				
5	20	Acrylonitrile	53.508	7.0	310061	0.043	0.040	5.050	5.059	11.32				
	21	tert-Butyl methyl ether (MTBE)	9.805	-1.9	786741	0.540	0.550	5.094	5.095	7.89				
	22	trans-1,2-Dichloroethene	10.226	2.3	657080	0.451	0.441	5.272	5.276	6.34				
	23	Isopropyl ether (DIPE)	10.918	9.2	1400453	0.961	0.880	5.687	5.692	7.83				
	24	Vinyl acetate	10.710	7.1	501747	0.344	0.321	5.850	5.852	11.40				
	25	1,1-Dichloroethane	10.517	5.2	828152	0.568	0.540	5.850	5.853	6.83				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	9.977	-0.2	1183255	0.812	0.813	6.265	6.265	8.56				
5	28	2-Butanone	45.670	-8.7	438405	0.060	0.066	6.442	6.440	9.12				
	29	2,2-Dichloropropane	8.837	-11.6	693615	0.476	0.538	6.650	6.650	7.93				
	30	cis-1,2-Dichloroethene	10.682	6.8	529401	0.363	0.340	6.709	6.705	9.52				
	31	Chloroform	9.141	-8.6	810614	0.556	0.608	6.931	6.930	12.21				
	32	Bromochloromethane	10.320	3.2	310687	0.213	0.206	7.168	7.169	8.79				
	33	Tetrahydrofuran	8.018	-19.8	42975	0.029	0.037	7.213	7.215	11.65				
	34	Dibromofluoromethane	10.058	0.6	445940	0.306	0.304	7.242	7.243	13.19				
	35	1,1,1-Trichloroethane	8.951	-10.5	783252	0.537	0.600	7.509	7.519	8.89				
	36	Cyclohexane	9.904	-1.0	624073	0.428	0.432	7.538	7.538	9.21				
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene	9.832	-1.7	235706	0.162	0.164	7.731	7.739	8.22				
	39	Carbon tetrachloride	8.793	-12.1	639597	0.439	0.499	7.894	7.893	9.16				
	40	tert-Amyl methyl ether (TAME)	10.160	1.6	885635	0.607	0.598	7.894	7.908	7.20				
	41	1,2-Dichloroethane-d4	8.954	-10.5	352943	0.242	0.270	7.968	7.979	10.30				
	42	Benzene	11.047	10.5	1773569	1.216	1.101	8.146	8.145	5.25				
	43	1,2-Dichloroethane	9.025	-9.8	453115	0.311	0.344	8.116	8.120	13.08				
	44	Trichloroethene	10.012	0.1	511419	0.351	0.350	9.079	9.083	6.77				
	45	Methylcyclohexane	9.800	-2.0	688803	0.472	0.482	9.168	9.176	13.31				
	46	1,2-Dichloropropane	10.763	7.6	394503	0.271	0.251	9.361	9.364	8.42				
	47	Bromodichloromethane	8.826	-11.7	564519	0.387	0.439	9.731	9.741	12.12				
20	48	1,4-Dioxane	188.765	-5.6	34248	0.001	0.001	9.790	9.779	11.23				
	49	Dibromomethane	9.554	-4.5	194884	0.134	0.140	9.820	9.834	7.18				
	50	2-Chloroethyl vinyl ether	10.125	1.3	116170	0.080	0.079	10.235	10.238	13.01				
5	51	4-Methyl-2-pentanone	50.701	1.4	1111189	0.152	0.150	10.264	10.283	11.85				
	52	cis-1,3-Dichloropropene	9.896	-1.0	640446	0.439	0.444	10.620	10.629	7.60				
	53	CHLOROBENZENE-D5	10.000	0	1207297	1	1	13.716	13.726	0				
	54	Toluene-d8	10.351	3.5	1527415	1.265	1.222	11.035	11.038	8.56				
	55	Toluene	10.603	6.0	1918259	1.589	1.498	11.168	11.173	6.69				
	56	Ethyl methacrylate	10.127	1.3	308968	0.256	0.253	11.464	11.474	13.78				
	57	trans-1,3-Dichloropropene	9.640	-3.6	505830	0.419	0.435	11.479	11.490	10.00				
	58	1,1,2-Trichloroethane	9.957	-0.4	263881	0.219	0.219	11.746	11.760	9.84				
5	59	2-Hexanone	45.591	-8.8	656965	0.109	0.111	11.761	11.776	19.21	-0.0312	0.1262		0.9976
	60	1,3-Dichloropropane	9.946	-0.5	469386	0.389	0.391	12.190	12.201	9.24				
	61	Tetrachloroethene	9.317	-6.8	382862	0.317	0.340	12.294	12.308	8.13				
	62	Dibromochloromethane	9.227	-7.7	323283	0.268	0.290	12.664	12.675	7.03				
	63	1,2-Dibromoethane	9.750	-2.5	260128	0.215	0.221	13.035	13.043	8.26				
	64	1-Chlorohexane	9.480	-5.2	795389	0.659	0.695	13.316	13.320	5.71				
	65	Chlorobenzene	10.174	1.7	1265090	1.048	1.030	13.790	13.795	6.31				
	66	1,1,1,2-Tetrachloroethane	9.822	-1.8	407851	0.338	0.344	13.864	13.872	9.54				
	67	Ethylbenzene	9.808	-1.9	2221146	1.840	1.876	13.879	13.890	9.54				
2	68	m-Xylene & p-Xylene	18.778	-6.1	3357661	1.391	1.481	14.027	14.030	8.93				
	69	o-Xylene	9.874	-1.3	1702007	1.410	1.428	14.842	14.849	9.71				
	70	Styrene	10.081	0.8	1271745	1.053	1.045	14.916	14.921	6.93				
	71	Isopropylbenzene	9.475	-5.2	2237530	1.853	1.956	15.524	15.530	7.56				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	390071	1	1	18.679	18.693	0				
	73	Bromoform	10.403	4.0	149023	0.382	0.367	15.568	15.569	11.93				
	74	trans-1,4-Dichloro-2-butene	9.266	-7.3	80729	0.207	0.223	15.627	15.632	7.51				
	75	1,1,2,2-Tetrachloroethane	11.077	10.8	258076	0.662	0.597	15.864	15.869	11.29				
	76	4-Bromofluorobenzene	10.193	1.9	504433	1.293	1.269	16.013	16.020	9.24				
	77	1,2,3-Trichloropropane	10.112	1.1	86704	0.222	0.220	16.146	16.162	9.42				
	78	n-Propylbenzene	10.643	6.4	2639309	6.766	6.357	16.294	16.305	9.90				
	79	Bromobenzene	10.386	3.9	390060	1.000	0.963	16.383	16.394	11.94				
	80	1,3,5-Trimethylbenzene	10.378	3.8	1699332	4.356	4.198	16.605	16.613	7.15				
	81	2-Chlorotoluene	10.446	4.5	1700484	4.359	4.173	16.635	16.649	7.05				
	82	4-Chlorotoluene	9.973	-0.3	1386824	3.555	3.565	16.738	16.742	6.57				
	83	tert-Butylbenzene	10.467	4.7	379037	0.972	0.928	17.287	17.301	10.33				
	84	1,2,4-Trimethylbenzene	10.417	4.2	1629540	4.178	4.010	17.361	17.364	7.06				
	85	sec-Butylbenzene	10.482	4.8	2315214	5.935	5.662	17.657	17.662	11.41				
	86	p-Isopropyltoluene	10.350	3.5	1945839	4.988	4.820	17.879	17.889	9.96				
	87	1,3-Dichlorobenzene	10.149	1.5	789417	2.024	1.994	18.027	18.038	8.46				
	88	1,2,3-Trimethylbenzene	10.267	2.7	1558138	3.994	3.890	18.131	18.145	8.36				
	89	1,4-Dichlorobenzene	10.222	2.2	768840	1.971	1.928	18.190	18.200	7.64				
	90	n-Butylbenzene	10.013	0.1	1723405	4.418	4.412	18.487	18.501	13.97				
	91	1,2-Dichlorobenzene	10.110	1.1	647540	1.660	1.642	18.724	18.727	7.38				
	92	1,2-Dibromo-3-chloropropane	10.513	5.1	37937	0.097	0.093	19.716	19.723	13.33				
	93	1,2,4-Trichlorobenzene	9.794	-2.1	426286	1.093	1.116	20.813	20.816	8.77				
	94	Hexachlorobutadiene	9.724	-2.8	277847	0.712	0.732	20.976	20.990	6.72				
	95	Naphthalene	9.749	-2.5	604845	1.551	1.591	21.153	21.167	9.31				
	96	1,2,3-Trichlorobenzene	9.676	-3.2	321802	0.825	0.853	21.479	21.483	7.02				

Spike Amount = Nominal Amount * M

SC 24/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	152	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	8.562	14.4	112	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	11.812	-18.1	167	0.01
6	C,T,M	Vinyl chloride	10.000	11.830	-18.3	158	0.01
7	T,M	Bromomethane	10.000	11.618	-16.2	172	0.02
8	T,M	Chloroethane	10.000	12.385	-23.8#	183	0.00
9	T,M	Dichlorofluoromethane	10.000	9.815	1.9	147	0.00
10	T,M	Trichlorofluoromethane	10.000	9.254	7.5	122	0.13
11	T,M	Acrolein	50.000	56.858	-13.7	180	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	8.850	11.5	129	-0.02
13	T,M	Acetone	50.000	45.731	8.5	140	0.00
14	C,T,M	1,1-Dichloroethene	10.000	9.776	2.2	145	0.01
15	T,M	tert-Butyl alcohol	250.000	222.069	11.2	130	0.00
16	T,M	Iodomethane	10.000	11.013	-10.1	160	0.00
17	T,M	Methyl acetate	10.000	10.258	-2.6	157	0.00
18	T,M	Methylene chloride	10.000	10.357	-3.6	160	0.00
19	T,M	Carbon disulfide	10.000	10.976	-9.8	157	0.00
20	T,M	Acrylonitrile	50.000	53.509	-7.0	165	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	9.806	1.9	144	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.226	-2.3	151	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.918	-9.2	163	0.00
24	T,M	Vinyl acetate	10.000	10.710	-7.1	154	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.517	-5.2	159	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.01
27	T,M	tert-Butyl ethyl ether (ETB	10.000	9.977	0.2	146	0.00
28	T,M	2-Butanone	50.000	45.670	8.7	143	0.00
29	T,M	2,2-Dichloropropane	10.000	8.837	11.6	129	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.683	-6.8	158	0.00
31	C,T,M	Chloroform	10.000	9.142	8.6	135	0.00
32	T,M	Bromochloromethane	10.000	10.321	-3.2	155	0.00
33	T,M	Tetrahydrofuran	10.000	8.019	19.8	134	0.00
34	S	Dibromofluoromethane	10.000	10.058	-0.6	140	0.00
35	T,M	1,1,1-Trichloroethane	10.000	8.951	10.5	127	0.00
36	T,M	Cyclohexane	10.000	9.904	1.0	144	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.01
38	T,M	1,1-Dichloropropene	10.000	9.833	1.7	148	0.00
39	T,M	Carbon tetrachloride	10.000	8.794	12.1	124	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.160	-1.6	149	-0.02
41	S	1,2-Dichloroethane-d4	10.000	8.954	10.5	123	-0.01

(#) = Out of Range

SA 8/16/24

This evaluated From ICV (IVO01H0902) File ID: RHV147

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M Benzene	10.000	11.048	-10.5	160	0.00
43	T,M 1,2-Dichloroethane	10.000	9.026	9.7	124	0.00
44	T,M Trichloroethene	10.000	10.012	-0.1	148	0.00
45	T,M Methylcyclohexane	10.000	9.801	2.0	141	-0.01
46	C,T,M 1,2-Dichloropropane	10.000	10.764	-7.6	158	0.00
47	T,M Bromodichloromethane	10.000	8.826	11.7	133	-0.01
48	T,M 1,4-Dioxane	200.000	188.765	5.6	141	0.02
49	T,M Dibromomethane	10.000	9.555	4.5	141	-0.01
50	T,M 2-Chloroethyl vinyl ether	10.000	10.125	-1.3	157	0.00
51	T,M 4-Methyl-2-pentanone	50.000	50.701	-1.4	141	-0.01
52	T,M cis-1,3-Dichloropropene	10.000	9.896	1.0	142	-0.01
53	I CHLOROBENZENE-D5	10.000	10.000	0.0	145	-0.01
54	S Toluene-d8	10.000	10.351	-3.5	141	0.00
55	C,T,M Toluene	10.000	10.604	-6.0	147	0.00
56	T,M Ethyl methacrylate	10.000	10.128	-1.3	138	0.00
57	T,M trans-1,3-Dichloropropene	10.000	9.640	3.6	130	0.00
58	T,M 1,1,2-Trichloroethane	10.000	9.958	0.4	143	-0.01
59	T,M 2-Hexanone	50.000	45.591	8.8	129	0.00
60	T,M 1,3-Dichloropropane	10.000	9.947	0.5	141	-0.01
61	T,M Tetrachloroethene	10.000	9.318	6.8	138	-0.01
62	T,M Dibromochloromethane	10.000	9.227	7.7	129	-0.01
63	T,M 1,2-Dibromoethane	10.000	9.750	2.5	141	0.00
64	T,M 1-Chlorohexane	10.000	9.480	5.2	139	0.00
65	P,M Chlorobenzene	10.000	10.175	-1.8	143	0.00
66	T,M 1,1,1,2-Tetrachloroethane	10.000	9.822	1.8	134	0.00
67	C,T,M Ethylbenzene	10.000	9.808	1.9	135	-0.01
68	T,M m-Xylene & p-Xylene	20.000	18.778	6.1	133	0.00
69	T,M o-Xylene	10.000	9.875	1.3	133	0.00
70	T,M Styrene	10.000	10.081	-0.8	139	0.00
71	T,M Isopropylbenzene	10.000	9.475	5.3	131	0.00
72	I 1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	122	-0.01
73	P,T,M Bromoform	10.000	10.403	-4.0	123	0.00
74	T,M trans-1,4-Dichloro-2-butene	10.000	9.266	7.3	113	0.00
75	T,M 1,1,2,2-Tetrachloroethane	10.000	11.077	-10.8	133	0.00
76	S 4-Bromofluorobenzene	10.000	10.193	-1.9	124	0.00
77	T,M 1,2,3-Trichloropropane	10.000	10.113	-1.1	129	-0.01
78	T,M n-Propylbenzene	10.000	10.644	-6.4	129	-0.01
79	T,M Bromobenzene	10.000	10.387	-3.9	130	-0.01
80	T,M 1,3,5-Trimethylbenzene	10.000	10.379	-3.8	129	0.00

(#) = Out of Range

SC 9/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	10.446	-4.5	130	-0.01
82	T,M	4-Chlorotoluene	10.000	9.974	0.3	123	0.00
83	T,M	tert-Butylbenzene	10.000	10.468	-4.7	134	-0.01
84	T,M	1,2,4-Trimethylbenzene	10.000	10.417	-4.2	126	0.00
85	T,M	sec-Butylbenzene	10.000	10.483	-4.8	126	0.00
86	T,M	p-Isopropyltoluene	10.000	10.350	-3.5	124	0.00
87	T,M	1,3-Dichlorobenzene	10.000	10.149	-1.5	126	-0.01
88	T,M	1,2,3-Trimethylbenzene	10.000	10.268	-2.7	121	-0.01
89	T,M	1,4-Dichlorobenzene	10.000	10.222	-2.2	127	0.00
90	T,M	n-Butylbenzene	10.000	10.013	-0.1	118	-0.01
91	T,M	1,2-Dichlorobenzene	10.000	10.110	-1.1	123	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.513	-5.1	118	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	9.794	2.1	119	0.00
94	T,M	Hexachlorobutadiene	10.000	9.724	2.8	116	-0.01
95	T,M	Naphthalene	10.000	9.749	2.5	114	-0.01
96	T,M	1,2,3-Trichlorobenzene	10.000	9.677	3.2	115	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	152	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.282	14.3	112	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.282	-18.0	167	0.01
6	C,T,M	Vinyl chloride	0.210	0.249	-18.6	158	0.01
7	T,M	Bromomethane	0.186	0.216	-16.1	172	0.02
8	T,M	Chloroethane	0.163	0.202	-23.9#	183	0.00
9	T,M	Dichlorofluoromethane	0.360	0.354	1.7	147	0.00
10	T,M	Trichlorofluoromethane	0.478	0.443	7.3	122	0.13
11	T,M	Acrolein	0.010	0.011	-10.0	180	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.173	11.7	129	-0.02
13	T,M	Acetone	0.048	0.041	14.6	140	0.00
14	C,T,M	1,1-Dichloroethene	0.484	0.473	2.3	145	0.01
15	T,M	tert-Butyl alcohol	0.013	0.012	7.7	130	0.00
16	T,M	Iodomethane	0.437	0.482	-10.3	160	0.00
17	T,M	Methyl acetate	0.103	0.106	-2.9	157	0.00
18	T,M	Methylene chloride	0.336	0.348	-3.6	160	0.00
19	T,M	Carbon disulfide	0.838	0.919	-9.7	157	0.00
20	T,M	Acrylonitrile	0.040	0.043	-7.5	165	0.00
21	T,M	tert-Butyl methyl ether (MT	0.550	0.540	1.8	144	0.00
22	T,M	trans-1,2-Dichloroethene	0.441	0.451	-2.3	151	0.00
23	T,M	Isopropyl ether (DIPE)	0.880	0.961	-9.2	163	0.00
24	T,M	Vinyl acetate	0.321	0.344	-7.2	154	0.00
25	P,T,M	1,1-Dichloroethane	0.540	0.568	-5.2	159	0.00
26	T,M	2-Butanol	0.000	0.010	0.0	0#	-0.01
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.812	0.1	146	0.00
28	T,M	2-Butanone	0.066	0.060	9.1	143	0.00
29	T,M	2,2-Dichloropropane	0.538	0.476	11.5	129	0.00
30	T,M	cis-1,2-Dichloroethene	0.340	0.363	-6.8	158	0.00
31	C,T,M	Chloroform	0.608	0.556	8.6	135	0.00
32	T,M	Bromochloromethane	0.206	0.213	-3.4	155	0.00
33	T,M	Tetrahydrofuran	0.037	0.029	21.6#	134	0.00
34	S	Dibromofluoromethane	0.304	0.306	-0.7	140	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.537	10.5	127	0.00
36	T,M	Cyclohexane	0.432	0.428	0.9	144	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.021	0.0	0#	-0.01
38	T,M	1,1-Dichloropropene	0.164	0.162	1.2	148	0.00
39	T,M	Carbon tetrachloride	0.499	0.439	12.0	124	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.607	-1.5	149	-0.02
41	S	1,2-Dichloroethane-d4	0.270	0.242	10.4	123	-0.01

(#) = Out of Range

sc 8/26/24

* 1&2 evaluated From ICV (IV001H0902) File ID: RHV137

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M Benzene	1.101	1.216	-10.4	160	0.00
43	T,M 1,2-Dichloroethane	0.344	0.311	9.6	124	0.00
44	T,M Trichloroethene	0.350	0.351	-0.3	148	0.00
45	T,M Methylcyclohexane	0.482	0.472	2.1	141	-0.01
46	C,T,M 1,2-Dichloropropane	0.251	0.271	-8.0	158	0.00
47	T,M Bromodichloromethane	0.439	0.387	11.8	133	-0.01
48	T,M 1,4-Dioxane	0.001	0.001	0.0	141	0.02
49	T,M Dibromomethane	0.140	0.134	4.3	141	-0.01
50	T,M 2-Chloroethyl vinyl ether	0.079	0.080	-1.3	157	0.00
51	T,M 4-Methyl-2-pentanone	0.150	0.152	-1.3	141	-0.01
52	T,M cis-1,3-Dichloropropene	0.444	0.439	1.1	142	-0.01
53	I CHLOROBENZENE-D5	1.000	1.000	0.0	145	-0.01
54	S Toluene-d8	1.222	1.265	-3.5	141	0.00
55	C,T,M Toluene	1.498	1.589	-6.1	147	0.00
56	T,M Ethyl methacrylate	0.253	0.256	-1.2	138	0.00
57	T,M trans-1,3-Dichloropropene	0.435	0.419	3.7	130	0.00
58	T,M 1,1,2-Trichloroethane	0.219	0.219	0.0	143	-0.01
59	T,M 2-Hexanone	0.111	0.109	1.8	129	0.00
60	T,M 1,3-Dichloropropane	0.391	0.389	0.5	141	-0.01
61	T,M Tetrachloroethene	0.340	0.317	6.8	138	-0.01
62	T,M Dibromochloromethane	0.290	0.268	7.6	129	-0.01
63	T,M 1,2-Dibromoethane	0.221	0.215	2.7	141	0.00
64	T,M 1-Chlorohexane	0.695	0.659	5.2	139	0.00
65	P,M Chlorobenzene	1.030	1.048	-1.7	143	0.00
66	T,M 1,1,1,2-Tetrachloroethane	0.344	0.338	1.7	134	0.00
67	C,T,M Ethylbenzene	1.876	1.840	1.9	135	-0.01
68	T,M m-Xylene & p-Xylene	1.481	1.391	6.1	133	0.00
69	T,M o-Xylene	1.428	1.410	1.3	133	0.00
70	T,M Styrene	1.045	1.053	-0.8	139	0.00
71	T,M Isopropylbenzene	1.956	1.853	5.3	131	0.00
72	I 1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	122	-0.01
73	P,T,M Bromoform	0.367	0.382	-4.1	123	0.00
74	T,M trans-1,4-Dichloro-2-butene	0.223	0.207	7.2	113	0.00
75	T,M 1,1,2,2-Tetrachloroethane	0.597	0.662	-10.9	133	0.00
76	S 4-Bromofluorobenzene	1.269	1.293	-1.9	124	0.00
77	T,M 1,2,3-Trichloropropane	0.220	0.222	-0.9	129	-0.01
78	T,M n-Propylbenzene	6.357	6.766	-6.4	129	-0.01
79	T,M Bromobenzene	0.963	1.000	-3.8	130	-0.01
80	T,M 1,3,5-Trimethylbenzene	4.198	4.356	-3.8	129	0.00

(#) = Out of Range

9/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	4.359	-4.5	130	-0.01
82	T,M	4-Chlorotoluene	3.565	3.555	0.3	123	0.00
83	T,M	tert-Butylbenzene	0.928	0.972	-4.7	134	-0.01
84	T,M	1,2,4-Trimethylbenzene	4.010	4.178	-4.2	126	0.00
85	T,M	sec-Butylbenzene	5.662	5.935	-4.8	126	0.00
86	T,M	p-Isopropyltoluene	4.820	4.988	-3.5	124	0.00
87	T,M	1,3-Dichlorobenzene	1.994	2.024	-1.5	126	-0.01
88	T,M	1,2,3-Trimethylbenzene	3.890	3.994	-2.7	121	-0.01
89	T,M	1,4-Dichlorobenzene	1.928	1.971	-2.2	127	0.00
90	T,M	n-Butylbenzene	4.412	4.418	-0.1	118	-0.01
91	T,M	1,2-Dichlorobenzene	1.642	1.660	-1.1	123	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.097	-4.3	118	0.00
93	T,M	1,2,4-Trichlorobenzene	1.116	1.093	2.1	119	0.00
94	T,M	Hexachlorobutadiene	0.732	0.712	2.7	116	-0.01
95	T,M	Naphthalene	1.591	1.551	2.5	114	-0.01
96	T,M	1,2,3-Trichlorobenzene	0.853	0.825	3.3	115	0.00

Sm 9/6/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1458016	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1207297	10.00	ug/l	-0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	390071	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	445940	10.06	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.60%			
41) 1,2-Dichloroethane-d4	7.97	65	352943	8.95	ug/l	-0.01
Spiked Amount 10.000			Recovery = 89.50%			
54) Toluene-d8	11.03	98	1527415	10.35	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.50%			
76) 4-Bromofluorobenzene	16.01	95	504433	10.19	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.90%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	410825	8.56	ug/l	96
5) Chloromethane	2.55	50	410805	11.81	ug/l	98
6) Vinyl chloride	2.69	62	362949	11.83	ug/l	97
7) Bromomethane	3.23	94	315660	11.62	ug/l	96
8) Chloroethane	3.27	64	294990	12.38	ug/l	87
9) Dichlorofluoromethane	3.35	67	515590	9.81	ug/l	99
10) Trichlorofluoromethane	3.61	101	645259	9.25	ug/l	99
11) Acrolein	4.03	56	83543	56.86	ug/l	88
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	252752	8.85	ug/l	100
13) Acetone	4.10	43	300505	45.73	ug/l	87
14) 1,1-Dichloroethene	4.26	61	689726	9.78	ug/l	93
15) tert-Butyl alcohol	4.37	59	435647	222.07	ug/l	100
16) Iodomethane	4.66	142	702444	11.01	ug/l	88
17) Methyl acetate	4.68	43	154672	10.26	ug/l	94
18) Methylene chloride	4.89	49	507851	10.36	ug/l	96
19) Carbon disulfide	4.90	76	1340359	10.98	ug/l	100
20) Acrylonitrile	5.05	53	310061	53.51	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	786741	9.81	ug/l	92
22) trans-1,2-Dichloroethene	5.27	61	657080	10.23	ug/l	94
23) Isopropyl ether (DIPE)	5.69	45	1400453	10.92	ug/l	99
24) Vinyl acetate	5.85	43	501747	10.71	ug/l	96
25) 1,1-Dichloroethane	5.85	63	828152	10.52	ug/l	98
27) tert-Butyl ethyl ether (ET	6.26	59	1183255	9.98	ug/l	99
28) 2-Butanone	6.44	43	438405	45.67	ug/l	98
29) 2,2-Dichloropropane	6.65	77	693615	8.84	ug/l	96
30) cis-1,2-Dichloroethene	6.71	96	529401	10.68	ug/l	93
31) Chloroform	6.93	83	810614	9.14	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	310687	10.32	ug/l	99
33)	Tetrahydrofuran	7.21	42	42975	8.02	ug/l	90
35)	1,1,1-Trichloroethane	7.51	97	783252	8.95	ug/l	99
36)	Cyclohexane	7.54	84	624073	9.90	ug/l	99
38)	1,1-Dichloropropene	7.73	110	235706	9.83	ug/l	99
39)	Carbon tetrachloride	7.89	119	639597	8.79	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	885635	10.16	ug/l	99
42)	Benzene	8.15	78	1773569	11.05	ug/l	98
43)	1,2-Dichloroethane	8.12	62	453115	9.03	ug/l	98
44)	Trichloroethene	9.08	130	511419	10.01	ug/l	97
45)	Methylcyclohexane	9.17	83	688803	9.80	ug/l	97
46)	1,2-Dichloropropane	9.36	63	394503	10.76	ug/l	86
47)	Bromodichloromethane	9.73	83	564519	8.83	ug/l	100
48)	1,4-Dioxane	9.79	88	34248	188.77	ug/l	94
49)	Dibromomethane	9.82	93	194884	9.55	ug/l	98
50)	2-Chloroethyl vinyl ether	10.23	63	116170	10.13	ug/l	97
51)	4-Methyl-2-pentanone	10.26	43	1111189	50.70	ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	640446	9.90	ug/l	99
55)	Toluene	11.17	91	1918259	10.60	ug/l	99
56)	Ethyl methacrylate	11.46	69	308968	10.13	ug/l	93
57)	trans-1,3-Dichloropropene	11.48	75	505830	9.64	ug/l	98
58)	1,1,2-Trichloroethane	11.75	97	263881	9.96	ug/l	98
59)	2-Hexanone	11.76	43	656965	45.59	ug/l	94
60)	1,3-Dichloropropane	12.19	76	469386	9.95	ug/l	99
61)	Tetrachloroethene	12.29	164	382862	9.32	ug/l	97
62)	Dibromochloromethane	12.66	129	323283	9.23	ug/l	100
63)	1,2-Dibromoethane	13.03	107	260128	9.75	ug/l	99
64)	1-Chlorohexane	13.32	91	795389	9.48	ug/l	99
65)	Chlorobenzene	13.79	112	1265090	10.17	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	407851	9.82	ug/l	98
67)	Ethylbenzene	13.88	91	2221146	9.81	ug/l	97
68)	m-Xylene & p-Xylene	14.03	91	3357661	18.78	ug/l	96
69)	o-Xylene	14.84	91	1702007	9.87	ug/l	98
70)	Styrene	14.92	104	1271745	10.08	ug/l	96
71)	Isopropylbenzene	15.52	105	2237530	9.47	ug/l	98
73)	Bromoform	15.57	173	149023	10.40	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	80729	9.27	ug/l	97
75)	1,1,2,2-Tetrachloroethane	15.86	83	258076	11.08	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	86704	10.11	ug/l	99
78)	n-Propylbenzene	16.29	91	2639309	10.64	ug/l	98
79)	Bromobenzene	16.38	156	390060	10.39	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

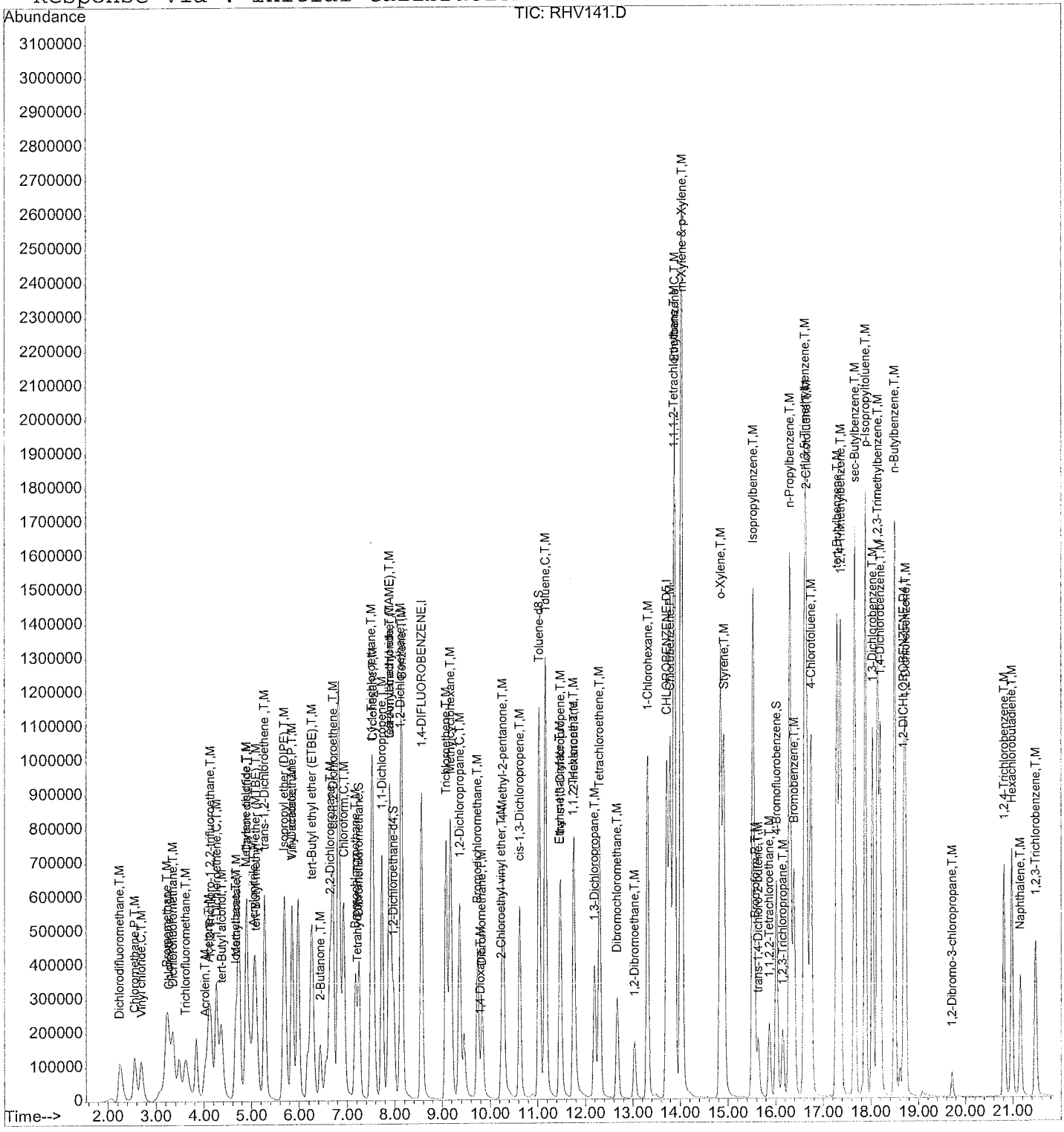
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.61	105	1699332	10.38	ug/l	96
81)	2-Chlorotoluene	16.63	91	1700484	10.45	ug/l	96
82)	4-Chlorotoluene	16.74	91	1386824	9.97	ug/l	97
83)	tert-Butylbenzene	17.29	134	379037	10.47	ug/l	89
84)	1,2,4-Trimethylbenzene	17.36	105	1629540	10.42	ug/l	95
85)	sec-Butylbenzene	17.66	105	2315214	10.48	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1945839	10.35	ug/l	98
87)	1,3-Dichlorobenzene	18.03	146	789417	10.15	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	1558138	10.27	ug/l	98
89)	1,4-Dichlorobenzene	18.19	146	768840	10.22	ug/l	99
90)	n-Butylbenzene	18.49	91	1723405	10.01	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	647540	10.11	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.72	157	37937	10.51	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	426286	9.79	ug/l	97
94)	Hexachlorobutadiene	20.98	225	277847	9.72	ug/l	97
95)	Naphthalene	21.15	128	604845	9.75	ug/l	100
96)	1,2,3-Trichlorobenzene	21.48	180	321802	9.68	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RHV145 BFB Injection Date: 08/13/24

Instrument ID: 01New BFB Injection Time: 15:24

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.567
75	30 - 60% of mass 95	48.649
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.418
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	72.564
175	5 - 9% of mass 174	4.820(6.64)1
176	95 - 101% % of mass 174	71.637(98.72)1
177	5 - 9% % of mass 176	4.061(5.67)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD50	IVO01H0902	RHV147	08/13/24	16:44

SC
8/16/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01New
IC_Beginning DateTime :08/09/24 17:28
Spike Amount :10 PPB
CC/CV File :RHV147
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09
Date_Time :08/13/24 16:44

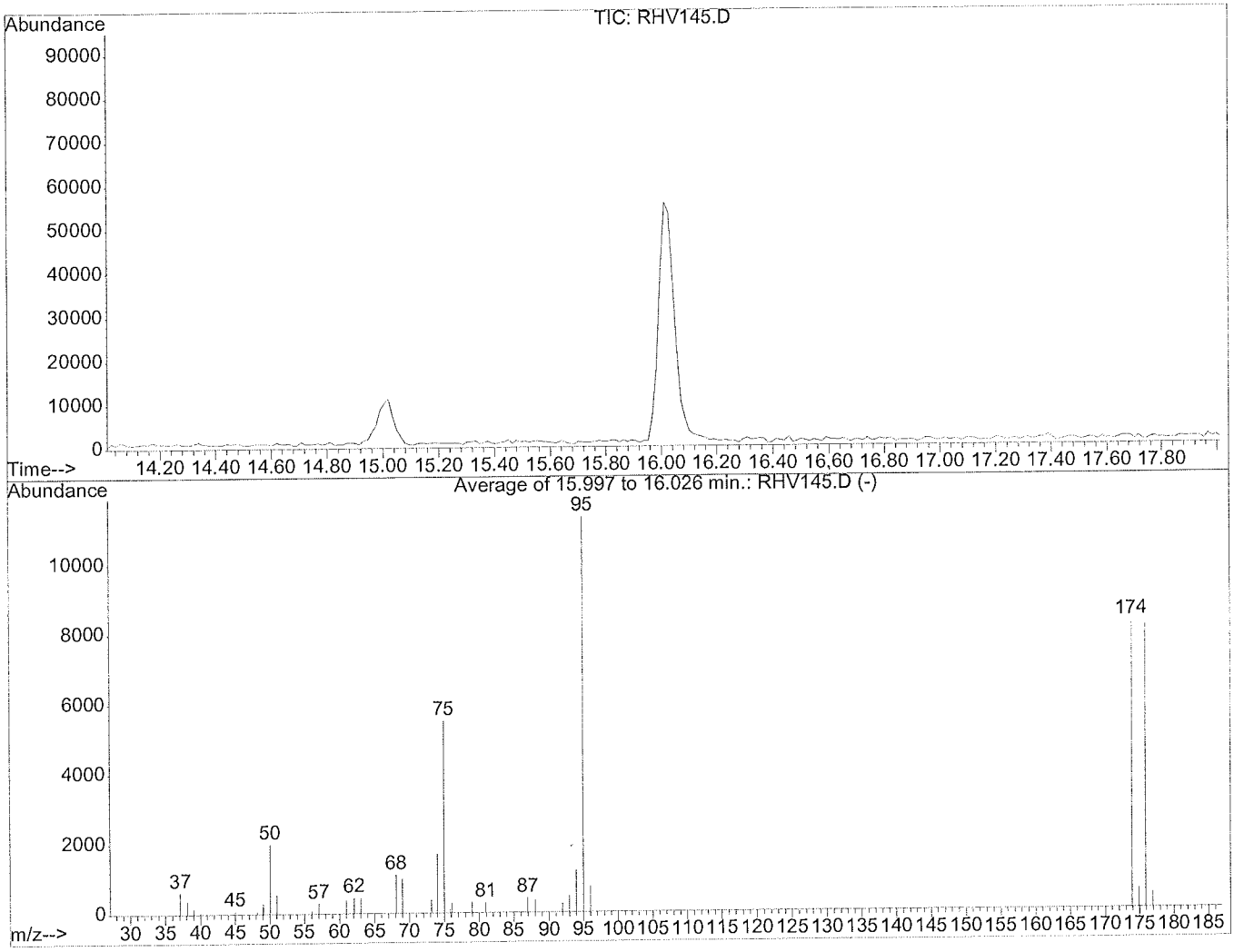
M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1270191	1	1	8.561	8.560	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane												
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane												
	6	Vinyl chloride												
	7	Bromomethane												
	8	Chloroethane	9.018	-9.8	187127	0.147	0.163	3.273	3.278	13.37				
	9	Dichlorofluoromethane												
	10	Trichlorofluoromethane												
5	11	Acrolein												
	12	1,1,2-Trichloro-1,2,2-trifluoroethane												
5	13	Acetone												
	14	1,1-Dichloroethene												
25	15	tert-Butyl alcohol												
	16	Iodomethane												
	17	Methyl acetate												
	18	Methylene chloride												
	19	Carbon disulfide												
5	20	Acrylonitrile												
	21	tert-Butyl methyl ether (MTBE)												
	22	trans-1,2-Dichloroethene												
	23	Isopropyl ether (DIPE)												
	24	Vinyl acetate												
	25	1,1-Dichloroethane												
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)												
5	28	2-Butanone												
	29	2,2-Dichloropropane												
	30	cis-1,2-Dichloroethene												
	31	Chloroform												
	32	Bromochloromethane												
	33	Tetrahydrofuran												
	34	Dibromofluoromethane	10.429	4.3	402823	0.317	0.304	7.243	7.243	13.19				
	35	1,1,1-Trichloroethane												
	36	Cyclohexane												
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene												
	39	Carbon tetrachloride												
	40	tert-Amyl methyl ether (TAME)												
	41	1,2-Dichloroethane-d4	9.454	-5.5	324659	0.256	0.270	7.969	7.979	10.30				
	42	Benzene												
	43	1,2-Dichloroethane												
	44	Trichloroethene												
	45	Methylcyclohexane												
	46	1,2-Dichloropropane												
	47	Bromodichloromethane												
20	48	1,4-Dioxane												
	49	Dibromomethane												
	50	2-Chloroethyl vinyl ether												
5	51	4-Methyl-2-pentanone												
	52	cis-1,3-Dichloropropene												
	53	CHLOROBENZENE-D5	10.000	0	1068412	1	1	13.716	13.726	0				
	54	Toluene-d8	10.902	9.0	1423776	1.333	1.222	11.035	11.038	8.56				
	55	Toluene												
	56	Ethyl methacrylate												
	57	trans-1,3-Dichloropropene												
	58	1,1,2-Trichloroethane												
5	59	2-Hexanone												
	60	1,3-Dichloropropane												
	61	Tetrachloroethene												
	62	Dibromochloromethane												
	63	1,2-Dibromoethane												
	64	1-Chlorohexane												
	65	Chlorobenzene												
	66	1,1,1,2-Tetrachloroethane												
	67	Ethylbenzene												
2	68	m-Xylene & p-Xylene												
	69	o-Xylene												
	70	Styrene												
	71	Isopropylbenzene												
	72	1,2-DICHLOROBENZENE-D4	10.000	0	439346	1	1	18.679	18.693	0				
	73	Bromoform												
	74	trans-1,4-Dichloro-2-butene												
	75	1,1,2,2-Tetrachloroethane												
	76	4-Bromofluorobenzene	9.531	-4.7	531274	1.209	1.269	16.013	16.020	9.24				
	77	1,2,3-Trichloropropane												
	78	n-Propylbenzene												
	79	Bromobenzene												
	80	1,3,5-Trimethylbenzene												
	81	2-Chlorotoluene												
	82	4-Chlorotoluene												
	83	tert-Butylbenzene												
	84	1,2,4-Trimethylbenzene												
	85	sec-Butylbenzene												
	86	p-Isopropyltoluene												
	87	1,3-Dichlorobenzene												
	88	1,2,3-Trimethylbenzene												
	89	1,4-Dichlorobenzene												
	90	n-Butylbenzene												
	91	1,2-Dichlorobenzene												
	92	1,2-Dibromo-3-chloropropane												
	93	1,2,4-Trichlorobenzene												
	94	Hexachlorobutadiene												
	95	Naphthalene												
	96	1,2,3-Trichlorobenzene												

Spike Amount = Nominal Amount * M

SV
9/6/24

Data File : D:\HPCHEM\1\DATA\24H13\RHV145.D
Acq On : 13 Aug 2024 3:24 pm
Sample : BFB01H10
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye
Inst : 01New
Multiplr: 1.00



AutoFind: Scans 979, 980, 981; Background Corrected with Scan 973

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	1990	PASS
75	95	30	60	48.6	5511	PASS
95	95	100	100	100.0	11328	PASS
96	95	5	9	6.4	727	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	72.6	8220	PASS
175	174	5	9	6.6	546	PASS
176	174	95	101	98.7	8115	PASS
177	176	5	9	5.7	460	PASS

RHV145.D VO01H09.M Fri Sep 06 16:25:53 2024 SC 9/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	132	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	0.000	100.0#	0	-2.24#
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	0.000	100.0#	0	-2.54#
6	C,T,M	Vinyl chloride	10.000	0.000	100.0#	0	-2.68#
7	T,M	Bromomethane	10.000	0.000	100.0#	0	-3.21#
8	T,M	Chloroethane	10.000	9.018	9.8	116	0.00
9	T,M	Dichlorofluoromethane	10.000	0.000	100.0#	0	-3.35#
10	T,M	Trichlorofluoromethane	10.000	0.000	100.0#	0	-3.48#
11	T,M	Acrolein	50.000	0.000	100.0#	0	-4.01#
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	0.000	100.0#	0	-4.15#
13	T,M	Acetone	50.000	-2.613	105.2#	0	-4.10#
14	C,T,M	1,1-Dichloroethene	10.000	0.000	100.0#	0	-4.25#
15	T,M	tert-Butyl alcohol	250.000	0.000	100.0#	0	-4.37#
16	T,M	Iodomethane	10.000	0.000	100.0#	0	-4.66#
17	T,M	Methyl acetate	10.000	0.000	100.0#	0	-4.68#
18	T,M	Methylene chloride	10.000	0.000	100.0#	0	-4.89#
19	T,M	Carbon disulfide	10.000	0.000	100.0#	0	-4.90#
20	T,M	Acrylonitrile	50.000	0.000	100.0#	0	-5.05#
21	T,M	tert-Butyl methyl ether (MT	10.000	0.000	100.0#	0	-5.09#
22	T,M	trans-1,2-Dichloroethene	10.000	0.000	100.0#	0	-5.27#
23	T,M	Isopropyl ether (DIPE)	10.000	0.000	100.0#	0	-5.69#
24	T,M	Vinyl acetate	10.000	0.000	100.0#	0	-5.85#
25	P,T,M	1,1-Dichloroethane	10.000	0.000	100.0#	0	-5.85#
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-6.17#
27	T,M	tert-Butyl ethyl ether (ETB	10.000	0.000	100.0#	0	-6.26#
28	T,M	2-Butanone	50.000	0.000	100.0#	0	-6.44#
29	T,M	2,2-Dichloropropane	10.000	0.000	100.0#	0	-6.65#
30	T,M	cis-1,2-Dichloroethene	10.000	0.000	100.0#	0	-6.71#
31	C,T,M	Chloroform	10.000	0.000	100.0#	0	-6.93#
32	T,M	Bromochloromethane	10.000	0.000	100.0#	0	-7.17#
33	T,M	Tetrahydrofuran	10.000	0.000	100.0#	0	-7.21#
34	S	Dibromofluoromethane	10.000	10.429	-4.3	127	0.00
35	T,M	1,1,1-Trichloroethane	10.000	0.000	100.0#	0	-7.51#
36	T,M	Cyclohexane	10.000	0.000	100.0#	0	-7.54#
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-7.55#
38	T,M	1,1-Dichloropropene	10.000	0.000	100.0#	0	-7.73#
39	T,M	Carbon tetrachloride	10.000	0.000	100.0#	0	-7.89#
40	T,M	tert-Amyl methyl ether (TAM	10.000	0.000	100.0#	0	-7.91#
41	S	1,2-Dichloroethane-d4	10.000	9.454	5.5	113	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	0.000	100.0#	0	-8.15#
43	T,M	1,2-Dichloroethane	10.000	0.000	100.0#	0	-8.12#
44	T,M	Trichloroethene	10.000	0.000	100.0#	0	-9.08#
45	T,M	Methylcyclohexane	10.000	0.000	100.0#	0	-9.18#
46	C,T,M	1,2-Dichloropropane	10.000	0.000	100.0#	0	-9.36#
47	T,M	Bromodichloromethane	10.000	0.000	100.0#	0	-9.74#
48	T,M	1,4-Dioxane	200.000	0.000	100.0#	0	-9.78#
49	T,M	Dibromomethane	10.000	0.000	100.0#	0	-9.83#
50	T,M	2-Chloroethyl vinyl ether	10.000	0.000	100.0#	0	-10.23#
51	T,M	4-Methyl-2-pentanone	50.000	0.000	100.0#	0	-10.28#
52	T,M	cis-1,3-Dichloropropene	10.000	0.000	100.0#	0	-10.63#
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	128	-0.01
54	S	Toluene-d8	10.000	10.903	-9.0	131	0.00
55	C,T,M	Toluene	10.000	0.000	100.0#	0	-11.17#
56	T,M	Ethyl methacrylate	10.000	0.000	100.0#	0	-11.46#
57	T,M	trans-1,3-Dichloropropene	10.000	0.000	100.0#	0	-11.48#
58	T,M	1,1,2-Trichloroethane	10.000	0.000	100.0#	0	-11.76#
59	T,M	2-Hexanone	50.000	2.471	95.1#	0	-11.76#
60	T,M	1,3-Dichloropropane	10.000	0.000	100.0#	0	-12.20#
61	T,M	Tetrachloroethene	10.000	0.000	100.0#	0	-12.31#
62	T,M	Dibromochloromethane	10.000	0.000	100.0#	0	-12.68#
63	T,M	1,2-Dibromoethane	10.000	0.000	100.0#	0	-13.03#
64	T,M	1-Chlorohexane	10.000	0.000	100.0#	0	-13.32#
65	P,M	Chlorobenzene	10.000	0.000	100.0#	0	-13.79#
66	T,M	1,1,1,2-Tetrachloroethane	10.000	0.000	100.0#	0	-13.86#
67	C,T,M	Ethylbenzene	10.000	0.000	100.0#	0	-13.89#
68	T,M	m-Xylene & p-Xylene	20.000	0.000	100.0#	0	-14.03#
69	T,M	o-Xylene	10.000	0.000	100.0#	0	-14.84#
70	T,M	Styrene	10.000	0.000	100.0#	0	-14.92#
71	T,M	Isopropylbenzene	10.000	0.000	100.0#	0	-15.52#
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	137	-0.01
73	P,T,M	Bromoform	10.000	0.000	100.0#	0	-15.57#
74	T,M	trans-1,4-Dichloro-2-butene	10.000	0.000	100.0#	0	-15.63#
75	T,M	1,1,2,2-Tetrachloroethane	10.000	0.000	100.0#	0	-15.86#
76	S	4-Bromofluorobenzene	10.000	9.531	4.7	131	0.00
77	T,M	1,2,3-Trichloropropane	10.000	0.000	100.0#	0	-16.16#
78	T,M	n-Propylbenzene	10.000	0.000	100.0#	0	-16.31#
79	T,M	Bromobenzene	10.000	0.000	100.0#	0	-16.40#
80	T,M	1,3,5-Trimethylbenzene	10.000	0.000	100.0#	0	-16.60#

(#) = Out of Range

9/16/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D
Acq On : 13 Aug 2024 4:44 pm
Sample : IVO01H0902 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 3
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	0.000	100.0#	0	-16.65#
82	T,M	4-Chlorotoluene	10.000	0.000	100.0#	0	-16.74#
83	T,M	tert-Butylbenzene	10.000	0.000	100.0#	0	-17.30#
84	T,M	1,2,4-Trimethylbenzene	10.000	0.000	100.0#	0	-17.36#
85	T,M	sec-Butylbenzene	10.000	0.000	100.0#	0	-17.66#
86	T,M	p-Isopropyltoluene	10.000	0.000	100.0#	0	-17.88#
87	T,M	1,3-Dichlorobenzene	10.000	0.000	100.0#	0	-18.04#
88	T,M	1,2,3-Trimethylbenzene	10.000	0.000	100.0#	0	-18.15#
89	T,M	1,4-Dichlorobenzene	10.000	0.000	100.0#	0	-18.19#
90	T,M	n-Butylbenzene	10.000	0.000	100.0#	0	-18.50#
91	T,M	1,2-Dichlorobenzene	10.000	0.000	100.0#	0	-18.72#
92	T,M	1,2-Dibromo-3-chloropropane	10.000	0.000	100.0#	0	-19.72#
93	T,M	1,2,4-Trichlorobenzene	10.000	0.000	100.0#	0	-20.81#
94	T,M	Hexachlorobutadiene	10.000	0.000	100.0#	0	-20.99#
95	T,M	Naphthalene	10.000	0.000	100.0#	0	-21.17#
96	T,M	1,2,3-Trichlorobenzene	10.000	0.000	100.0#	0	-21.48#

S 9/6/24

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	132	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.000	100.0#	0#	-2.24#
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.000#	100.0#	0#	-2.54#
6	C,T,M	Vinyl chloride	0.210	0.000	100.0#	0#	-2.68#
7	T,M	Bromomethane	0.186	0.000	100.0#	0#	-3.21#
8	T,M	Chloroethane	0.163	0.147	9.8	116	0.00
9	T,M	Dichlorofluoromethane	0.360	0.000	100.0#	0#	-3.35#
10	T,M	Trichlorofluoromethane	0.478	0.000	100.0#	0#	-3.48#
11	T,M	Acrolein	0.010	0.000	100.0#	0#	-4.01#
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.000	100.0#	0#	-4.15#
13	T,M	Acetone	0.048	0.000	100.0#	0#	-4.10#
14	C,T,M	1,1-Dichloroethene	0.484	0.000	100.0#	0#	-4.25#
15	T,M	tert-Butyl alcohol	0.013	0.000	100.0#	0#	-4.37#
16	T,M	Iodomethane	0.437	0.000	100.0#	0#	-4.66#
17	T,M	Methyl acetate	0.103	0.000	100.0#	0#	-4.68#
18	T,M	Methylene chloride	0.336	0.000	100.0#	0#	-4.89#
19	T,M	Carbon disulfide	0.838	0.000	100.0#	0#	-4.90#
20	T,M	Acrylonitrile	0.040	0.000	100.0#	0#	-5.05#
21	T,M	tert-Butyl methyl ether (MT	0.550	0.000	100.0#	0#	-5.09#
22	T,M	trans-1,2-Dichloroethene	0.441	0.000	100.0#	0#	-5.27#
23	T,M	Isopropyl ether (DIPE)	0.880	0.000	100.0#	0#	-5.69#
24	T,M	Vinyl acetate	0.321	0.000	100.0#	0#	-5.85#
25	P,T,M	1,1-Dichloroethane	0.540	0.000#	100.0#	0#	-5.85#
26	T,M	2-Butanol	0.000	0.000	0.0	0#	-6.17#
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.000	100.0#	0#	-6.26#
28	T,M	2-Butanone	0.066	0.000	100.0#	0#	-6.44#
29	T,M	2,2-Dichloropropane	0.538	0.000	100.0#	0#	-6.65#
30	T,M	cis-1,2-Dichloroethene	0.340	0.000	100.0#	0#	-6.71#
31	C,T,M	Chloroform	0.608	0.000	100.0#	0#	-6.93#
32	T,M	Bromochloromethane	0.206	0.000	100.0#	0#	-7.17#
33	T,M	Tetrahydrofuran	0.037	0.000	100.0#	0#	-7.21#
34	S	Dibromofluoromethane	0.304	0.317	-4.3	127	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.000	100.0#	0#	-7.51#
36	T,M	Cyclohexane	0.432	0.000	100.0#	0#	-7.54#
37	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	-7.55#
38	T,M	1,1-Dichloropropene	0.164	0.000	100.0#	0#	-7.73#
39	T,M	Carbon tetrachloride	0.499	0.000	100.0#	0#	-7.89#
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.000	100.0#	0#	-7.91#
41	S	1,2-Dichloroethane-d4	0.270	0.256	5.2	113	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	0.000	100.0#	0#	-8.15#
43	T,M	1,2-Dichloroethane	0.344	0.000	100.0#	0#	-8.12#
44	T,M	Trichloroethene	0.350	0.000	100.0#	0#	-9.08#
45	T,M	Methylcyclohexane	0.482	0.000	100.0#	0#	-9.18#
46	C,T,M	1,2-Dichloropropane	0.251	0.000	100.0#	0#	-9.36#
47	T,M	Bromodichloromethane	0.439	0.000	100.0#	0#	-9.74#
48	T,M	1,4-Dioxane	0.001	0.000	100.0#	0#	-9.78#
49	T,M	Dibromomethane	0.140	0.000	100.0#	0#	-9.83#
50	T,M	2-Chloroethyl vinyl ether	0.079	0.000	100.0#	0#	-10.23#
51	T,M	4-Methyl-2-pentanone	0.150	0.000	100.0#	0#	-10.28#
52	T,M	cis-1,3-Dichloropropene	0.444	0.000	100.0#	0#	-10.63#
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	128	-0.01
54	S	Toluene-d8	1.222	1.333	-9.1	131	0.00
55	C,T,M	Toluene	1.498	0.000	100.0#	0#	-11.17#
56	T,M	Ethyl methacrylate	0.253	0.000	100.0#	0#	-11.46#
57	T,M	trans-1,3-Dichloropropene	0.435	0.000	100.0#	0#	-11.48#
58	T,M	1,1,2-Trichloroethane	0.219	0.000	100.0#	0#	-11.76#
59	T,M	2-Hexanone	0.111	0.000	100.0#	0#	-11.76#
60	T,M	1,3-Dichloropropane	0.391	0.000	100.0#	0#	-12.20#
61	T,M	Tetrachloroethene	0.340	0.000	100.0#	0#	-12.31#
62	T,M	Dibromochloromethane	0.290	0.000	100.0#	0#	-12.68#
63	T,M	1,2-Dibromoethane	0.221	0.000	100.0#	0#	-13.03#
64	T,M	1-Chlorohexane	0.695	0.000	100.0#	0#	-13.32#
65	P,M	Chlorobenzene	1.030	0.000#	100.0#	0#	-13.79#
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.000	100.0#	0#	-13.86#
67	C,T,M	Ethylbenzene	1.876	0.000	100.0#	0#	-13.89#
68	T,M	m-Xylene & p-Xylene	1.481	0.000	100.0#	0#	-14.03#
69	T,M	o-Xylene	1.428	0.000	100.0#	0#	-14.84#
70	T,M	Styrene	1.045	0.000	100.0#	0#	-14.92#
71	T,M	Isopropylbenzene	1.956	0.000	100.0#	0#	-15.52#
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	137	-0.01
73	P,T,M	Bromoform	0.367	0.000#	100.0#	0#	-15.57#
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.000	100.0#	0#	-15.63#
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.000	100.0#	0#	-15.86#
76	S	4-Bromofluorobenzene	1.269	1.209	4.7	131	0.00
77	T,M	1,2,3-Trichloropropane	0.220	0.000	100.0#	0#	-16.16#
78	T,M	n-Propylbenzene	6.357	0.000	100.0#	0#	-16.31#
79	T,M	Bromobenzene	0.963	0.000	100.0#	0#	-16.40#
80	T,M	1,3,5-Trimethylbenzene	4.198	0.000	100.0#	0#	-16.60#

(#) = Out of Range

09/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	0.000	100.0#	0#	-16.65#
82	T,M	4-Chlorotoluene	3.565	0.000	100.0#	0#	-16.74#
83	T,M	tert-Butylbenzene	0.928	0.000	100.0#	0#	-17.30#
84	T,M	1,2,4-Trimethylbenzene	4.010	0.000	100.0#	0#	-17.36#
85	T,M	sec-Butylbenzene	5.662	0.000	100.0#	0#	-17.66#
86	T,M	p-Isopropyltoluene	4.820	0.000	100.0#	0#	-17.88#
87	T,M	1,3-Dichlorobenzene	1.994	0.000	100.0#	0#	-18.04#
88	T,M	1,2,3-Trimethylbenzene	3.890	0.000	100.0#	0#	-18.15#
89	T,M	1,4-Dichlorobenzene	1.928	0.000	100.0#	0#	-18.19#
90	T,M	n-Butylbenzene	4.412	0.000	100.0#	0#	-18.50#
91	T,M	1,2-Dichlorobenzene	1.642	0.000	100.0#	0#	-18.72#
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.000	100.0#	0#	-19.72#
93	T,M	1,2,4-Trichlorobenzene	1.116	0.000	100.0#	0#	-20.81#
94	T,M	Hexachlorobutadiene	0.732	0.000	100.0#	0#	-20.99#
95	T,M	Naphthalene	1.591	0.000	100.0#	0#	-21.17#
96	T,M	1,2,3-Trichlorobenzene	0.853	0.000	100.0#	0#	-21.48#

SC 09/6/24

(#) = Out of Range SPCC's out = 4 CCC's out = 6

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 6 16:06 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

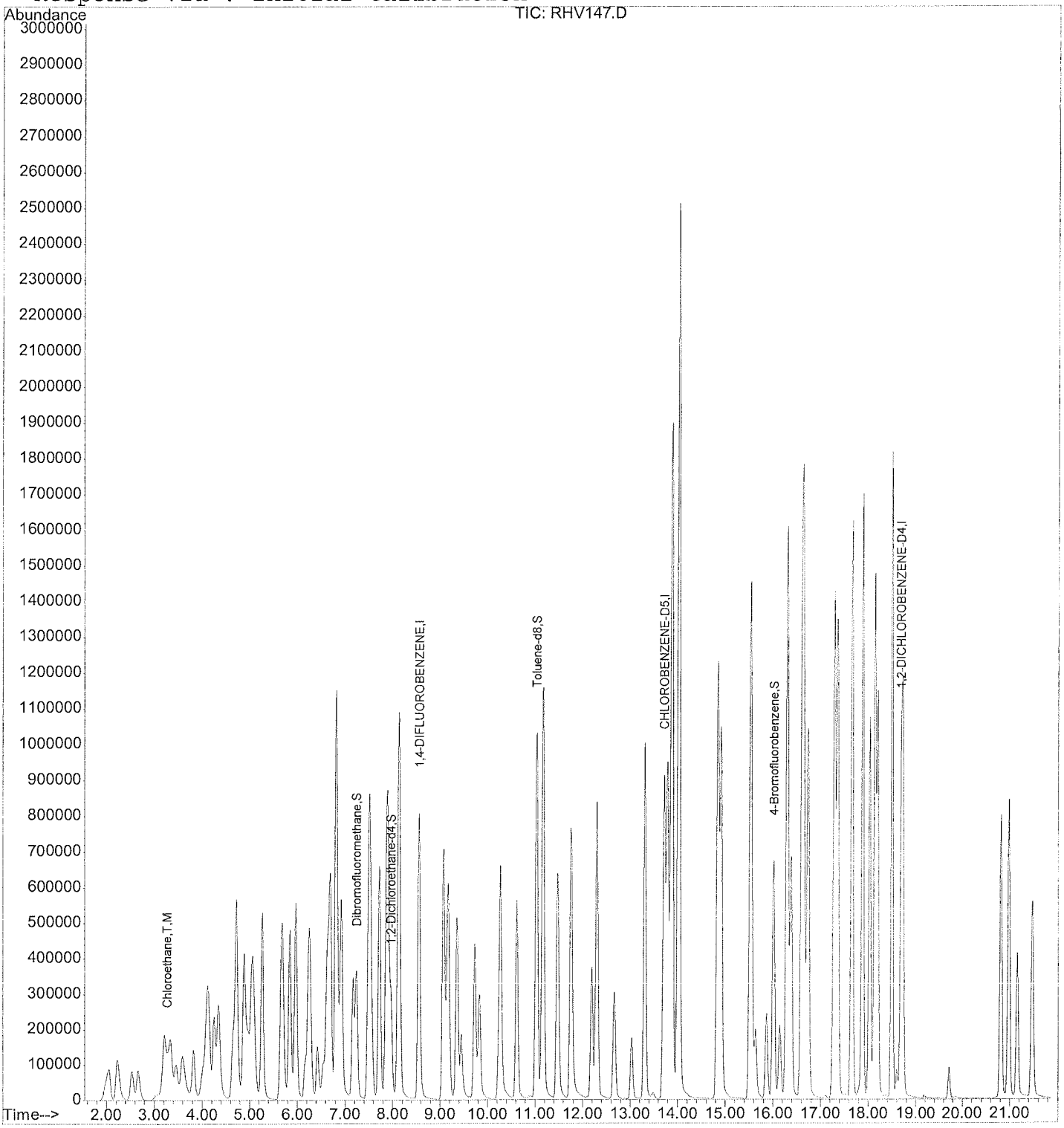
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1270191	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1068412	10.00	ug/l	-0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	439346	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	402823	10.43	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.30%			
41) 1,2-Dichloroethane-d4	7.97	65	324659	9.45	ug/l	-0.01
Spiked Amount 10.000			Recovery = 94.50%			
54) Toluene-d8	11.03	98	1423776	10.90	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.00%			
76) 4-Bromofluorobenzene	16.01	95	531274	9.53	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.30%			
Target Compounds						Qvalue
8) Chloroethane	3.27	64	187127	9.02	ug/l	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 6 16:06 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



DAILY CALIBRATIONS

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SDG No : 24I061
Lab File ID: RIV549 BFB Injection Date: 09/24/24
Instrument ID: 01 BFB Injection Time: 01:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.317
75	30 - 60% of mass 95	48.221
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.365
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	76.390
175	5 - 9% of mass 174	5.293(6.93)1
176	95 - 101% % of mass 174	72.654(95.11)1
177	5 - 9% % of mass 176	4.741(6.53)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CV001H0936	RIV550	09/24/24	01:33
2	LCS1W	V001I21L	RIV551	09/24/24	02:02
3	LCD1W	V001I21C	RIV552	09/24/24	02:32
4	MBLK1W	V001I21B	RIV554	09/24/24	03:31
5	TB04-GW091124	24I061-17	RIV555	09/24/24	04:00
6	EW01-GW091124	24I061-15	RIV556	09/24/24	04:29
7	EB02-GW091124	24I061-16	RIV557	09/24/24	04:58
8	MW14D-GW091024	24I061-01	RIV558	09/24/24	05:28
9	MW14S-GW091024	24I061-02	RIV559	09/24/24	05:57
10	MW27-GW091024	24I061-03	RIV560	09/24/24	06:26
11	MW29A-GW091024	24I061-04	RIV561	09/24/24	06:56
12	FD07-GW091024	24I061-05	RIV562	09/24/24	07:25
13	MW29B-GW091024	24I061-06	RIV563	09/24/24	07:55
14	MW29C-GW091024	24I061-07	RIV564	09/24/24	08:24
15	MW31A-GW091024	24I061-08	RIV565	09/24/24	08:54
16	MW31B-GW091024	24I061-09	RIV566	09/24/24	09:23
17	MW31C-GW091024	24I061-10	RIV567	09/24/24	09:53
18	MW03RA-GW091124	24I061-11	RIV568	09/24/24	10:23
19	MW08A-GW091024	24I061-18	RIV569	09/24/24	10:52
20	MW03RA-GW091124MS	24I061-11M	RIV570	09/24/24	11:22
21	MW03RA-GW091124MSD	24I061-11S	RIV571	09/24/24	11:53

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RHV134
Instrument ID: 01

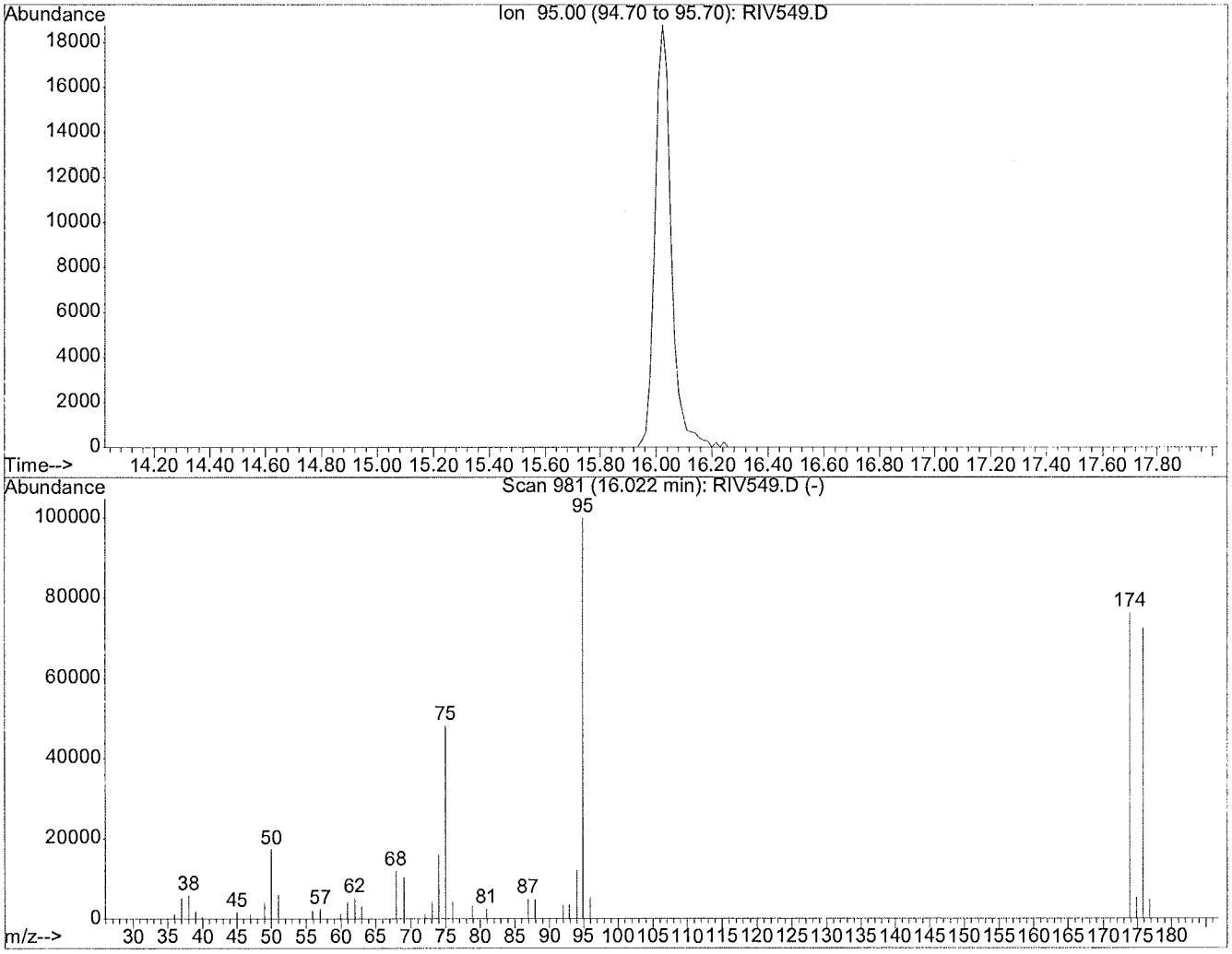
Project: VA SALT LAKE CITY
SDG No: 24I061
Date Analyzed: 08/09/24
Time Analyzed: 20:17

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	962079	8.56	831588	13.73	320498	18.69
	UPPER LIMIT	1924158	8.73	1663176	13.90	640996	18.86
	LOWER LIMIT	481040	8.39	415794	13.56	160249	18.52
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	884730	8.57	760803	13.73	432877	18.69
2	LCS1W	982130	8.56	807900	13.71	450028	18.69
3	LCD1W	1004015	8.57	857951	13.71	463684	18.69
4	MBLK1W	1014514	8.57	836242	13.73	412910	18.69
5	TB04-GW091124	985199	8.57	828333	13.73	402033	18.69
6	EW01-GW091124	934072	8.57	800699	13.73	391817	18.69
7	EB02-GW091124	925278	8.57	780916	13.73	390786	18.69
8	MW14D-GW091024	899527	8.57	774239	13.73	386055	18.69
9	MW14S-GW091024	872001	8.57	758749	13.73	382497	18.69
10	MW27-GW091024	879636	8.57	742110	13.73	371745	18.69
11	MW29A-GW091024	844920	8.58	729087	13.73	367957	18.69
12	FD07-GW091024	839968	8.56	709177	13.73	374150	18.69
13	MW29B-GW091024	825408	8.56	711983	13.71	357281	18.69
14	MW29C-GW091024	805118	8.57	701413	13.73	359008	18.69
15	MW31A-GW091024	805401	8.57	697482	13.73	353933	18.69
16	MW31B-GW091024	785615	8.56	685669	13.71	348547	18.69
17	MW31C-GW091024	776128	8.56	660130	13.71	336755	18.69
18	MW03RA-GW091124	770467	8.56	675553	13.71	339276	18.69
19	MW08A-GW091024	761273	8.56	675762	13.71	340320	18.69
20	MW03RA-GW091124MS	746707	8.56	659780	13.71	388141	18.69
21	MW03RA-GW091124MSD	867565	8.56	727495	13.71	426381	18.69

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data File : D:\HPCHEM\1\DATA\24I23\RIV549.D
Acq On : 24 Sep 2024 1:03 am
Sample : BFB01I21
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye/CLi
Inst : 01
Multiplr: 1.00



Spectrum Information: Scan 981 — scan 977 CL 10/2/24

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.3	17317	PASS
75	95	30	60	48.2	48221	PASS
95	95	100	100	100.0	100000	PASS
96	95	5	9	5.4	5365	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.4	76390	PASS
175	174	5	9	6.9	5293	PASS
176	174	95	101	95.1	72654	PASS
177	176	5	9	6.5	4741	PASS

RIV549.D VO01H09.M Wed Oct 02 10:37:16 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV550.D Vial: 2
Acq On : 24 Sep 2024 1:33 am Operator: DNguye/CLingl
Sample : CVO01H0936 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	92	0.01
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	10.207	-2.1	81	0.03
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	9.165	8.4	79	0.03
6	C,T,M	Vinyl chloride	10.000	10.722	-7.2	87	0.03
7	T,M	Bromomethane	10.000	10.022	-0.2	90	0.03
8	T,M	Chloroethane	10.000	11.171	-11.7	100	-0.01
9	T,M	Dichlorofluoromethane	10.000	12.251	-22.5#	111	0.03
10	T,M	Trichlorofluoromethane	10.000	8.809	11.9	71	0.16#
11	T,M	Acrolein	50.000	30.583	38.8#	59	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.830	-8.3	96	0.01
13	T,M	Acetone	50.000	48.398	3.2	89	0.02
14	C,T,M	1,1-Dichloroethene	10.000	8.881	11.2	80	0.03
15	T,M	tert-Butyl alcohol	250.000	258.253	-3.3	92	0.02
16	T,M	Iodomethane	10.000	10.211	-2.1	90	0.02
17	T,M	Methyl acetate	10.000	10.000	0.0	93	0.02
18	T,M	Methylene chloride	10.000	10.328	-3.3	97	0.01
19	T,M	Carbon disulfide	10.000	11.079	-10.8	96	0.02
20	T,M	Acrylonitrile	50.000	56.549	-13.1	106	0.03
21	T,M	tert-Butyl methyl ether (MT	10.000	12.434	-24.3#	111	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	9.624	3.8	86	0.01
23	T,M	Isopropyl ether (DIPE)	10.000	12.312	-23.1#	112	0.01
24	T,M	Vinyl acetate	10.000	8.179	18.2	71	0.01
25	P,T,M	1,1-Dichloroethane	10.000	11.315	-13.1	104	0.01
26	T,M	2-Butanol	250.000	0.000	100.0#	0	0.02
27	T,M	tert-Butyl ethyl ether (ETB	10.000	11.712	-17.1	104	0.00
28	T,M	2-Butanone	50.000	52.439	-4.9	100	0.01
29	T,M	2,2-Dichloropropane	10.000	9.506	4.9	84	0.01
30	T,M	cis-1,2-Dichloroethene	10.000	11.009	-10.1	99	0.01
31	C,T,M	Chloroform	10.000	11.492	-14.9	103	0.00
32	T,M	Bromochloromethane	10.000	11.277	-12.8	103	0.01
33	T,M	Tetrahydrofuran	10.000	9.621	3.8	98	0.01
34	S	Dibromofluoromethane	10.000	10.352	-3.5	88	0.01
35	T,M	1,1,1-Trichloroethane	10.000	9.749	2.5	84	0.01
36	T,M	Cyclohexane	10.000	10.576	-5.8	93	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.02
38	T,M	1,1-Dichloropropene	10.000	8.723	12.8	80	0.01
39	T,M	Carbon tetrachloride	10.000	8.919	10.8	76	0.01
40	T,M	tert-Amyl methyl ether (TAM	10.000	12.626	-26.3#	113	0.00
41	S	1,2-Dichloroethane-d4	10.000	10.746	-7.5	89	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV550.D Vial: 2
Acq On : 24 Sep 2024 1:33 am Operator: DNguye/CLingl
Sample : CVO01H0936 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	11.844	-18.4	104	0.00
43	T,M	1,2-Dichloroethane	10.000	10.869	-8.7	91	0.01
44	T,M	Trichloroethene	10.000	10.265	-2.7	92	0.01
45	T,M	Methylcyclohexane	10.000	10.635	-6.3	93	0.00
46	C,T,M	1,2-Dichloropropane	10.000	12.680	-26.8#	113	0.00
47	T,M	Bromodichloromethane	10.000	11.589	-15.9	106	0.00
48	T,M	1,4-Dioxane	200.000	194.798	2.6	88	0.01
49	T,M	Dibromomethane	10.000	11.105	-11.1	99	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	7.372	26.3#	69	0.00
51	T,M	4-Methyl-2-pentanone	50.000	61.145	-22.3#	103	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	11.988	-19.9	104	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	91	0.00
54	S	Toluene-d8	10.000	10.618	-6.2	91	0.00
55	C,T,M	Toluene	10.000	11.380	-13.8	99	0.00
56	T,M	Ethyl methacrylate	10.000	13.322	-33.2#	115	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	11.563	-15.6	98	0.01
58	T,M	1,1,2-Trichloroethane	10.000	12.357	-23.6#	112	0.00
59	T,M	2-Hexanone	50.000	55.353	-10.7	100	0.01
60	T,M	1,3-Dichloropropane	10.000	13.015	-30.2#	116	0.00
61	T,M	Tetrachloroethene	10.000	10.448	-4.5	98	0.00
62	T,M	Dibromochloromethane	10.000	11.864	-18.6	104	0.00
63	T,M	1,2-Dibromoethane	10.000	10.942	-9.4	100	0.00
64	T,M	1-Chlorohexane	10.000	10.047	-0.5	93	0.00
65	P,M	Chlorobenzene	10.000	10.734	-7.3	95	0.00
66	T,M	1,1,1,2-Tetrachloroethane	10.000	12.203	-22.0#	105	0.01
67	C,T,M	Ethylbenzene	10.000	10.976	-9.8	95	0.00
68	T,M	m-Xylene & p-Xylene	20.000	21.299	-6.5	95	0.00
69	T,M	o-Xylene	10.000	11.770	-17.7	100	0.00
70	T,M	Styrene	10.000	12.017	-20.2#	105	0.00
71	T,M	Isopropylbenzene	10.000	10.775	-7.8	94	0.01
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	135	0.00
73	P,T,M	Bromoform	10.000	8.244	17.6	108	0.00
74	T,M	trans-1,4-Dichloro-2-butene	10.000	6.884	31.2#	93	0.01
75	T,M	1,1,2,2-Tetrachloroethane	10.000	9.240	7.6	123	0.00
76	S	4-Bromofluorobenzene	10.000	8.481	15.2	115	0.00
77	T,M	1,2,3-Trichloropropane	10.000	7.037	29.6#	99	0.00
78	T,M	n-Propylbenzene	10.000	7.326	26.7#	99	0.00
79	T,M	Bromobenzene	10.000	8.580	14.2	119	0.00
80	T,M	1,3,5-Trimethylbenzene	10.000	6.872	31.3#	95	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV550.D Vial: 2
Acq On : 24 Sep 2024 1:33 am Operator: DNguye/CLingl
Sample : CVO01H0936 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	7.196	28.0#	99	0.00
82	T,M	4-Chlorotoluene	10.000	7.484	25.2#	102	0.00
83	T,M	tert-Butylbenzene	10.000	8.198	18.0	116	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	7.624	23.8#	102	0.00
85	T,M	sec-Butylbenzene	10.000	7.309	26.9#	97	0.00
86	T,M	p-Isopropyltoluene	10.000	7.048	29.5#	94	0.00
87	T,M	1,3-Dichlorobenzene	10.000	8.762	12.4	121	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	7.601	24.0#	100	0.00
89	T,M	1,4-Dichlorobenzene	10.000	8.836	11.6	121	0.00
90	T,M	n-Butylbenzene	10.000	7.443	25.6#	97	0.00
91	T,M	1,2-Dichlorobenzene	10.000	8.953	10.5	121	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.533	4.7	119	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	7.884	21.2#	106	0.00
94	T,M	Hexachlorobutadiene	10.000	7.225	27.8#	96	0.00
95	T,M	Naphthalene	10.000	7.617	23.8#	99	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	7.958	20.4#	105	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV550.D Vial: 2
Acq On : 24 Sep 2024 1:33 am Operator: DNguye/CLingl
Sample : CVO01H0936 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	92	0.01
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.336	-2.1	81	0.03
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.219	8.4	79	0.03
6	C,T,M	Vinyl chloride	0.210	0.226	-7.6	87	0.03
7	T,M	Bromomethane	0.186	0.187	-0.5	90	0.03
8	T,M	Chloroethane	0.163	0.182	-11.7	100	-0.01
9	T,M	Dichlorofluoromethane	0.360	0.441	-22.5#	111	0.03
10	T,M	Trichlorofluoromethane	0.478	0.421	11.9	71	0.16#
11	T,M	Acrolein	0.010	0.006	40.0#	59	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.212	-8.2	96	0.01
13	T,M	Acetone	0.048	0.043	10.4	89	0.02
14	C,T,M	1,1-Dichloroethene	0.484	0.430	11.2	80	0.03
15	T,M	tert-Butyl alcohol	0.013	0.014	-7.7	92	0.02
16	T,M	Iodomethane	0.437	0.447	-2.3	90	0.02
17	T,M	Methyl acetate	0.103	0.103	0.0	93	0.02
18	T,M	Methylene chloride	0.336	0.347	-3.3	97	0.01
19	T,M	Carbon disulfide	0.838	0.928	-10.7	96	0.02
20	T,M	Acrylonitrile	0.040	0.045	-12.5	106	0.03
21	T,M	tert-Butyl methyl ether (MT	0.550	0.684	-24.4#	111	0.00
22	T,M	trans-1,2-Dichloroethene	0.441	0.424	3.9	86	0.01
23	T,M	Isopropyl ether (DIPE)	0.880	1.083	-23.1#	112	0.01
24	T,M	Vinyl acetate	0.321	0.263	18.1	71	0.01
25	P,T,M	1,1-Dichloroethane	0.540	0.611	-13.1	104	0.01
26	T,M	2-Butanol	0.000	0.008	0.0	0#	0.02
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.953	-17.2	104	0.00
28	T,M	2-Butanone	0.066	0.069	-4.5	100	0.01
29	T,M	2,2-Dichloropropane	0.538	0.512	4.8	84	0.01
30	T,M	cis-1,2-Dichloroethene	0.340	0.374	-10.0	99	0.01
31	C,T,M	Chloroform	0.608	0.699	-15.0	103	0.00
32	T,M	Bromochloromethane	0.206	0.233	-13.1	103	0.01
33	T,M	Tetrahydrofuran	0.037	0.035	5.4	98	0.01
34	S	Dibromofluoromethane	0.304	0.315	-3.6	88	0.01
35	T,M	1,1,1-Trichloroethane	0.600	0.585	2.5	84	0.01
36	T,M	Cyclohexane	0.432	0.457	-5.8	93	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.020	0.0	0#	-0.02
38	T,M	1,1-Dichloropropene	0.164	0.143	12.8	80	0.01
39	T,M	Carbon tetrachloride	0.499	0.445	10.8	76	0.01
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.755	-26.3#	113	0.00
41	S	1,2-Dichloroethane-d4	0.270	0.291	-7.8	89	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV550.D Vial: 2
Acq On : 24 Sep 2024 1:33 am Operator: DNguye/CLingl
Sample : CVO01H0936 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	1.304	-18.4	104	0.00
43	T,M	1,2-Dichloroethane	0.344	0.374	-8.7	91	0.01
44	T,M	Trichloroethene	0.350	0.360	-2.9	92	0.01
45	T,M	Methylcyclohexane	0.482	0.513	-6.4	93	0.00
46	C,T,M	1,2-Dichloropropane	0.251	0.319	-27.1#	113	0.00
47	T,M	Bromodichloromethane	0.439	0.508	-15.7	106	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	88	0.01
49	T,M	Dibromomethane	0.140	0.155	-10.7	99	0.00
50	T,M	2-Chloroethyl vinyl ether	0.079	0.058	26.6#	69	0.00
51	T,M	4-Methyl-2-pentanone	0.150	0.184	-22.7#	103	0.00
52	T,M	cis-1,3-Dichloropropene	0.444	0.532	-19.8	104	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	91	0.00
54	S	Toluene-d8	1.222	1.298	-6.2	91	0.00
55	C,T,M	Toluene	1.498	1.705	-13.8	99	0.00
56	T,M	Ethyl methacrylate	0.253	0.337	-33.2#	115	0.00
57	T,M	trans-1,3-Dichloropropene	0.435	0.503	-15.6	98	0.01
58	T,M	1,1,2-Trichloroethane	0.219	0.271	-23.7#	112	0.00
59	T,M	2-Hexanone	0.111	0.133	-19.8	100	0.01
60	T,M	1,3-Dichloropropane	0.391	0.509	-30.2#	116	0.00
61	T,M	Tetrachloroethene	0.340	0.356	-4.7	98	0.00
62	T,M	Dibromochloromethane	0.290	0.344	-18.6	104	0.00
63	T,M	1,2-Dibromoethane	0.221	0.242	-9.5	100	0.00
64	T,M	1-Chlorohexane	0.695	0.698	-0.4	93	0.00
65	P,M	Chlorobenzene	1.030	1.105	-7.3	95	0.00
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.420	-22.1#	105	0.01
67	C,T,M	Ethylbenzene	1.876	2.059	-9.8	95	0.00
68	T,M	m-Xylene & p-Xylene	1.481	1.577	-6.5	95	0.00
69	T,M	o-Xylene	1.428	1.680	-17.6	100	0.00
70	T,M	Styrene	1.045	1.256	-20.2#	105	0.00
71	T,M	Isopropylbenzene	1.956	2.108	-7.8	94	0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	135	0.00
73	P,T,M	Bromoform	0.367	0.303	17.4	108	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.154	30.9#	93	0.01
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.552	7.5	123	0.00
76	S	4-Bromofluorobenzene	1.269	1.076	15.2	115	0.00
77	T,M	1,2,3-Trichloropropane	0.220	0.155	29.5#	99	0.00
78	T,M	n-Propylbenzene	6.357	4.657	26.7#	99	0.00
79	T,M	Bromobenzene	0.963	0.826	14.2	119	0.00
80	T,M	1,3,5-Trimethylbenzene	4.198	2.885	31.3#	95	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV550.D Vial: 2
Acq On : 24 Sep 2024 1:33 am Operator: DNguye/CLingl
Sample : CVO01H0936 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	3.003	28.0#	99	0.00
82	T,M	4-Chlorotoluene	3.565	2.668	25.2#	102	0.00
83	T,M	tert-Butylbenzene	0.928	0.761	18.0	116	0.00
84	T,M	1,2,4-Trimethylbenzene	4.010	3.057	23.8#	102	0.00
85	T,M	sec-Butylbenzene	5.662	4.138	26.9#	97	0.00
86	T,M	p-Isopropyltoluene	4.820	3.397	29.5#	94	0.00
87	T,M	1,3-Dichlorobenzene	1.994	1.747	12.4	121	0.00
88	T,M	1,2,3-Trimethylbenzene	3.890	2.957	24.0#	100	0.00
89	T,M	1,4-Dichlorobenzene	1.928	1.704	11.6	121	0.00
90	T,M	n-Butylbenzene	4.412	3.284	25.6#	97	0.00
91	T,M	1,2-Dichlorobenzene	1.642	1.470	10.5	121	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.088	5.4	119	0.00
93	T,M	1,2,4-Trichlorobenzene	1.116	0.880	21.1#	106	0.00
94	T,M	Hexachlorobutadiene	0.732	0.529	27.7#	96	0.00
95	T,M	Naphthalene	1.591	1.212	23.8#	99	0.00
96	T,M	1,2,3-Trichlorobenzene	0.853	0.678	20.5#	105	0.00

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV550.D Vial: 2
Acq On : 24 Sep 2024 1:33 am Operator: DNguye/CLingl
Sample : CVO01H0936 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 1:55 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	884730	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	760803	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	432877	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	278500	10.35	ug/l	0.01
Spiked Amount 10.000			Recovery =	103.50%		
41) 1,2-Dichloroethane-d4	7.98	65	257031	10.75	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.50%		
54) Toluene-d8	11.03	98	987327	10.62	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.20%		
76) 4-Bromofluorobenzene	16.01	95	465765	8.48	ug/l	0.00
Spiked Amount 10.000			Recovery =	84.80%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.27	85	297174	10.21	ug/l	97
5) Chloromethane	2.57	50	193421	9.17	ug/l	94
6) Vinyl chloride	2.71	62	199600	10.72	ug/l	99
7) Bromomethane	3.24	94	165233	10.02	ug/l	95
8) Chloroethane	3.26	64	161457	11.17	ug/l	91
9) Dichlorofluoromethane	3.38	67	390515	12.25	ug/l	98
10) Trichlorofluoromethane	3.64	101	372728	8.81	ug/l	97
11) Acrolein	4.03	56	27268	30.58	ug/l	90
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	187693	10.83	ug/l	97
13) Acetone	4.12	43	192409	48.40	ug/l	93
14) 1,1-Dichloroethene	4.28	61	380213	8.88	ug/l	98
15) tert-Butyl alcohol	4.38	59	307427	258.25	ug/l	99
16) Iodomethane	4.68	142	395199	10.21	ug/l	86
17) Methyl acetate	4.69	43	91495	10.00	ug/l	95
18) Methylene chloride	4.90	49	307314	10.33	ug/l	90
19) Carbon disulfide	4.92	76	821009	11.08	ug/l	99
20) Acrylonitrile	5.08	53	198838	56.55	ug/l	98
21) tert-Butyl methyl ether (M	5.09	73	605342	12.43	ug/l	96
22) trans-1,2-Dichloroethene	5.29	61	375251	9.62	ug/l	97
23) Isopropyl ether (DIPE)	5.70	45	958332	12.31	ug/l	98
24) Vinyl acetate	5.86	43	232499	8.18	ug/l	96
25) 1,1-Dichloroethane	5.86	63	540629	11.31	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	842868	11.71	ug/l	94
28) 2-Butanone	6.46	43	305449	52.44	ug/l	96
29) 2,2-Dichloropropane	6.66	77	452731	9.51	ug/l	99
30) cis-1,2-Dichloroethene	6.72	96	331045	11.01	ug/l	98
31) Chloroform	6.93	83	618363	11.49	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV550.D Vial: 2
Acq On : 24 Sep 2024 1:33 am Operator: DNguye/CLingl
Sample : CVO01H0936 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 1:55 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.18	49	205994	11.28	ug/l	98
33)	Tetrahydrofuran	7.23	42	31290	9.62	ug/l	90
35)	1,1,1-Trichloroethane	7.52	97	517655	9.75	ug/l	98
36)	Cyclohexane	7.54	84	404372	10.58	ug/l	98
38)	1,1-Dichloropropene	7.74	110	126877	8.72	ug/l	98
39)	Carbon tetrachloride	7.91	119	393651	8.92	ug/l	99
40)	tert-Amyl methyl ether (TA	7.91	73	667848	12.63	ug/l	99
42)	Benzene	8.14	78	1153787	11.84	ug/l	97
43)	1,2-Dichloroethane	8.13	62	331099	10.87	ug/l	97
44)	Trichloroethene	9.09	130	318149	10.26	ug/l	97
45)	Methylcyclohexane	9.18	83	453560	10.64	ug/l	91
46)	1,2-Dichloropropane	9.36	63	282002	12.68	ug/l	91
47)	Bromodichloromethane	9.74	83	449779	11.59	ug/l	96
48)	1,4-Dioxane	9.79	88	21446	194.80	ug/l	96
49)	Dibromomethane	9.83	93	137440	11.10	ug/l	95
50)	2-Chloroethyl vinyl ether	10.23	63	51325	7.37	ug/l	96
51)	4-Methyl-2-pentanone	10.28	43	813164	61.14	ug/l	99
52)	cis-1,3-Dichloropropene	10.63	75	470754	11.99	ug/l	97
55)	Toluene	11.17	91	1297379	11.38	ug/l	99
56)	Ethyl methacrylate	11.46	69	256108	13.32	ug/l	94
57)	trans-1,3-Dichloropropene	11.49	75	382343	11.56	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	206352	12.36	ug/l	94
59)	2-Hexanone	11.77	43	507725	55.35	ug/l	100
60)	1,3-Dichloropropane	12.20	76	387030	13.02	ug/l	99
61)	Tetrachloroethene	12.31	164	270526	10.45	ug/l	94
62)	Dibromochloromethane	12.68	129	261953	11.86	ug/l	100
63)	1,2-Dibromoethane	13.03	107	183963	10.94	ug/l	98
64)	1-Chlorohexane	13.31	91	531212	10.05	ug/l	100
65)	Chlorobenzene	13.79	112	841045	10.73	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	319319	12.20	ug/l	97
67)	Ethylbenzene	13.89	91	1566342	10.98	ug/l	97
68)	m-Xylene & p-Xylene	14.02	91	2399948	21.30	ug/l	96
69)	o-Xylene	14.84	91	1278483	11.77	ug/l	94
70)	Styrene	14.91	104	955296	12.02	ug/l	99
71)	Isopropylbenzene	15.53	105	1603499	10.78	ug/l	98
73)	Bromoform	15.56	173	131061	8.24	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	66559	6.88	ug/l	98
75)	1,1,2,2-Tetrachloroethane	15.86	83	238895	9.24	ug/l	94
77)	1,2,3-Trichloropropane	16.16	110	66959	7.04	ug/l	90
78)	n-Propylbenzene	16.30	91	2015996	7.33	ug/l	98
79)	Bromobenzene	16.39	156	357568	8.58	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I23\RIV550.D Vial: 2
Acq On : 24 Sep 2024 1:33 am Operator: DNguye/CLingl
Sample : CVO01H0936 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 1:55 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

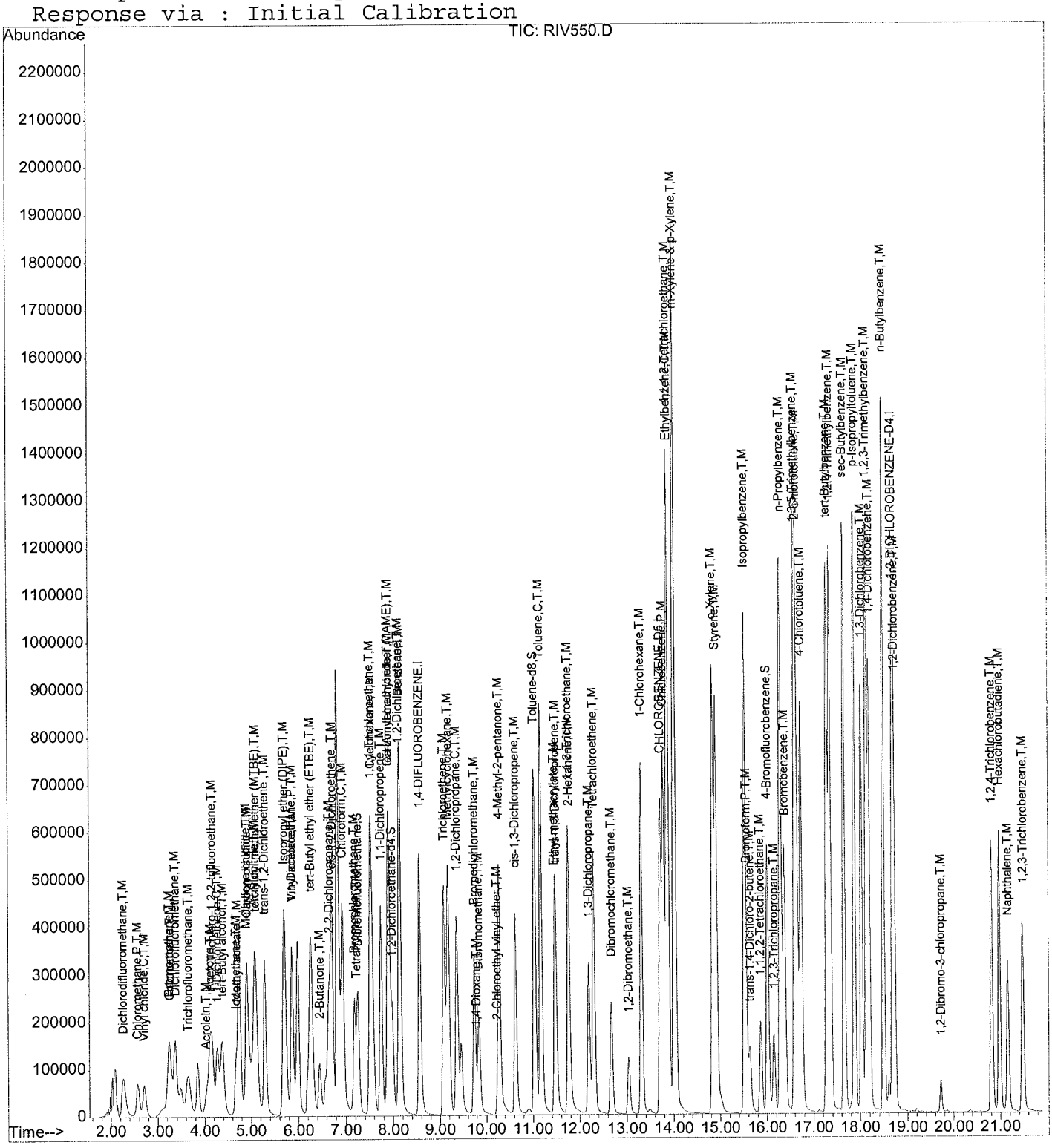
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1248644	6.87	ug/l	98
81)	2-Chlorotoluene	16.64	91	1299883	7.20	ug/l	97
82)	4-Chlorotoluene	16.73	91	1154908	7.48	ug/l	97
83)	tert-Butylbenzene	17.30	134	329410	8.20	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	1323437	7.62	ug/l	98
85)	sec-Butylbenzene	17.65	105	1791364	7.31	ug/l	96
86)	p-Isopropyltoluene	17.89	119	1470413	7.05	ug/l	97
87)	1,3-Dichlorobenzene	18.04	146	756324	8.76	ug/l	92
88)	1,2,3-Trimethylbenzene	18.14	105	1280108	7.60	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	737506	8.84	ug/l	93
90)	n-Butylbenzene	18.50	91	1421641	7.44	ug/l	99
91)	1,2-Dichlorobenzene	18.73	146	636376	8.95	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.72	157	38174	9.53	ug/l	95
93)	1,2,4-Trichlorobenzene	20.82	180	380810	7.88	ug/l	97
94)	Hexachlorobutadiene	20.98	225	229090	7.23	ug/l	97
95)	Naphthalene	21.16	128	524440	7.62	ug/l	98
96)	1,2,3-Trichlorobenzene	21.49	180	293677	7.96	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I23\RIV550.D Vial: 2
Acq On : 24 Sep 2024 1:33 am Operator: DNguye/CLing
Sample : CVO01H0936 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 1:55 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SDG No : 24I061
Lab File ID: RIV573 BFB Injection Date: 09/24/24
Instrument ID: 01 BFB Injection Time: 12:53

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	19.180
75	30 - 60% of mass 95	49.476
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.173
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	76.008
175	5 - 9% of mass 174	5.113(6.73)1
176	95 - 101% % of mass 174	73.023(96.07)1
177	5 - 9% % of mass 176	4.870(6.67)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CVO01H0937	RIV574	09/24/24	13:24
2	LCS2W	VO01I22L	RIV575	09/24/24	14:02
3	LCD2W	VO01I22C	RIV576	09/24/24	14:32
4	MBLK2W	VO01I22B	RIV578	09/24/24	15:33
5	MW03RC-GW091124	24I061-14	RIV586	09/24/24	19:32
6	MW03RB-GW091124	24I061-12	RIV587	09/24/24	20:02
7	IW01-GW091124	24I061-13	RIV588	09/24/24	20:31
8	MW03RC-GW091124MS	24I061-14M	RIV589	09/24/24	21:01
9	MW03RC-GW091124MSD	24I061-14S	RIV590	09/24/24	21:31
10	MW03RD-GW091124	24I061-19	RIV591	09/24/24	22:00

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RHV134
Instrument ID: 01

Project: VA SALT LAKE CITY
SDG No: 24I061
Date Analyzed: 08/09/24
Time Analyzed: 20:17

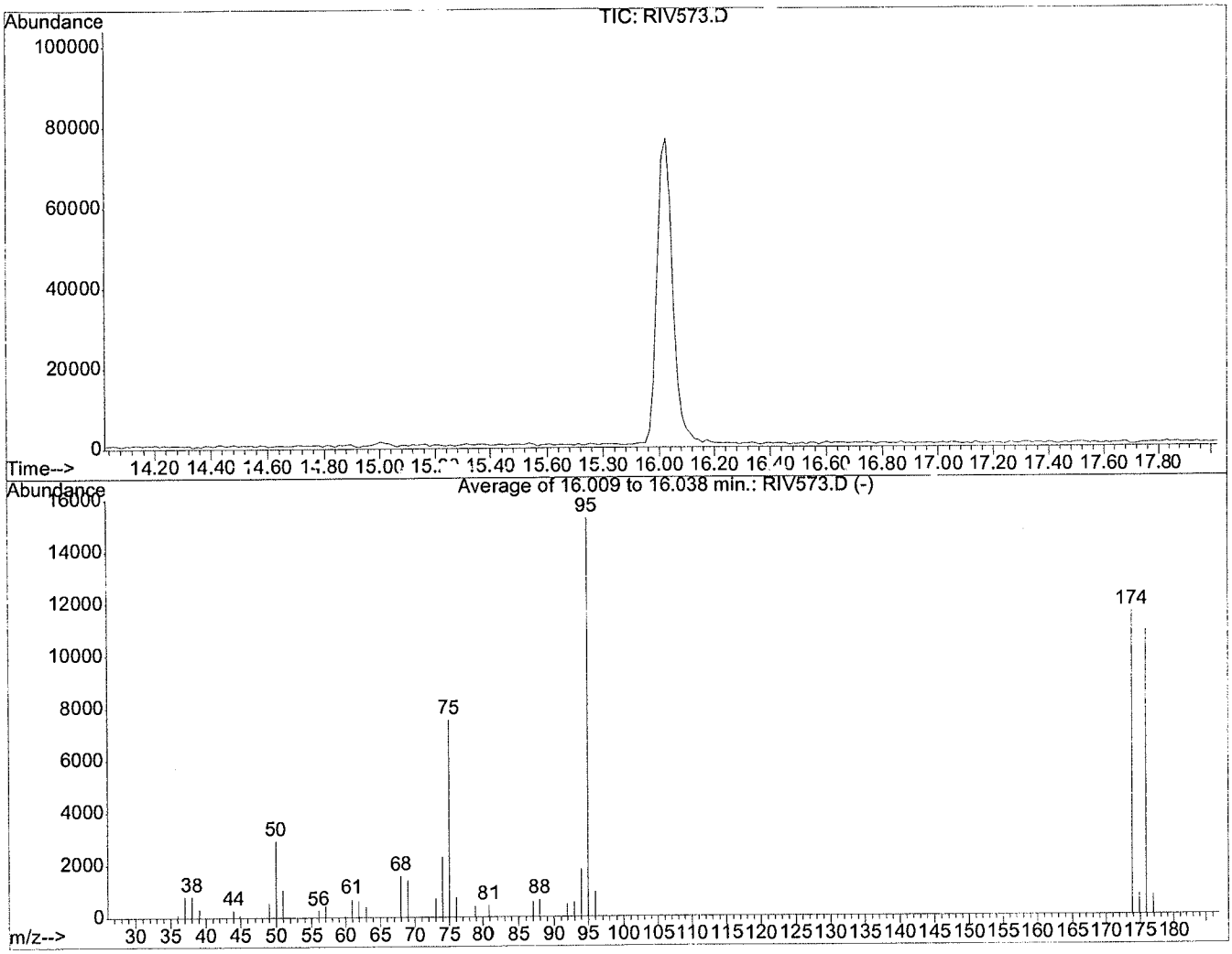
	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	962079	8.56	831588	13.73	320498	18.69
	UPPER LIMIT	1924158	8.73	1663176	13.90	640996	18.86
	LOWER LIMIT	481040	8.39	415794	13.56	160249	18.52
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	818525	8.57	704574	13.73	396932	18.69
2	LCS2W	850428	8.56	725833	13.73	399763	18.69
3	LCD2W	951936	8.57	812355	13.73	460145	18.69
4	MBLK2W	957336	8.58	790093	13.73	389616	18.69
5	MW03RC-GW091124	784092	8.57	664503	13.73	339322	18.69
6	MW03RB-GW091124	776028	8.57	655692	13.73	340752	18.69
7	IW01-GW091124	742477	8.57	644187	13.73	327355	18.69
8	MW03RC-GW091124MS	762613	8.57	656093	13.71	379142	18.69
9	MW03RC-GW091124MSD	845305	8.57	732767	13.73	412726	18.69
10	MW03RD-GW091124	897588	8.56	752512	13.71	372842	18.69

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

BFB

Data File : D:\HPCHEM\1\DATA\24I24\RIV573.D
Acq On : 24 Sep 2024 12:53 pm
Sample : BFB01I22
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye/CLi
Inst : 01
Multiplr: 1.00



AutoFind: Scans 979, 980, 981; Background Corrected with Scan 972

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.2	2930	PASS
75	95	30	60	49.5	7558	PASS
95	95	100	100	100.0	15276	PASS
96	95	5	9	6.2	943	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.0	11611	PASS
175	174	5	9	6.7	781	PASS
176	174	95	101	96.1	11155	PASS
177	176	5	9	6.7	744	PASS

RIV573.D VO01H09.M Wed Oct 02 11:00:49 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I24\RIV574.D Vial: 2
Acq On : 24 Sep 2024 1:24 pm Operator: DNguye/CLingl
Sample : CVO01H0937 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	85	0.01
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	11.428	-14.3	84	0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	9.305	7.0	74	0.03
6	C,T,M	Vinyl chloride	10.000	11.316	-13.2	85	0.03
7	T,M	Bromomethane	10.000	9.951	0.5	83	0.03
8	T,M	Chloroethane	10.000	11.297	-13.0	94	0.03
9	T,M	Dichlorofluoromethane	10.000	12.324	-23.2#	104	0.03
10	T,M	Trichlorofluoromethane	10.000	9.871	1.3	73	0.16#
11	T,M	Acrolein	50.000	30.765	38.5#	55	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.356	-13.6	93	0.03
13	T,M	Acetone	50.000	48.548	2.9	83	0.00
14	C,T,M	1,1-Dichloroethene	10.000	8.842	11.6	73	0.01
15	T,M	tert-Butyl alcohol	250.000	265.871	-6.3	87	0.01
16	T,M	Iodomethane	10.000	9.766	2.3	79	0.01
17	T,M	Methyl acetate	10.000	9.224	7.8	79	0.01
18	T,M	Methylene chloride	10.000	9.929	0.7	86	0.01
19	T,M	Carbon disulfide	10.000	11.442	-14.4	92	0.01
20	T,M	Acrylonitrile	50.000	52.354	-4.7	91	0.01
21	T,M	tert-Butyl methyl ether (MT	10.000	11.758	-17.6	97	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	9.436	5.6	78	0.01
23	T,M	Isopropyl ether (DIPE)	10.000	11.500	-15.0	97	0.01
24	T,M	Vinyl acetate	10.000	9.127	8.7	74	0.01
25	P,T,M	1,1-Dichloroethane	10.000	10.936	-9.4	93	0.01
26	T,M	2-Butanol	250.000	0.000	100.0#	0	0.01
27	T,M	tert-Butyl ethyl ether (ETB	10.000	11.039	-10.4	91	0.00
28	T,M	2-Butanone	50.000	52.815	-5.6	93	0.00
29	T,M	2,2-Dichloropropane	10.000	10.783	-7.8	88	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.752	-7.5	89	0.01
31	C,T,M	Chloroform	10.000	11.162	-11.6	93	0.00
32	T,M	Bromochloromethane	10.000	10.706	-7.1	90	0.01
33	T,M	Tetrahydrofuran	10.000	8.632	13.7	81	0.01
34	S	Dibromofluoromethane	10.000	10.147	-1.5	79	0.01
35	T,M	1,1,1-Trichloroethane	10.000	9.856	1.4	78	0.01
36	T,M	Cyclohexane	10.000	10.323	-3.2	84	0.01
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.00
38	T,M	1,1-Dichloropropene	10.000	8.957	10.4	76	0.01
39	T,M	Carbon tetrachloride	10.000	9.088	9.1	72	0.01
40	T,M	tert-Amyl methyl ether (TAM	10.000	11.823	-18.2	98	0.00
41	S	1,2-Dichloroethane-d4	10.000	10.777	-7.8	83	0.00

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24I24\RIV574.D Vial: 2
Acq On : 24 Sep 2024 1:24 pm Operator: DNguye/CLingl
Sample : CVO01H0937 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	11.500	-15.0	94	0.00
43	T,M	1,2-Dichloroethane	10.000	10.517	-5.2	81	0.01
44	T,M	Trichloroethene	10.000	9.885	1.2	82	0.01
45	T,M	Methylcyclohexane	10.000	10.321	-3.2	83	0.00
46	C,T,M	1,2-Dichloropropane	10.000	12.098	-21.0#	100	0.00
47	T,M	Bromodichloromethane	10.000	11.338	-13.4	96	0.00
48	T,M	1,4-Dioxane	200.000	209.366	-4.7	88	0.01
49	T,M	Dibromomethane	10.000	10.622	-6.2	88	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	6.634	33.7#	58	0.01
51	T,M	4-Methyl-2-pentanone	50.000	58.282	-16.6	91	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	12.029	-20.3#	97	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	85	0.00
54	S	Toluene-d8	10.000	10.731	-7.3	85	0.00
55	C,T,M	Toluene	10.000	11.028	-10.3	89	0.01
56	T,M	Ethyl methacrylate	10.000	12.808	-28.1#	102	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	11.541	-15.4	91	0.01
58	T,M	1,1,2-Trichloroethane	10.000	11.599	-16.0	97	0.00
59	T,M	2-Hexanone	50.000	53.534	-7.1	89	0.01
60	T,M	1,3-Dichloropropane	10.000	12.399	-24.0#	102	0.00
61	T,M	Tetrachloroethene	10.000	10.537	-5.4	91	0.00
62	T,M	Dibromochloromethane	10.000	11.290	-12.9	92	0.00
63	T,M	1,2-Dibromoethane	10.000	10.295	-2.9	87	0.01
64	T,M	1-Chlorohexane	10.000	10.341	-3.4	88	0.00
65	P,M	Chlorobenzene	10.000	10.465	-4.6	86	0.01
66	T,M	1,1,1,2-Tetrachloroethane	10.000	11.996	-20.0	96	0.01
67	C,T,M	Ethylbenzene	10.000	11.280	-12.8	90	0.00
68	T,M	m-Xylene & p-Xylene	20.000	21.374	-6.9	88	0.00
69	T,M	o-Xylene	10.000	11.654	-16.5	92	0.01
70	T,M	Styrene	10.000	11.891	-18.9	96	0.00
71	T,M	Isopropylbenzene	10.000	10.667	-6.7	86	0.01
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	124	0.00
73	P,T,M	Bromoform	10.000	7.983	20.2#	96	0.00
74	T,M	trans-1,4-Dichloro-2-butene	10.000	7.160	28.4#	89	0.01
75	T,M	1,1,2,2-Tetrachloroethane	10.000	9.059	9.4	111	0.01
76	S	4-Bromofluorobenzene	10.000	8.628	13.7	107	0.01
77	T,M	1,2,3-Trichloropropane	10.000	6.870	31.3#	89	0.00
78	T,M	n-Propylbenzene	10.000	7.485	25.1#	93	0.00
79	T,M	Bromobenzene	10.000	8.310	16.9	106	0.00
80	T,M	1,3,5-Trimethylbenzene	10.000	6.894	31.1#	87	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I24\RIV574.D Vial: 2
Acq On : 24 Sep 2024 1:24 pm Operator: DNguye/CLingl
Sample : CVO01H0937 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	7.155	28.4#	90	0.00
82	T,M	4-Chlorotoluene	10.000	7.709	22.9#	96	0.00
83	T,M	tert-Butylbenzene	10.000	7.793	22.1#	102	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	7.194	28.1#	88	0.01
85	T,M	sec-Butylbenzene	10.000	7.337	26.6#	89	0.01
86	T,M	p-Isopropyltoluene	10.000	7.212	27.9#	88	0.01
87	T,M	1,3-Dichlorobenzene	10.000	8.826	11.7	111	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	7.547	24.5#	91	0.00
89	T,M	1,4-Dichlorobenzene	10.000	8.753	12.5	110	0.01
90	T,M	n-Butylbenzene	10.000	7.842	21.6#	94	0.00
91	T,M	1,2-Dichlorobenzene	10.000	8.675	13.2	107	0.01
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.392	6.1	107	0.01
93	T,M	1,2,4-Trichlorobenzene	10.000	8.141	18.6	101	0.00
94	T,M	Hexachlorobutadiene	10.000	7.780	22.2#	95	0.00
95	T,M	Naphthalene	10.000	7.583	24.2#	90	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	8.199	18.0	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I24\RIV574.D Vial: 2
Acq On : 24 Sep 2024 1:24 pm Operator: DNguye/CLingl
Sample : CVO01H0937 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	85	0.01
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.376	-14.3	84	0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.222	7.1	74	0.03
6	C,T,M	Vinyl chloride	0.210	0.238	-13.3	85	0.03
7	T,M	Bromomethane	0.186	0.185	0.5	83	0.03
8	T,M	Chloroethane	0.163	0.185	-13.5	94	0.03
9	T,M	Dichlorofluoromethane	0.360	0.444	-23.3#	104	0.03
10	T,M	Trichlorofluoromethane	0.478	0.472	1.3	73	0.16#
11	T,M	Acrolein	0.010	0.006	40.0#	55	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.222	-13.3	93	0.03
13	T,M	Acetone	0.048	0.044	8.3	83	0.00
14	C,T,M	1,1-Dichloroethene	0.484	0.428	11.6	73	0.01
15	T,M	tert-Butyl alcohol	0.013	0.014	-7.7	87	0.01
16	T,M	Iodomethane	0.437	0.427	2.3	79	0.01
17	T,M	Methyl acetate	0.103	0.095	7.8	79	0.01
18	T,M	Methylene chloride	0.336	0.334	0.6	86	0.01
19	T,M	Carbon disulfide	0.838	0.958	-14.3	92	0.01
20	T,M	Acrylonitrile	0.040	0.042	-5.0	91	0.01
21	T,M	tert-Butyl methyl ether (MT	0.550	0.647	-17.6	97	0.00
22	T,M	trans-1,2-Dichloroethene	0.441	0.416	5.7	78	0.01
23	T,M	Isopropyl ether (DIPE)	0.880	1.012	-15.0	97	0.01
24	T,M	Vinyl acetate	0.321	0.293	8.7	74	0.01
25	P,T,M	1,1-Dichloroethane	0.540	0.591	-9.4	93	0.01
26	T,M	2-Butanol	0.000	0.008	0.0	0#	0.01
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.898	-10.5	91	0.00
28	T,M	2-Butanone	0.066	0.070	-6.1	93	0.00
29	T,M	2,2-Dichloropropane	0.538	0.581	-8.0	88	0.00
30	T,M	cis-1,2-Dichloroethene	0.340	0.365	-7.4	89	0.01
31	C,T,M	Chloroform	0.608	0.679	-11.7	93	0.00
32	T,M	Bromochloromethane	0.206	0.221	-7.3	90	0.01
33	T,M	Tetrahydrofuran	0.037	0.032	13.5	81	0.01
34	S	Dibromofluoromethane	0.304	0.309	-1.6	79	0.01
35	T,M	1,1,1-Tricnloroethane	0.600	0.592	1.3	78	0.01
36	T,M	Cyclohexane	0.432	0.446	-3.2	84	0.01
37	T,M	2,2,4-Trimethylpentane	0.000	0.020	0.0	0#	0.00
38	T,M	1,1-Dichloropropene	0.164	0.147	10.4	76	0.01
39	T,M	Carbon tetrachloride	0.499	0.453	9.2	72	0.01
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.707	-18.2	98	0.00
41	S	1,2-Dichloroethane-d4	0.270	0.291	-7.8	83	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I24\RIV574.D Vial: 2
Acq On : 24 Sep 2024 1:24 pm Operator: DNguye/CLingl
Sample : CVO01H0937 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	1.266	-15.0	94	0.00
43	T,M	1,2-Dichloroethane	0.344	0.362	-5.2	81	0.01
44	T,M	Trichloroethene	0.350	0.346	1.1	82	0.01
45	T,M	Methylcyclohexane	0.482	0.498	-3.3	83	0.00
46	C,T,M	1,2-Dichloropropane	0.251	0.304	-21.1#	100	0.00
47	T,M	Bromodichloromethane	0.439	0.497	-13.2	96	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	88	0.01
49	T,M	Dibromomethane	0.140	0.149	-6.4	88	0.00
50	T,M	2-Chloroethyl vinyl ether	0.079	0.052	34.2#	58	0.01
51	T,M	4-Methyl-2-pentanone	0.150	0.175	-16.7	91	0.00
52	T,M	cis-1,3-Dichloropropene	0.444	0.534	-20.3#	97	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	85	0.00
54	S	Toluene-d8	1.222	1.312	-7.4	85	0.00
55	C,T,M	Toluene	1.498	1.652	-10.3	89	0.01
56	T,M	Ethyl methacrylate	0.253	0.324	-28.1#	102	0.00
57	T,M	trans-1,3-Dichloropropene	0.435	0.502	-15.4	91	0.01
58	T,M	1,1,2-Trichloroethane	0.219	0.255	-16.4	97	0.00
59	T,M	2-Hexanone	0.111	0.129	-16.2	89	0.01
60	T,M	1,3-Dichloropropane	0.391	0.485	-24.0#	102	0.00
61	T,M	Tetrachloroethene	0.340	0.359	-5.6	91	0.00
62	T,M	Dibromochloromethane	0.290	0.328	-13.1	92	0.00
63	T,M	1,2-Dibromoethane	0.221	0.228	-3.2	87	0.01
64	T,M	1-Chlorohexane	0.695	0.719	-3.5	88	0.00
65	P,M	Chlorobenzene	1.030	1.078	-4.7	86	0.01
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.413	-20.1#	96	0.01
67	C,T,M	Ethylbenzene	1.876	2.116	-12.8	90	0.00
68	T,M	m-Xylene & p-Xylene	1.481	1.583	-6.9	88	0.00
69	T,M	o-Xylene	1.428	1.664	-16.5	92	0.01
70	T,M	Styrene	1.045	1.242	-18.9	96	0.00
71	T,M	Isopropylbenzene	1.956	2.087	-6.7	86	0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	124	0.00
73	P,T,M	Bromoform	0.367	0.293	20.2#	96	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.160	28.3#	89	0.01
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.541	9.4	111	0.01
76	S	4-Bromofluorobenzene	1.269	1.095	13.7	107	0.01
77	T,M	1,2,3-Trichloropropane	0.220	0.151	31.4#	89	0.00
78	T,M	n-Propylbenzene	6.357	4.758	25.2#	93	0.00
79	T,M	Bromobenzene	0.963	0.800	16.9	106	0.00
80	T,M	1,3,5-Trimethylbenzene	4.198	3.894	31.1#	87	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I24\RIV574.D Vial: 2
Acq On : 24 Sep 2024 1:24 pm Operator: DNguye/CLingl
Sample : CVO01H0937 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	2.986	28.4#	90	0.00
82	T,M	4-Chlorotoluene	3.565	2.748	22.9#	96	0.00
83	T,M	tert-Butylbenzene	0.928	0.723	22.1#	102	0.00
84	T,M	1,2,4-Trimethylbenzene	4.010	2.885	28.1#	88	0.01
85	T,M	sec-Butylbenzene	5.662	4.155	26.6#	89	0.01
86	T,M	p-Isopropyltoluene	4.820	3.476	27.9#	88	0.01
87	T,M	1,3-Dichlorobenzene	1.994	1.760	11.7	111	0.00
88	T,M	1,2,3-Trimethylbenzene	3.890	2.936	24.5#	91	0.00
89	T,M	1,4-Dichlorobenzene	1.928	1.688	12.4	110	0.01
90	T,M	n-Butylbenzene	4.412	3.460	21.6#	94	0.00
91	T,M	1,2-Dichlorobenzene	1.642	1.424	13.3	107	0.01
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.087	6.5	107	0.01
93	T,M	1,2,4-Trichlorobenzene	1.116	0.908	18.6	101	0.00
94	T,M	Hexachlorobutadiene	0.732	0.570	22.1#	95	0.00
95	T,M	Naphthalene	1.591	1.206	24.2#	90	0.00
96	T,M	1,2,3-Trichlorobenzene	0.853	0.699	18.1	99	0.00

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV574.D Vial: 2
Acq On : 24 Sep 2024 1:24 pm Operator: DNguye/CLingl
Sample : CVO01H0937 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 14:02 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	818525	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	704574	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	396932	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	252559	10.15	ug/l	0.01
Spiked Amount 10.000			Recovery =	101.50%		
41) 1,2-Dichloroethane-d4	7.98	65	238469	10.78	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.80%		
54) Toluene-d8	11.03	98	924134	10.73	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.30%		
76) 4-Bromofluorobenzene	16.02	95	434511	8.63	ug/l	0.01
Spiked Amount 10.000			Recovery =	86.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	307815	11.43	ug/l	98
5) Chloromethane	2.57	50	181678	9.30	ug/l	95
6) Vinyl chloride	2.71	62	194892	11.32	ug/l	99
7) Bromomethane	3.24	94	151789	9.95	ug/l	99
8) Chloroethane	3.30	64	151059	11.30	ug/l	91
9) Dichlorofluoromethane	3.38	67	363461	12.32	ug/l	96
10) Trichlorofluoromethane	3.64	101	386434	9.87	ug/l	90
11) Acrolein	4.03	56	25377	30.76	ug/l	92
12) 1,1,2-Trichloro-1,2,2-trif	4.18	151	182074	11.36	ug/l	98
13) Acetone	4.10	43	178535	48.55	ug/l	92
14) 1,1-Dichloroethene	4.26	61	350223	8.84	ug/l	70
15) tert-Butyl alcohol	4.38	59	292811	265.87	ug/l	96
16) Iodomethane	4.68	142	349693	9.77	ug/l	87
17) Methyl acetate	4.69	43	78076	9.22	ug/l	91
18) Methylene chloride	4.90	49	273335	9.93	ug/l	90
19) Carbon disulfide	4.92	76	784446	11.44	ug/l	99
20) Acrylonitrile	5.06	53	170311	52.35	ug/l	98
21) tert-Butyl methyl ether (M	5.09	73	529610	11.76	ug/l	97
22) trans-1,2-Dichloroethene	5.29	61	340392	9.44	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	828090	11.50	ug/l	98
24) Vinyl acetate	5.86	43	240039	9.13	ug/l	98
25) 1,1-Dichloroethane	5.86	63	483447	10.94	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	734983	11.04	ug/l	95
28) 2-Butanone	6.44	43	284619	52.81	ug/l	97
29) 2,2-Dichloropropane	6.65	77	475155	10.78	ug/l	99
30) cis-1,2-Dichloroethene	6.72	96	299126	10.75	ug/l	98
31) Chloroform	6.93	83	555660	11.16	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV574.D Vial: 2
Acq On : 24 Sep 2024 1:24 pm Operator: DNguye/CLingl
Sample : CVO01H0937 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 14:02 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.18	49	180930	10.71	ug/l	99
33)	Tetrahydrofuran	7.23	42	25973	8.63	ug/l	92
35)	1,1,1-Trichloroethane	7.52	97	484173	9.86	ug/l	98
36)	Cyclohexane	7.55	84	365173	10.32	ug/l	100
38)	1,1-Dichloropropene	7.74	110	120544	8.96	ug/l	100
39)	Carbon tetrachloride	7.91	119	371077	9.09	ug/l	100
40)	tert-Amyl methyl ether (TA	7.91	73	578566	11.82	ug/l	100
42)	Benzene	8.14	78	1036432	11.50	ug/l	98
43)	1,2-Dichloroethane	8.13	62	296402	10.52	ug/l	98
44)	Trichloroethene	9.09	130	283448	9.88	ug/l	97
45)	Methylcyclohexane	9.18	83	407233	10.32	ug/l	91
46)	1,2-Dichloropropane	9.36	63	248921	12.10	ug/l	94
47)	Bromodichloromethane	9.74	83	407112	11.34	ug/l	96
48)	1,4-Dioxane	9.79	88	21325	209.37	ug/l	95
49)	Dibromomethane	9.83	93	121629	10.62	ug/l	94
50)	2-Chloroethyl vinyl ether	10.25	63	42728	6.63	ug/l	95
51)	4-Methyl-2-pentanone	10.28	43	717091	58.28	ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	437034	12.03	ug/l	95
55)	Toluene	11.18	91	1164266	11.03	ug/l	100
56)	Ethyl methacrylate	11.46	69	228025	12.81	ug/l	90
57)	trans-1,3-Dichloropropene	11.49	75	353398	11.54	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	179383	11.60	ug/l	94
59)	2-Hexanone	11.77	43	454022	53.53	ug/l	100
60)	1,3-Dichloropropane	12.20	76	341447	12.40	ug/l	100
61)	Tetrachloroethene	12.31	164	252664	10.54	ug/l	94
62)	Dibromochloromethane	12.68	129	230840	11.29	ug/l	100
63)	1,2-Dibromoethane	13.05	107	160296	10.30	ug/l	100
64)	1-Chlorohexane	13.31	91	506314	10.34	ug/l	100
65)	Chlorobenzene	13.80	112	759382	10.47	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.88	131	290706	12.00	ug/l	97
67)	Ethylbenzene	13.89	91	1490733	11.28	ug/l	95
68)	m-Xylene & p-Xylene	14.02	91	2230452	21.37	ug/l	96
69)	o-Xylene	14.85	91	1172322	11.65	ug/l	95
70)	Styrene	14.91	104	875394	11.89	ug/l	98
71)	Isopropylbenzene	15.53	105	1470139	10.67	ug/l	98
73)	Bromoform	15.56	173	116372	7.98	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.64	53	63477	7.16	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.88	83	214758	9.06	ug/l	96
77)	1,2,3-Trichloropropane	16.16	110	59940	6.87	ug/l	92
78)	n-Propylbenzene	16.30	91	1888716	7.49	ug/l	98
79)	Bromobenzene	16.39	156	317554	8.31	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I24\RIV574.D Vial: 2
Acq On : 24 Sep 2024 1:24 pm Operator: DNguye/CLingl
Sample : CVO01H0937 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 14:02 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

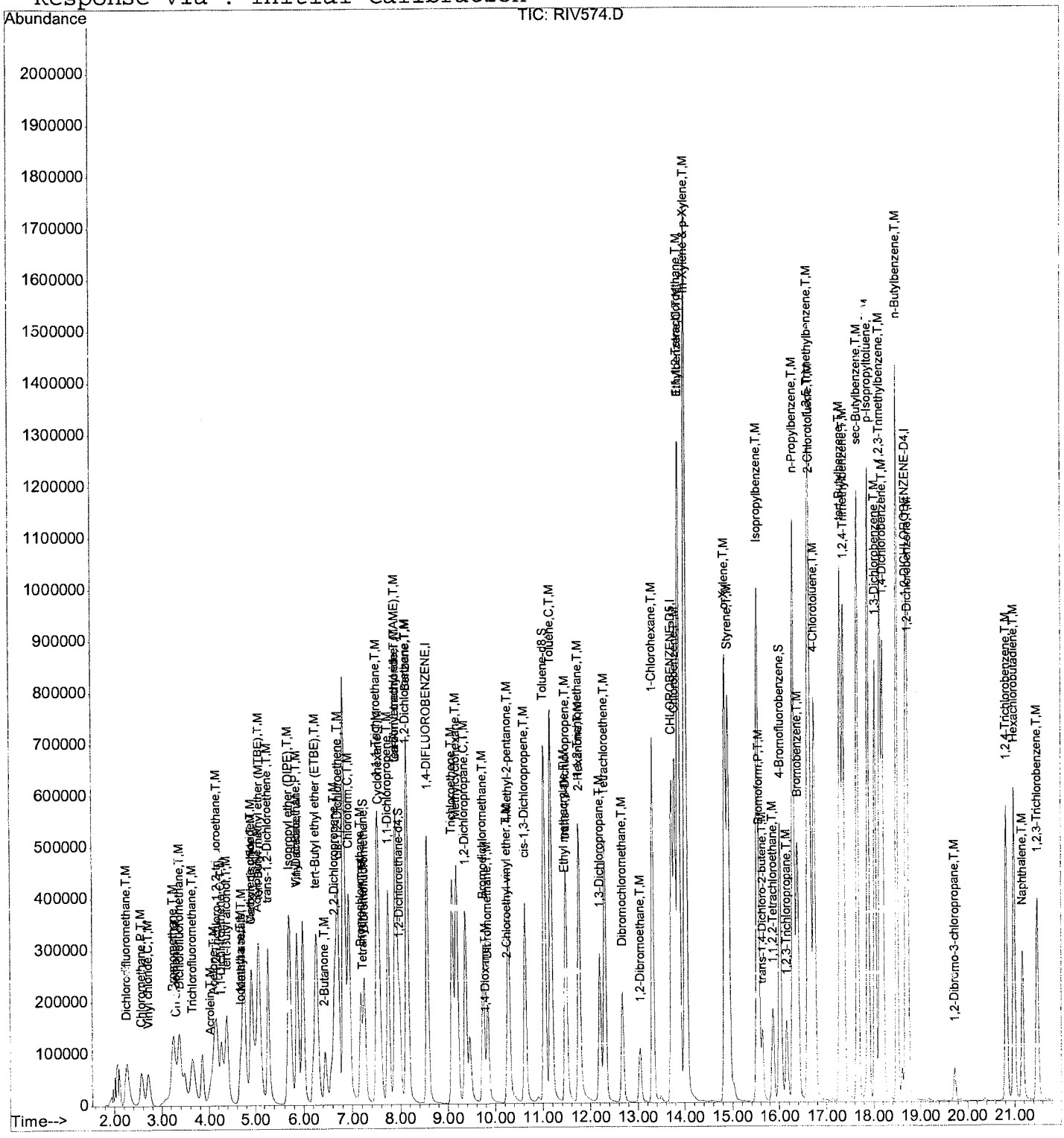
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	1148672	6.89 ug/l	98
81)	2-Chlorotoluene	16.65	91	1185215	7.16 ug/l	98
82)	4-Chlorotoluene	16.73	91	1090770	7.71 ug/l	99
83)	tert-Butylbenzene	17.30	134	287138	7.79 ug/l	93
84)	1,2,4-Trimethylbenzene	17.37	105	1145154	7.19 ug/l	97
85)	sec-Butylbenzene	17.67	105	1649077	7.34 ug/l	95
86)	p-Isopropyltoluene	17.89	119	1379621	7.21 ug/l	97
87)	1,3-Dichlorobenzene	18.04	146	698567	8.83 ug/l	91
88)	1,2,3-Trimethylbenzene	18.14	105	1165453	7.55 ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	669907	8.75 ug/l	92
90)	n-Butylbenzene	18.50	91	1373453	7.84 ug/l	99
91)	1,2-Dichlorobenzene	18.73	146	565401	8.68 ug/l	96
92)	1,2-Dibromo-3-chloropropan	19.73	157	34488	9.39 ug/l	97
93)	1,2,4-Trichlorobenzene	20.82	180	360560	8.14 ug/l	98
94)	Hexachlorobutadiene	20.98	225	226212	7.78 ug/l	97
95)	Naphthalene	21.16	128	478702	7.58 ug/l	97
96)	1,2,3-Trichlorobenzene	21.49	180	277472	8.20 ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I24\RIV574.D Vial: 2
Acq On : 24 Sep 2024 1:24 pm Operator: DNguye/CLing
Sample : CVO01H0937 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 24 14:02 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SDG No : 24I061
Lab File ID: RIV628 BFB Injection Date: 09/25/24
Instrument ID: 01 BFB Injection Time: 16:09

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	19.006
75	30 - 60% of mass 95	49.087
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.180
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	74.599
175	5 - 9% of mass 174	4.500(6.03)1
176	95 - 101% % of mass 174	71.971(96.48)1
177	5 - 9% % of mass 176	3.674(5.1)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CV001H0939	RIV629	09/25/24	16:48
2	LCS3W	V001I24L	RIV630	09/25/24	17:26
3	LCD3W	V001I24C	RIV631	09/25/24	17:56
4	MBLK3W	V001I24B	RIV633	09/25/24	18:56
5	MW03RB-GW091124	24I061-12I	RIV635	09/25/24	19:55

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RHV134
Instrument ID: 01

Project: VA SALT LAKE CITY
SDG No: 24I061
Date Analyzed: 08/09/24
Time Analyzed: 20:17

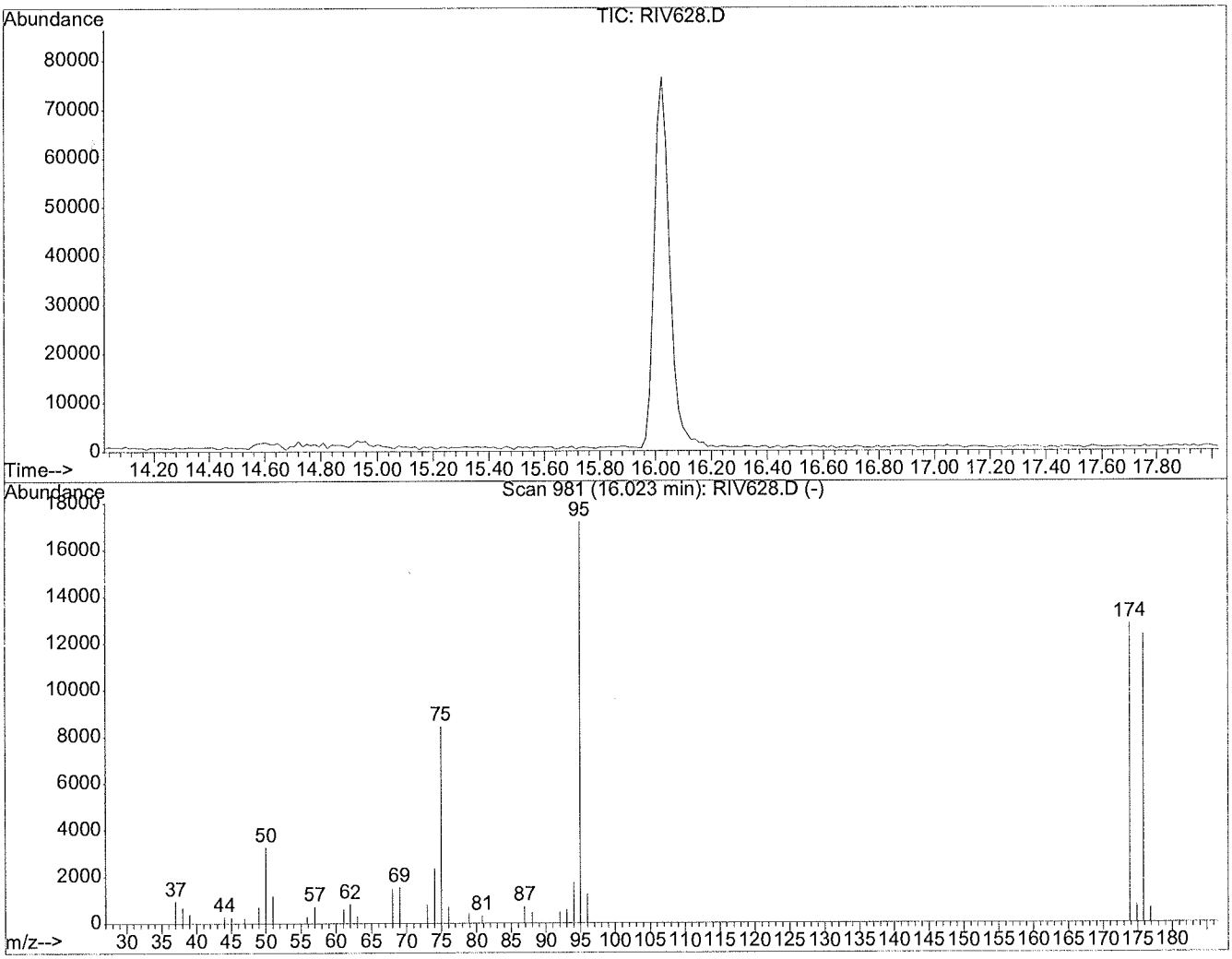
	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	962079	8.56	831588	13.73	320498	18.69
	UPPER LIMIT	1924158	8.73	1663176	13.90	640996	18.86
	LOWER LIMIT	481040	8.39	415794	13.56	160249	18.52
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	697358	8.56	601884	13.73	344212	18.69
2	LCS3W	895133	8.56	744563	13.73	408605	18.69
3	LCD3W	974342	8.58	818125	13.73	477843	18.69
4	MBLK3W	966844	8.57	813116	13.73	405162	18.69
5	MW03RB-GW091124	898058	8.57	755478	13.73	372343	18.69

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

BFB

Data File : D:\HPCHEM\1\DATA\24I25\RIV628.D
Acq On : 25 Sep 2024 4:09 pm
Sample : BFB01I24
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye/CLi
Inst : 01
Multiplr: 1.00



Spectrum Information: Scan 981 -Scan 974 CC 10/2/24

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	3269	PASS
75	95	30	60	49.1	8443	PASS
95	95	100	100	100.0	17200	PASS
96	95	5	9	7.2	1235	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	74.6	12831	PASS
175	174	5	9	6.0	774	PASS
176	174	95	101	96.5	12379	PASS
177	176	5	9	5.1	632	PASS

RIV628.D VO01H09.M Wed Oct 02 12:58:20 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV629.D
Acq On : 25 Sep 2024 4:48 pm
Sample : CVO01H0939
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	72	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	12.045	-20.4#	75	0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	11.027	-10.3	74	0.03
6	C,T,M	Vinyl chloride	10.000	12.646	-26.5#	81	0.01
7	T,M	Bromomethane	10.000	11.189	-11.9	79	0.02
8	T,M	Chloroethane	10.000	12.404	-24.0#	88	0.02
9	T,M	Dichlorofluoromethane	10.000	13.441	-34.4#	96	0.02
10	T,M	Trichlorofluoromethane	10.000	10.557	-5.6	67	0.13
11	T,M	Acrolein	50.000	30.262	39.5#	46	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	12.052	-20.5#	84	0.01
13	T,M	Acetone	50.000	47.815	4.4	70	-0.01
14	C,T,M	1,1-Dichloroethene	10.000	9.388	6.1	66	0.00
15	T,M	tert-Butyl alcohol	250.000	254.321	-1.7	71	0.00
16	T,M	Iodomethane	10.000	10.791	-7.9	75	-0.01
17	T,M	Methyl acetate	10.000	10.414	-4.1	76	0.02
18	T,M	Methylene chloride	10.000	10.764	-7.6	79	0.00
19	T,M	Carbon disulfide	10.000	12.564	-25.6#	86	0.00
20	T,M	Acrylonitrile	50.000	54.245	-8.5	80	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	12.152	-21.5#	85	-0.02
22	T,M	trans-1,2-Dichloroethene	10.000	9.991	0.1	71	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	12.252	-22.5#	88	0.00
24	T,M	Vinyl acetate	10.000	9.067	9.3	62	0.00
25	P,T,M	1,1-Dichloroethane	10.000	11.920	-19.2	86	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	0.01
27	T,M	tert-Butyl ethyl ether (ETB	10.000	11.753	-17.5	82	0.00
28	T,M	2-Butanone	50.000	53.390	-6.8	80	0.00
29	T,M	2,2-Dichloropropane	10.000	10.813	-8.1	75	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	11.572	-15.7	82	0.00
31	C,T,M	Chloroform	10.000	11.879	-18.8	84	0.00
32	T,M	Bromochloromethane	10.000	11.221	-12.2	80	0.00
33	T,M	Tetrahydrofuran	10.000	8.707	12.9	70	0.01
34	S	Dibromofluoromethane	10.000	10.359	-3.6	69	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.171	-1.7	69	0.00
36	T,M	Cyclohexane	10.000	11.874	-18.7	82	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.02
38	T,M	1,1-Dichloropropene	10.000	9.181	8.2	66	0.01
39	T,M	Carbon tetrachloride	10.000	9.283	7.2	63	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	12.611	-26.1#	89	0.00
41	S	1,2-Dichloroethane-d4	10.000	10.586	-5.9	69	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV629.D Vial: 2
Acq On : 25 Sep 2024 4:48 pm Operator: DNguye/CLingl
Sample : CVO01H0939 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	12.118	-21.2#	84	0.00
43	T,M	1,2-Dichloroethane	10.000	10.853	-8.5	71	0.00
44	T,M	Trichloroethene	10.000	10.744	-7.4	76	0.00
45	T,M	Methylcyclohexane	10.000	12.043	-20.4#	83	-0.02
46	C,T,M	1,2-Dichloropropane	10.000	12.764	-27.6#	90	0.00
47	T,M	Bromodichloromethane	10.000	11.661	-16.6	84	0.00
48	T,M	1,4-Dioxane	200.000	192.320	3.8	69	0.01
49	T,M	Dibromomethane	10.000	10.853	-8.5	77	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	7.037	29.6#	52	0.00
51	T,M	4-Methyl-2-pentanone	50.000	57.851	-15.7	77	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	12.409	-24.1#	85	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	72	0.00
54	S	Toluene-d8	10.000	10.852	-8.5	74	0.00
55	C,T,M	Toluene	10.000	11.729	-17.3	81	0.00
56	T,M	Ethyl methacrylate	10.000	12.673	-26.7#	86	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	11.768	-17.7	79	0.01
58	T,M	1,1,2-Trichloroethane	10.000	12.111	-21.1#	87	0.00
59	T,M	2-Hexanone	50.000	53.225	-6.5	76	0.01
60	T,M	1,3-Dichloropropane	10.000	12.413	-24.1#	88	0.00
61	T,M	Tetrachloroethene	10.000	10.663	-6.6	79	0.00
62	T,M	Dibromochloromethane	10.000	11.589	-15.9	81	0.00
63	T,M	1,2-Dibromoethane	10.000	10.527	-5.3	76	0.01
64	T,M	1-Chlorohexane	10.000	10.441	-4.4	76	0.00
65	P,M	Chlorobenzene	10.000	10.822	-8.2	76	0.00
66	T,M	1,1,1,2-Tetrachloroethane	10.000	12.274	-22.7#	84	0.01
67	C,T,M	Ethylbenzene	10.000	11.519	-15.2	79	0.00
68	T,M	m-Xylene & p-Xylene	20.000	22.112	-10.6	78	0.00
69	T,M	o-Xylene	10.000	12.180	-21.8#	82	0.00
70	T,M	Styrene	10.000	12.193	-21.9#	84	0.00
71	T,M	Isopropylbenzene	10.000	11.127	-11.3	77	0.01
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	107	0.00
73	P,T,M	Bromoform	10.000	7.900	21.0#	83	0.00
74	T,M	trans-1,4-Dichloro-2-butene	10.000	6.478	35.2#	69	0.01
75	T,M	1,1,2,2-Tetrachloroethane	10.000	8.957	10.4	95	0.00
76	S	4-Bromofluorobenzene	10.000	8.421	15.8	91	0.01
77	T,M	1,2,3-Trichloropropane	10.000	7.034	29.7#	79	0.00
78	T,M	n-Propylbenzene	10.000	7.592	24.1#	81	0.00
79	T,M	Bromobenzene	10.000	8.402	16.0	93	0.00
80	T,M	1,3,5-Trimethylbenzene	10.000	7.195	28.0#	79	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV629.D
Acq On : 25 Sep 2024 4:48 pm
Sample : CVO01H0939
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	7.314	26.9#	80	0.00
82	T,M	4-Chlorotoluene	10.000	7.952	20.5#	86	0.00
83	T,M	tert-Butylbenzene	10.000	7.973	20.3#	90	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	7.359	26.4#	78	0.00
85	T,M	sec-Butylbenzene	10.000	7.284	27.2#	77	0.01
86	T,M	p-Isopropyltoluene	10.000	7.117	28.8#	75	0.01
87	T,M	1,3-Dichlorobenzene	10.000	8.778	12.2	96	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	8.062	19.4	84	0.00
89	T,M	1,4-Dichlorobenzene	10.000	9.011	9.9	99	0.01
90	T,M	n-Butylbenzene	10.000	7.877	21.2#	82	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.116	8.8	98	0.01
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.278	7.2	92	0.01
93	T,M	1,2,4-Trichlorobenzene	10.000	8.501	15.0	91	0.00
94	T,M	Hexachlorobutadiene	10.000	7.993	20.1#	84	0.00
95	T,M	Naphthalene	10.000	7.734	22.7#	80	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	8.329	16.7	87	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV629.D Vial: 2
Acq On : 25 Sep 2024 4:48 pm Operator: DNguye/CLingl
Sample : CVO01H0939 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	72	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.396	-20.4#	75	0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.263	-10.0	74	0.03
6	C,T,M	Vinyl chloride	0.210	0.266	-26.7#	81	0.01
7	T,M	Bromomethane	0.186	0.208	-11.8	79	0.02
8	T,M	Chloroethane	0.163	0.203	-24.5#	88	0.02
9	T,M	Dichlorofluoromethane	0.360	0.484	-34.4#	96	0.02
10	T,M	Trichlorofluoromethane	0.478	0.505	-5.6	67	0.13
11	T,M	Acrolein	0.010	0.006	40.0#	46#	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.236	-20.4#	84	0.01
13	T,M	Acetone	0.048	0.043	10.4	70	-0.01
14	C,T,M	1,1-Dichloroethene	0.484	0.454	6.2	66	0.00
15	T,M	tert-Butyl alcohol	0.013	0.014	-7.7	71	0.00
16	T,M	Iodomethane	0.437	0.472	-8.0	75	-0.01
17	T,M	Methyl acetate	0.103	0.108	-4.9	76	0.02
18	T,M	Methylene chloride	0.336	0.362	-7.7	79	0.00
19	T,M	Carbon disulfide	0.838	1.052	-25.5#	86	0.00
20	T,M	Acrylonitrile	0.040	0.043	-7.5	80	0.00
21	T,M	tert-Butyl methyl ether (MT	0.550	0.669	-21.6#	85	-0.02
22	T,M	trans-1,2-Dichloroethene	0.441	0.440	0.2	71	0.00
23	T,M	Isopropyl ether (DIPE)	0.880	1.078	-22.5#	88	0.00
24	T,M	Vinyl acetate	0.321	0.291	9.3	62	0.00
25	P,T,M	1,1-Dichloroethane	0.540	0.644	-19.3	86	0.00
26	T,M	2-Butanol	0.000	0.009	0.0	0#	0.01
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.956	-17.6	82	0.00
28	T,M	2-Butanone	0.066	0.070	-6.1	80	0.00
29	T,M	2,2-Dichloropropane	0.538	0.582	-8.2	75	0.00
30	T,M	cis-1,2-Dichloroethene	0.340	0.393	-15.6	82	0.00
31	C,T,M	Chloroform	0.608	0.722	-18.8	84	0.00
32	T,M	Bromochloromethane	0.206	0.232	-12.6	80	0.00
33	T,M	Tetrahydrofuran	0.037	0.032	13.5	70	0.01
34	S	Dibromofluoromethane	0.304	0.315	-3.6	69	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.610	-1.7	69	0.00
36	T,M	Cyclohexane	0.432	0.513	-18.8	82	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.022	0.0	0#	-0.02
38	T,M	1,1-Dichloropropene	0.164	0.151	7.9	66	0.01
39	T,M	Carbon tetrachloride	0.499	0.463	7.2	63	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.754	-26.1#	89	0.00
41	S	1,2-Dichloroethane-d4	0.270	0.286	-5.9	69	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV629.D Vial: 2
Acq On : 25 Sep 2024 4:48 pm Operator: DNguye/CLingl
Sample : CVO01H0939 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	1.334	-21.2#	84	0.00
43	T,M	1,2-Dichloroethane	0.344	0.374	-8.7	71	0.00
44	T,M	Trichloroethene	0.350	0.376	-7.4	76	0.00
45	T,M	Methylcyclohexane	0.482	0.581	-20.5#	83	-0.02
46	C,T,M	1,2-Dichloropropane	0.251	0.321	-27.9#	90	0.00
47	T,M	Bromodichloromethane	0.439	0.512	-16.6	84	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	69	0.01
49	T,M	Dibromomethane	0.140	0.152	-8.6	77	0.00
50	T,M	2-Chloroethyl vinyl ether	0.079	0.055	30.4#	52	0.00
51	T,M	4-Methyl-2-pentanone	0.150	0.174	-16.0	77	0.00
52	T,M	cis-1,3-Dichloropropene	0.444	0.551	-24.1#	85	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	72	0.00
54	S	Toluene-d8	1.222	1.326	-8.5	74	0.00
55	C,T,M	Toluene	1.498	1.758	-17.4	81	0.00
56	T,M	Ethyl methacrylate	0.253	0.320	-26.5#	86	0.00
57	T,M	trans-1,3-Dichloropropene	0.435	0.511	-17.5	79	0.01
58	T,M	1,1,2-Trichloroethane	0.219	0.266	-21.5#	87	0.00
59	T,M	2-Hexanone	0.111	0.128	-15.3	76	0.01
60	T,M	1,3-Dichloropropane	0.391	0.485	-24.0#	88	0.00
61	T,M	Tetrachloroethene	0.340	0.363	-6.8	79	0.00
62	T,M	Dibromochloromethane	0.290	0.336	-15.9	81	0.00
63	T,M	1,2-Dibromoethane	0.221	0.233	-5.4	76	0.01
64	T,M	1-Chlorohexane	0.695	0.726	-4.5	76	0.00
65	P,M	Chlorobenzene	1.030	1.115	-8.3	76	0.00
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.422	-22.7#	84	0.01
67	C,T,M	Ethylbenzene	1.876	2.161	-15.2	79	0.00
68	T,M	m-Xylene & p-Xylene	1.481	1.637	-10.5	78	0.00
69	T,M	o-Xylene	1.428	1.739	-21.8#	82	0.00
70	T,M	Styrene	1.045	1.274	-21.9#	84	0.00
71	T,M	Isopropylbenzene	1.956	2.176	-11.2	77	0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	107	0.00
73	P,T,M	Bromoform	0.367	0.290	21.0#	83	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.145	35.0#	69	0.01
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.535	10.4	95	0.00
76	S	4-Bromofluorobenzene	1.269	1.068	15.8	91	0.01
77	T,M	1,2,3-Trichloropropane	0.220	0.155	29.5#	79	0.00
78	T,M	n-Propylbenzene	6.357	4.826	24.1#	81	0.00
79	T,M	Bromobenzene	0.963	0.809	16.0	93	0.00
80	T,M	1,3,5-Trimethylbenzene	4.198	3.020	28.1#	79	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV629.D Vial: 2
Acq On : 25 Sep 2024 4:48 pm Operator: DNguye/CLingl
Sample : CVO01H0939 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	3.052	26.9#	80	0.00
82	T,M	4-Chlorotoluene	3.565	2.834	20.5#	86	0.00
83	T,M	tert-Butylbenzene	0.928	0.740	20.3#	90	0.00
84	T,M	1,2,4-Trimethylbenzene	4.010	2.951	26.4#	78	0.00
85	T,M	sec-Butylbenzene	5.662	4.124	27.2#	77	0.01
86	T,M	p-Isopropyltoluene	4.820	3.430	28.8#	75	0.01
87	T,M	1,3-Dichlorobenzene	1.994	1.750	12.2	96	0.00
88	T,M	1,2,3-Trimethylbenzene	3.890	3.136	19.4	84	0.00
89	T,M	1,4-Dichlorobenzene	1.928	1.737	9.9	99	0.01
90	T,M	n-Butylbenzene	4.412	3.475	21.2#	82	0.00
91	T,M	1,2-Dichlorobenzene	1.642	1.497	8.8	98	0.01
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.086	7.5	92	0.01
93	T,M	1,2,4-Trichlorobenzene	1.116	0.949	15.0	91	0.00
94	T,M	Hexachlorobutadiene	0.732	0.586	19.9	84	0.00
95	T,M	Naphthalene	1.591	1.230	22.7#	80	0.00
96	T,M	1,2,3-Trichlorobenzene	0.853	0.710	16.8	87	0.00

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV629.D Vial: 2
Acq On : 25 Sep 2024 4:48 pm Operator: DNguye/CLingl
Sample : CVO01H0939 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 25 17:10 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	697358	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	601884	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	344212	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	219667	10.36	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.60%			
41) 1,2-Dichloroethane-d4	7.98	65	199584	10.59	ug/l	0.00
Spiked Amount 10.000			Recovery = 105.90%			
54) Toluene-d8	11.03	98	798299	10.85	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.50%			
76) 4-Bromofluorobenzene	16.02	95	367741	8.42	ug/l	0.01
Spiked Amount 10.000			Recovery = 84.20%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	276417	12.05	ug/l	99
5) Chloromethane	2.57	50	183437	11.03	ug/l	100
6) Vinyl chloride	2.69	62	185569	12.65	ug/l	100
7) Bromomethane	3.23	94	145398	11.19	ug/l	99
8) Chloroethane	3.29	64	141305	12.40	ug/l	92
9) Dichlorofluoromethane	3.36	67	337729	13.44	ug/l	98
10) Trichlorofluoromethane	3.61	101	352094	10.56	ug/l	92
11) Acrolein	4.03	56	21267	30.26	ug/l	92
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	164626	12.05	ug/l	96
13) Acetone	4.09	43	149925	47.81	ug/l	92
14) 1,1-Dichloroethene	4.25	61	316804	9.39	ug/l	72
15) tert-Butyl alcohol	4.37	59	238629	254.32	ug/l	100
16) Iodomethane	4.65	142	329216	10.79	ug/l	86
17) Methyl acetate	4.69	43	75098	10.41	ug/l	93
18) Methylene chloride	4.89	49	252461	10.76	ug/l	91
19) Carbon disulfide	4.90	76	733872	12.56	ug/l	100
20) Acrylonitrile	5.05	53	150342	54.25	ug/l	97
21) tert-Butyl methyl ether (M	5.08	73	466334	12.15	ug/l	93
22) trans-1,2-Dichloroethene	5.27	61	307040	9.99	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	751666	12.25	ug/l	98
24) Vinyl acetate	5.85	43	203153	9.07	ug/l	96
25) 1,1-Dichloroethane	5.85	63	448937	11.92	ug/l	100
27) tert-Butyl ethyl ether (ET	6.26	59	666692	11.75	ug/l	95
28) 2-Butanone	6.44	43	245126	53.39	ug/l	99
29) 2,2-Dichloropropane	6.65	77	405916	10.81	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	274291	11.57	ug/l	97
31) Chloroform	6.93	83	503792	11.88	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV629.D
Acq On : 25 Sep 2024 4:48 pm
Sample : CVO01H0939
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 25 17:10 2024

Vial: 2
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	161556	11.22	ug/l	99
33)	Tetrahydrofuran	7.23	42	22318	8.71	ug/l	91
35)	1,1,1-Trichloroethane	7.51	97	425662	10.17	ug/l	97
36)	Cyclohexane	7.54	84	357837	11.87	ug/l	100
38)	1,1-Dichloropropene	7.74	110	105262	9.18	ug/l	98
39)	Carbon tetrachloride	7.89	119	322936	9.28	ug/l	100
40)	tert-Amyl methyl ether (TA	7.91	73	525782	12.61	ug/l	99
42)	Benzene	8.14	78	930503	12.12	ug/l	97
43)	1,2-Dichloroethane	8.11	62	260594	10.85	ug/l	98
44)	Trichloroethene	9.08	130	262473	10.74	ug/l	96
45)	Methylcyclohexane	9.17	83	404837	12.04	ug/l	91
46)	1,2-Dichloropropane	9.36	63	223746	12.76	ug/l	93
47)	Bromodichloromethane	9.75	83	356740	11.66	ug/l	97
48)	1,4-Dioxane	9.79	88	16689	192.32	ug/l	90
49)	Dibromomethane	9.83	93	105883	10.85	ug/l	91
50)	2-Chloroethyl vinyl ether	10.23	63	38618	7.04	ug/l	94
51)	4-Methyl-2-pentanone	10.28	43	606424	57.85	ug/l	99
52)	cis-1,3-Dichloropropene	10.63	75	384101	12.41	ug/l	96
55)	Toluene	11.17	91	1057860	11.73	ug/l	99
56)	Ethyl methacrylate	11.46	69	192747	12.67	ug/l	93
57)	trans-1,3-Dichloropropene	11.49	75	307835	11.77	ug/l	97
58)	1,1,2-Trichloroethane	11.76	97	159997	12.11	ug/l	94
59)	2-Hexanone	11.77	43	385501	53.22	ug/l	99
60)	1,3-Dichloropropane	12.20	76	292022	12.41	ug/l	98
61)	Tetrachloroethene	12.31	164	218438	10.66	ug/l	94
62)	Dibromochloromethane	12.68	129	202418	11.59	ug/l	100
63)	1,2-Dibromoethane	13.05	107	140020	10.53	ug/l	99
64)	1-Chlorohexane	13.31	91	436727	10.44	ug/l	99
65)	Chlorobenzene	13.79	112	670809	10.82	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.88	131	254077	12.27	ug/l	96
67)	Ethylbenzene	13.89	91	1300455	11.52	ug/l	96
68)	m-Xylene & p-Xylene	14.02	91	1971157	22.11	ug/l	96
69)	o-Xylene	14.84	91	1046599	12.18	ug/l	95
70)	Styrene	14.91	104	766822	12.19	ug/l	98
71)	Isopropylbenzene	15.54	105	1309934	11.13	ug/l	98
73)	Bromoform	15.56	173	99863	7.90	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.64	53	49802	6.48	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	184144	8.96	ug/l	98
77)	1,2,3-Trichloropropane	16.16	110	53219	7.03	ug/l	94
78)	n-Propylbenzene	16.31	91	1661203	7.59	ug/l	98
79)	Bromobenzene	16.39	156	278446	8.40	ug/l	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV629.D Vial: 2
Acq On : 25 Sep 2024 4:48 pm Operator: DNguye/CLingl
Sample : CVO01H0939 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 25 17:10 2024 Quant Results File: VO01H09.RES

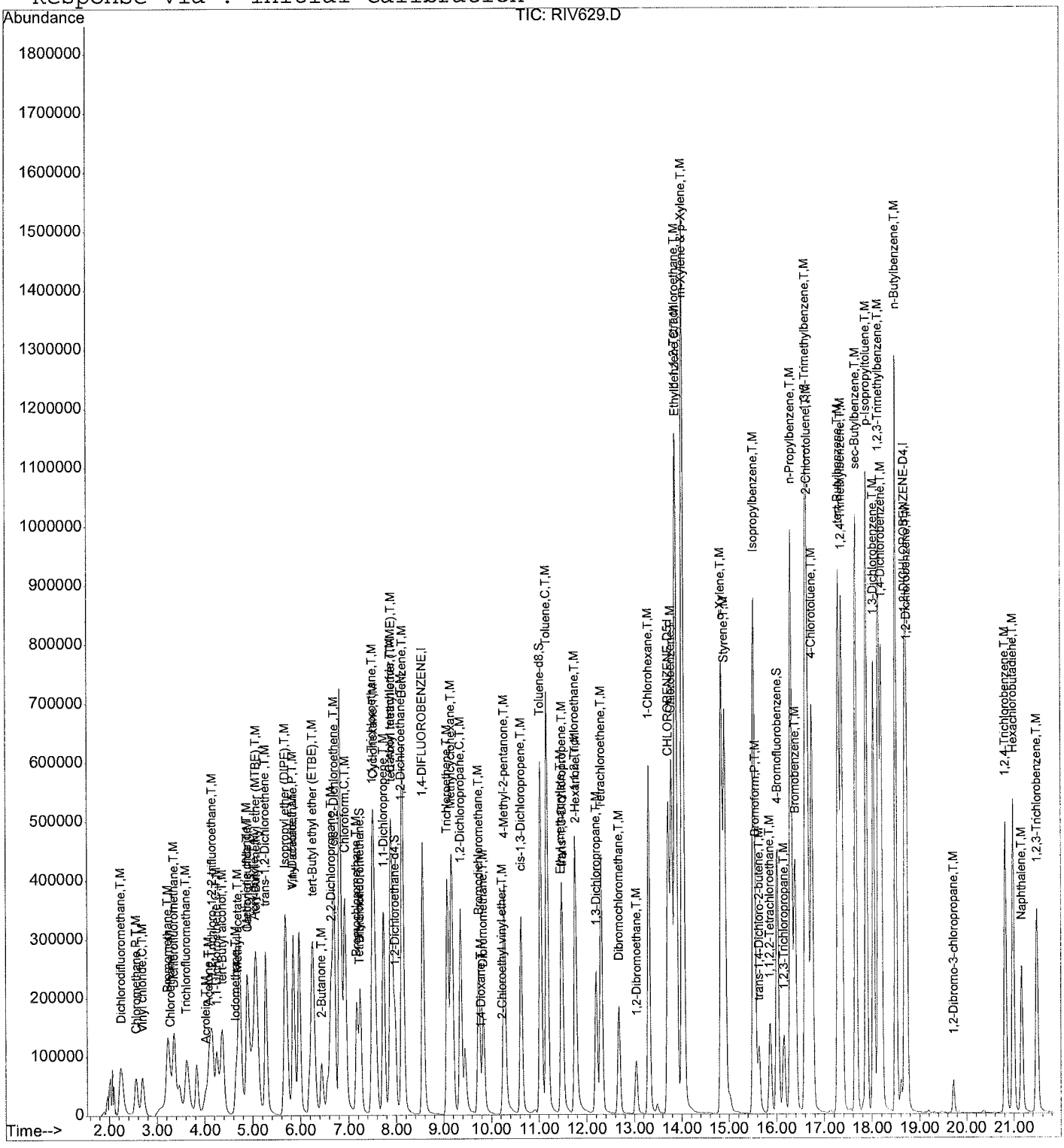
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	1039636	7.20	ug/l	98
81)	2-Chlorotoluene	16.65	91	1050672	7.31	ug/l	97
82)	4-Chlorotoluene	16.73	91	975667	7.95	ug/l	98
83)	tert-Butylbenzene	17.30	134	254762	7.97	ug/l	93
84)	1,2,4-Trimethylbenzene	17.36	105	1015752	7.36	ug/l	98
85)	sec-Butylbenzene	17.67	105	1419570	7.28	ug/l	95
86)	p-Isopropyltoluene	17.89	119	1180617	7.12	ug/l	96
87)	1,3-Dichlorobenzene	18.04	146	602484	8.78	ug/l	92
88)	1,2,3-Trimethylbenzene	18.14	105	1079577	8.06	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	598034	9.01	ug/l	92
90)	n-Butylbenzene	18.50	91	1196304	7.88	ug/l	98
91)	1,2-Dichlorobenzene	18.73	146	515213	9.12	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.73	157	29543	9.28	ug/l	97
93)	1,2,4-Trichlorobenzene	20.82	180	326514	8.50	ug/l	96
94)	Hexachlorobutadiene	20.98	225	201538	7.99	ug/l	97
95)	Naphthalene	21.16	128	423441	7.73	ug/l	97
96)	1,2,3-Trichlorobenzene	21.49	180	244431	8.33	ug/l	96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I25\RIV629.D Vial: 2
Acq On : 25 Sep 2024 4:48 pm Operator: DNguye/CLing
Sample : CVO01H0939 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 25 17:10 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



ANALYTICAL LOGS

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments: * Varied Amounts

* ICV (1V001H0901) not evaluated for chloroethane only - compound to be evaluated from ICV (1V001H0902)

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24H09
Method File:	V001H09
Analytical Batch:	V001H096

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☐ Water
☐ pH <2. Outliers indicated on analytical sequence.
☐ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☑ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE

DATE	8/9/24
ICAL ID	V001H09

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2	SV1-45-19-01	*	250
DCC GAS	-15-03		250
DCC 4ADD	-06-02		250
DCC 8260	-21-01		50
DCC KET	-19-02		250
BFB	-01-01	1	50
IS/SURR. IS	SV1-43-95-01	1	250
IS/SURR. SS	-45-07-02	*	250
ICV/LCS CS2	-43-79-02	1	250
ICV/LCS GAS	-45-06-01	1	250
ICV/LCS 4ADD	-43-81-03	5	50
ICV/LCS KET	-45-21-03	5	250
ICV/LCS 8260	-43-78-03	5	50
Data File Folder	24H09		

	LOT #	Syringe Lot #
pH strip	N/A	MSV-03-09-12-4
Chlorine strip		-01-12-6
Methanol		-03-23
$NaHSO_4$		-02-24
Reagent Water	RW4-23-001	
Sand		

ELECTRONIC DATA ARCHIVAL

Location	Date
HPCHEM_VOA/TO01	

Analyzed By: [signature]

Date: 8/9/24

Disposed By: [signature]

Date Disposed: 8/10/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24H09

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RHV128.D	1.	BFB01H09	T/CHK	9 Aug 2024 08:08
2	2	RHV129.D	1.	VO01H091 0.03/0.15	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	9 Aug 2024 17:28
3	3	RHV130.D	1.	VO01H092 0.05/0.25	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	9 Aug 2024 18:14
4	4	RHV131.D	1.	VO01H093 0.1/0.5	1ppb 8260/5ppb KET-AA/25ppb TBA	9 Aug 2024 18:45
5	5	RHV132.D	1.	VO01H094 0.2/1.0	2ppb 8260/10ppb KET-AA/50ppb TBA	9 Aug 2024 19:15
6	6	RHV133.D	1.	VO01H095 0.5/2.5	5ppb 8260/25ppb KET-AA/125ppb TBA	9 Aug 2024 19:46
7	7	RHV134.D	1.	VO01H096 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	9 Aug 2024 20:17
8	8	RHV135.D	1.	VO01H097 2.0/10	20ppb 8260/100ppb KET-AA/500ppb TBA	9 Aug 2024 20:47
9	9	RHV136.D	1.	VO01H098 3.0/15	30ppb 8260/150ppb KET-AA/750ppb TBA	9 Aug 2024 21:17
10	10	RHV137.D	1.	VO01H099 5.0/25	50ppb 8260/250ppb KET-AA/1250ppb TBA	9 Aug 2024 21:47
11	11	RHV138.D	1.	VO01H0910 10/50	100ppb 8260/500ppb KET-AA/2500ppb TBA	9 Aug 2024 22:17
12	12	RHV139.D	1.	RINSE		9 Aug 2024 22:47
13	13	RHV140.D	1.	RINSE		9 Aug 2024 23:17
14	14	RHV141.D	1.	VO01H0901 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	9 Aug 2024 23:47
15	15	RHV142.D	1.	RINSE		10 Aug 2024 00:17
16	16	RHV143.D	1.	LOD1	0.2ppb 8260/4.0ppb KET-AA/5.0ppb TBA	10 Aug 2024 00:48
17	17	RHV144.D	1.	LOD2	0.3ppb 8260/4.0ppb KET-AA/5.0ppb TBA	10 Aug 2024 01:18

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24H13
Method File:	V001H09
Analytical Batch:	CV001H0901

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5 mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	V001H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SV1-45-14-01	1	
DCC	-15-03	1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-14-02	5	50
BFB	-01-01	1	250
IS/SURR.	SV1-43-78-01	5	
ICV/LCS	-43-79-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03 -45-21-03	5 5	
ICV/LCS	-43-76-03	5	
Data File Folder	24H13		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-0412-9	
Chlorine strip	301902	↓ -6	
Methanol			
$NaHSO_4$			
Reagent Water	EW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: PM
Date: 8/13/24
Disposed By: PM
Date Disposed: 8/14/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24H13

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RHV145.D	1.	BFB01H10	T/CHK	13 Aug 2024 15:24
2	1	RHV146.D	1.	CVO01H0901	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 16:12
3	3	RHV147.D	1.	IVO01H0902 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 16:44
4	4	RHV148.D	1.	VO01H10L	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 17:17
5	5	RHV149.D	1.	RINSE	25mL	13 Aug 2024 17:49
6	6	RHV150.D	1.	VO01H10B	25mL	13 Aug 2024 18:21
7	7	RHV151.D	1.	24H006-12	25mL	13 Aug 2024 18:53
8	8	RHV152.D	1.	24H006-11	25mL	13 Aug 2024 19:25
9	9	RHV153.D	1.	24H006-10	25mL	13 Aug 2024 19:57
10	10	RHV154.D	1.	24H006-01	25mL	13 Aug 2024 20:29
11	11	RHV155.D	1.	24H006-02	25mL	13 Aug 2024 21:00
12	12	RHV156.D	1.	24H006-03	25mL	13 Aug 2024 21:31
13	13	RHV157.D	1.	24H006-04	25mL	13 Aug 2024 22:02
14	14	RHV158.D	1.	24H006-05	25mL	13 Aug 2024 22:33
15	15	RHV159.D	1.	24H006-06	25mL	13 Aug 2024 23:04
16	16	RHV160.D	1.	24H006-07	25mL	13 Aug 2024 23:35
17	17	RHV161.D	1.	24H006-08	25mL	14 Aug 2024 00:05
18	18	RHV162.D	1.	24H006-09	25mL	14 Aug 2024 00:35
19	19	RHV163.D	1.	24H006-01M	25mL	14 Aug 2024 01:06
20	20	RHV164.D	1.	24H006-01S	25mL	14 Aug 2024 01:36
21	21	RHV165.D	1.	EVO01H0901	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 02:06
22	22	RHV166.D	1.	EVO01H09011	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 02:36
23	23	RHV167.D	1.	EVO01H09012	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 03:06

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-077
Instrument No.:	01
Analytical Sequence:	24I23
Method File:	V001H09
Analytical Batch:	CV001H0936

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	8/19/24		
ICAL ID	V001H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SV1-45-19-01 -15-03	1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-19-02	5	
BFB	-01-02	1	50/200
IS/SURR.	SV1-45-29-03	5	
ICV/LCS	-43-74-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03 -45-21-03	5 5	
ICV/LCS	-43-78-03	5	
Data File Folder	24I23		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-09-12-4	
Chlorine strip	301902	↓ -6	
Methanol			
$NaHSO_4$			
Reagent Water	RW3-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: CL / M
Date: 9/23/24
Disposed By: CL
Date Disposed: 9/24/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24I23

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RIV525.D	1.	BFB01I20	T/CHK	23 Sep 2024 11:37
2	2	RIV526.D	1.	CVO01H0935	10ppb 8260/50ppb KET-AA/250ppb TBA	23 Sep 2024 13:10
3	3	RIV527.D	1.	VO01I20L	10ppb 8260/50ppb KET-AA/250ppb TBA	23 Sep 2024 14:07
4	4	RIV528.D	1.	VO01I20C	10ppb 8260/50ppb KET-AA/250ppb TBA	23 Sep 2024 14:37
5	6	RIV529.D	1.	RINSE	25mL	23 Sep 2024 15:07
6	7	RIV530.D	1.	VO01I20B	25mL	23 Sep 2024 15:37
7	8	RIV531.D	1.	24I034-01	25mL	23 Sep 2024 16:07
8	9	RIV532.D	1.	24I034-10	25mL	23 Sep 2024 16:38
9	10	RIV533.D	1.	24I034-11	25mL	23 Sep 2024 17:08
10	11	RIV534.D	1.	24I034-05	25mL	23 Sep 2024 17:37
11	12	RIV535.D	1.	24I034-06	25mL	23 Sep 2024 18:07
12	13	RIV536.D	1.	24I034-02	25mL	23 Sep 2024 18:37
13	14	RIV537.D	1.	24I034-09I 10X	2.5mL	23 Sep 2024 19:07
14	15	RIV538.D	1.	24I034-07I 5X	5.0mL	23 Sep 2024 19:37
15	16	RIV539.D	1.	24I034-08	25mL	23 Sep 2024 20:07
16	17	RIV540.D	1.	24I034-03	25mL	23 Sep 2024 20:37
17	18	RIV541.D	1.	24I034-04	25mL	23 Sep 2024 21:07
18	19	RIV542.D	1.	24I034-07	25mL	23 Sep 2024 21:37
19	20	RIV543.D	1.	24I034-09	25mL	23 Sep 2024 22:06
20	21	RIV544.D	1.	24I034-09M	25mL	23 Sep 2024 22:36
21	22	RIV545.D	1.	24I034-09S	25mL	23 Sep 2024 23:05
22	23	RIV546.D	1.	RINSE	25mL	23 Sep 2024 23:35
23	24	RIV547.D	1.	RINSE	25mL	24 Sep 2024 00:05
24	25	RIV548.D	1.	RINSE	25mL	24 Sep 2024 00:34
25	1	RIV549.D	1.	BFB01I21	T/CHK	24 Sep 2024 01:03
26	2	Riv550.d	1.	CVO01H0936	10ppb 8260/50ppb KET-AA/250ppb TBA	24 Sep 2024 01:33
27	3	Riv551.d	1.	VO01I21L	10ppb 8260/50ppb KET-AA/250ppb TBA	24 Sep 2024 02:02
28	4	Riv552.d	1.	VO01I21C	10ppb 8260/50ppb KET-AA/250ppb TBA	24 Sep 2024 02:32
29	5	Riv553.d	1.	RINSE	25mL	24 Sep 2024 03:01
30	6	Riv554.d	1.	VO01I21B	10ppb 8260/50ppb KET-AA/250ppb TBA	24 Sep 2024 03:31
31	7	Riv555.d	1.	24I061-17	25mL	24 Sep 2024 04:00
32	8	Riv556.d	1.	24I061-15	25mL	24 Sep 2024 04:29
33	9	Riv557.d	1.	24I061-16	25mL	24 Sep 2024 04:58
34	10	Riv558.d	1.	24I061-01	25mL	24 Sep 2024 05:28
35	11	Riv559.d	1.	24I061-02	25mL	24 Sep 2024 05:57
36	12	Riv560.d	1.	24I061-03	25mL	24 Sep 2024 06:26
37	13	Riv561.d	1.	24I061-04	25mL	24 Sep 2024 06:56
38	14	Riv562.d	1.	24I061-05	25mL	24 Sep 2024 07:25
39	15	Riv563.d	1.	24I061-06	25mL	24 Sep 2024 07:55
40	16	Riv564.d	1.	24I061-07	25mL	24 Sep 2024 08:24
41	17	Riv565.d	1.	24I061-08	25mL	24 Sep 2024 08:54
42	18	Riv566.d	1.	24I061-09	25mL	24 Sep 2024 09:23
43	19	Riv567.d	1.	24I061-10	25mL	24 Sep 2024 09:53
44	20	Riv568.d	1.	24I061-11	25mL	24 Sep 2024 10:23
45	21	Riv569.d	1.	24I061-18	25mL	24 Sep 2024 10:52
46	22	Riv570.d	1.	24I061-11M	25mL	24 Sep 2024 11:22
47	23	Riv571.d	1.	24I061-11S	25mL	24 Sep 2024 11:53
48	24	Riv572.d	1.	RINSE	25mL	24 Sep 2024 12:23

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-077
Instrument No.:	01
Analytical Sequence:	24I24
Method File:	V001H09
Analytical Batch:	CV001H0937

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	VO01H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-45-19-01	1	50/250
	-15-03	1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-19-02	5	
BFB	-01-02	1	
IS/SURR.	SVI-45-29-03	5	
ICV/LCS	-43-74-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03	5	
	-45-21-03	5	
ICV/LCS	-43-78-03	5	
Data File Folder	24I24		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-09-12-4	
Chlorine strip	301902	↓ -6	
Methanol			
$NaHSO_4$			
Reagent Water	RW3-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: CL/ PM
Date: 9/24/24
Disposed By: CL
Date Disposed: 9/25/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24I24

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RIV573.D	1.	BFB01I22	T/CHK	24 Sep 2024 12:53
2	2	RIV574.D	1.	CVO01H0937	10ppb 8260/50ppb KET-AA/250ppb TBA	24 Sep 2024 13:24
3	3	RIV575.D	1.	VO01I22L	10ppb 8260/50ppb KET-AA/250ppb TBA	24 Sep 2024 14:02
4	4	RIV576.D	1.	VO01I22C	10ppb 8260/50ppb KET-AA/250ppb TBA	24 Sep 2024 14:32
5	5	RIV577.D	1.	RINSE	25mL	24 Sep 2024 15:02
6	6	RIV578.D	1.	VO01I22B	25mL	24 Sep 2024 15:33
7	7	RIV579.D	1.	24I096 VW01	25mL	24 Sep 2024 16:03
8	8	RIV580.D	1.	24I096 VW02	25mL	24 Sep 2024 16:33
9	9	RIV581.D	1.	24I096 VW05	25mL	24 Sep 2024 17:02
10	10	RIV582.D	1.	24I096 VW06	25mL	24 Sep 2024 17:32
11	11	RIV583.D	1.	24I096 VW07	25mL	24 Sep 2024 18:02
12	12	RIV584.D	1.	24I096 VS01	25mL	24 Sep 2024 18:32
13	13	RIV585.D	1.	24I096 SE08	25mL	24 Sep 2024 19:02
14	14	RIV586.D	1.	24I061-14	25mL	24 Sep 2024 19:32
15	15	RIV587.D	1.	24I061-12	25mL	24 Sep 2024 20:02
16	16	RIV588.D	1.	24I061-13	25mL	24 Sep 2024 20:31
17	17	RIV589.D	1.	24I061-14M	25mL	24 Sep 2024 21:01
18	18	RIV590.D	1.	24I061-14S	25mL	24 Sep 2024 21:31
19	19	RIV591.D	1.	24I061-19	25mL	24 Sep 2024 22:00
20	20	RIV592.D	1.	24I047-03I 5000X	0.0050mL	24 Sep 2024 22:30
21	21	RIV593.D	1.	24I047-02I 100X	0.25mL	24 Sep 2024 23:00
22	22	RIV594.D	1.	24I047-03J 25X	1.0mL	24 Sep 2024 23:29
23	23	RIV595.D	1.	24I047-03	25mL	24 Sep 2024 23:58
24	24	RIV596.D	1.	24I047-02	25mL	25 Sep 2024 00:28
25	25	RIV597.D	1.	RINSE	25mL	25 Sep 2024 00:57
26	26	RIV598.D	1.	RINSE	25mL	25 Sep 2024 01:26
27	27	RIV599.D	1.	RINSE	25mL	25 Sep 2024 01:55
28	1	RIV600.D	1.	BFB01I23	T/CHK	25 Sep 2024 02:25
29	2	RIV601.D	1.	CVO01H0938	10ppb 8260/50ppb KET-AA/250ppb TBA	25 Sep 2024 02:54
30	3	RIV602.D	1.	VO01I23L	10ppb 8260/50ppb KET-AA/250ppb TBA	25 Sep 2024 03:23
31	4	RIV603.D	1.	VO01I23C	10ppb 8260/50ppb KET-AA/250ppb TBA	25 Sep 2024 03:52
32	5	RIV604.D	1.	RINSE	25mL	25 Sep 2024 04:21
33	6	RIV605.D	1.	VO01I23B	25mL	25 Sep 2024 04:50
34	7	RIV606.D	1.	24I047-13	25mL	25 Sep 2024 05:19
35	8	RIV607.D	1.	24I049-02	25mL	25 Sep 2024 05:49
36	9	RIV608.D	1.	24I066-15	25mL	25 Sep 2024 06:18
37	10	RIV609.D	1.	24I068-01	25mL	25 Sep 2024 06:47
38	11	RIV610.D	1.	24I068-02	25mL	25 Sep 2024 07:16
39	12	RIV611.D	1.	24I068-03	25mL	25 Sep 2024 07:46
40	13	RIV612.D	1.	24I047-11	25mL	25 Sep 2024 08:15
41	14	RIV613.D	1.	24I047-12	25mL	25 Sep 2024 08:44
42	15	RIV614.D	1.	24I049-01	25mL	25 Sep 2024 09:14
43	16	RIV615.D	1.	24I066-16	25mL	25 Sep 2024 09:43
44	17	RIV616.D	1.	24I066-17	25mL	25 Sep 2024 10:13
45	18	RIV617.D	1.	24I047-01	25mL	25 Sep 2024 10:42
46	19	RIV618.D	1.	24I047-05	25mL	25 Sep 2024 11:11
47	20	RIV619.D	1.	24I047-06	25mL	25 Sep 2024 11:41
48	21	RIV620.D	1.	24I047-07	25mL	25 Sep 2024 12:11
49	22	RIV621.D	1.	24I047-08	25mL	25 Sep 2024 12:40
50	23	RIV622.D	1.	24I047-09	25mL	25 Sep 2024 13:10
51	24	RIV623.D	1.	24I047-10I 50X	0.5mL	25 Sep 2024 13:40
52	25	RIV624.D	1.	24I047-10	25mL	25 Sep 2024 14:09
53	26	RIV625.D	1.	RINSE	25mL	25 Sep 2024 14:39
54	27	RIV626.D	1.	RINSE	25mL	25 Sep 2024 15:09
55	28	RIV627.D	1.	RINSE	25mL	25 Sep 2024 15:39

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
VOLATILES

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-077
Instrument No.:	01
Analytical Sequence:	24I25
Method File:	V001H09
Analytical Batch:	cV001H0939

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	V001H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-45-19-01	1	50/250
	-15-03	1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-19-02	5	
BFB	-01-02	1	
IS/SURR.	SVI-45-29-03	5	
ICV/LCS	-43-74-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03	5	
	-45-21-03	5	
ICV/LCS	-43-78-03	5	
Data File Folder	24I25		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSU-03-09-12-4	
Chlorine strip	301902	↓	-6
Methanol			
$NaHSO_4$			
Reagent Water	RW3-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By:	CL/m
Date:	9/25/24
Disposed By:	CL
Date Disposed:	9/26/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24I25

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RIV628.D	1.	BFB01I24	T/CHK	25 Sep 2024 16:09
2	2	RIV629.D	1.	CVO01H0939	10ppb 8260/50ppb KET-AA/250ppb TBA	25 Sep 2024 16:48
3	3	RIV630.D	1.	VO01I24L	10ppb 8260/50ppb KET-AA/250ppb TBA	25 Sep 2024 17:26
4	4	RIV631.D	1.	VO01I24C	10ppb 8260/50ppb KET-AA/250ppb TBA	25 Sep 2024 17:56
5	5	RIV632.D	1.	RINSE	25mL	25 Sep 2024 18:26
6	6	RIV633.D	1.	VO01I24B	25mL	25 Sep 2024 18:56
7	7	RIV634.D	1.	24I047-05I 50X	0.5mL	25 Sep 2024 19:26
8	8	RIV635.D	1.	24I061-12I 10X	2.5mL	25 Sep 2024 19:55
9	9	RIV636.D	1.	24I048-01I 10X	2.5mL	25 Sep 2024 20:25
10	10	RIV637.D	1.	24I048-22	25mL	25 Sep 2024 20:55
11	11	RIV638.D	1.	24I058-09	25mL	25 Sep 2024 21:24
12	12	RIV639.D	1.	24I066-27	25mL	25 Sep 2024 21:54
13	13	RIV640.D	1.	24I066-28	25mL	25 Sep 2024 22:23
14	14	RIV641.D	1.	24I066-22	25mL	25 Sep 2024 22:53
15	15	RIV642.D	1.	24I058-10	25mL	25 Sep 2024 23:22
16	16	RIV643.D	1.	24I058-02	25mL	25 Sep 2024 23:51
17	17	RIV644.D	1.	24I058-06	25mL	26 Sep 2024 00:21
18	18	RIV645.D	1.	24I058-07	25mL	26 Sep 2024 00:50
19	19	RIV646.D	1.	24I058-09M	25mL	26 Sep 2024 01:19
20	20	RIV647.D	1.	24I058-09S	25mL	26 Sep 2024 01:48
21	21	RIV648.D	1.	24I066-20	25mL	26 Sep 2024 02:17
22	22	RIV649.D	1.	24I066-21	25mL	26 Sep 2024 02:47
23	23	RIV650.D	1.	24I066-19	25mL	26 Sep 2024 03:16
24	24	RIV651.D	1.	24I066-18	25mL	26 Sep 2024 03:45
25	25	RIV652.D	1.	EVO01H0939	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 04:14
26	26	RIV653.D	1.	EVO01H09391	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 04:43
27	27	RIV654.D	1.	EVO01H09392	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 05:12
28	28	RIV655.D	1.	RINSE	25mL	26 Sep 2024 05:41
29	1	RIV656.D	1.	RINSE	25mL	26 Sep 2024 06:10
30	2	RIV657.D	1.	BFB01I25	T/CHK	26 Sep 2024 06:39
31	3	RIV658.D	1.	CVO01H0940	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 07:08
32	4	RIV659.D	1.	VO01I25L	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 07:37
33	5	RIV660.D	1.	VO01I25C	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 08:06
34	6	RIV661.D	1.	RINSE	25mL	26 Sep 2024 08:35
35	7	RIV662.D	1.	VO01I25B	25mL	26 Sep 2024 09:04
36	8	RIV663.D	1.	24I058-01	25mL	26 Sep 2024 09:33
37	9	RIV664.D	1.	24I073-01	25mL	26 Sep 2024 10:02
38	10	RIV665.D	1.	24I077-05	25mL	26 Sep 2024 10:32
39	11	RIV666.D	1.	24I058-11	25mL	26 Sep 2024 11:01
40	12	RIV667.D	1.	TB	25mL	26 Sep 2024 11:31
41	13	RIV668.D	1.	24I058-12	25mL	26 Sep 2024 12:01
42	14	RIV669.D	1.	24I058-03I 5X	5.0mL	26 Sep 2024 12:31
43	15	RIV670.D	1.	24I058-08I 5X	5.0mL	26 Sep 2024 13:02
44	16	RIV671.D	1.	24I077-01	25mL	26 Sep 2024 13:32
45	17	RIV672.D	1.	24I077-02	25mL	26 Sep 2024 14:02
46	18	RIV673.D	1.	24I077-03	25mL	26 Sep 2024 14:32
47	19	RIV674.D	1.	24I077-04	25mL	26 Sep 2024 15:02
48	20	RIV675.D	1.	24I077-07	25mL	26 Sep 2024 15:32
49	21	RIV676.D	1.	RINSE	25mL	26 Sep 2024 16:03

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 10-09-2024
EMAX Batch No.: 24I062

Attn: Cherie Zakowski

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202

Subject: Laboratory Report
Project: VA SALT LAKE CITY

Enclosed is the Laboratory report for samples received on 09/13/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
MW03RA-GW091124	I062-01	09/11/24	WATER	ANIONS BY IC
				NITRATE/NITRITE AS N
				TOTAL ALKALINITY
				TOTAL ORGANIC CARBON
				DISSOLVED GAS
IW01-GW091124	I062-02	09/11/24	WATER	ANIONS BY IC
				NITRATE/NITRITE AS N
				TOTAL ALKALINITY
				TOTAL ORGANIC CARBON
				DISSOLVED GAS
MW03RB-GW091124	I062-03	09/11/24	WATER	ANIONS BY IC
				NITRATE/NITRITE AS N
				TOTAL ALKALINITY
				TOTAL ORGANIC CARBON
				DISSOLVED GAS
EW01-GW091124	I062-04	09/11/24	WATER	ANIONS BY IC
				NITRATE/NITRITE AS N
				TOTAL ALKALINITY
				TOTAL ORGANIC CARBON
				DISSOLVED GAS
EB02-GW091124	I062-05	09/11/24	WATER	CANCELLED
MW03RA-GW091124MS	I062-01M	09/11/24	WATER	ANIONS BY IC
				NITRATE/NITRITE AS N
				TOTAL ORGANIC CARBON
				DISSOLVED GAS
MW03RA-GW091124MSD	I062-01S	09/11/24	WATER	ANIONS BY IC
				DISSOLVED GAS
MW03RA-GW091124DUP	I062-01D	09/11/24	WATER	NITRATE/NITRITE AS N
				TOTAL ALKALINITY
				TOTAL ORGANIC CARBON

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912023-25
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

Revised COC email from client on 9/17/24

LP 9/17/24

CHAIN OF CUSTODY

EMAX Laboratories, Inc.
3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE

EMAX CONTROL NO. 24I062
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEl 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sl	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

ANALYSIS REQUIRED: VOCs (8260C), Anions (Cl, SO4), Nitrate/Nitrite (SM4500-NO3E), Alkalinity (SM2320B), TOC (SW9060), TDS (SM 2540C), Dissolved Gases (RSK-175)

TAT:
- Rush __24__hrs.
- Rush __48_hrs
- Rush_72_hrs
- 7 days
- 14 days
- 21 days

LAB	SAMPLE ID / CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	PRESERVATIVE CODE HCl	IC	HS	IC	HS	IC	HCl	COMMENTS
1	MW03RA-GW091124	03RA	9/11/24	1045	15	/	/	GW	X		3	3	3	3		9	MS/MSD
2	IW01-GW091124	IW01	9/11/24	1111	5	/	/	GW			1	1	1	1		3	
3	MW03RB-GW091124	03RB	9/11/24	1100	5	/	/	GW			1	1	1	1		3	
4	EW01-GW091124	EW01	9/11/24	1521	5	/	/	GW			1	1	1	1		3	
5	~~EB02-GW091124~~	—	~~9/11/24~~	~~1620~~	~~5~~	/	/	~~O~~			~~1~~	~~1~~	~~1~~	~~1~~		~~3~~	JPB 9/17/24
6																	
7																	
8																	
9																	

Instructions
Please CC Maria Day at daymk@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s
1	1.1	

SAMPLER
COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
~~[illegible]~~	~~9/11/24~~	~~1620~~	EB 9/12/24
Emma Goldberg Emma Goldberg CDM Smith	9/12/24	1600	
	9/13/24	10:00	[signature]

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

CHAIN OF CUSTODY

EMAX Laboratories, Inc.
3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE

EMAX CONTROL NO. 24I062
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEL 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sl	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

TAT
- ☐ Rush __24__hrs.
- ☐ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☑ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	VOCs (8260C)	Anions (Cl, SO4)	Nitrate/Nitrite (SM4500-NO3E)	Alkalinity (SM2320B)	TOC (SW9060)	TDS (SM 2540C)	Dissolved Gases (RSK-175)	COMMENTS
										PRESERVATIVE CODE							
										HCl	IC	HS	IC	HS	IC	HCl	
1	MW03RA-GW091124	03RA	9/11/24	1045	15			GW	X		3	3	3	3		9	MS/MSD
2	IW01-GW091124	IW01	9/11/24	1111	5			GW			1	1	1	1		3	
3	MW03RB-GW091124	03RB	9/11/24	1100	5			GW			1	1	1	1		3	
4	EW01-GW091124	EW01	9/11/24	1521	5			GW			1	1	1	1		3	
5	EB02-GW091124	—	9/11/24	1620	5			O			1	1	1	1		3	
6																	
7																	
8																	
9																	

Instructions
Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s
1	1.1	

SAMPLER
COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
[signature]	9/4/24	1620	9/12/24
Emma Goldberg Emma Goldberg CDM	9/12/24	1600	
Samples	9/13/24	10:00	[signature]

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

SAMPLE RECEIPT FORM 1

EMAX LABORATORIES, INC.

Type of Delivery	Airbill / Tracking Number	ECN 24I062
☒ Fedex ☐ UPS ☐ GSO ☐ Others	2794 3980 6397	Recipient Maria Rivera
☐ EMAX Courier ☐ Client Delivery		Date 09/13/24 Time 10:00

COC INSPECTION

☒ Client Name	☒ Client PM/FC	☐ Sampler Name	☒ Sampling Date/Time	☒ Sample ID	☒ Matrix
☒ Address	☒ Tel # / Fax #	☐ Courier Signature	☒ Analysis Required	☒ Preservative (if any)	☒ TAT
Safety Issues (if any)	☐ High concentrations expected	☐ From Superfund Site	☐ Rad screening required		

Note: _____

PACKAGING INSPECTION

Container	☒ Cooler	☐ Box	☐ Other		
Condition	☒ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☒ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☒ bag
Temperatures (Cool, ≤6 °C but not frozen)	☒ Cooler 1 1.1 °C	☐ Cooler 2 ____ °C	☐ Cooler 3 ____ °C	☐ Cooler 4 ____ °C	☐ Cooler 5 ____ °C
	☐ Cooler 6 ____ °C	☐ Cooler 7 ____ °C	☐ Cooler 8 ____ °C	☐ Cooler 9 ____ °C	☐ Cooler 10 ____ °C
Thermometer:	(A) S/N 24041221	B - S/N ____	C - S/N ____	D - S/N 230044057	

Comments: ☐ Temperature is out of range. PM was informed IMMEDIATELY.

Note: _____

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
1	10	D1	TOC not on label	R1

09/13/24

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

NOTES/OBSERVATIONS:

SAMPLE MATRIX IS DRINKING WATER? ☐ YES ☒ NO

LEGEND:

☐ Continue to next page.

Code	Description- Sample Management	Code	Description-Sample Management	Code	Description-Sample Management
(D1)	Analysis is not indicated in label	D13	Out of Holding Time	R1	Proceed as indicated in ☒ COC ☐ Label
D2	Analysis mismatch COC vs label	D14	Bubble is >6mm	R2	Refer to attached instruction
D3	Sample ID mismatch COC vs label	D15	No trip blank in cooler	R3	Cancel the analysis
D4	Sample ID is not indicated in ____	D16	Preservation not indicated in ____	R4	Use vial with smallest bubble first
D5	Container -{improper} {leaking} {broken}	D17	Preservation mismatch COC vs label	R5	Log-in with latest sampling date and time+1 min
D6	Date/Time is not indicated in ____	D18	Insufficient chemical preservative	R6	Adjust pH as necessary
D7	Date/Time mismatch COC vs label	D19	Insufficient Sample	R7	Filter and preserved as necessary
D8	Sample listed in COC is not received	D20	No filtration info for dissolved analysis	R8	____
D9	Sample received is not listed in COC	D21	No sample for moisture determination	R9	____
D10	No initial/date on corrections in COC/label	D22	____	R10	____
D11	Container count mismatch COC vs received	D23	____	R11	____
D12	Container size mismatch COC vs received	D24	____	R12	____

REVIEWS:

Sample Labeling Maria Rivera Date 09/13/24 — 9/13/24

SRF Date 9/13/24

PM Date 9/13/24

EMAX Laboratories, Inc. 3051 Fujita St., Torrance, CA 90505

Outlook

RE: Login for VA Salt Lake City SDG 24I062

From Zakowski, Cherie <ZakowskiCA@cdmsmith.com>
Date Tue 9/17/2024 2:14 PM
To Linh Pham <LPham@emaxlabs.com>
Cc Caspar Pang <CPang@emaxlabs.com>; Cecilia Chavez <CChavez@emaxlabs.com>; Borgerding, Joseph P. <borgerdingjp@cdmsmith.com>

1 attachments (499 KB)
Revised COC 24I062.pdf;

Hello again: Joe provided a more detailed explanation of what happened:

We sent 1 bottle for Nitrate/Nitrite and TOC, 1 bottle for Anions and Alkalinity, and 3 VOA Vials for Dissolved Gases under sample ID EB02-GW091124. They arrived on 9/13/24 at 10:00am and were logged in by EMAX under SDG 24I062. These bottles **do not** need to be analyzed and should not have been sent. In a different cooler, that arrived at the same time 9/13/24 at 10:00am we have 3 VOA vials labeled EB02-GW091124 that **do** need to be analyzed for VOCs. This cooler is associated with SDG 24I061.

In summary we only want to run VOC analysis for sample EB02-GW091124, and accidentally shipped bottles for other analysis. We have removed this sample from the COC with SDG 24I062.

Let us know if you have questions.

Thanks

Cherie Zakowski
Project Manager/Scientist
CDM Smith
555 17th Street, Suite 500
Denver, CO 80202
Direct Phone: 720-264-1109
Main Phone: 303-383-2300

From: Zakowski, Cherie <ZakowskiCA@cdmsmith.com>
Sent: Tuesday, September 17, 2024 3:07 PM
To: 'Linh Pham' <LPham@emaxlabs.com>
Cc: 'Caspar Pang (CPang@emaxlabs.com)' <CPang@emaxlabs.com>; 'Cecilia Chavez' <CChavez@emaxlabs.com>
Subject: FW: Login for VA Salt Lake City SDG 24I062

Hi: Please see the revised attached COC. We are canceling EB-02 that is listed on this COC. We do not need it for these analyses.

Thanks

Cherie Zakowski
Project Manager/Scientist
CDM Smith
555 17th Street, Suite 500
Denver, CO 80202
Direct Phone: 720-264-1109
Main Phone: 303-383-2300

From: Linh Pham <LPham@emaxlabs.com>
Sent: Tuesday, September 17, 2024 2:02 PM
To: Zakowski, Cherie <ZakowskiCA@cdmsmith.com>
Cc: Caspar Pang <CPang@emaxlabs.com>
Subject: Login for VA Salt Lake City SDG 24I062

Hello Cherie,
Please review the attached login and let us know if you have any questions.

Thank you

Linh Pham

Project Coordinator

Phone: 310-618-8889 ext. 120

EMAX Laboratories, Inc.

3051 Fujita St

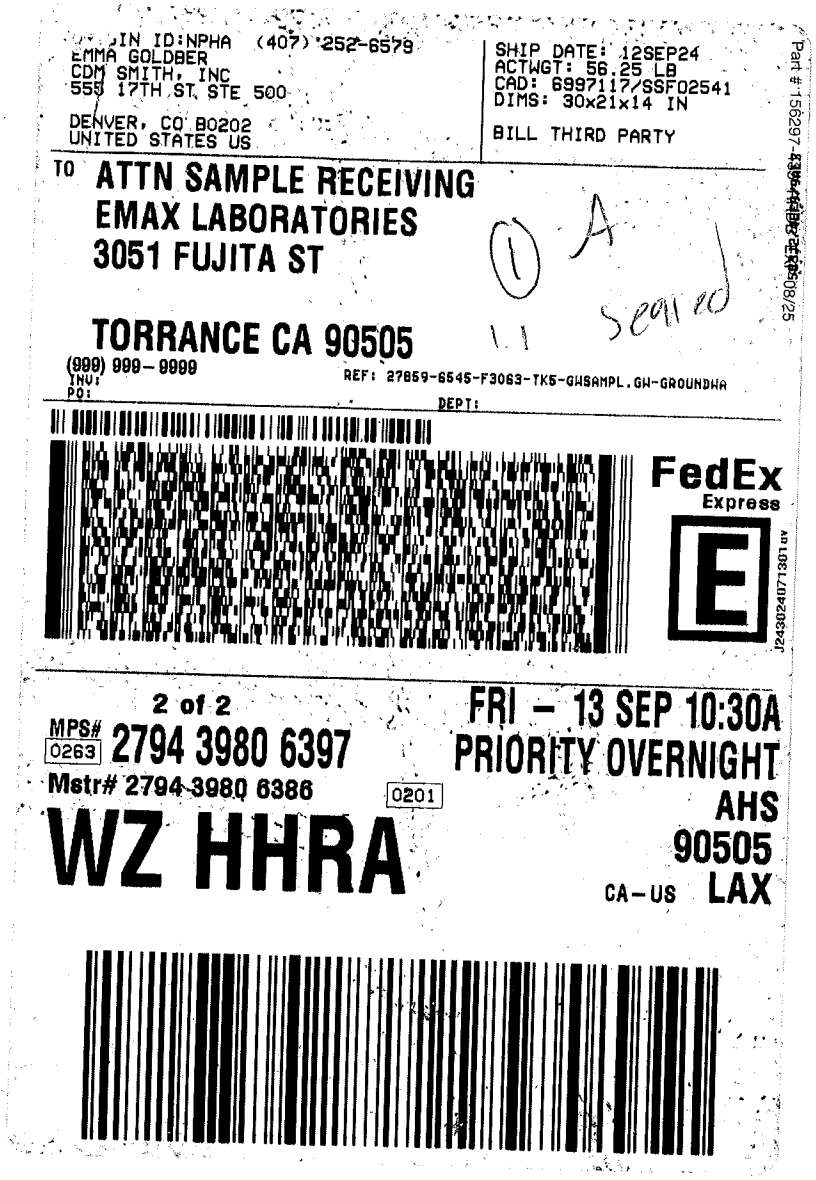
Torrance, CA90505

EMAX will be closed in observance of the upcoming holidays:

Indigenous Peoples' Day (Monday 10/14/2024)

Veterans' Day (Monday 11/11/2024)

Thanksgiving (Thursday/Friday 11/28-11/29/2024)


IN ID:NPHA (407) 252-6579
EMMA GOLDBER
CDM SMITH, INC
555 17TH ST STE 500
DENVER, CO 80202
UNITED STATES US
SHIP DATE: 12SEP24
ACTWGT: 56.25 LB
CAD: 6997117/SSF02541
DIMS: 30x21x14 IN
BILL THIRD PARTY
TO ATTN SAMPLE RECEIVING
EMAX LABORATORIES
3051 FUJITA ST
TORRANCE CA 90505
(999) 999-9999
INV:
PO:
REF: 27859-8545-F3063-TK5-GWSAMPL.GW-GROUNDWA
DEPT:
FedEx
Express
2 of 2
MPS# 0263 2794 3980 6397
Mstr# 2794 3980 6386
0201
WZ HHRA
FRI - 13 SEP 10:30A
PRIORITY OVERNIGHT
AHS
90505
CA-US LAX

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range or estimated value.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

METHOD RSK-175
DISSOLVED GASES

SDG#: 24I062

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I062

METHOD RSK-175
DISSOLVED GASES

A total of four(4) water samples were received on 09/13/24 to be analyzed for Dissolved Gases in accordance with Method RSK-175 and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DGI005WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. DGI005WL/DGI005WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. I062-01M/I062-01S - all analytes were within MS QC limits. Refer to Matrix QC summary form for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE
DISSOLVED GASES

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24I062
Instrument ID : GCT072

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DGI005WB	1	NA	09/19/2413:26	09/19/2412:30	BI19003A	BI19002A	DGI005W	Method Blank
LCS1W	DGI005WL	1	NA	09/19/2413:39	09/19/2412:30	BI19004A	BI19002A	DGI005W	Lab Control Sample (LCS)
LCD1W	DGI005WC	1	NA	09/19/2413:50	09/19/2412:30	BI19005A	BI19002A	DGI005W	LCS Duplicate
MW03RA-GW091124	I062-01	1	NA	09/19/2417:27	09/19/2412:30	BI19019A	BI19013A	DGI005W	Field Sample
IW01-GW091124	I062-02	1	NA	09/19/2418:36	09/19/2412:30	BI19022A	BI19013A	DGI005W	Field Sample
MW03RB-GW091124	I062-03	1	NA	09/19/2418:49	09/19/2412:30	BI19023A	BI19013A	DGI005W	Field Sample
EW01-GW091124	I062-04	1	NA	09/19/2419:12	09/19/2412:30	BI19025A	BI19024A	DGI005W	Field Sample
MW03RA-GW091124MS	I062-01M	1	NA	09/19/2417:40	09/19/2412:30	BI19020A	BI19013A	DGI005W	Matrix Spike Sample (MS)
MW03RA-GW091124MSD	I062-01S	1	NA	09/19/2417:51	09/19/2412:30	BI19021A	BI19013A	DGI005W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD RSK-175
DISSOLVED GASES

Client : CDM SMITH	Date Collected: 09/11/24
Project : VA SALT LAKE CITY	Date Received: 09/13/24
Batch No. : 24I062	Date Extracted: 09/19/24 12:30
Sample ID: MW03RA-GW091124	Date Analyzed: 09/19/24 17:27
Lab Samp ID: I062-01	Dilution Factor: 1
Lab File ID: BI19019A	Matrix : WATER
Ext Btch ID: DGI005W	% Moisture : NA
Calib. Ref.: BI19013A	Instrument ID : GCT072

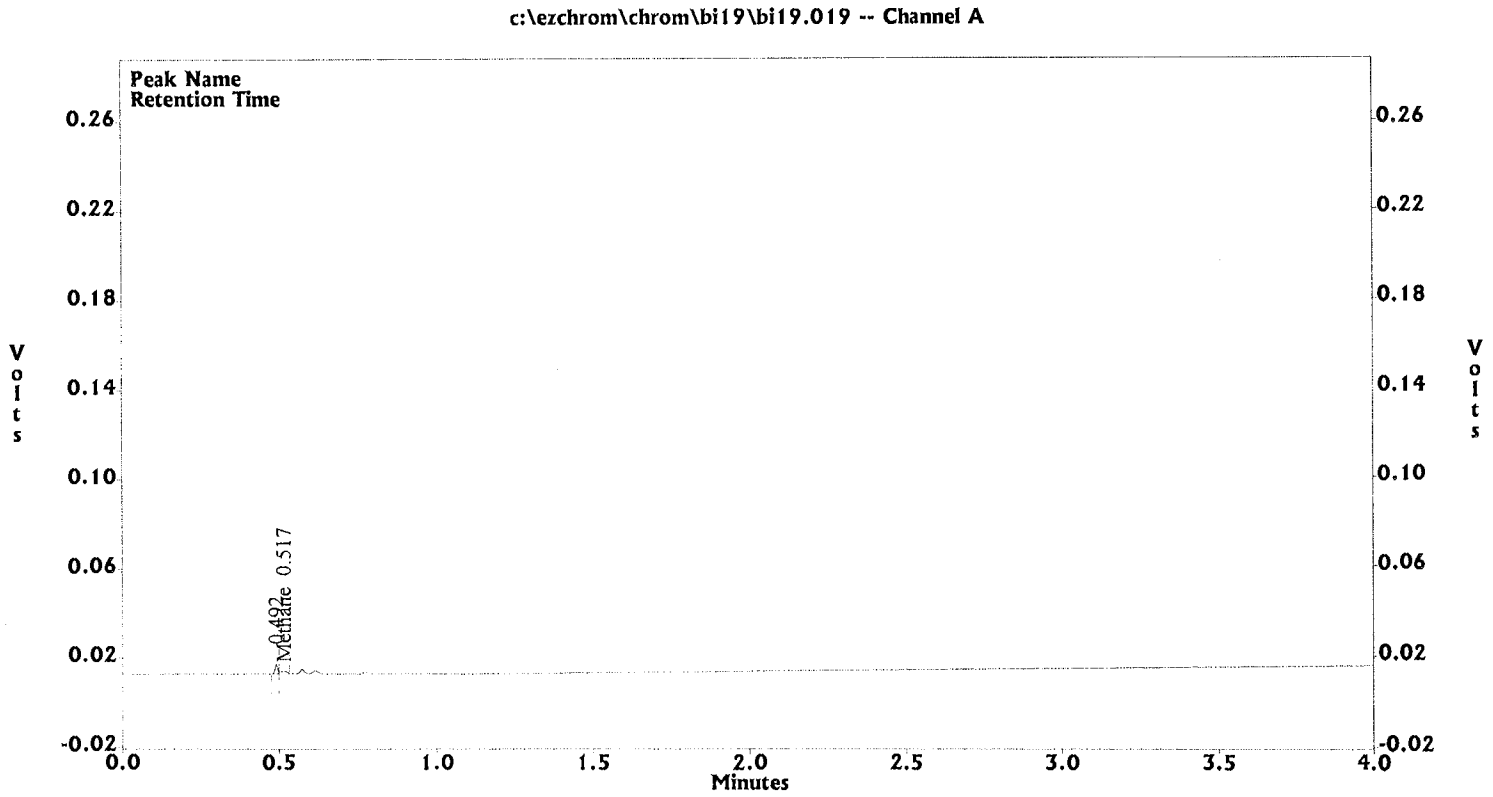
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	2.0	0.32
ETHENE	ND	2.0	0.30
METHANE	0.52J	2.0	0.17

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.019
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : I062-01
Acquired : Sep 19, 2024 17:27:54
Printed : Sep 19, 2024 19:16:37
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	1652	3195.35	0.517
--	Ethylene	0.775	0	0.00	0.000
--	Acetylene	0.858	0	0.00	0.000
--	Ethane	0.908	0	0.00	0.000
--	Propane	2.450	0	0.00	0.000



METHOD RSK-175
DISSOLVED GASES

Client : CDM SMITH	Date Collected: 09/11/24
Project : VA SALT LAKE CITY	Date Received: 09/13/24
Batch No. : 24I062	Date Extracted: 09/19/24 12:30
Sample ID: IW01-GW091124	Date Analyzed: 09/19/24 18:36
Lab Samp ID: I062-02	Dilution Factor: 1
Lab File ID: BI19022A	Matrix : WATER
Ext Btch ID: DGI005W	% Moisture : NA
Calib. Ref.: BI19013A	Instrument ID : GCT072

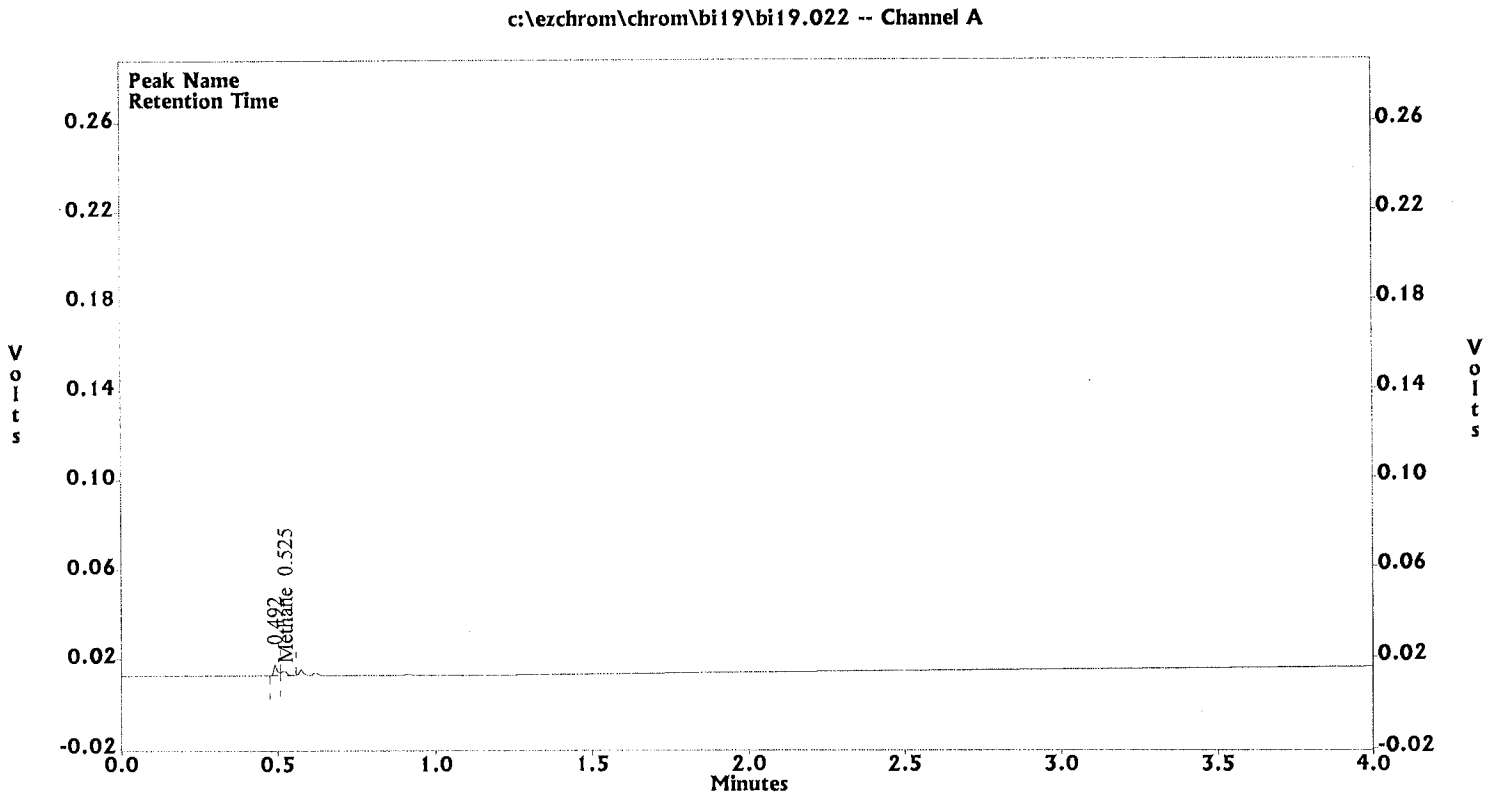
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	2.0	0.32
ETHENE	ND	2.0	0.30
METHANE	0.70J	2.0	0.17

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.022
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : I062-02
Acquired : Sep 19, 2024 18:36:01
Printed : Sep 19, 2024 19:17:20
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	2236	3195.35	0.700
--	Ethylene	0.775	0	0.00	0.000
--	Acetylene	0.858	0	0.00	0.000
--	Ethane	0.908	0	0.00	0.000
--	Propane	2.450	0	0.00	0.000



METHOD RSK-175
DISSOLVED GASES

Client : CDM SMITH	Date Collected: 09/11/24
Project : VA SALT LAKE CITY	Date Received: 09/13/24
Batch No. : 24I062	Date Extracted: 09/19/24 12:30
Sample ID: MW03RB-GW091124	Date Analyzed: 09/19/24 18:49
Lab Samp ID: I062-03	Dilution Factor: 1
Lab File ID: BI19023A	Matrix : WATER
Ext Btch ID: DGI005W	% Moisture : NA
Calib. Ref.: BI19013A	Instrument ID : GCT072

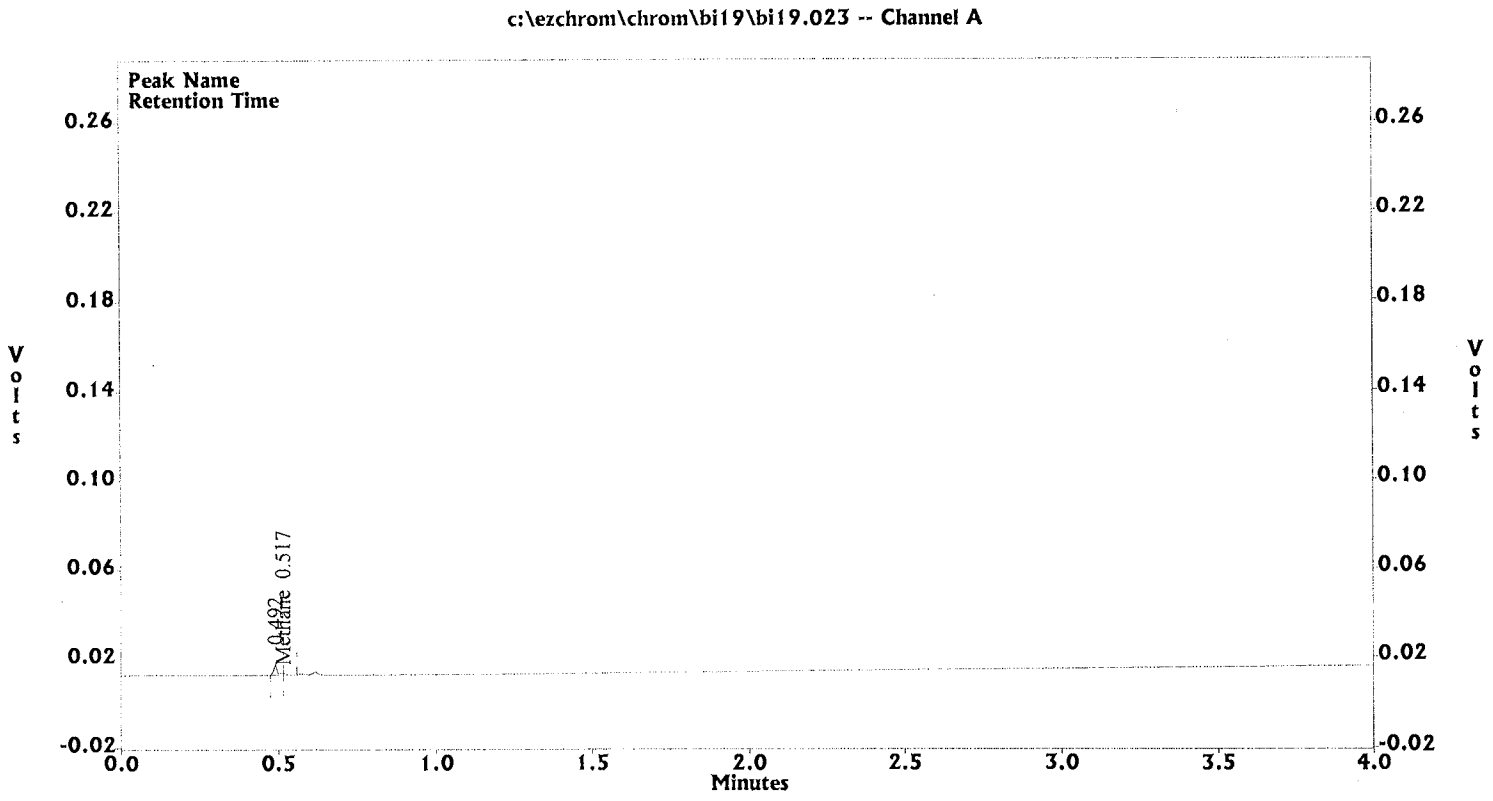
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	2.0	0.32
ETHENE	ND	2.0	0.30
METHANE	ND	2.0	0.17

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.023
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : I062-03
Acquired : Sep 19, 2024 18:49:50
Printed : Sep 19, 2024 19:17:53
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	403	3195.35	0.126
--	Ethylene	0.775	0	0.00	0.000
--	Acetylene	0.858	0	0.00	0.000
--	Ethane	0.908	0	0.00	0.000
--	Propane	2.450	0	0.00	0.000



METHOD RSK-175
DISSOLVED GASES

Client : CDM SMITH	Date Collected: 09/11/24
Project : VA SALT LAKE CITY	Date Received: 09/13/24
Batch No. : 24I062	Date Extracted: 09/19/24 12:30
Sample ID: EW01-GW091124	Date Analyzed: 09/19/24 19:12
Lab Samp ID: I062-04	Dilution Factor: 1
Lab File ID: BI19025A	Matrix : WATER
Ext Btch ID: DGI005W	% Moisture : NA
Calib. Ref.: BI19024A	Instrument ID : GCT072

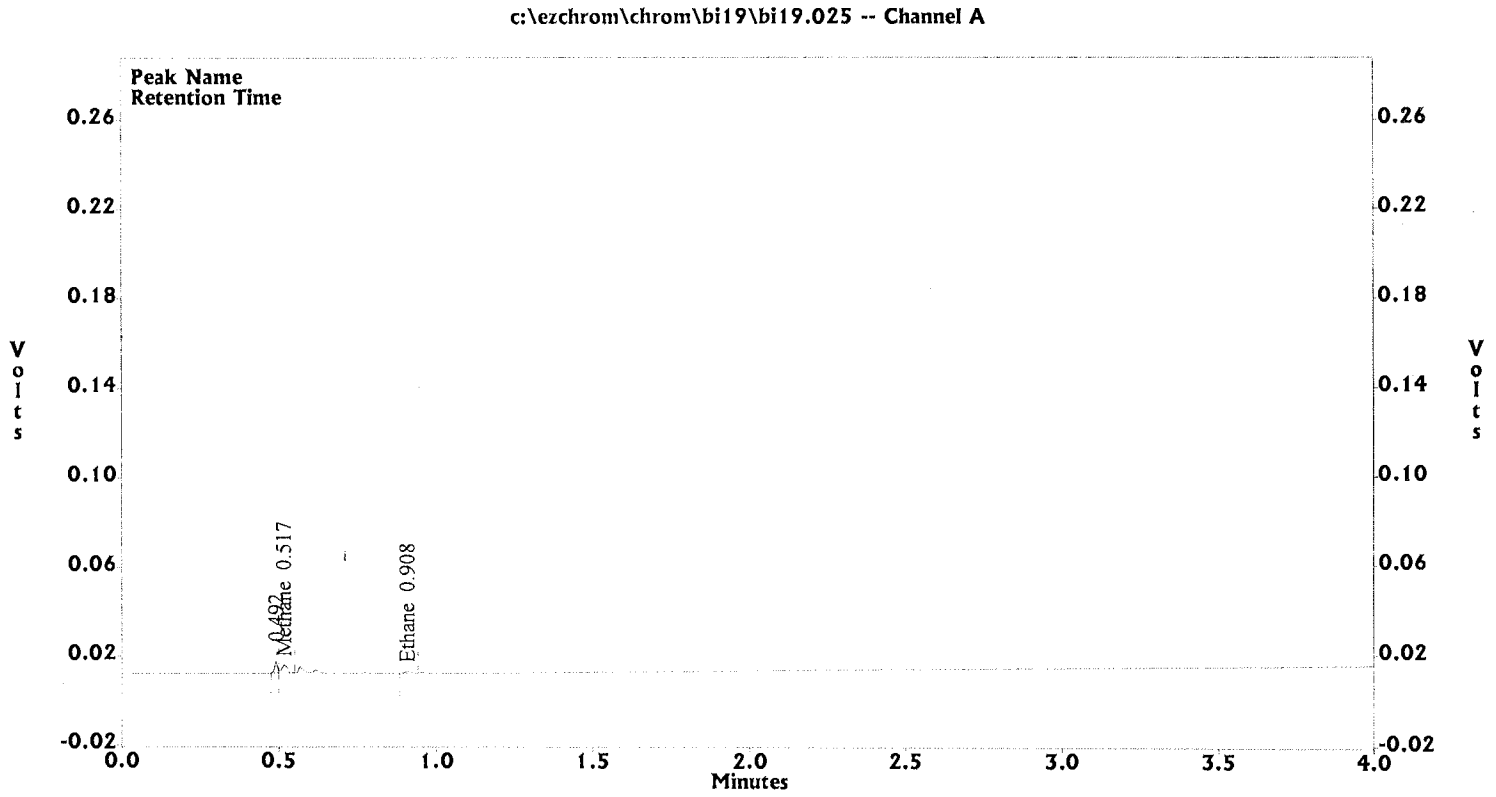
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	2.0	0.32
ETHENE	ND	2.0	0.30
METHANE	1.3J	2.0	0.17

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.025
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : I062-04
Acquired : Sep 19, 2024 19:12:14
Printed : Sep 19, 2024 19:18:25
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	4198	3195.35	1.314
--	Ethylene	0.775	0	0.00	0.000
--	Acetylene	0.858	0	0.00	0.000
3	Ethane	0.908	909	2984.48	0.305
--	Propane	2.450	0	0.00	0.000



QC SUMMARIES

METHOD RSK-175
DISSOLVED GASES

Client : CDM SMITH	Date Collected: NA
Project : VA SALT LAKE CITY	Date Received: 09/19/24
Batch No. : 24I062	Date Extracted: 09/19/24 12:30
Sample ID: MBLK1W	Date Analyzed: 09/19/24 13:26
Lab Samp ID: DGI005WB	Dilution Factor: 1
Lab File ID: BI19003A	Matrix : WATER
Ext Btch ID: DGI005W	% Moisture : NA
Calib. Ref.: BI19002A	Instrument ID : GCT072

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	2.0	0.32
ETHENE	ND	2.0	0.30
METHANE	ND	2.0	0.17

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: CDM SMITH
PROJECT: VA SALT LAKE CITY
BATCH NO.: 24I062
METHOD: RSK-175

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	DGI005WB	DGI005WL	DGI005WC		
LAB FILE ID:	BI19003A	BI19004A	BI19005A		
DATE EXTRACTED:	09/19/2412:30	09/19/2412:30	09/19/2412:30	DATE COLLECTED:	NA
DATE ANALYZED:	09/19/2413:26	09/19/2413:39	09/19/2413:50	DATE RECEIVED:	09/19/24
PREP. BATCH:	DGI005W	DGI005W	DGI005W		
CALIB. REF:	BI19002A	BI19002A	BI19002A		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Ethane	ND	25.5	24.0	94	25.5	25.0	98	4	70-140	30
Ethene	ND	23.8	22.5	94	23.8	23.4	98	4	70-140	30
Methane	ND	13.6	13.0	96	13.6	13.7	100	5	70-130	30

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: CDM SMITH
PROJECT: VA SALT LAKE CITY
BATCH NO.: 24I062
METHOD: RSK-175

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MW03RA-GW091124				
LAB SAMP ID:	I062-01	I062-01M	I062-01S		
LAB FILE ID:	BI19019A	BI19020A	BI19021A		
DATE EXTRACTED:	09/19/2412:30	09/19/2412:30	09/19/2412:30	DATE COLLECTED:	09/11/24
DATE ANALYZED:	09/19/2417:27	09/19/2417:40	09/19/2417:51	DATE RECEIVED:	09/13/24
PREP. BATCH:	DGI005W	DGI005W	DGI005W		
CALIB. REF:	BI19013A	BI19013A	BI19013A		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Ethane	ND	25.5	20.8	81	25.5	21.3	83	2	70-140	30
Ethene	ND	23.8	20.3	85	23.8	20.9	88	3	70-140	30
Methane	0.517J	13.6	11.1	78	13.6	11.3	79	2	70-130	30

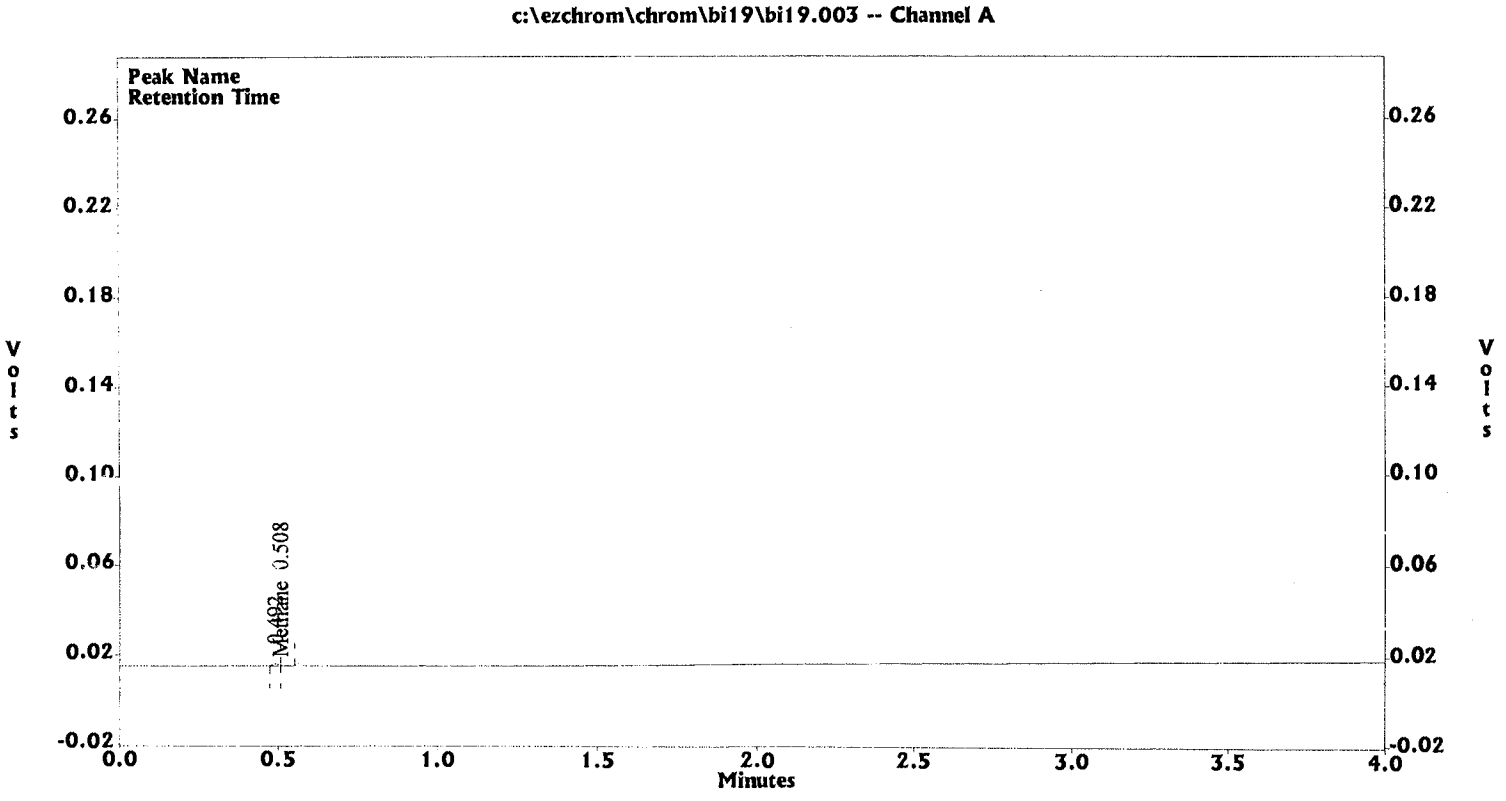
QC DATA

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.003
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DGI005WB
Acquired : Sep 19, 2024 13:26:30
Printed : Sep 19, 2024 17:49:26
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.508	188	3195.35	0.059
--	Ethylene	0.775	0	0.00	0.000
--	Acetylene	0.858	0	0.00	0.000
--	Ethane	0.908	0	0.00	0.000
--	Propane	2.450	0	0.00	0.000

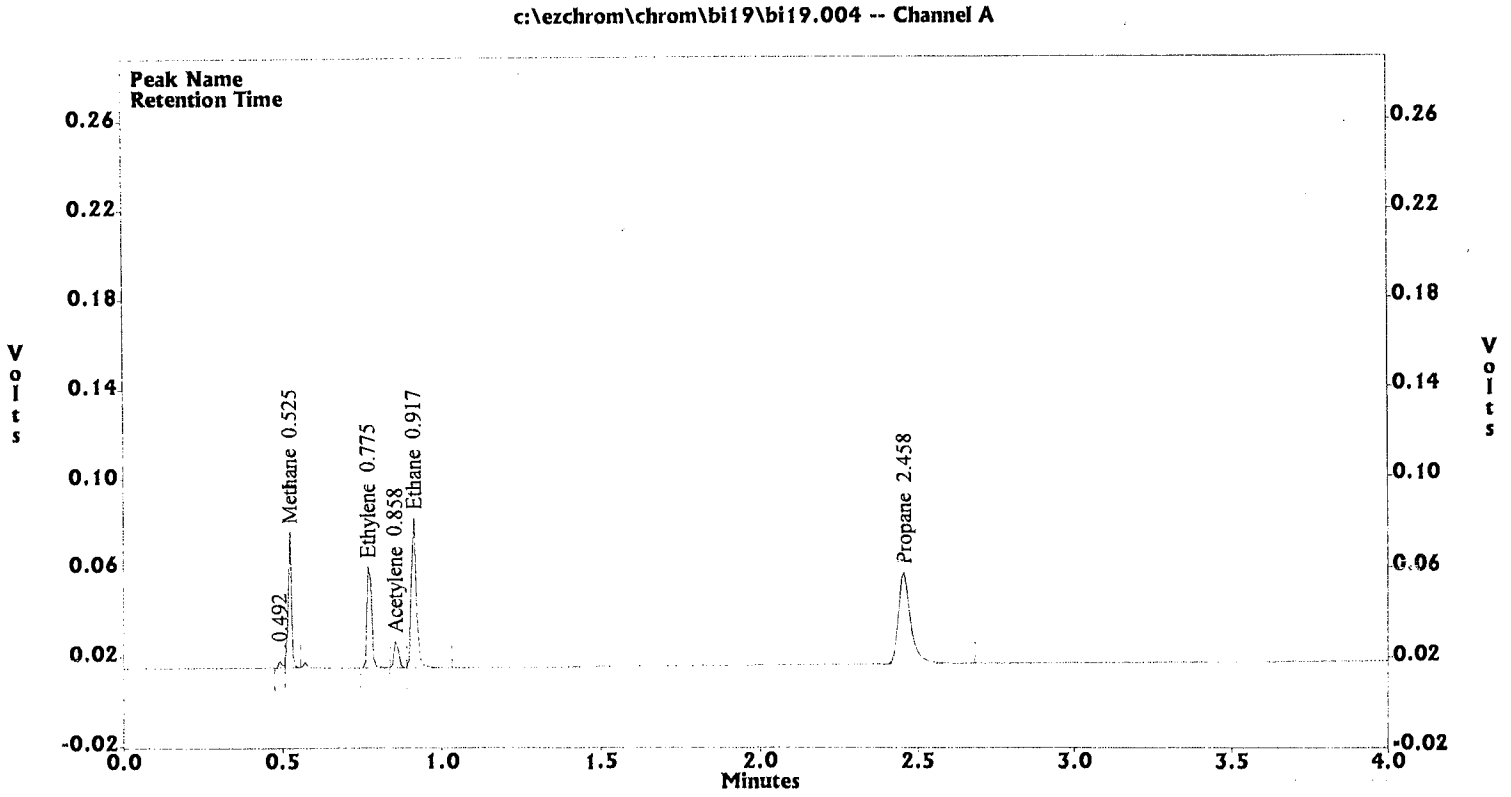


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.004
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DGI005WL
Acquired : Sep 19, 2024 13:39:15
Printed : Sep 19, 2024 17:49:32
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	41694	3195.35	13.048
3	Ethylene	0.775	46336	2060.05	22.493
4	Acetylene	0.858	11456	574.97	19.924
5	Ethane	0.917	71727	2984.48	24.033
6	Propane	2.458	111895	2994.95	37.361

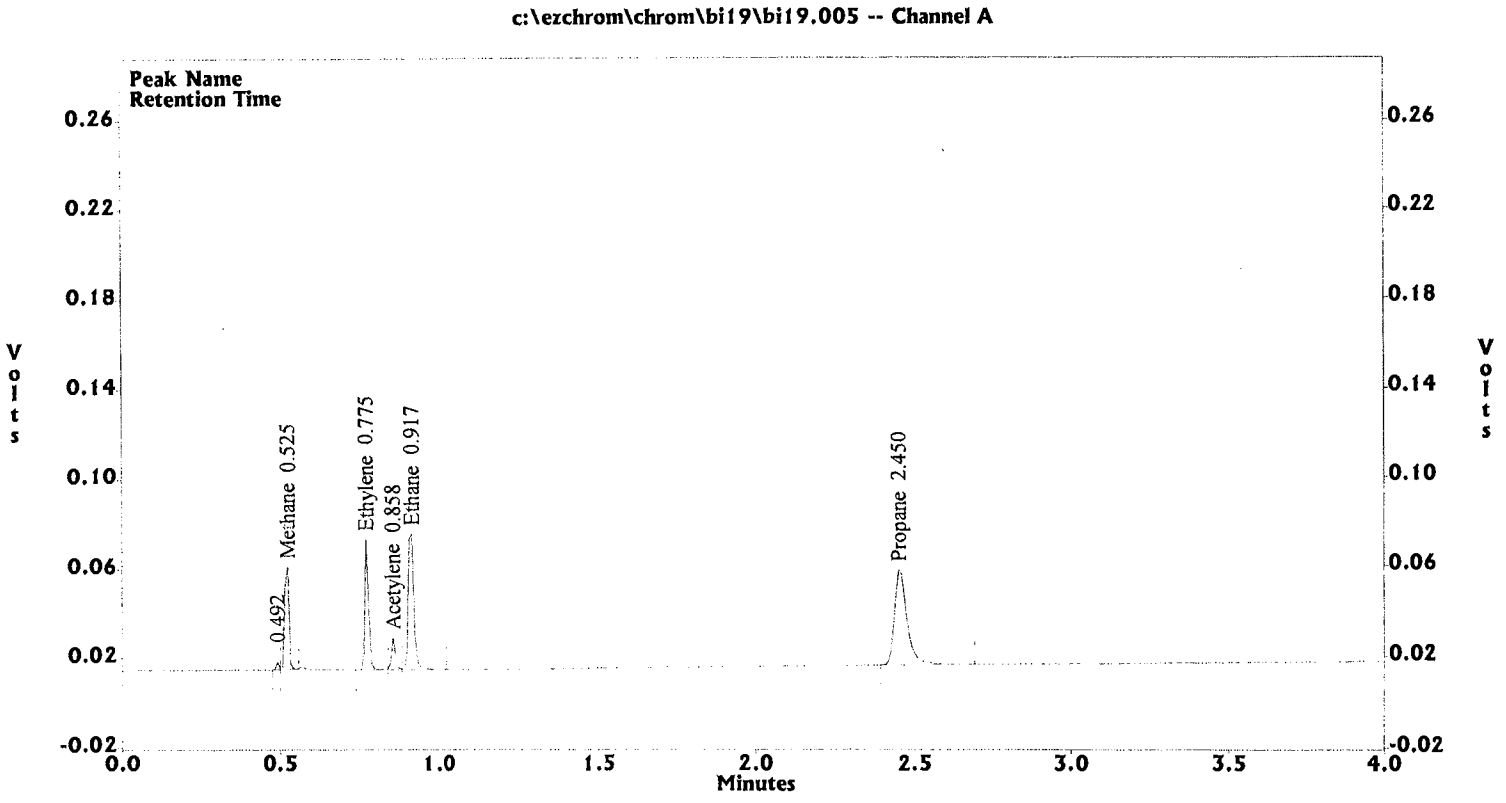


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.005
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DGI005WC
Acquired : Sep 19, 2024 13:50:52
Printed : Sep 19, 2024 17:49:37
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	43663	3195.35	13.665
3	Ethylene	0.775	48212	2060.05	23.403
4	Acetylene	0.858	11570	574.97	20.123
5	Ethane	0.917	74629	2984.48	25.006
6	Propane	2.450	116516	2994.95	38.904

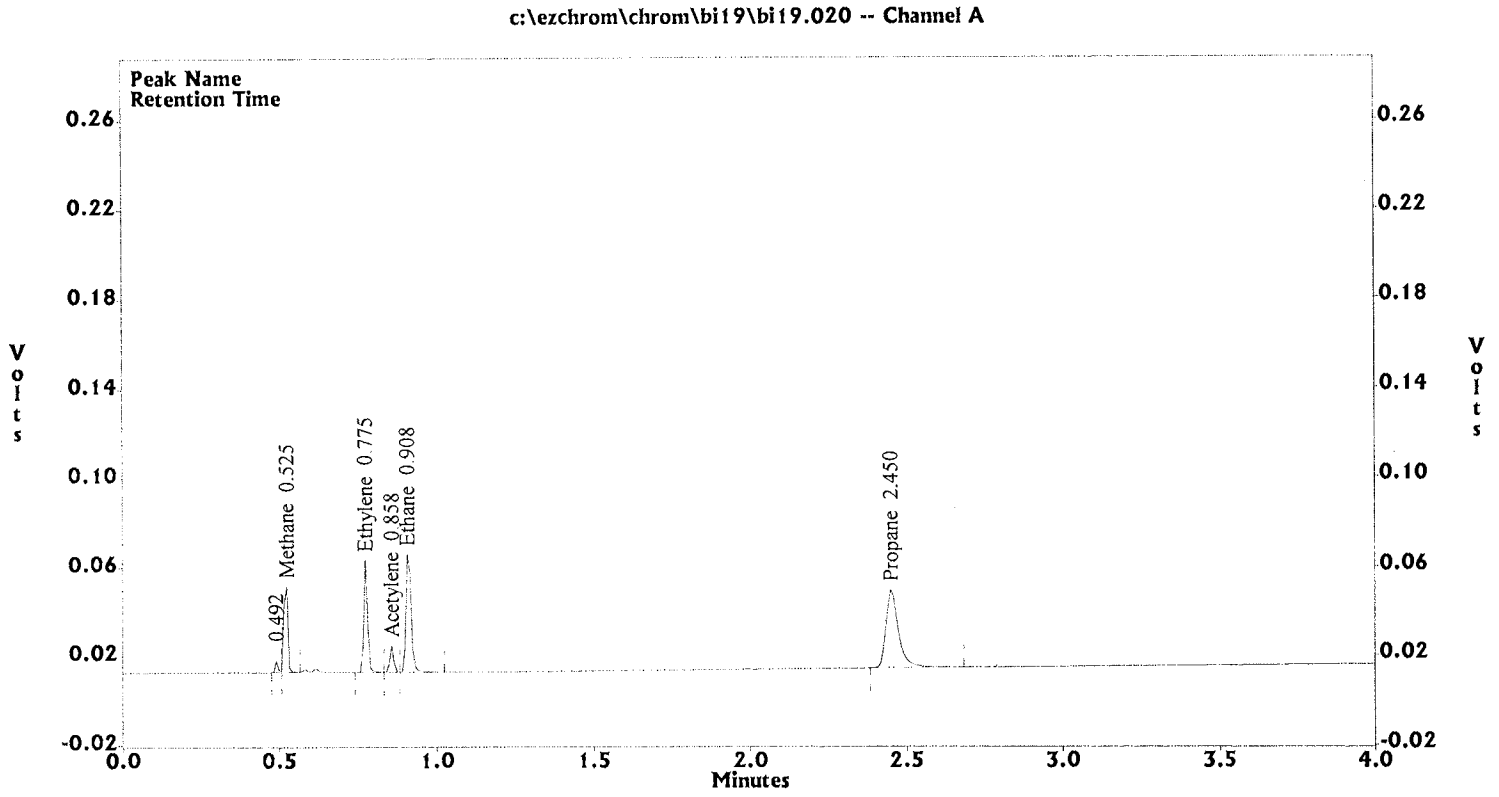


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.020
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : I062-01M
Acquired : Sep 19, 2024 17:40:10
Printed : Sep 19, 2024 19:16:45
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	35474	3195.35	11.102
3	Ethylene	0.775	41894	2060.05	20.336
4	Acetylene	0.858	10091	574.97	17.550
5	Ethane	0.908	62012	2984.48	20.778
6	Propane	2.450	96356	2994.95	32.173

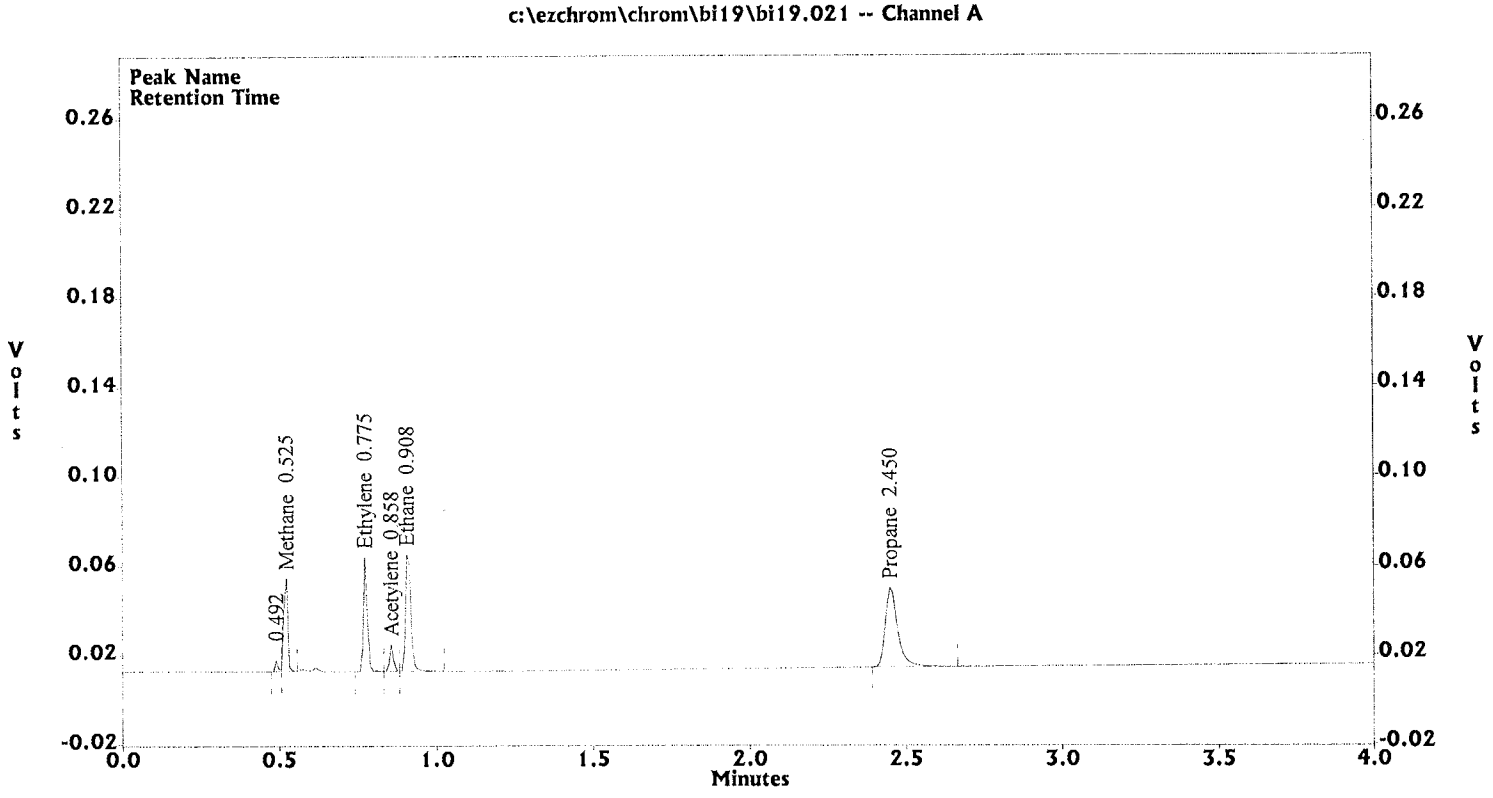


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.021
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : I062-01S
Acquired : Sep 19, 2024 17:51:19
Printed : Sep 19, 2024 19:16:52
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	36193	3195.35	11.327
3	Ethylene	0.775	43044	2060.05	20.895
4	Acetylene	0.858	10122	574.97	17.604
5	Ethane	0.908	63494	2984.48	21.275
6	Propane	2.450	98449	2994.95	32.872



INITIAL CALIBRATION(S)

INITIAL CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Column : RT-QS-BOND
Column size ID : 30MX0.53MM
LFID & Datetime: BH10002A 08/10/23 11:25
LFID & Datetime: BH10003A 08/10/23 11:38
LFID & Datetime: BH10004A 08/10/23 11:50
LFID & Datetime: BH10005A 08/10/23 12:03
LFID & Datetime: BH10006A 08/10/23 12:17
LFID & Datetime: BH10007A 08/10/23 12:29
CONC UNIT: ppb

COMPOUND	CONC X	CALIBRATION FACTORS (AREA)/UNIT 2.00X	10.00X	25.00X	40.00X	75.00X	100.00X	MEAN	%RSD
Methane	0.34	3675	3492	3190	3042	2924	2849	3195.3	10.2
Ethylene	0.60	2234	2136	2105	1958	1969	1957	2060.0	5.6
Acetylene	0.35	529	605	618	550	573	575	575.0	5.7
Ethane	0.64	3365	3080	3053	2834	2815	2760	2984.5	7.7
Propane	0.94	3398	3041	2994	2886	2856	2794	2995.0	7.3

DG72H10.MET

8/11/23

INITIAL CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
LFID & Datetime: BH10002A 08/10/23 11:25
LFID & Datetime: BH10003A 08/10/23 11:38
LFID & Datetime: BH10004A 08/10/23 11:50
LFID & Datetime: BH10005A 08/10/23 12:03
LFID & Datetime: BH10006A 08/10/23 12:17
LFID & Datetime: BH10007A 08/10/23 12:29

COMPOUND	RT OF STANDARDS (MIN) 2.0X	10.0X	25.0X	40.0X	75.0X	100.0X	MEAN RT	RT WINDOW FROM	TO	RTWINDOW WIDTH
Methane	0.508	0.517	0.525	0.517	0.517	0.517	0.517	0.474	0.560	0.043
Ethylene	0.767	0.767	0.775	0.767	0.767	0.775	0.770	0.655	0.885	0.115
Acetylene	0.850	0.850	0.858	0.850	0.850	0.850	0.851	0.736	0.966	0.115
Ethane	0.900	0.900	0.908	0.900	0.900	0.908	0.903	0.799	1.007	0.104
Propane	2.442	2.442	2.450	2.442	2.442	2.442	2.443	2.273	2.613	0.170

DG72H10.MET

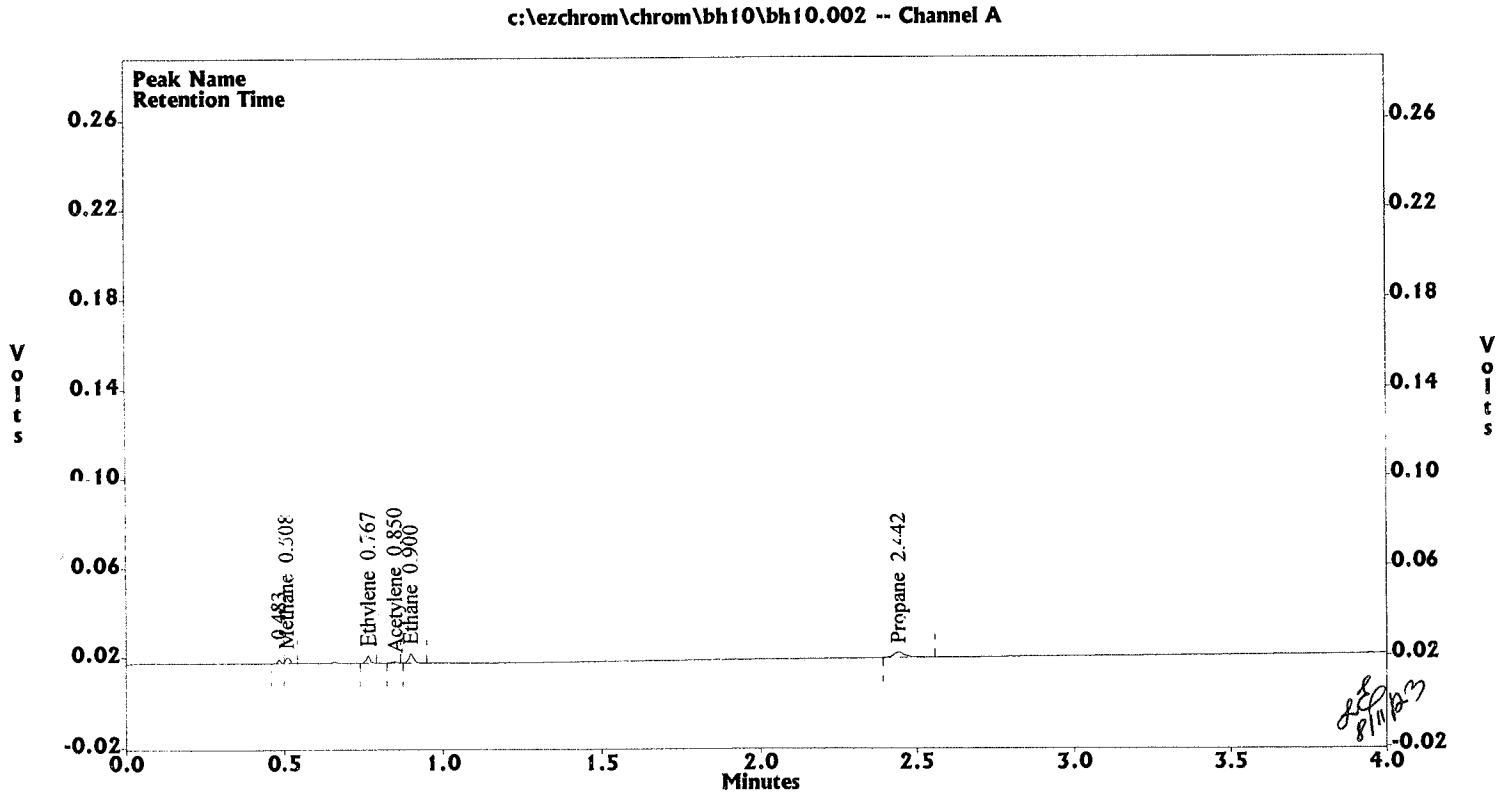
8/11/23

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.002
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1001
Acquired : Aug 10, 2023 11:25:46
Printed : Aug 10, 2023 12:59:27
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.508	2499	3195.35	0.680
3	Ethylene	0.767	2659	2060.05	1.190
4	Acetylene	0.850	585	574.97	1.105
5	Ethane	0.900	4291	2984.48	1.275
6	Propane	2.442	6355	2994.95	1.870

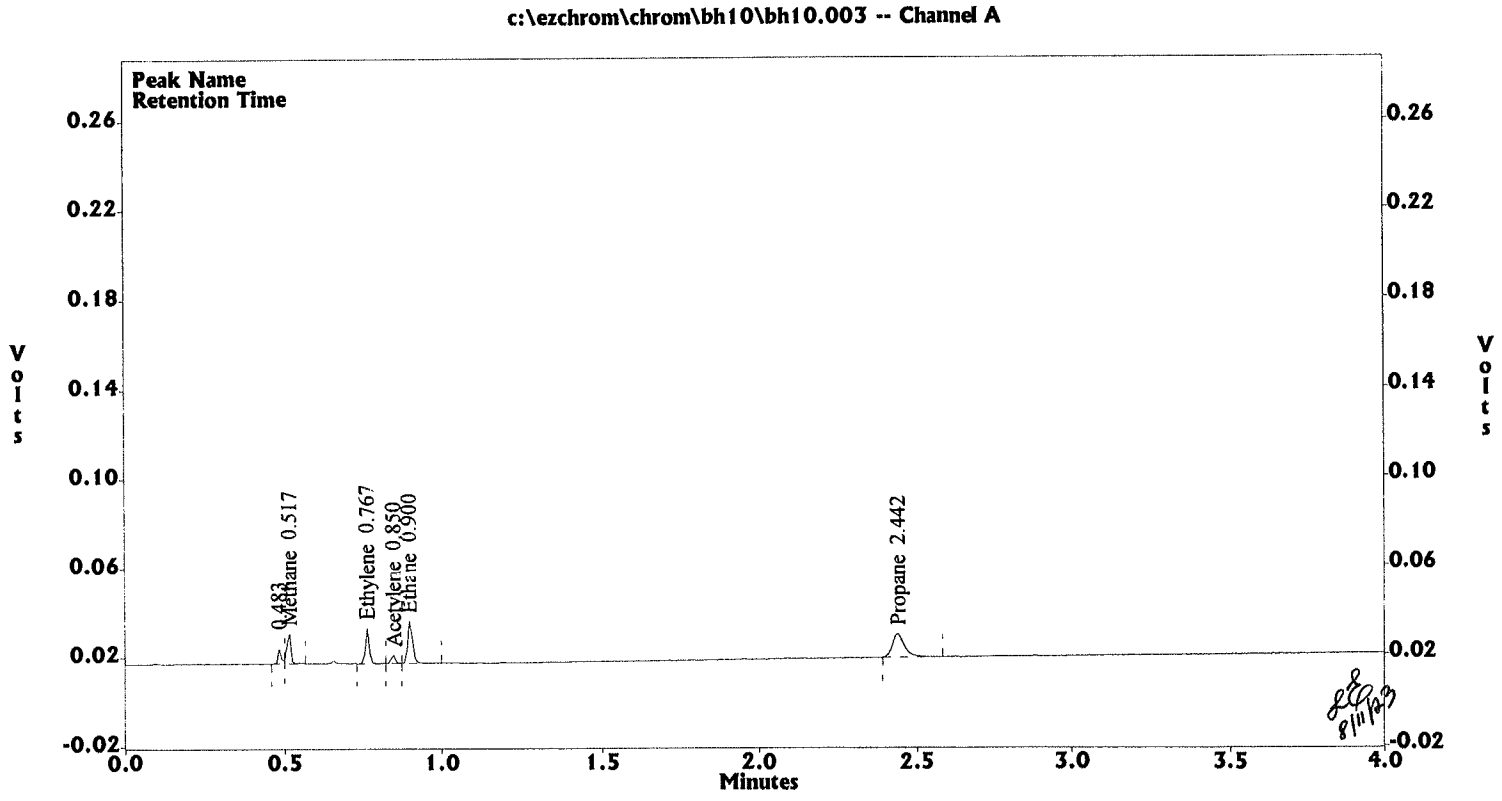


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.003
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1002
Acquired : Aug 10, 2023 11:38:22
Printed : Aug 10, 2023 13:00:53
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	11880	3195.35	3.402
3	Ethylene	0.767	12718	2060.05	5.953
4	Acetylene	0.850	3346	574.97	5.528
5	Ethane	0.900	19644	2984.48	6.378
6	Propane	2.442	28430	2994.95	9.350

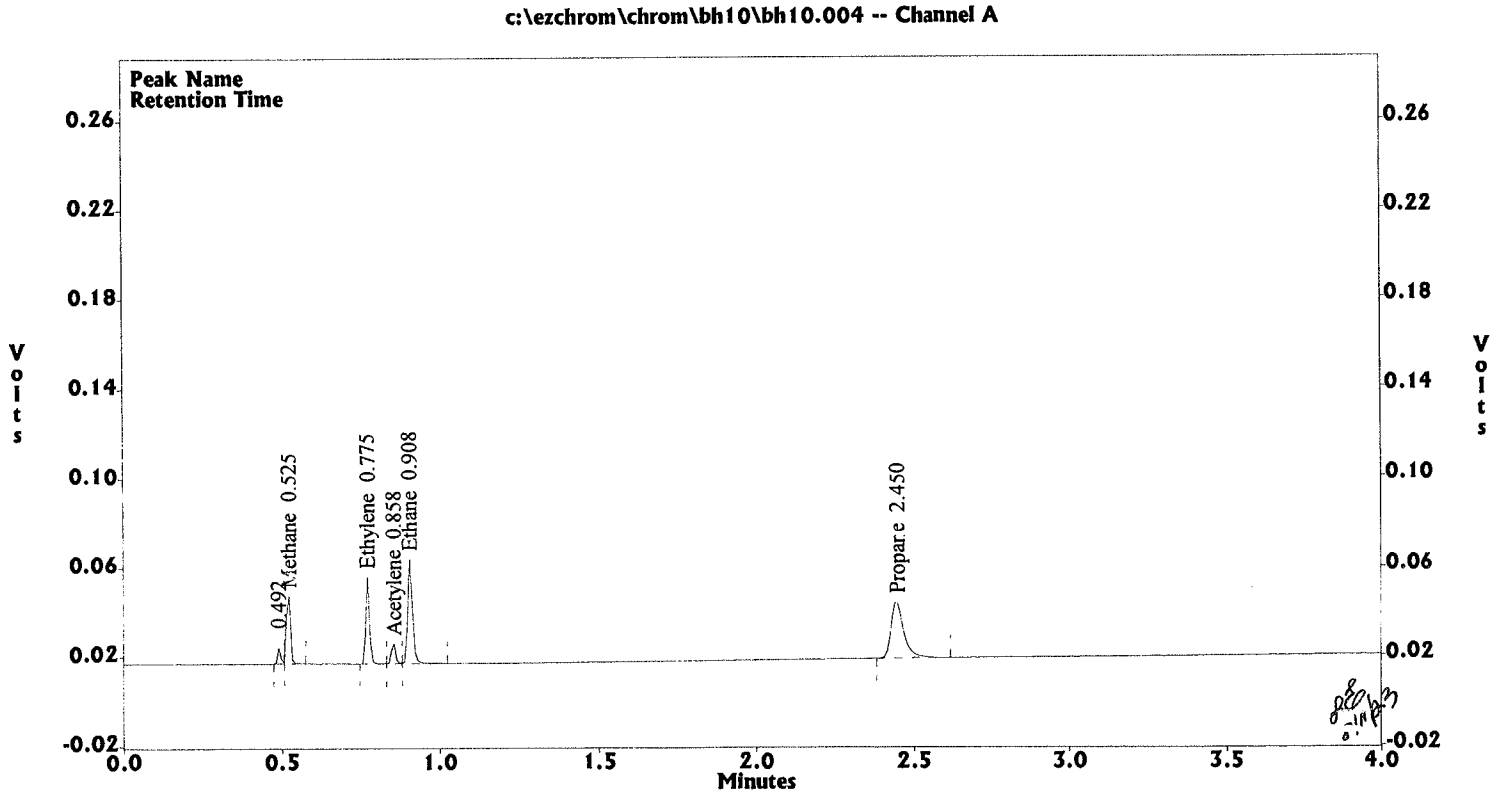


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.004
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1003
Acquired : Aug 10, 2023 11:50:35
Printed : Aug 10, 2023 13:01:17
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	27130	3195.35	8.504
3	Ethylene	0.775	31321	2060.05	14.880
4	Acetylene	0.858	8535	574.97	13.820
5	Ethane	0.908	48689	2984.48	15.950
6	Propane	2.450	70036	2994.95	23.390

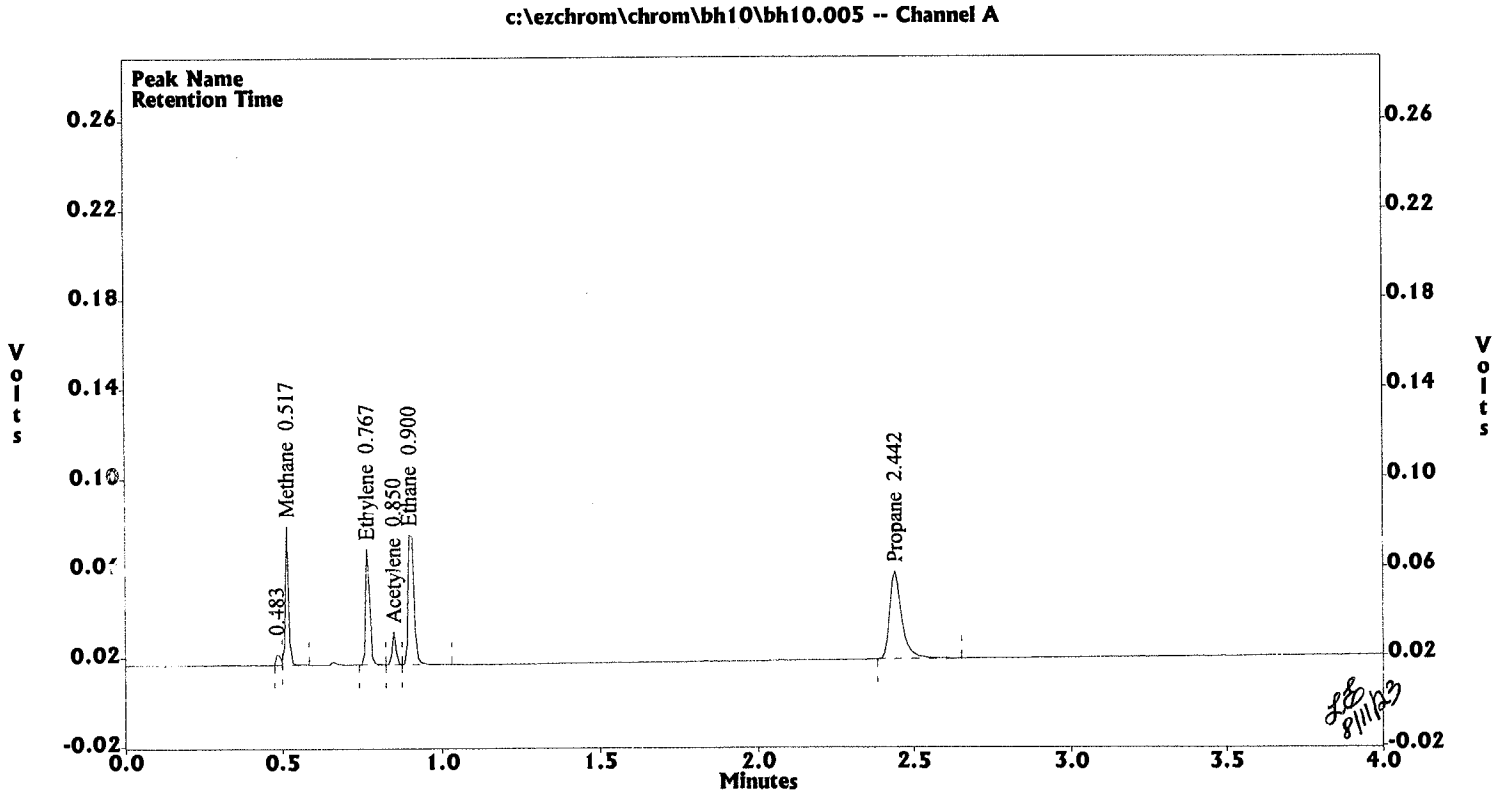


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.005
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1004
Acquired : Aug 10, 2023 12:03:54
Printed : Aug 10, 2023 13:01:25
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	41377	3195.35	13.600
3	Ethylene	0.767	46631	2060.05	23.810
4	Acetylene	0.850	12154	574.97	22.110
5	Ethane	0.900	72285	2984.48	25.510
6	Propane	2.442	107962	2994.95	37.410

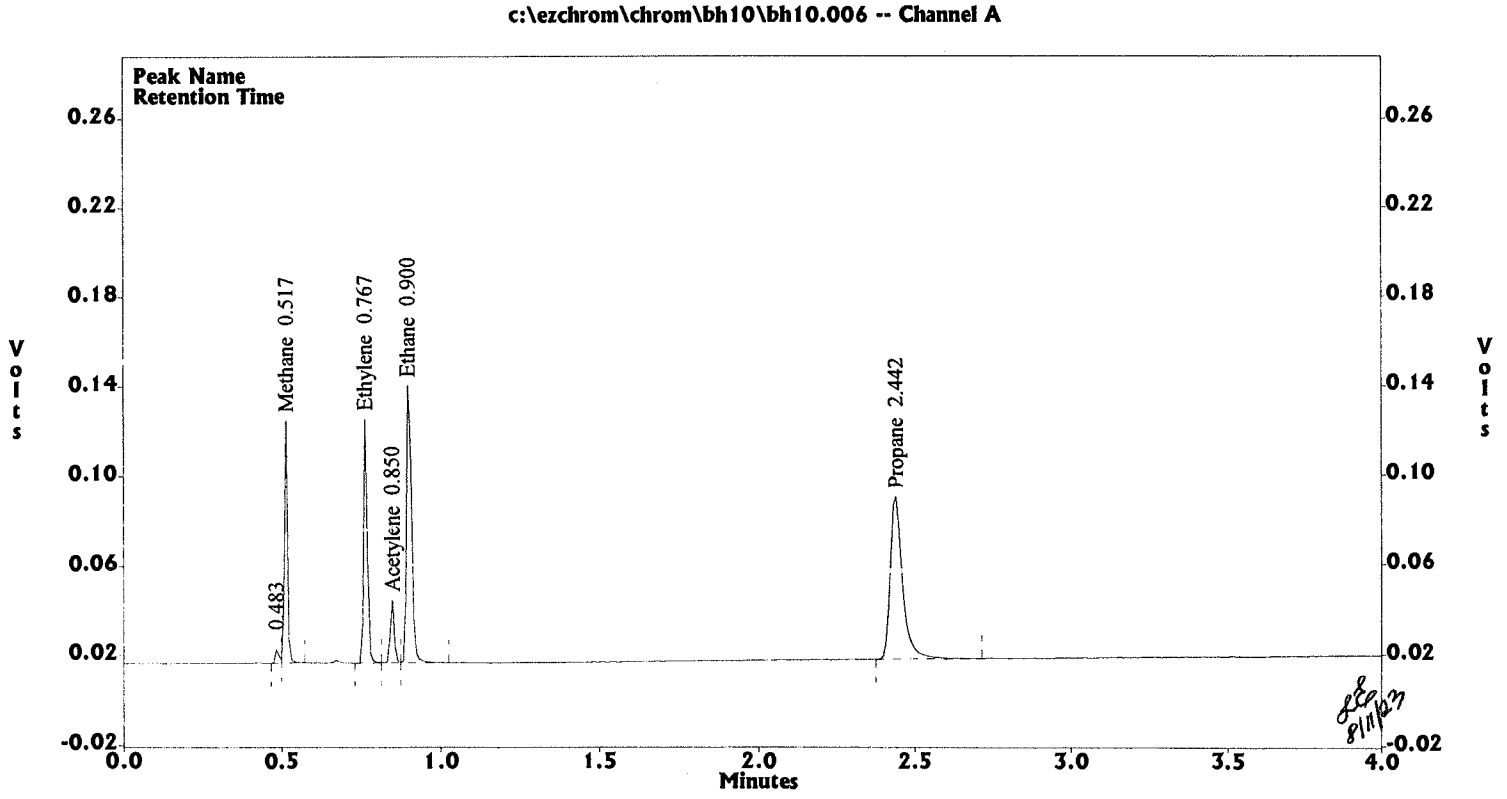


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.006
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1005
Acquired : Aug 10, 2023 12:17:22
Printed : Aug 10, 2023 13:01:34
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	74581	3195.35	25.510
3	Ethylene	0.767	87901	2060.05	44.640
4	Acetylene	0.850	23740	574.97	41.450
5	Ethane	0.900	134633	2984.48	47.830
6	Propane	2.442	200349	2994.95	70.150

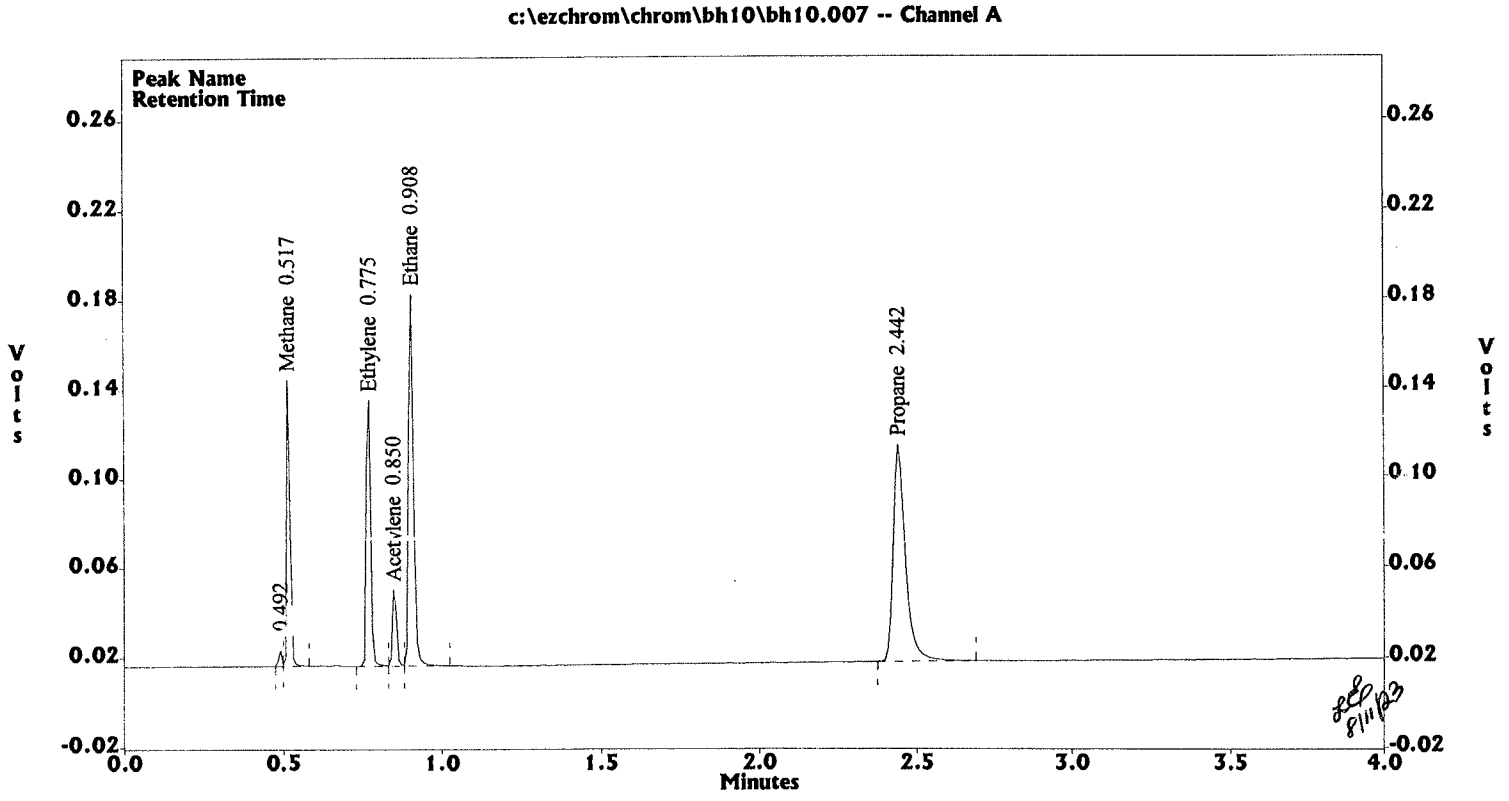


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.007
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1006
Acquired : Aug 10, 2023 12:29:40
Printed : Aug 10, 2023 13:01:43
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	96885	3195.35	34.010
3	Ethylene	0.775	116477	2060.05	59.520
4	Acetylene	0.850	31787	574.97	55.270
5	Ethane	0.908	176033	2984.48	63.770
6	Propane	2.442	261368	2994.95	93.530



SECOND SOURCE VERIFICATION

INITIAL CALIBRATION VERIFICATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BH10008A 08/10/2023 12:54
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.517	0.474	0.560	13.6	3195.3	43313	13.56	-0		15
Ethylene	0.767	0.652	0.882	23.8	2060.0	49406	23.98	1		15
Acetylene	0.850	0.735	0.965	22.1	575.000	12812	22.28	1		15
Ethane	0.900	0.796	1.004	25.5	2984.5	73566	24.65	-3		15
Propane	2.442	2.272	2.612	37.4	2995.0	109634	36.61	-2		15

DG72H10.MET

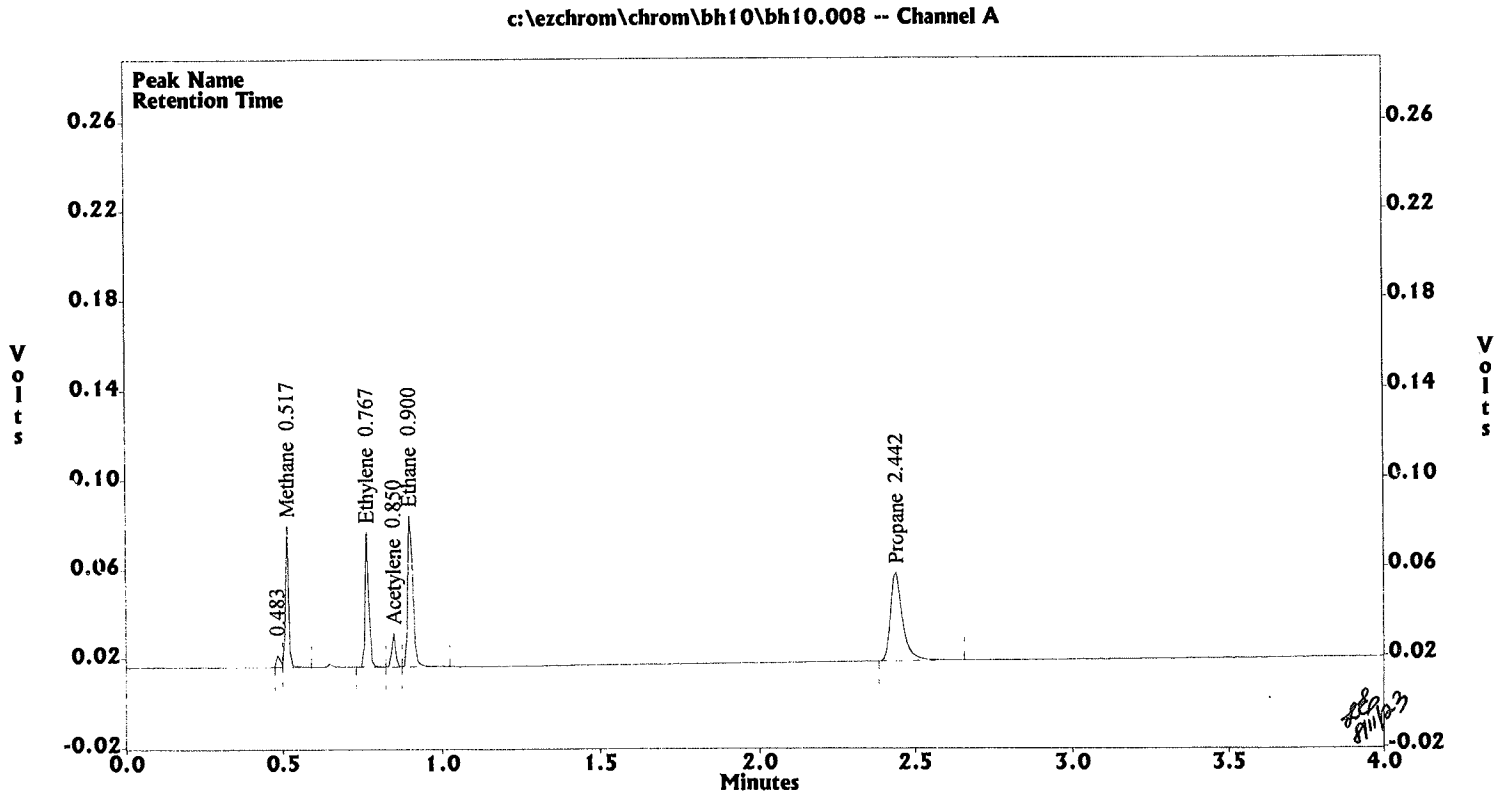
8/11/23

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.008
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : IDG72H10001
Acquired : Aug 10, 2023 12:54:30
Printed : Aug 10, 2023 13:07:59
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	43313	3195.35	13.555
3	Ethylene	0.767	49406	2060.05	23.983
4	Acetylene	0.850	12812	574.97	22.283
5	Ethane	0.900	73566	2984.48	24.649
6	Propane	2.442	109634	2994.95	36.606



DAILY CALIBRATION(S)

CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BI19002A 09/19/2024 13:13
CONC UNIT : ppb

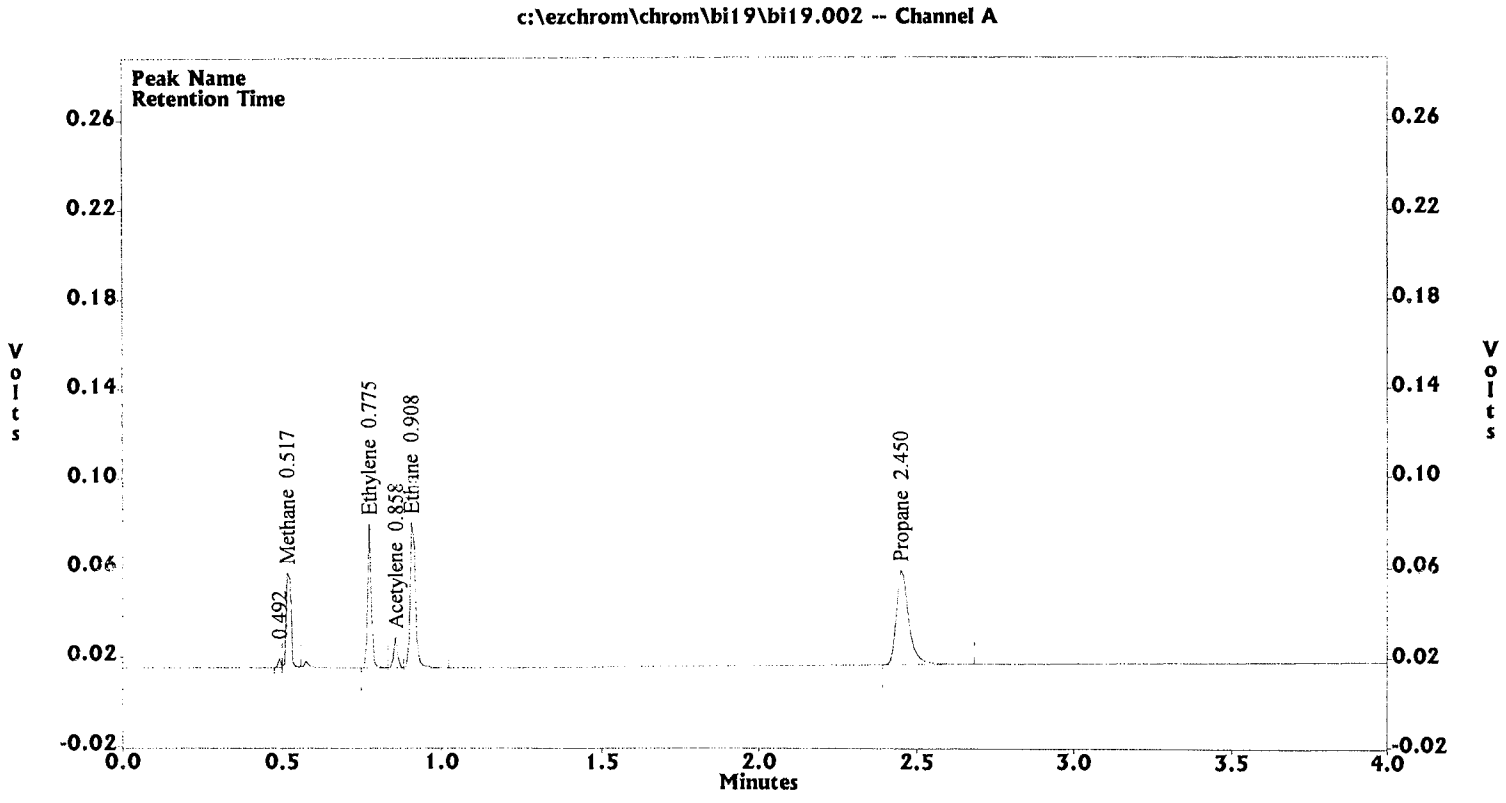
	RT	RT WINDOW		TRUE	AVERAGE	RESULT				%D
COMPOUND	MINUTES	FROM	TO	CONC	CF	AREA	CONC	%D	QL	LIMITS
Methane	0.517	0.474	0.560	13.6	3195.3	42710	13.37	-2		15
Ethylene	0.775	0.660	0.890	23.8	2060.0	51018	24.76	4		15
Acetylene	0.858	0.743	0.973	22.1	575.000	11184	19.45	-12		15
Ethane	0.908	0.804	1.012	25.5	2984.5	74850	25.08	-2		15
Propane	2.450	2.280	2.620	37.4	2995.0	115791	38.66	3		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.002
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10527
Acquired : Sep 19, 2024 13:13:23
Printed : Sep 19, 2024 17:49:09
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	42710	3195.35	13.366
3	Ethylene	0.775	51018	2060.05	24.765
4	Acetylene	0.858	11184	574.97	19.451
5	Ethane	0.908	74850	2984.48	25.080
6	Propane	2.450	115791	2994.95	38.662



CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BI19013A 09/19/2024 16:17
CONC UNIT : ppb

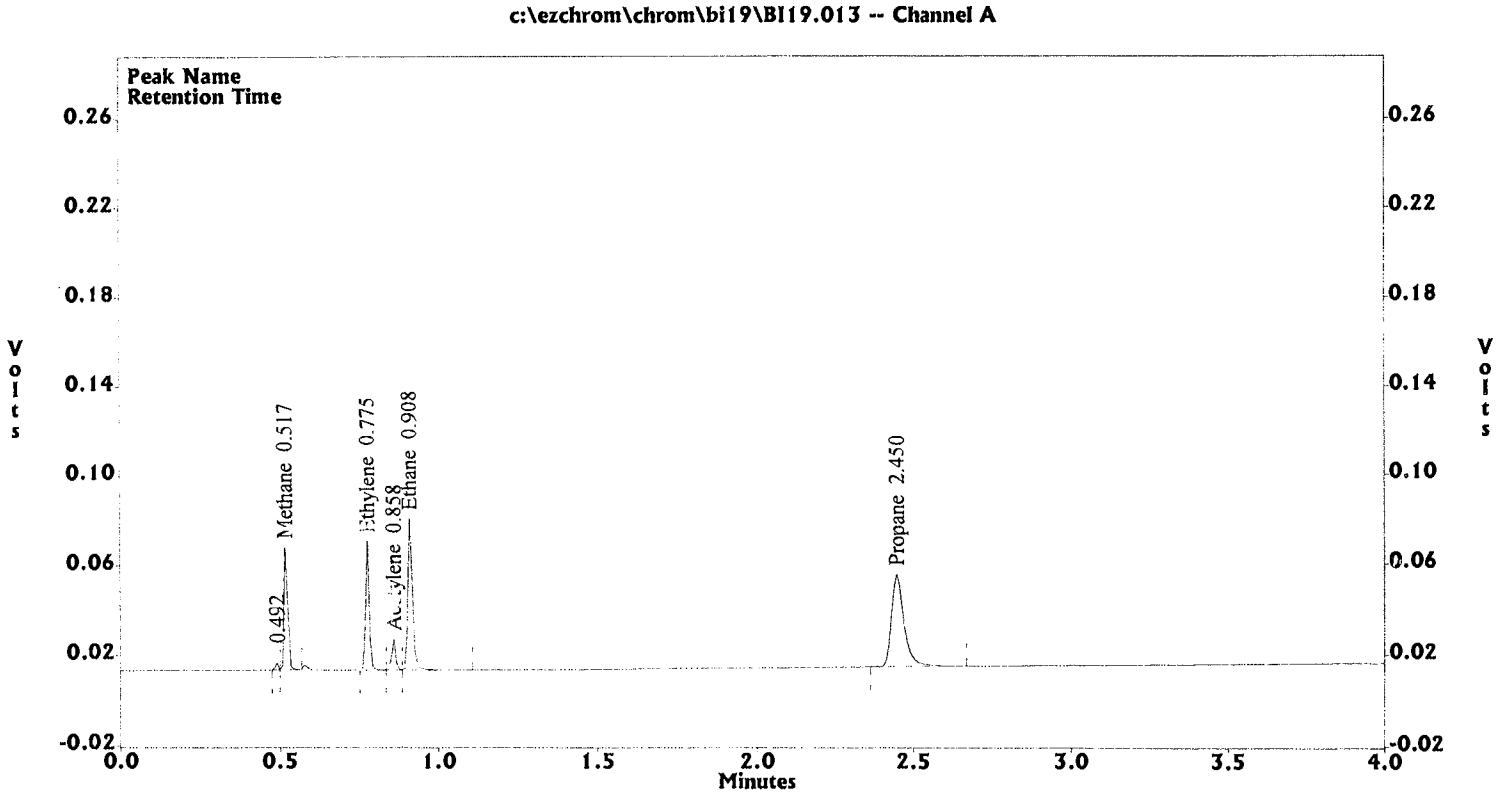
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.517	0.474	0.560	13.6	3195.3	42313	13.24	-3		15
Ethylene	0.775	0.660	0.890	23.8	2060.0	46163	22.41	-6		15
Acetylene	0.858	0.743	0.973	22.1	575.000	11780	20.49	-7		15
Ethane	0.908	0.804	1.012	25.5	2984.5	71252	23.87	-6		15
Propane	2.450	2.280	2.620	37.4	2995.0	110086	36.76	-2		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\BI19.013
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10528
Acquired : Sep 19, 2024 16:17:13
Printed : Sep 19, 2024 18:45:32
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	42313	3195.35	13.242
3	Ethylene	0.775	46163	2060.05	22.409
4	Acetylene	0.858	11780	574.97	20.488
5	Ethane	0.908	71252	2984.48	23.874
6	Propane	2.450	110086	2994.95	36.757



CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BI19024A 09/19/2024 19:01
CONC UNIT : ppb

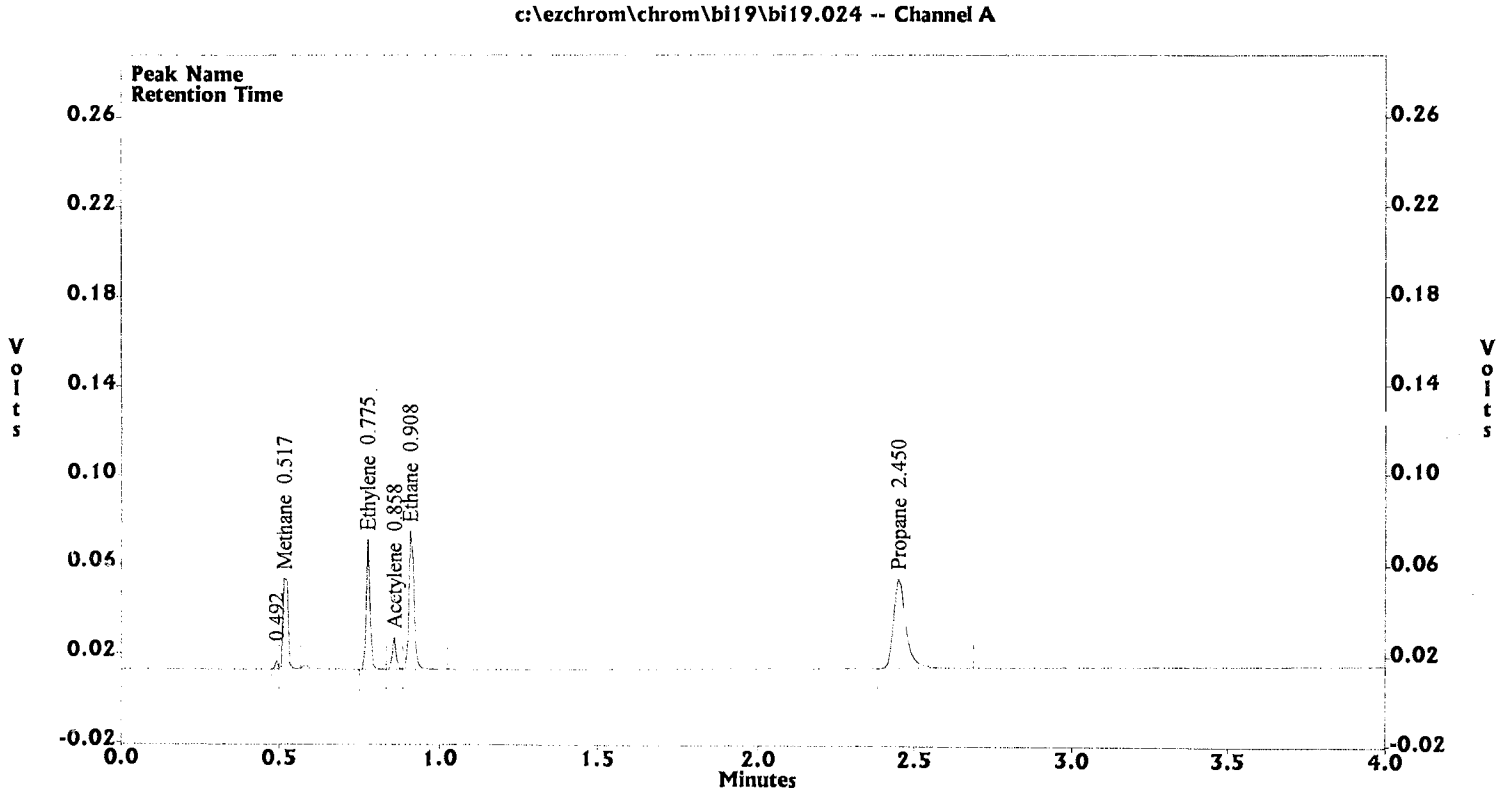
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.517	0.474	0.560	13.6	3195.3	42002	13.15	-3		15
Ethylene	0.775	0.660	0.890	23.8	2060.0	46296	22.47	-6		15
Acetylene	0.858	0.743	0.973	22.1	575.000	11777	20.48	-7		15
Ethane	0.908	0.804	1.012	25.5	2984.5	70271	23.55	-8		15
Propane	2.450	2.280	2.620	37.4	2995.0	109643	36.61	-2		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.024
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10529
Acquired : Sep 19, 2024 19:01:09
Printed : Sep 19, 2024 19:18:15
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	42002	3195.35	13.145
3	Ethylene	0.775	46296	2060.05	22.473
4	Acetylene	0.858	11777	574.97	20.483
5	Ethane	0.908	70271	2984.48	23.545
6	Propane	2.450	109643	2994.95	36.609



CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BI19027A 09/19/2024 19:34
CONC UNIT : ppb

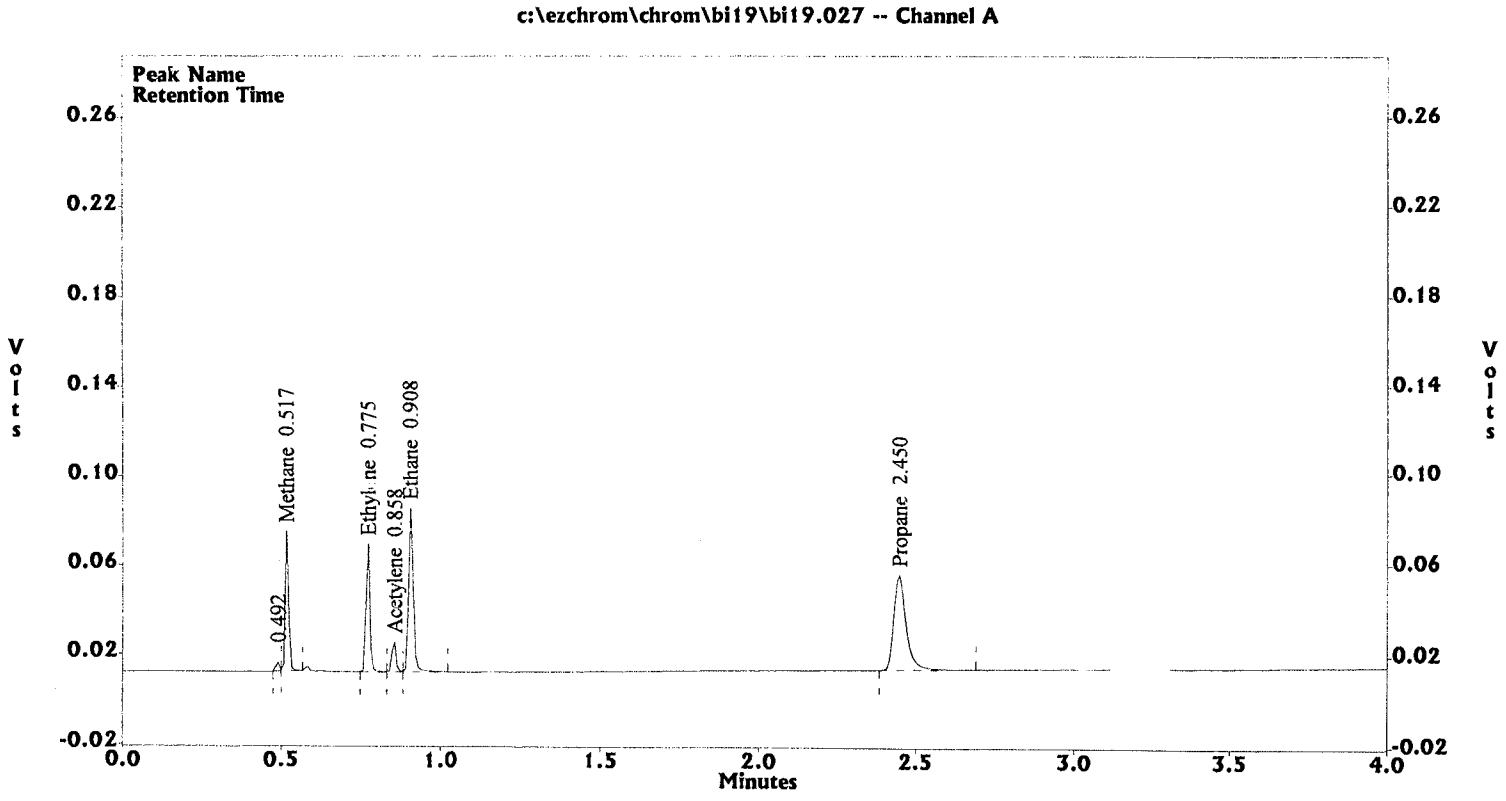
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.517	0.474	0.560	13.6	3195.3	43434	13.59	-0		15
Ethylene	0.775	0.660	0.890	23.8	2060.0	48738	23.66	-1		15
Acetylene	0.858	0.743	0.973	22.1	575.000	12279	21.36	-3		15
Ethane	0.908	0.804	1.012	25.5	2984.5	73980	24.79	-3		15
Propane	2.450	2.280	2.620	37.4	2995.0	115097	38.43	3		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.027
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10530
Acquired : Sep 19, 2024 19:34:32
Printed : Sep 19, 2024 19:49:30
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	43434	3195.35	13.593
3	Ethylene	0.775	48738	2060.05	23.659
4	Acetylene	0.858	12279	574.97	21.356
5	Ethane	0.908	73980	2984.48	24.788
6	Propane	2.450	115097	2994.95	38.430



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

- ☐ 10x : 400 µL of sample to 4000 µL final vol. (He)
- ☐ 20x : 200 µL of sample to 4000 µL final vol. (He)
- ☑ 40x : 100 µL of sample to 4000 µL final vol. (He)

DG1005W; I082, I088, I062, I077

Book #:	A72-034
Instrument No.:	72
Analytical Sequence:	BI19
Method File:	DG72H10
Analytical Batch:	CDG72H10527

SOP #	Rev. #
☑ EMAX-RSK175	5
☐ EMAX-D1945	0
☐ EMAX-	
☐ EMAX-	

STANDARDS ID		Conc (µL/L)
DCC	555B-26-27-01	200
Temperature (°C)	21	
Data File		

SYRINGES
☐ 100 µL - MSF-02-01-12
☐ 100 µL - MSF-03-01-09
☑ 50 µL - MSF-03-01-08
☐ 100 µL - MSF-03-01-03
☐ 10 µL - MSF-03-01-12
☑ 100mL - MSF-04-01-04

ELECTRONIC DATA ARCHIVAL	
Location	Date
labbkup/Ezchrom/EZC_9_DGAS	

Analyzed By: AS

Date: 9/19/24

Disposed By:

Date Disposed:

Batch: bi19.seq

Run	Sample ID	Method	Filename	Mult.	Description
1	IB72I1901	dg72h10.met	BI19.001	1	100uL
2	CDG72H10527	dg72h10.met	BI19.002	1	100uL
3	DGI005WB	dg72h10.met	BI19.003	1	100uL
4	DGI005WL	dg72h10.met	BI19.004	1	100uL
5	DGI005WC	dg72h10.met	BI19.005	1	100uL
6	I082-01	dg72h10.met	BI19.006	1	100uL
7	I082-01M	dg72h10.met	BI19.007	1	100uL
8	I082-01S	dg72h10.met	BI19.008	1	100uL
9	I082-01I DF=500	dg72h10.met	BI19.009	500	8uL of 40X
10	I082-02	dg72h10.met	BI19.010	1	100uL
11	I082-02I DF=500	dg72h10.met	BI19.011	500	8uL of 40X
12	I082-03	dg72h10.met	BI19.012	1	100uL
13	CDG72H10528	dg72h10.met	BI19.013	1	100uL
14	I082-03I DF=500	dg72h10.met	BI19.014	500	8uL of 40X
15	I088-01	dg72h10.met	BI19.015	1	100uL
16	I088-02	dg72h10.met	BI19.016	1	100uL
17	I088-03	dg72h10.met	BI19.017	1	100uL
18	I088-04	dg72h10.met	BI19.018	1	100uL
19	I062-01	dg72h10.met	BI19.019	1	100uL
20	I062-01M	dg72h10.met	BI19.020	1	100uL
21	I062-01S	dg72h10.met	BI19.021	1	100uL
22	I062-02	dg72h10.met	BI19.022	1	100uL
23	I062-03	dg72h10.met	BI19.023	1	100uL
24	CDG72H10529	dg72h10.met	BI19.024	1	100uL
25	I062-04	dg72h10.met	BI19.025	1	100uL
26	I077-07	dg72h10.met	BI19.026	1	100uL
27	CDG72H10530	dg72h10.met	BI19.027	1	100uL

FINAL

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

- ☐ 10x : 400 µL of sample to 4000 µL final vol. (He)
- ☐ 20x : 200 µL of sample to 4000 µL final vol. (He)
- ☐ 40x : 100 µL of sample to 4000 µL final vol. (He)

DGAS ICAL
DGH008W : 4LCS (Training File Long Tran)

Book #:	A72-031
Instrument No.:	72
Analytical Sequence:	BH10
Method File:	DG72H10
Analytical Batch:	CDG72H10001

SOP #	Rev. #
☑ EMAX-RSK17S	S
☐ EMAX-D194S	0
☐ EMAX-	
☐ EMAX-	

STANDARDS ID		Conc (µL/L)
DCC	SS5B-25-22-02	200
ICAL	SS5B-25-21-03	10→500
ICV	SS5B-25-22-01	200
Temperature (°C)	21	
Data File		

SYRINGES
☐ 100 µL - MSF-02-01-12
☑ 100 µL - MSF-03-01-09
☐ 50 µL - MSF-03-01-08
☐ 100 µL - MSF-03-01-03
☐ 10 µL - MSF-03-01-06
☐

ELECTRONIC DATA ARCHIVAL	
Location	Date
Labbkup/Ezchrom/EZC_9_DGAS	

Analyzed By: LT

Date: 08/10/23

Disposed By:

Date Disposed:

Batch: bh10.seq

Run	Run Type	Sample ID	Method	Filename	Level	Mult.	Description
1	Unknown	IB72H1001	dg72h10.met	BH10.001	0	1	100uL
2	Begin Calibration	DG72H1001	dg72h10.met	BH10.002	1	1	100uL
3	Calibration	DG72H1002	dg72h10.met	BH10.003	2	1	100uL
4	Calibration	DG72H1003	dg72h10.met	BH10.004	3	1	100uL
5	Calibration	DG72H1004	dg72h10.met	BH10.005	4	1	100uL
6	Calibration	DG72H1005	dg72h10.met	BH10.006	5	1	100uL
7	End Calibration	DG72H1006	dg72h10.met	BH10.007	6	1	100uL
8	Unknown	IDG72H10001	dg72h10.met	BH10.008	0	1	100uL

FINAL

EXTRACTION LOG(S)

EMAX LABORATORIES, INC.

EXTRACTION LOG FOR DISSOLVED GAS

SOP ☑ EMAX-RSK175 Rev. 5 ☐ Propylene ☐ Room Temp. (°C): 21 Book #: EDG-062

Start Date: 9/19/24 Time: 12:30 End Date: 9/19/24 Time: 13:50

PREPARATION BATCH* DGI005W

Sample Prep ID	Lab Sample ID	Sample Amount (ml)	Extract Volume (ml)	pH (< 2)	Notes
01	DGI005WB	39	4	N/A	
02	" WL	↓	↓	↓	
03	" WC				
04	I082-01			pH~7	rec'd unpreserved; sediment in vial
05	-01M			pH~7	
06	-01S			pH~7	
07	-02			pH~7	
08	-03			pH~7	
09	I088-01			pH~7	rec'd unpreserved
10	-02			pH~7	
11	-03			pH~7	
12	-04			pH~7	
13	I062-01			✓	
14	-01M			✓	
15	-01S			✓	
16	-02			✓	
17	-03			✓	
18	-04			✓	
19	I077-07			✓	
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

AS 9/19/24

Standards	ID	Amount Added (ul)
LCS/MS	SSSA-13-01-05	1600

Reagent	Source
H_2O	RW3-23-001
He	SSSA-13-02-09
Thermometer ID #:	RSK175-01
Tedlar Bag Lot#:	28221012
pH Strips:	HC 439475
Vial Manufacturer:	ESS #0R 309621

Syringes

- ☐ 5 mL - MSF-01-03-06
- ☑ 5 mL - MSF-01-01-12
- ☐ 5 mL - MSF-03-01-15
- ☐ 1 mL - MSF-01-03-14
- ☐ 1 mL - MSF-01-02-24
- ☑ SmL-MSF-02-0619

Comments:

Prepared By: AS

Standard Added By: AS

EMAX LABORATORIES, INC.

EXTRACTION LOG FOR DISSOLVED GAS

SOP ☑ EMAX-RSK175 Rev. 5 ☐ Propylene ☐ Room Temp. (°C): 21 Book #: EDG-059

Start Date: 08/10/23 Time: 11:03 End Date: 08/10/23 Time: 11:38

PREPARATION BATCH* NA

Sample Prep ID	Lab Sample ID	Sample Amount (ml)	Extract Volume (ml)	pH (<2)	Notes
01	DG72H10-01	39	4	NA	
02	-02	↓	↓	↓	
03	-03				
04	-04				
05	-05				
06	-06				
07	IDG72H10-001				
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					LT 8/10/23

Standards	ID	Amount Added (ul)
LCS/MS /ICV	SS5A-11-01-03	1606
ICAL	↓ -05	* See Comments

Reagent	Source
H_2O	RW 3-22-004
He	SS5A-12-02-05
Thermometer ID #:	ESK 175-01
Tedlar Bag Lot#:	28220128
pH Strips:	~~HC 203864~~ LT 8/10/23 N/A
Vial Manufacturer:	ESS #CR 292419

Syringes LT 8/10/23

- ☑ 5 mL - MSF-~~01-03-06~~ 03-01-05
- ☑ 5 mL - MSF-01-01-12
- ☑ 1 mL - MSF-01-03-14
- ☐ 1 mL - MSF-01-02-24
- ☐
- ☐

Comments: *

	DGAS Std (mL)		Helium (mL)
1)	0.08	+	3.92
2)	0.40	+	3.60
3)	1.00	+	3.00
4)	1.60	+	2.40
5)	3.00	+	1.00
6)	4.00	+	—

Prepared By: LT

Standard Added By: LT

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

WET CHEMICAL ANALYSES

SDG#: 24I062

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I062

METHOD E300.0
CHLORIDE

A total of four(4) water samples were received on 09/13/24 to be analyzed for Chloride in accordance with Method E300.0 and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Chloride was not detected in ICJ002WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. ICJ002WL/ICJ002WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed and the following was noted: I062-01JM/I062-01JS - Percent recovery for Chloride was not within MSD QC limit. Presence of matrix interference was suspected. Sample duplicate was analyzed and RPD was within expected value. Refer to Matrix QC summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met with the exception of those that were discussed within the associated QC parameter.

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I062

METHOD E300.0
SULFATE

A total of four(4) water samples were received on 09/13/24 to be analyzed for Sulfate in accordance with Method E300.0 and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Sulfate was not detected in ICJ002WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. ICJ002WL/ICJ002WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Sulfate was within MS QC limits in I062-01IM/I062-01IS. Sample duplicate was analyzed and RPD was not within expected value. Refer to Matrix QC summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met with the exception of those that were discussed within the associated QC parameter.

SAMPLE RESULTS

METHOD E300.0
CHLORIDE

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24I062
Matrix : WATER
InstrumentID : D7

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DFxPREP FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	ICJ002WB	ND	1	NA	0.2	0.05	10/01/2412:28	NA	AJ02-03	AJ02-01	ICJ002W	NA	NA
LCS1W	ICJ002WL	2.07	1	NA	0.2	0.05	10/01/2412:48	NA	AJ02-04	AJ02-01	ICJ002W	NA	NA
LCD1W	ICJ002WC	2.01	1	NA	0.2	0.05	10/01/2413:08	NA	AJ02-05	AJ02-01	ICJ002W	NA	NA
MW03RA-GW091124	I062-01J	443	200	NA	40	10	10/01/2421:38	NA	AJ02-28	AJ02-25	ICJ002W	09/11/2410:45	09/13/24
MW03RA-GW091124DUP	I062-01JD	429	200	NA	40	10	10/01/2421:58	NA	AJ02-29	AJ02-25	ICJ002W	09/11/2410:45	09/13/24
MW03RA-GW091124MS	I062-01JM	825	200	NA	40	10	10/01/2422:18	NA	AJ02-30	AJ02-25	ICJ002W	09/11/2410:45	09/13/24
MW03RA-GW091124MSD	I062-01JS	775	200	NA	40	10	10/01/2422:39	NA	AJ02-31	AJ02-25	ICJ002W	09/11/2410:45	09/13/24
IW01-GW091124	I062-02J	172	100	NA	20	5	10/01/2423:19	NA	AJ02-33	AJ02-25	ICJ002W	09/11/2411:11	09/13/24
MW03RB-GW091124	I062-03J	200	100	NA	20	5	10/02/2400:00	NA	AJ02-35	AJ02-25	ICJ002W	09/11/2411:00	09/13/24
EW01-GW091124	I062-04J	214	100	NA	20	5	10/02/2401:21	NA	AJ02-39	AJ02-37	ICJ002W	09/11/2415:21	09/13/24

METHOD E300.0
SULFATE

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24I062

Matrix : WATER
InstrumentID : D7

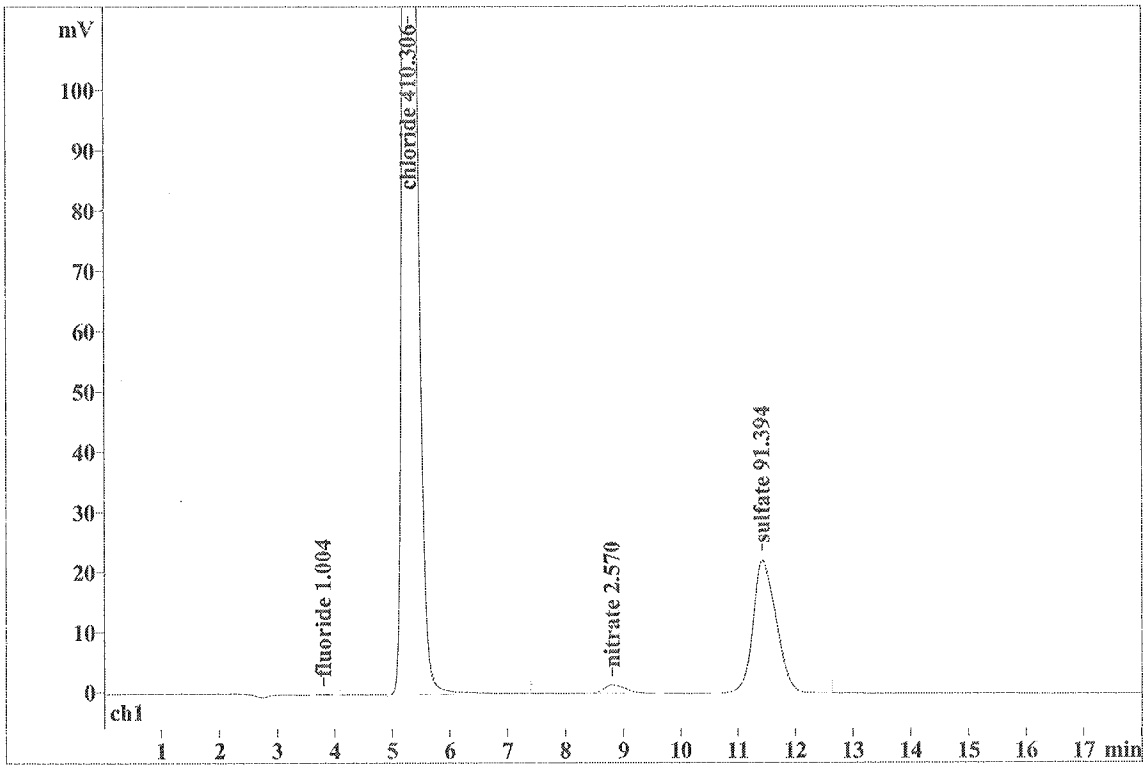
CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DFxPREP FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	ICJ002WB	ND	1	NA	0.5	0.13	10/01/2412:28	NA	AJ02-03	AJ02-01	ICJ002W	NA	NA
LCS1W	ICJ002WL	5.06	1	NA	0.5	0.13	10/01/2412:48	NA	AJ02-04	AJ02-01	ICJ002W	NA	NA
LCD1W	ICJ002WC	4.91	1	NA	0.5	0.13	10/01/2413:08	NA	AJ02-05	AJ02-01	ICJ002W	NA	NA
MW03RA-GW091124	I062-01I	91.4	20	NA	10	2.6	10/01/2419:36	NA	AJ02-22	AJ02-13	ICJ002W	09/11/2410:45	09/13/24
MW03RA-GW091124DUP	I062-01ID	114	20	NA	10	2.6	10/01/2419:57	NA	AJ02-23	AJ02-13	ICJ002W	09/11/2410:45	09/13/24
MW03RA-GW091124MS	I062-01IM	186	20	NA	10	2.6	10/01/2420:17	NA	AJ02-24	AJ02-13	ICJ002W	09/11/2410:45	09/13/24
MW03RA-GW091124MSD	I062-01IS	202	20	NA	10	2.6	10/01/2421:18	NA	AJ02-27	AJ02-25	ICJ002W	09/11/2410:45	09/13/24
IW01-GW091124	I062-02J	117	100	NA	50	13	10/01/2423:19	NA	AJ02-33	AJ02-25	ICJ002W	09/11/2411:11	09/13/24
MW03RB-GW091124	I062-03J	123	100	NA	50	13	10/02/2400:00	NA	AJ02-35	AJ02-25	ICJ002W	09/11/2411:00	09/13/24
EW01-GW091124	I062-04J	129	100	NA	50	13	10/02/2401:21	NA	AJ02-39	AJ02-37	ICJ002W	09/11/2415:21	09/13/24

Report date: 10/7/2024 1:51:31 PM
Printed by: ERodel

Ident: AJ02-22 I062-01I DF=20
Analysis from: 10/1/2024 7:36:54 PM
File: _2024-10-01_19-36.chw Last save: 10/1/2024 7:54:54 PM

Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133990

SAMPLE: METHOD 300/9056/4110B
: 2ml/40ml
Vial number: 22
Volume: 1.0 µL
Dilution: 20.00
Amount: 1.0000



Quantitation method: Custom

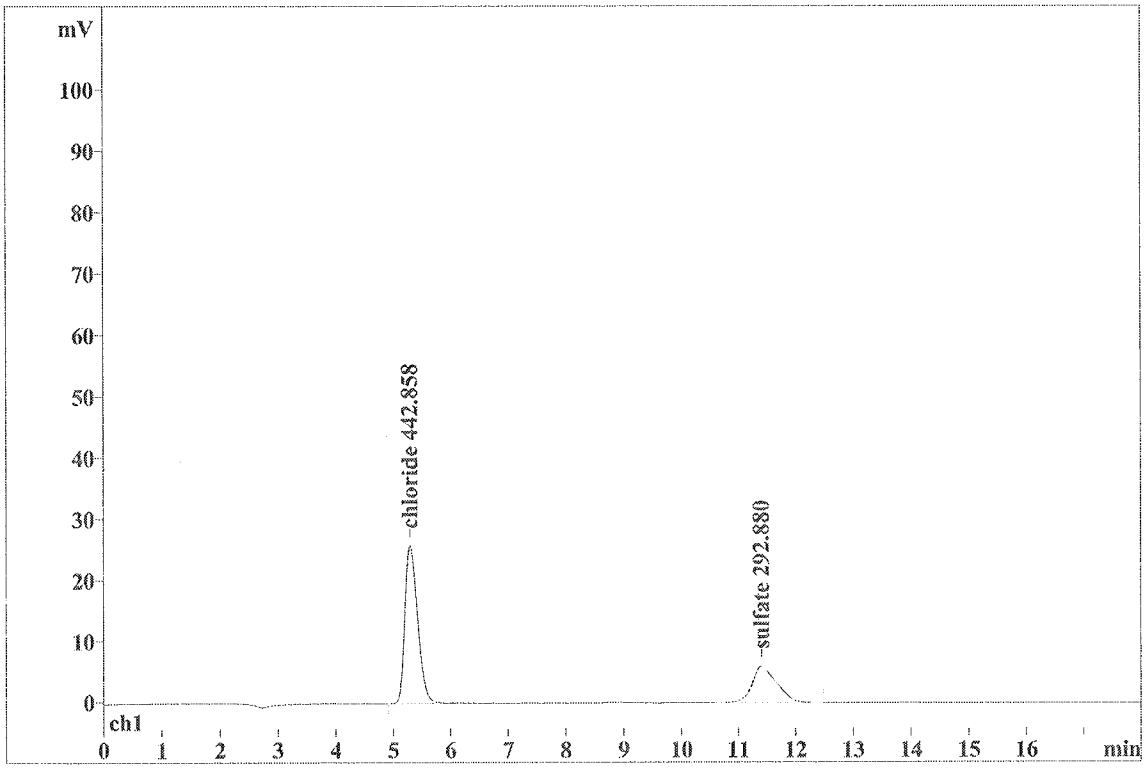
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.80	0.10	1.299	1.004	fluoride
2	5.30	254.80	3812.147	410.306	chloride
3	8.80	1.41	36.705	2.570	nitrate
4	11.43	22.15	617.367	91.394	sulfate
4	18.00	278.45	4467.518	505.275	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 1:56:43 PM
Printed by: ERodel

Ident: AJ02-28 I062-01J DF=200
Analysis from: 10/1/2024 9:38:24 PM
File: _2024-10-01_21-38.chw Last save: 10/1/2024 9:56:24 PM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133996

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/40ml
Vial number: 28
Volume: 1.0 µL
Dilution: 200.00
Amount: 1.0000



Quantitation method: Custom

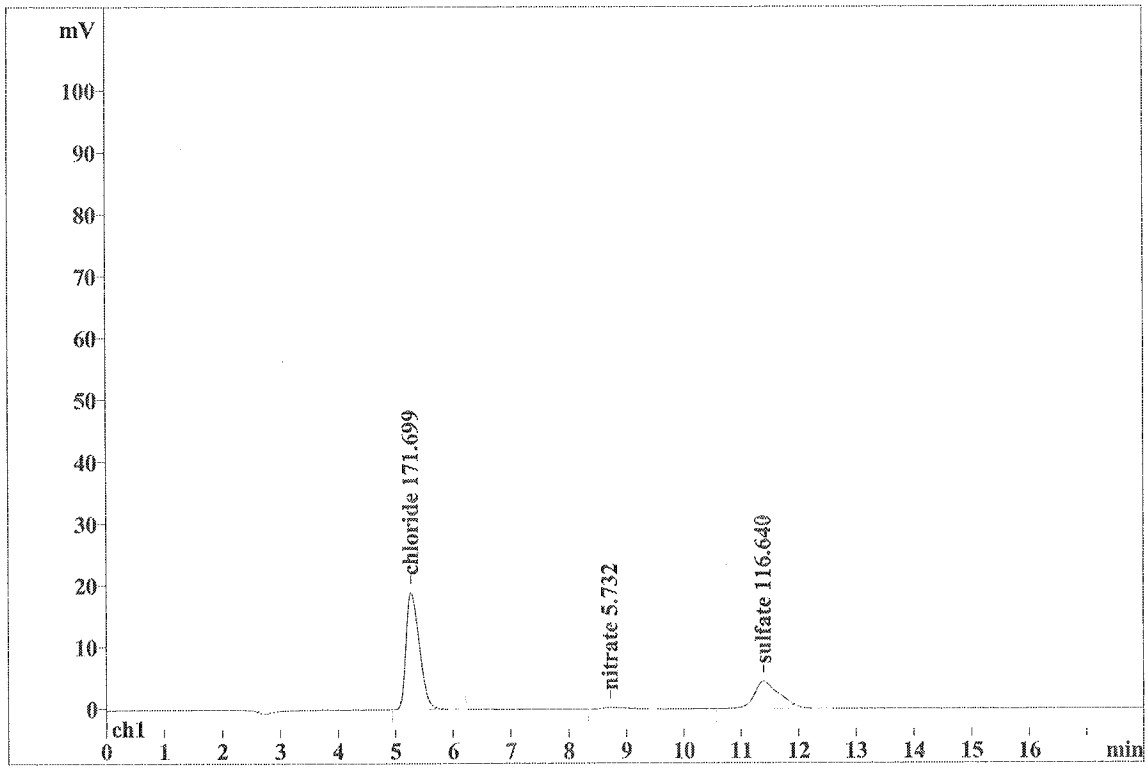
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	5.30	25.82	399.997	442.858	chloride
2	11.40	5.99	177.372	292.880	sulfate
2	18.00	31.81	577.369	735.738	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 1:59:27 PM
Printed by: ERodel

Ident: AJ02-33 I062-02J DF=100
Analysis from: 10/1/2024 11:19:39 PM
File: _2024-10-01_23-19.chw Last save: 10/4/2024 4:35:03 PM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 134001

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/20ml
Vial number: 33
Volume: 1.0 µL
Dilution: 100.00
Amount: 1.0000



Quantitation method: Custom

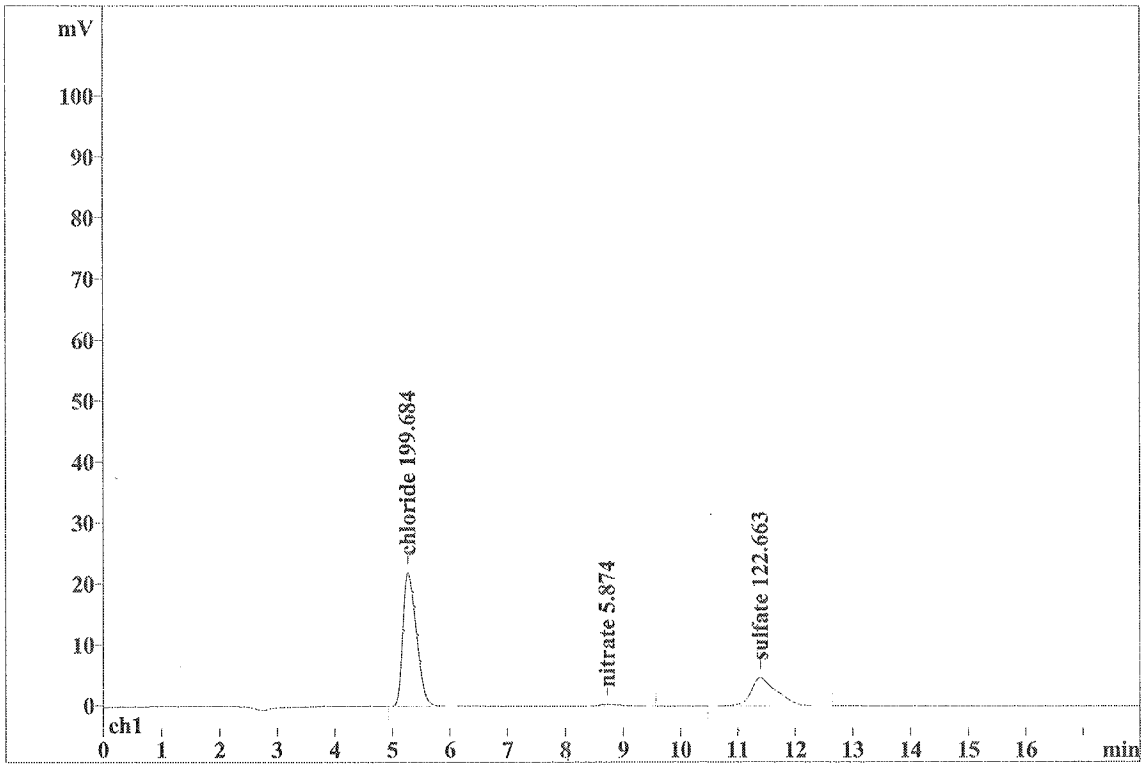
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	5.28	19.01	307.277	171.699	chloride
2	8.72	0.27	7.436	5.732	nitrate
3	11.39	4.44	135.147	116.640	sulfate
3	18.00	23.72	449.861	294.070	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 1:59:57 PM
Printed by: ERodel

Ident: AJ02-35 I062-03J DF=100
Analysis from: 10/2/2024 12:00:08 AM
File: _2024-10-02_00-00.chw Last save: 10/4/2024 4:34:51 PM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 134003

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/20ml
Vial number: 35
Volume: 1.0 µL
Dilution: 100.00
Amount: 1.0000



Quantitation method: Custom

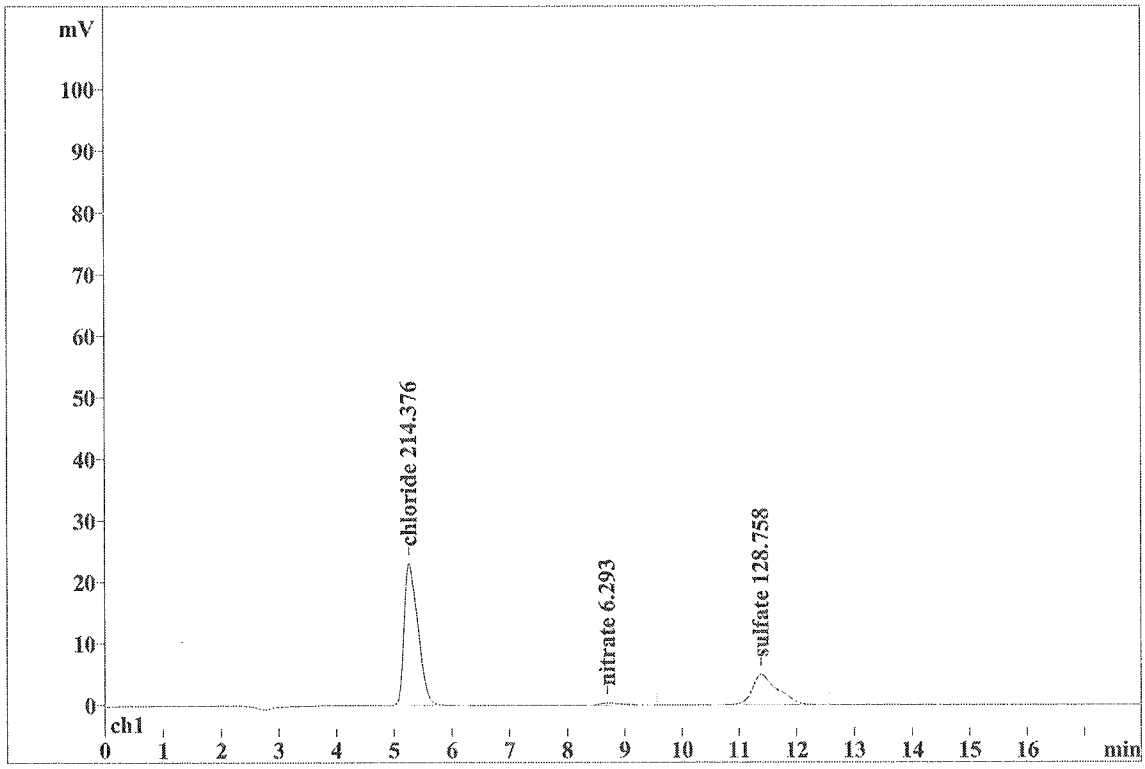
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	5.28	21.95	359.454	199.684	chloride
2	8.72	0.29	8.020	5.874	nitrate
3	11.40	4.68	143.682	122.663	sulfate
3	18.00	26.92	511.157	328.221	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 2:03:45 PM
Printed by: ERodel

Ident: AJ02-39 I062-04J DF=100
Analysis from: 10/2/2024 1:21:07 AM
File: _2024-10-02_01-21.chw Last save: 10/4/2024 4:35:38 PM
Modified!
Method: ICD7-I23.mtw Last save: 10/4/2024 4:35:33 PM
Run operator: ERodel
Analysis number: 134007

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/20ml
Vial number: 39
Volume: 1.0 µL
Dilution: 100.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	5.27	23.11	386.848	214.376	chloride
2	8.71	0.36	9.741	6.293	nitrate
3	11.39	4.97	152.318	128.758	sulfate
3	18.00	28.44	548.907	349.427	

This report has been created by IC Net
METROHM LTD

QC SUMMARIES

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : E300.0

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID :	MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID :	ICJ002WB	ICJ002WL	ICJ002WC
LAB FILE ID :	AJ02-03	AJ02-04	AJ02-05
DATE PREPARED :	NA	NA	NA
DATE ANALYZED :	10/01/2412:28	10/01/2412:48	10/01/2413:08
PREP BATCH :	ICJ002W	ICJ002W	ICJ002W
CALIBRATION REF:	AJ02-01	AJ02-01	AJ02-01

ACCESSION:

PARAMETER	MB RESULT (mg/L)	SPIKE AMT (mg/L)	BS RESULT (mg/L)	BS REC (%)	SPIKE AMT (mg/L)	BSD RESULT (mg/L)	BSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Chloride	ND	2	2.07	103	2	2.01	100	3	87-111	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : E300.0

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	200	200	200
SAMPLE ID :	MW03RA-GW091124	MW03RA-GW091124MS	MW03RA-GW091124MSD
LAB SAMPLE ID :	I062-01J	I062-01JM	I062-01JS
LAB FILE ID :	AJ02-28	AJ02-30	AJ02-31
DATE PREPARED :	NA	NA	NA
DATE ANALYZED :	10/01/2421:38	10/01/2422:18	10/01/2422:39
PREP BATCH :	ICJ002W	ICJ002W	ICJ002W
CALIBRATION REF:	AJ02-25	AJ02-25	AJ02-25

ACCESSION:

PARAMETER	PARENT RESULT (mg/L)	SPIKE AMT (mg/L)	MS RESULT (mg/L)	MS REC (%)	SPIKE AMT (mg/L)	MSD RESULT (mg/L)	MSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Chloride	443	400	825	96	400	775	83*	6	87-111	20

* Out of MS QC limit.

EMAX QUALITY CONTROL DATA
SAMPLE DUPLICATE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : E300.0

MATRIX	: WATER	
DILUTION FACTOR	: 200	200
SAMPLE ID	: MW03RA-GW091124	MW03RA-GW091124DUP
LAB SAMPLE ID	: I062-01J	I062-01JD
LAB FILE ID	: AJ02-28	AJ02-29
DATE PREPARED	: NA	NA
DATE ANALYZED	: 10/01/2421:38	10/01/2421:58
PREP BATCH	: ICJ002W	ICJ002W
CALIBRATION REF	: AJ02-25	AJ02-25

ACCESSION:

PARAMETER	PARENT RESULT (mg/L)	DUP RESULT (mg/L)	RPD (%)	MAX RPD (%)
Chloride	443	429	3	20

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : E300.0

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID :	MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID :	ICJ002WB	ICJ002WL	ICJ002WC
LAB FILE ID :	AJ02-03	AJ02-04	AJ02-05
DATE PREPARED :	NA	NA	NA
DATE ANALYZED :	10/01/2412:28	10/01/2412:48	10/01/2413:08
PREP BATCH :	ICJ002W	ICJ002W	ICJ002W
CALIBRATION REF:	AJ02-01	AJ02-01	AJ02-01

ACCESSION:

PARAMETER	MB RESULT (mg/L)	SPIKE AMT (mg/L)	BS RESULT (mg/L)	BS REC (%)	SPIKE AMT (mg/L)	BSD RESULT (mg/L)	BSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Sulfate	ND	5	5.06	101	5	4.91	98	3	87-112	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : E300.0

MATRIX	: WATER	% MOISTURE:	NA
DILUTION FACTOR:	20	20	20
SAMPLE ID	: MW03RA-GW091124	MW03RA-GW091124MS	MW03RA-GW091124MSD
LAB SAMPLE ID	: I062-01I	I062-01IM	I062-01IS
LAB FILE ID	: AJ02-22	AJ02-24	AJ02-27
DATE PREPARED	: NA	NA	NA
DATE ANALYZED	: 10/01/2419:36	10/01/2420:17	10/01/2421:18
PREP BATCH	: ICJ002W	ICJ002W	ICJ002W
CALIBRATION REF:	AJ02-13	AJ02-13	AJ02-25

ACCESSION:

PARAMETER	PARENT RESULT (mg/L)	SPIKE AMT (mg/L)	MS RESULT (mg/L)	MS REC (%)	SPIKE AMT (mg/L)	MSD RESULT (mg/L)	MSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Sulfate	91.4	100	186	95	100	202	111	8	87-112	20

EMAX QUALITY CONTROL DATA
SAMPLE DUPLICATE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : E300.0

MATRIX : WATER

DILUTION FACTOR:	20	20
SAMPLE ID :	MW03RA-GW091124	MW03RA-GW091124DUP
LAB SAMPLE ID :	I062-01I	I062-01ID
LAB FILE ID :	AJ02-22	AJ02-23
DATE PREPARED :	NA	NA
DATE ANALYZED :	10/01/2419:36	10/01/2419:57
PREP BATCH :	ICJ002W	ICJ002W
CALIBRATION REF:	AJ02-13	AJ02-13

ACCESSION:

PARAMETER	PARENT RESULT (mg/L)	DUP RESULT (mg/L)	RPD (%)	MAX RPD (%)
Sulfate	91.4	114	22*	20

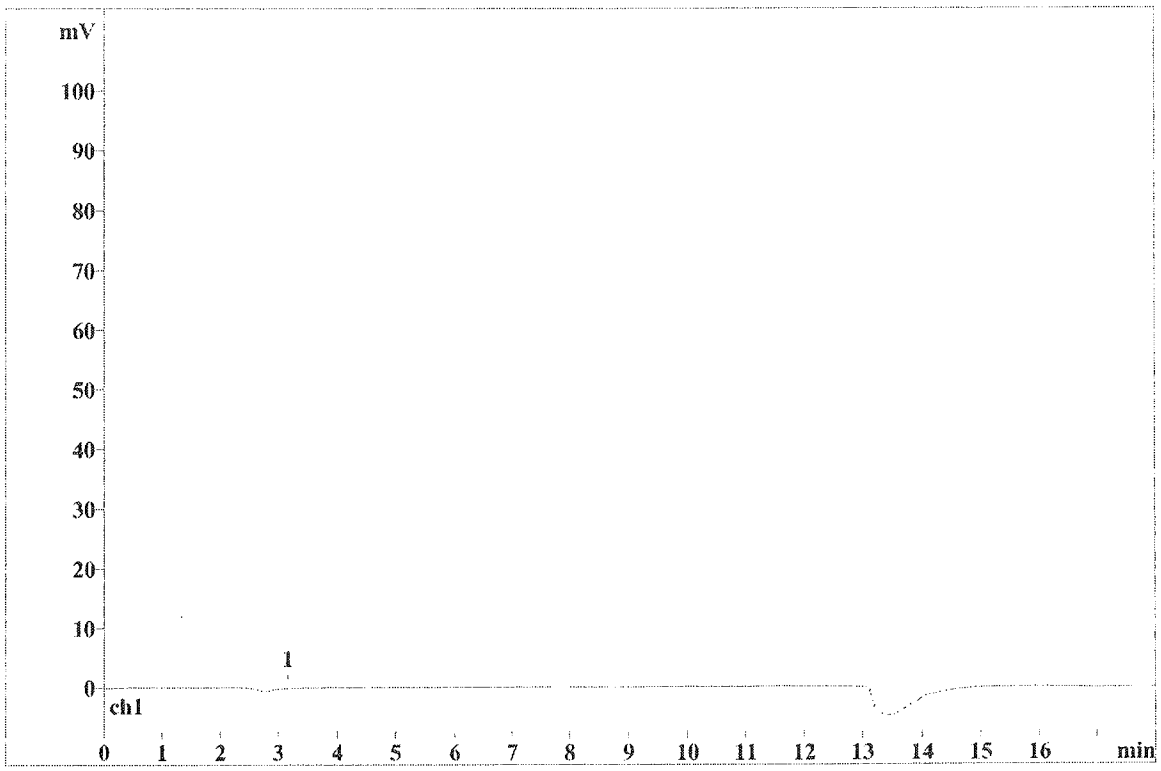
* Out of RPD limit.

QC DATA

Report date: 10/7/2024 1:24:00 PM
Printed by: ERodel

Ident: AJ02-03 ICJ002WB
Analysis from: 10/1/2024 12:28:06 PM
File: _2024-10-01_12-28.chw Last save: 10/1/2024 12:46:06 PM
Modified!
Method: ICD7-I23.mtw Last save: 9/28/2024 2:38:19 PM
Run operator: ERodel
Analysis number: 133970

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 3
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.17	0.39	26.044	0.000	

This report has been created by IC Net
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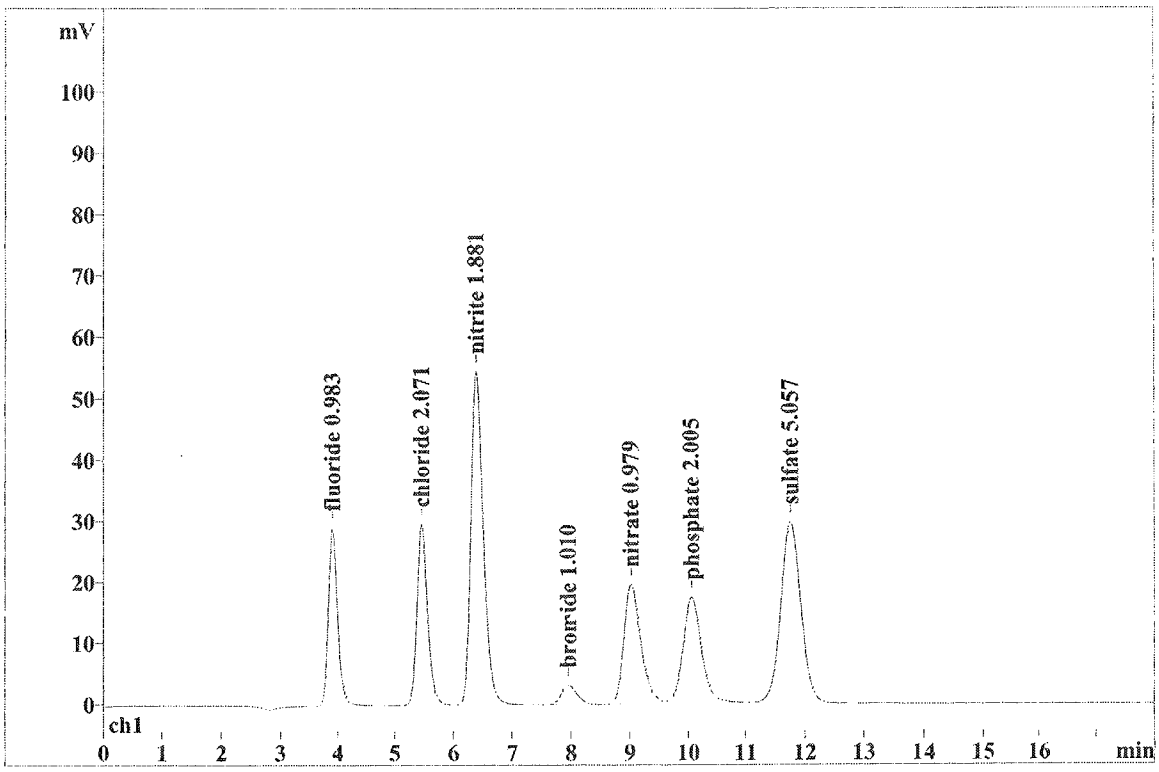
Report date: 10/7/2024 1:24:13 PM
Printed by: ERodel

Ident: AJ02-04 ICJ002WL
Analysis from: 10/1/2024 12:48:21 PM
File: _2024-10-01_12-48.chw Last save: 10/1/2024 3:42:18 PM

Method: ICD7-I23.mtw Last save: 9/28/2024 2:38:19 PM
Run operator: ERodel
Analysis number: 133971

SAMPLE: METHOD 300/9056/4.10B
:
Vial number: 4
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.91	29.07	325.060	0.983	fluoride
2	5.47	29.57	373.208	2.071	chloride
3	6.40	54.53	815.957	1.881	nitrite
4	7.96	3.23	60.896	1.010	bromide
5	9.03	19.46	386.522	0.979	nitrate
6	10.06	17.13	375.283	2.005	phosphate
7	11.77	29.65	686.396	5.057	sulfate
7	18.00	182.65	3023.323	13.986	

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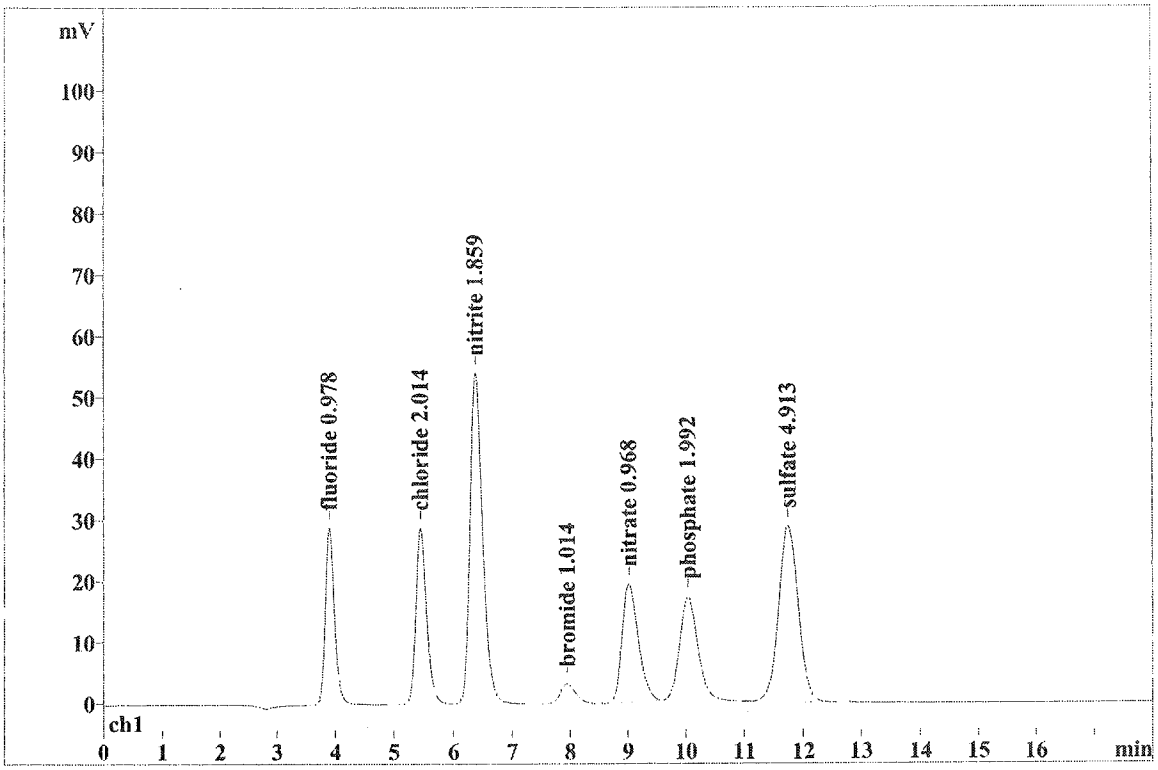
Report date: 10/7/2024 1:24:20 PM
Printed by: ERodel

Ident: AJ02-05 ICJ002WC
Analysis from: 10/1/2024 1:08:36 PM
File: _2024-10-01_13-08.chw Last save: 10/1/2024 3:42:42 PM

Method: ICD7-I23.mtw Last save: 9/28/2024 2:38:19 PM
Run operator: ERodel
Analysis number: 133972

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 5
Volume: 1.0 µm
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.90	29.02	323.300	0.978	fluoride
2	5.45	28.86	362.651	2.014	chloride
3	6.39	54.04	806.528	1.859	nitrite
4	7.95	3.27	61.232	1.014	bromide
5	9.02	19.38	382.004	0.968	nitrate
6	10.04	17.07	372.615	1.992	phosphate
7	11.75	28.83	666.069	4.913	sulfate
7	18.00	180.46	2974.399	13.740	

This report has been created by IC Net
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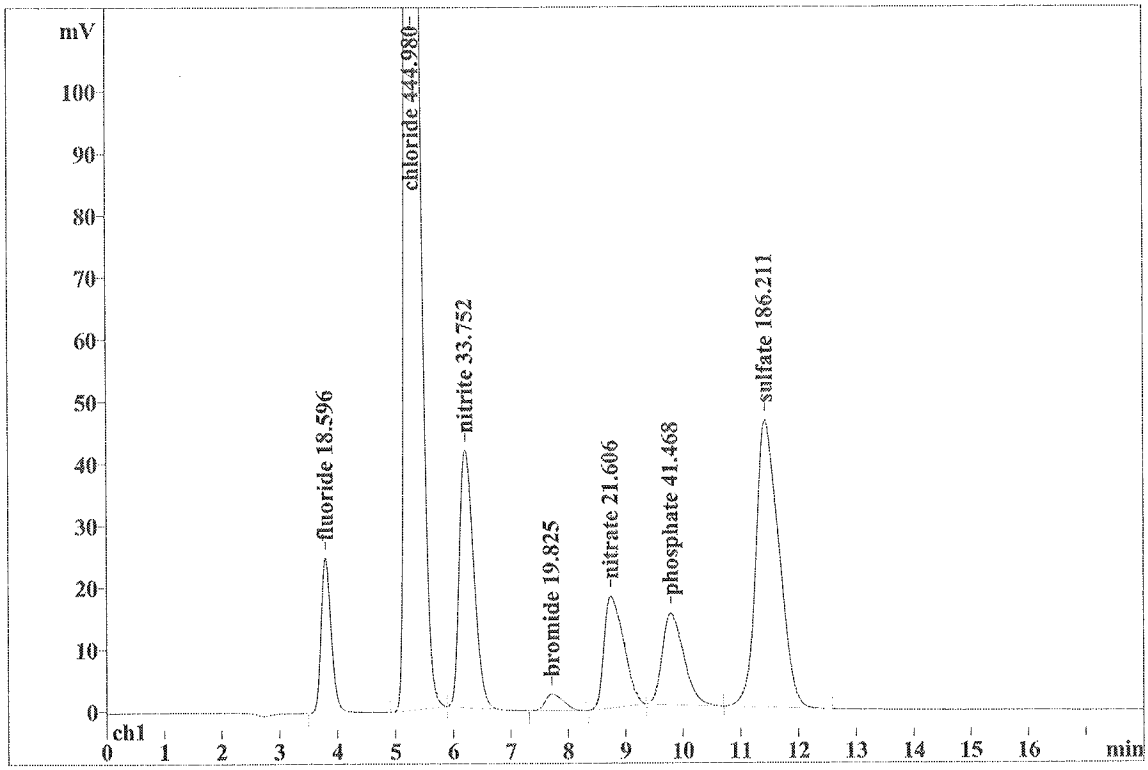
Report date: 10/7/2024 1:54:19 PM
Printed by: ERodel

Ident: AJ02-24 I062-01IM DF=20
Analysis from: 10/1/2024 8:17:24 PM
File: _2024-10-01_20-17.chw Last save: 10/1/2024 8:35:25 PM

Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133992

SAMPLE: METHOD 300/9056/4110B
: 2ml/40ml
Vial number: 24
Volume: 1.0 µL
Dilution: 20.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.80	24.98	306.529	18.596	fluoride
2	5.30	273.98	4135.394	444.980	chloride
3	6.22	41.57	730.037	33.752	nitrite
4	7.72	2.70	59.434	19.825	bromide
5	8.75	18.01	428.001	21.606	nitrate
6	9.79	14.74	389.224	41.468	phosphate
7	11.43	46.32	1289.096	186.211	sulfate
7	18.00	422.31	7337.715	766.440	

This report has been created by IC Net
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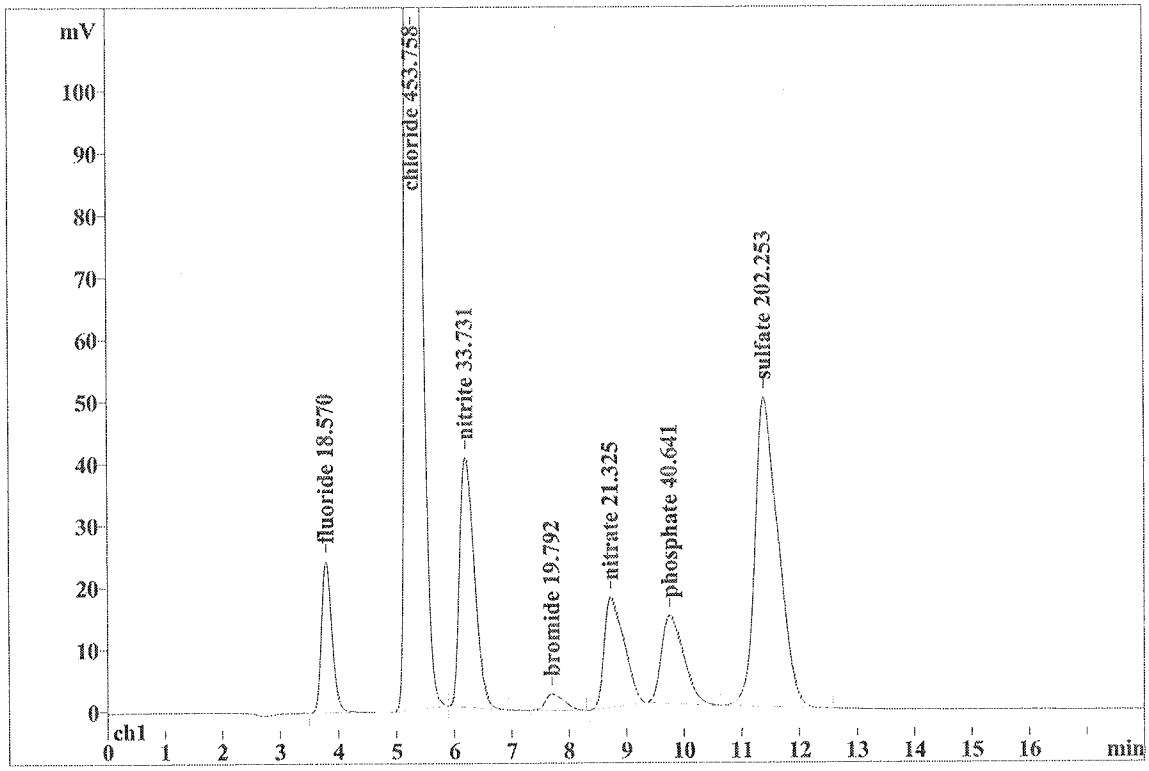
Report date: 10/7/2024 1:55:06 PM
Printed by: ERodel

Ident: AJ02-27 I062-01IS DF=20
Analysis from: 10/1/2024 9:18:09 PM
File: _2024-10-01_21-18.chw Last save: 10/1/2024 9:36:10 PM

Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133995

SAMPLE: METHOD 300/9056/4110B
: 2ml/40ml
Vial number: 27
Volume: 1.0 µL
Dilution: 20.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.80	24.44	306.065	18.570	fluoride
2	5.29	270.94	4217.224	453.758	chloride
3	6.21	40.30	729.567	33.731	nitrite
4	7.71	2.66	59.305	19.792	bromide
5	8.73	17.69	422.218	21.325	nitrate
6	9.76	14.22	380.801	40.641	phosphate
7	11.40	49.95	1402.750	202.253	sulfate
7	18.00	420.20	7517.930	790.071	

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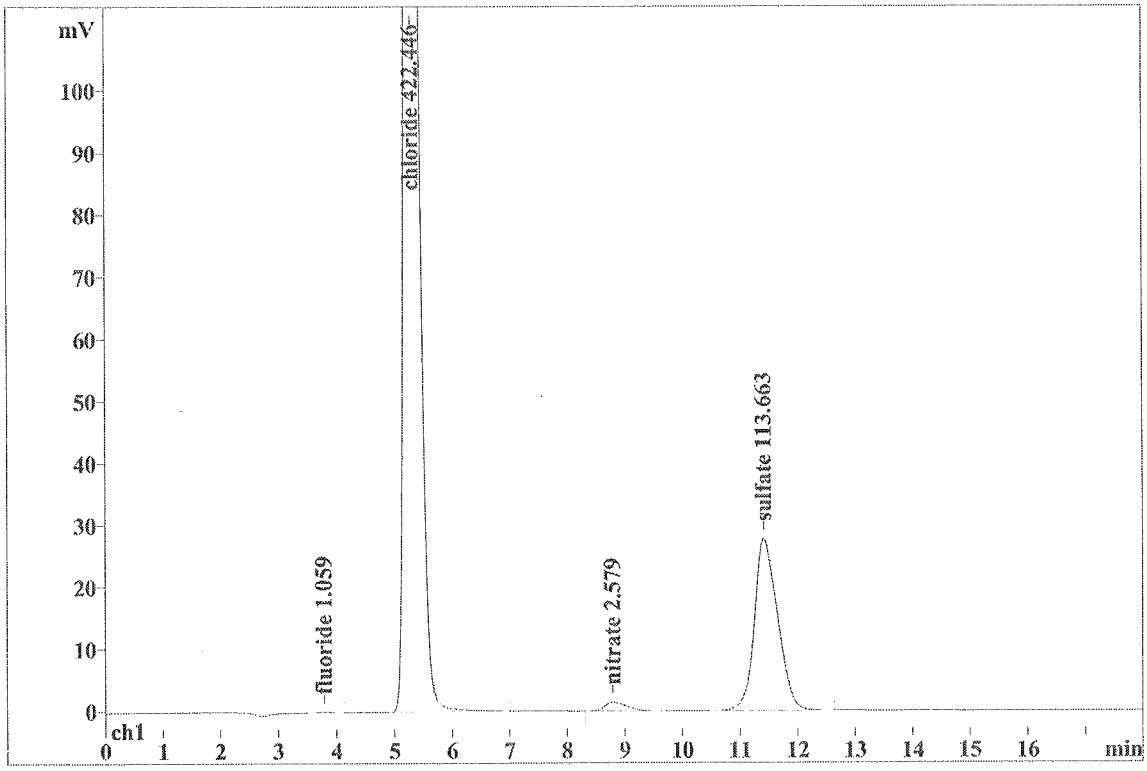
Report date: 10/7/2024 1:51:44 PM
Printed by: ERodel

Ident: AJ02-23 I062-01ID DF=20
Analysis from: 10/1/2024 7:57:09 PM
File: _2024-10-01_19-57.chw Last save: 10/1/2024 8:15:09 PM

Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133991

SAMPLE: METHOD 300/9056/4110B
: 2ml/40ml
Vial number: 23
Volume: 1.0 µL
Dilution: 20.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	0.17	2.241	1.059	fluoride
2	5.30	260.01	3925.322	422.446	chloride
3	8.79	1.41	36.883	2.579	nitrate
4	11.42	27.73	775.132	113.663	sulfate
4	17.99	289.32	4739.577	539.747	

This report has been created by IC Net
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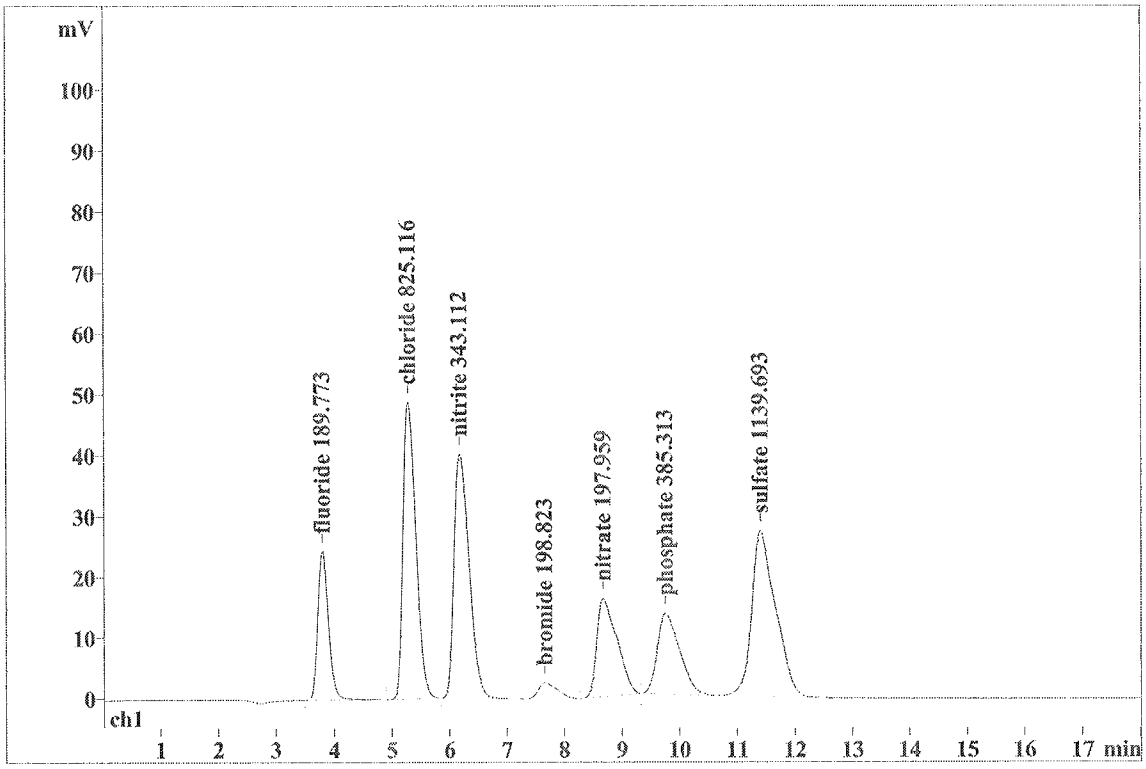
Report date: 10/7/2024 1:57:16 PM
Printed by: ERodel

Ident: AJ02-30 I062-01JM DF=200
Analysis from: 10/1/2024 10:18:54 PM
File: _2024-10-01_22-18.chw Last save: 10/1/2024 10:36:54 PM

Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133998

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/40ml
Vial number: 30
Volume: 1.0 µL
Dilution: 200.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.80	24.52	313.137	189.773	fluoride
2	5.29	48.76	756.350	825.116	chloride
3	6.18	40.20	742.470	343.112	nitrite
4	7.66	2.66	59.656	198.823	bromide
5	8.68	16.18	390.783	197.959	nitrate
6	9.76	13.37	359.331	385.313	phosphate
7	11.41	27.29	777.300	1139.693	sulfate
7	18.00	172.97	3399.026	3279.789	

This report has been created by IC Net
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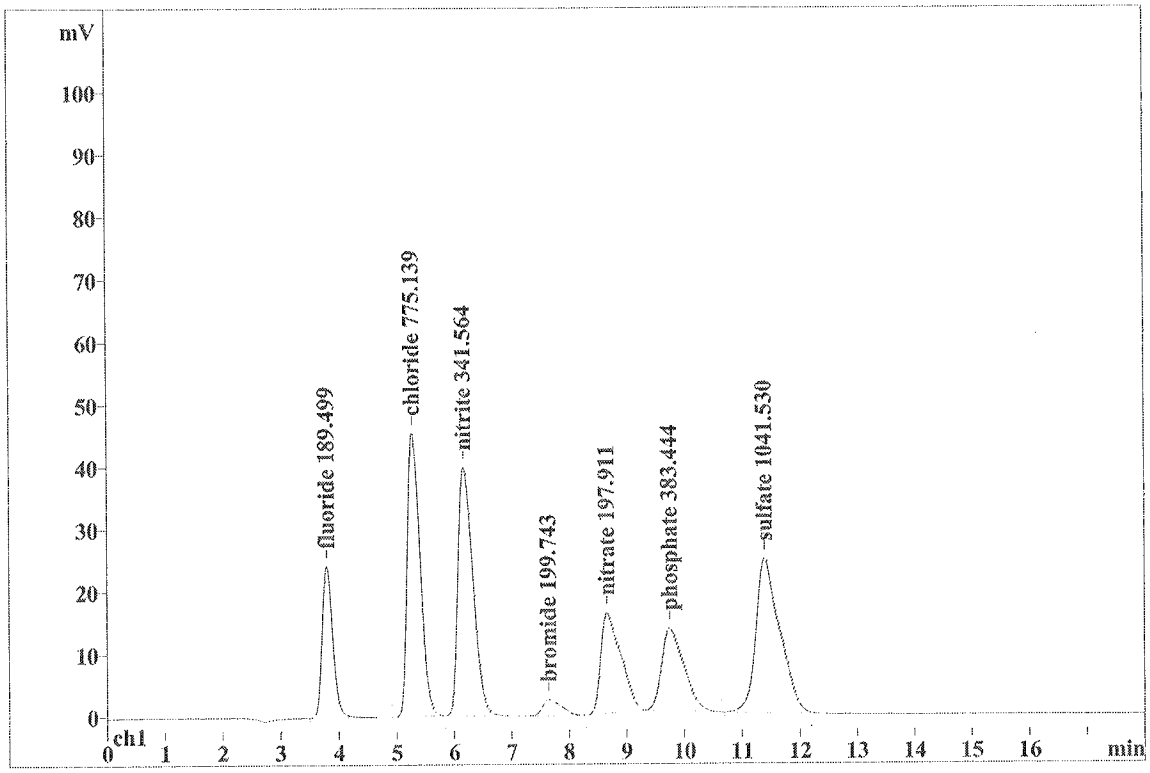
Report date: 10/7/2024 1:57:55 PM
Printed by: ERodel

Ident: AJ02-31 I062-01JS DF=200
Analysis from: 10/1/2024 10:39:09 PM
File: _2024-10-01_22-39.chw Last save: 10/1/2024 10:57:10 PM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133999

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/40ml
Vial number: 31
Volume: 1.0 µL
Dilution: 200.00
Amount: 1.0000



Quantitation method: Custom

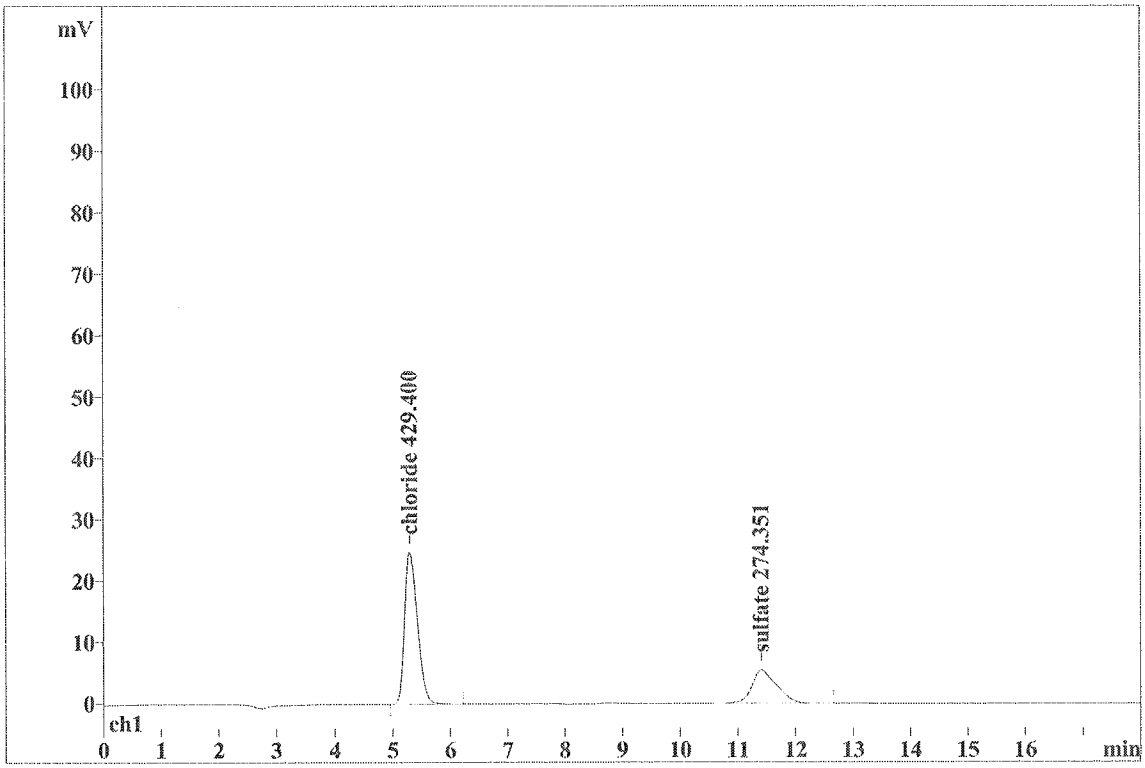
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.80	24.32	312.661	189.499	fluoride
2	5.28	45.47	709.760	775.139	chloride
3	6.18	39.77	739.025	341.564	nitrite
4	7.65	2.66	60.014	199.743	bromide
5	8.67	16.16	390.685	197.911	nitrate
6	9.75	13.26	357.429	383.444	phosphate
7	11.40	24.75	707.755	1041.530	sulfate
7	18.00	166.38	3277.328	3128.830	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 1:56:57 PM
Printed by: ERodel

Ident: AJ02-29 I062-01JD DF=200
Analysis from: 10/1/2024 9:58:39 PM
File: _2024-10-01_21-58.chw Last save: 10/1/2024 10:16:39 PM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133997

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/40ml
Vial number: 29
Volume: 1.0 µL
Dilution: 200.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	5.30	24.78	387.451	429.400	chloride
2	11.41	5.48	164.245	274.351	sulfate
2	18.00	30.26	551.695	703.750	

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INITIAL CALIBRATION(S)

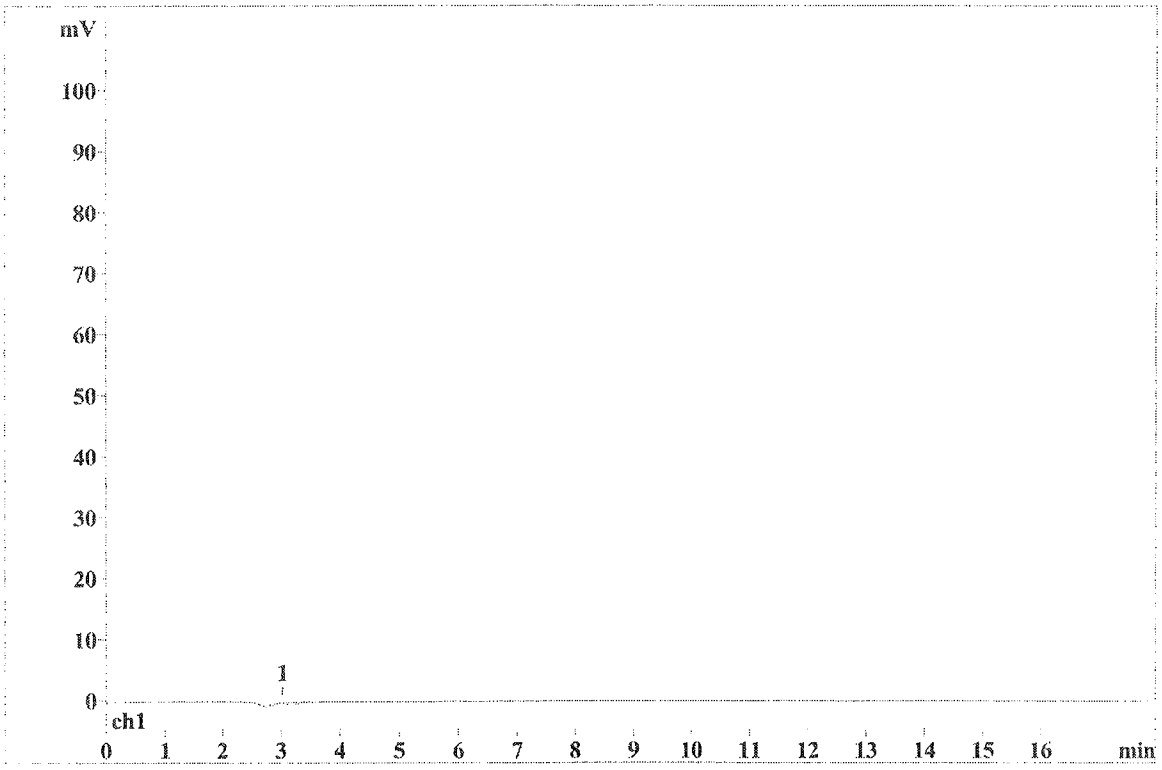
IC Result Check FormVersion : I23/AI32(2024)

LFID	LSID	Selection	iodide	chloride	fluoride	nitrite	bromide	nitrate	phosphate	sulfate	RawNetID	DF
AI32-01	IB	OCFIBNPS	0	0	0	0	0	0	0	0	_2024-09-23_18-12	1
AI32-02	S0	OCFIBNPS	0	0	0	0	0	0	0	0	_2024-09-23_18-32	1
AI32-03	S1	OCFIBNPS	0	0.108614	0.0843073	0.0817125	0.266844	0.0785244	0.195794	0.267441	_2024-09-23_18-53	1
AI32-04	S2	OCFIBNPS	0	0.149686	0.122848	0.121889	0.30554	0.11875	0.231533	0.303408	_2024-09-23_19-13	1
AI32-05	S3	OCFIBNPS	0	0.229721	0.200745	0.201335	0.38047	0.201269	0.304373	0.375788	_2024-09-23_19-33	1
AI32-06	S4	OCFIBNPS	0	0.48214	0.461048	0.459535	0.614251	0.468386	0.531232	0.608612	_2024-09-23_19-53	1
AI32-07	S5	OCFIBNPS	0	0.933934	0.952991	0.936214	1.01538	0.958395	0.962253	1.01492	_2024-09-23_20-14	1
AI32-08	S6	OCFIBNPS	0	1.89756	2.02806	1.94848	1.85007	2.02467	1.8839	1.84365	_2024-09-23_20-34	1
AI32-09	S7	OCFIBNPS	0	5.04835	5.28921	5.03216	4.55936	5.44893	4.78194	4.5886	_2024-09-23_20-54	1
AI32-10	S8	OCFIBNPS	0	10.579	10.3745	10.1386	9.54547	11.4217	9.80506	9.53559	_2024-09-23_21-15	1
AI32-11	S9	OCFIBNPS	0	22.1324	19.6464	19.9301	20.3126	23.8264	20.1539	20.312	_2024-09-23_21-35	1
AI32-12	ICV	OCFIBNPS	0%*	95.2%	95%	98%	99.7%	96.4%	95.9%	94.6%	_2024-09-23_21-55	1
AI32-13	ICV1	OCFIBNPS	0%*	92.4%	94.4%	94.2%	101%	98.1%	96.4%	105.8%	_2024-09-23_22-15	1
AI32-14	ICB	OCFIBNPS	0	0	0	0	0	0	0	0	_2024-09-23_22-36	1

Report date: 9/26/2024 12:43:36 PM
Printed by: ERodel

Ident: AI32-02 S0
Analysis from: 9/23/2024 6:32:44 PM
File: _2024-09-23_18-32.chw Last save: 9/24/2024 10:00:15 AM
Modified!
Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133697

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 2
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.02	0.30	9.717	0.000	

This report has been created by IC Net
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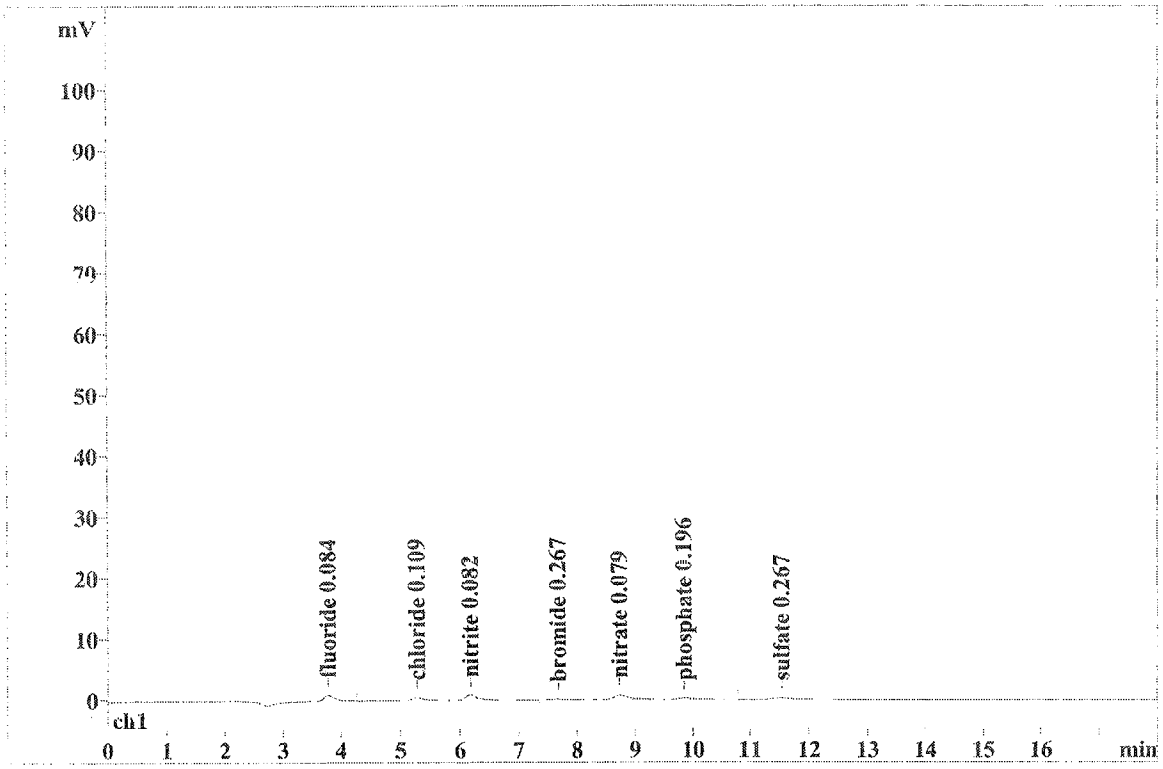
Report date: 9/26/2024 12:43:50 PM
Printed by: ERodel

Ident: AI32-03 S1
Analysis from: 9/23/2024 6:53:02 PM
File: _2024-09-23_18-53.chw Last save: 9/24/2024 10:00:15 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133698

SAMPLE: METHOD 300/9056/4110B
: 0.05 PPM
Vial number: 3
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.78	0.99	13.128	0.084	fluoride
2	5.28	0.52	7.402	0.109	chloride
3	6.18	0.96	15.324	0.082	nitrite
4	7.67	0.16	3.045	0.267	bromide
5	8.74	0.75	16.153	0.079	nitrate
6	9.85	0.27	7.020	0.196	phosphate
7	11.53	0.28	7.774	0.267	sulfate
7	18.00	3.91	69.846	1.083	

This report has been created by IC Net
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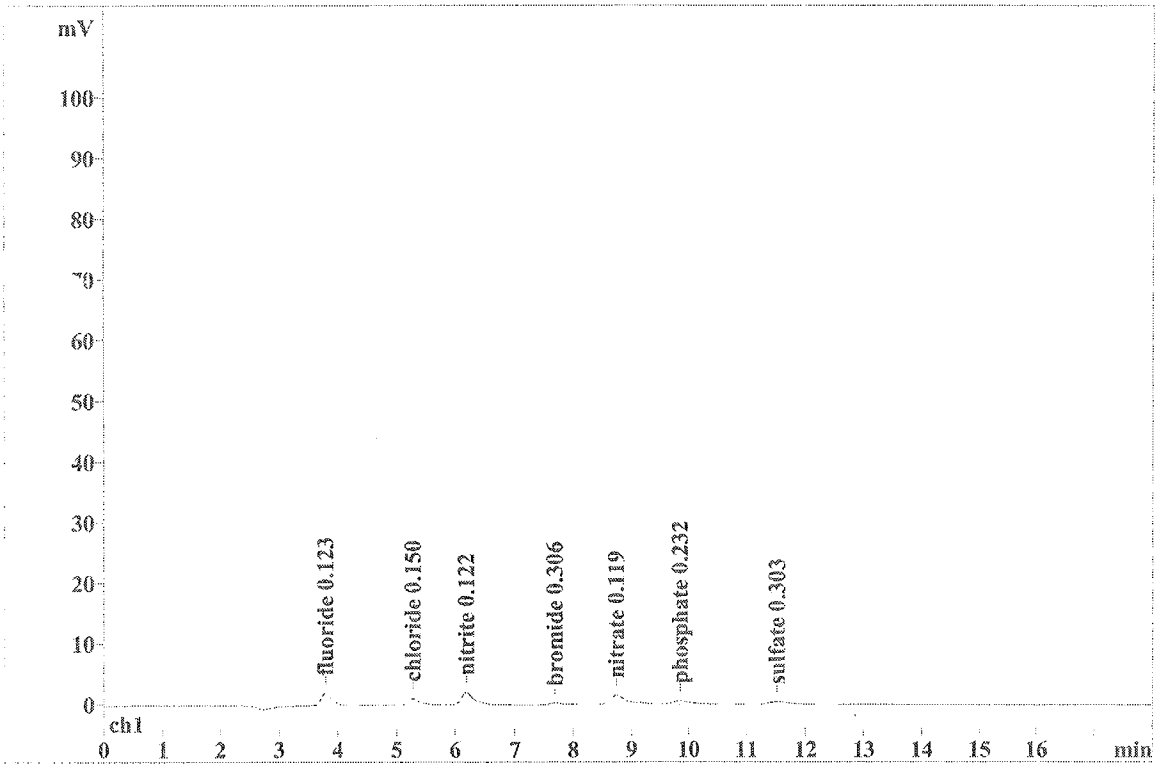
Report date: 9/26/2024 12:43:58 PM
Printed by: ERodel

Ident: AI32-04 S2
Analysis from: 9/23/2024 7:13:19 PM
File: _2024-09-23_19-13.chw Last save: 9/24/2024 10:00:15 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133699

SAMPLE: METHOD 300/9056/4110B
: 0.1 PPM
Vial number: 4
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	2.04	26.502	0.123	fluoride
2	5.29	1.05	15.060	0.150	chloride
3	6.19	2.06	33.205	0.122	nitrite
4	7.68	0.31	6.057	0.306	bromide
5	8.74	1.55	32.690	0.119	nitrate
6	9.85	0.57	14.295	0.232	phosphate
7	11.53	0.48	12.870	0.303	sulfate
7	18.00	8.06	140.679	1.354	

This report has been created by IC Net
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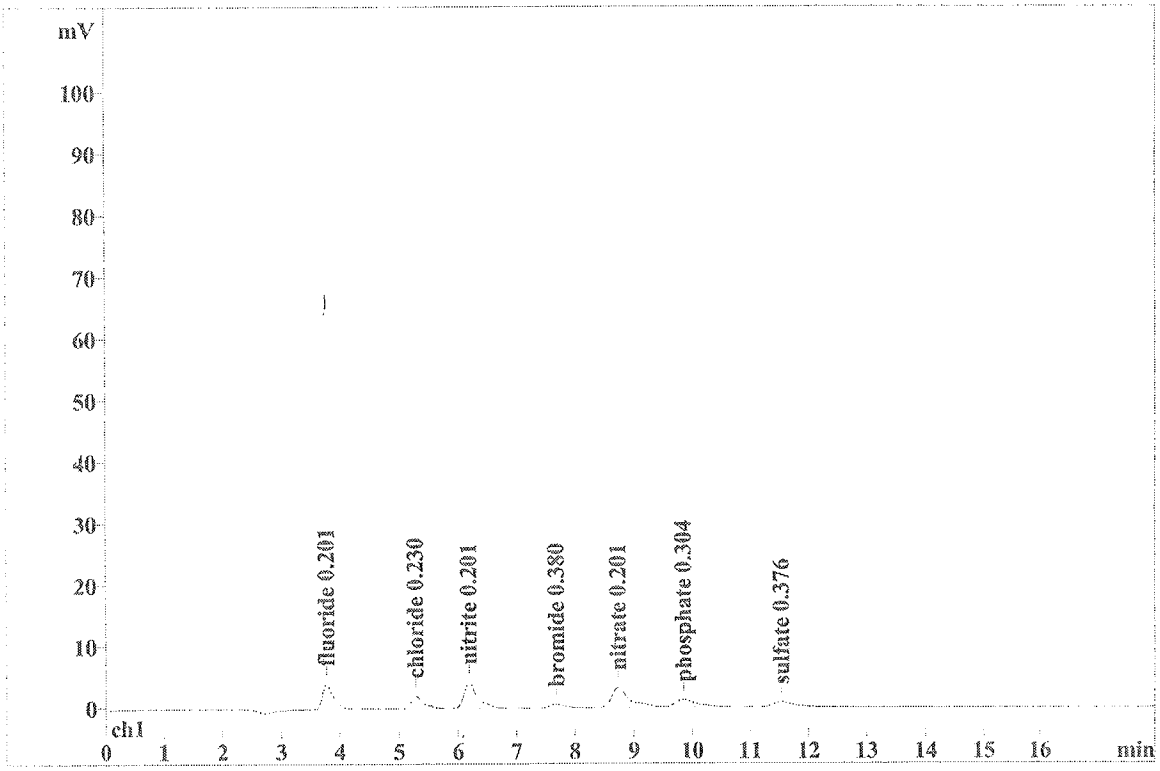
Report date: 9/26/2024 12:44:08 PM
Printed by: ERodel

Ident: AI32-05 S3
Analysis from: 9/23/2024 7:33:36 PM
File: _2024-09-23_19-33.chw Last save: 9/24/2024 10:00:15 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133700

SAMPLE: METHOD 300/9056/4110B
: 0.2 PPM
Vial number: 5
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	4.20	53.533	0.201	fluoride
2	5.29	2.08	29.982	0.230	chloride
3	6.19	4.29	68.562	0.201	nitrite
4	7.69	0.62	11.890	0.380	bromide
5	8.74	3.20	66.615	0.201	nitrate
6	9.86	1.17	29.122	0.304	phosphate
7	11.54	0.88	23.125	0.376	sulfate
7	18.00	16.44	282.829	1.894	

This report has been created by IC Net
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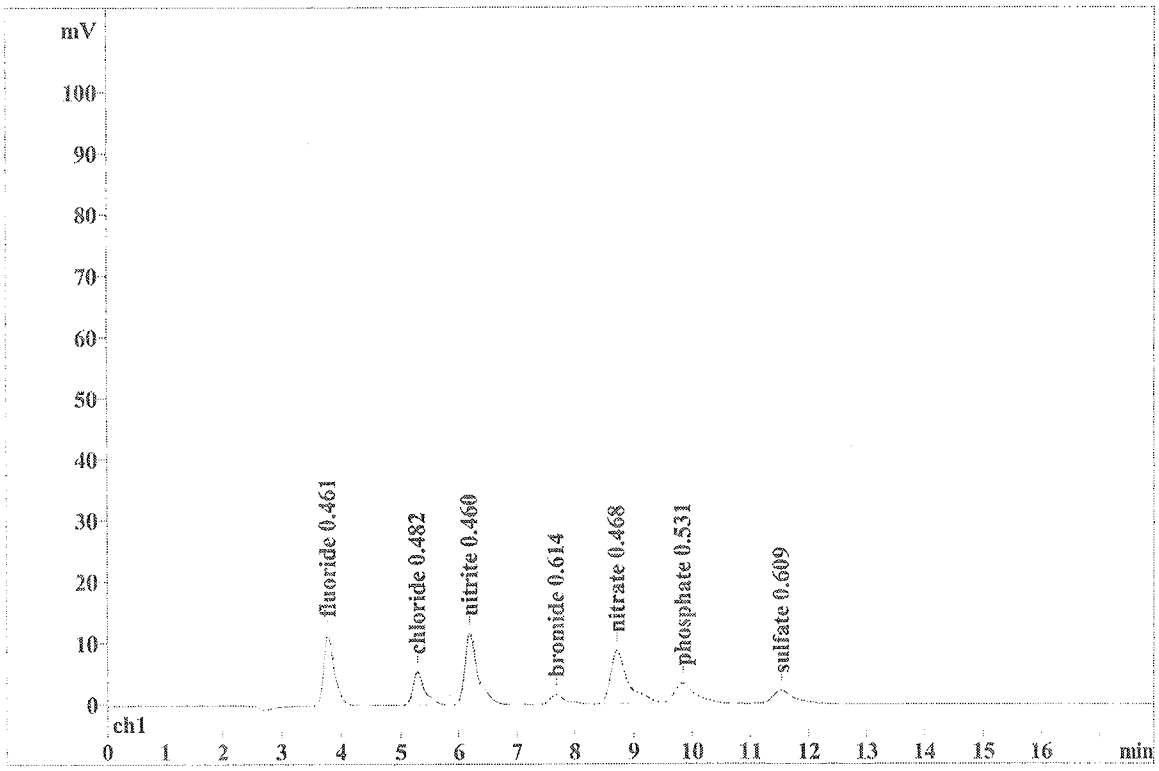
Report date: 9/26/2024 12:44:16 PM
Printed by: ERodel

Ident: AI32-06 S4
Analysis from: 9/23/2024 7:53:53 PM
File: _2024-09-23_19-53.chw Last save: 9/24/2024 10:00:15 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133701

SAMPLE: METHOD 300/9056/4110B
: 0.5 PPM
Vial number: 6
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.78	11.63	143.860	0.461	fluoride
2	5.28	5.49	77.045	0.482	chloride
3	6.19	11.69	183.474	0.460	nitrite
4	7.68	1.60	30.087	0.614	bromide
5	8.71	8.76	176.428	0.468	nitrate
6	9.84	3.18	75.301	0.531	phosphate
7	11.53	2.18	56.114	0.609	sulfate
7	18.00	44.51	742.310	3.625	

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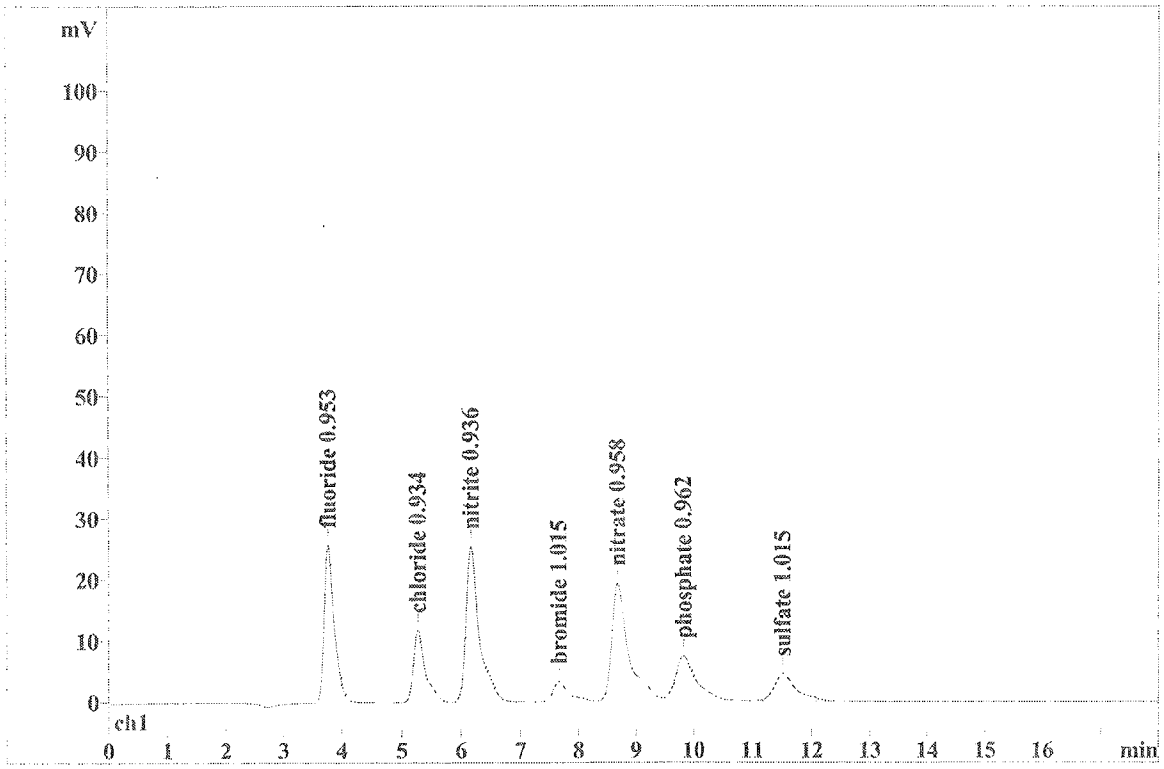
Report date: 9/26/2024 12:44:27 PM
Printed by: ERodel

Ident: AI32-07 S5
Analysis from: 9/23/2024 8:14:10 PM
File: _2024-09-23_20-14.chw Last save: 9/24/2024 10:00:15 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133702

SAMPLE: METHOD 300/9056/4110B
: 1.0 PPM
Vial number: 7
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.77	25.84	314.568	0.953	fluoride
2	5.27	11.78	161.280	0.934	chloride
3	6.17	25.42	395.621	0.936	nitrite
4	7.66	3.30	61.311	1.015	bromide
5	8.69	19.13	377.875	0.958	nitrate
6	9.83	7.00	163.038	0.962	phosphate
7	11.52	4.49	113.685	1.015	sulfate
7	17.99	96.98	1587.377	6.774	

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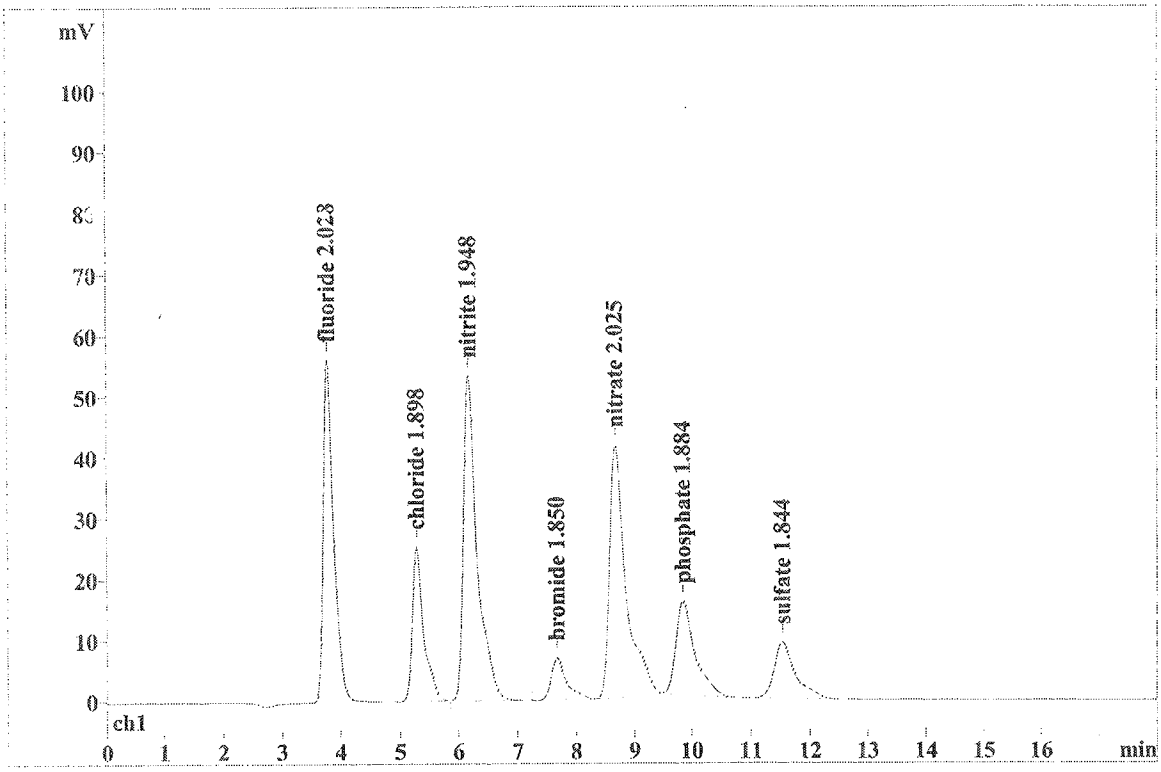
09/30/...

Report date: 9/26/2024 12:44:37 PM
Printed by: ERodel

Ident: AI32-08 S6
Analysis from: 9/23/2024 8:34:27 PM
File: _2024-09-23_20-34.chw Last save: 9/24/2024 10:00:16 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133703

SAMPLE: METHOD 300/9056/4110B
: 2.0 PPM
Vial number: 8
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

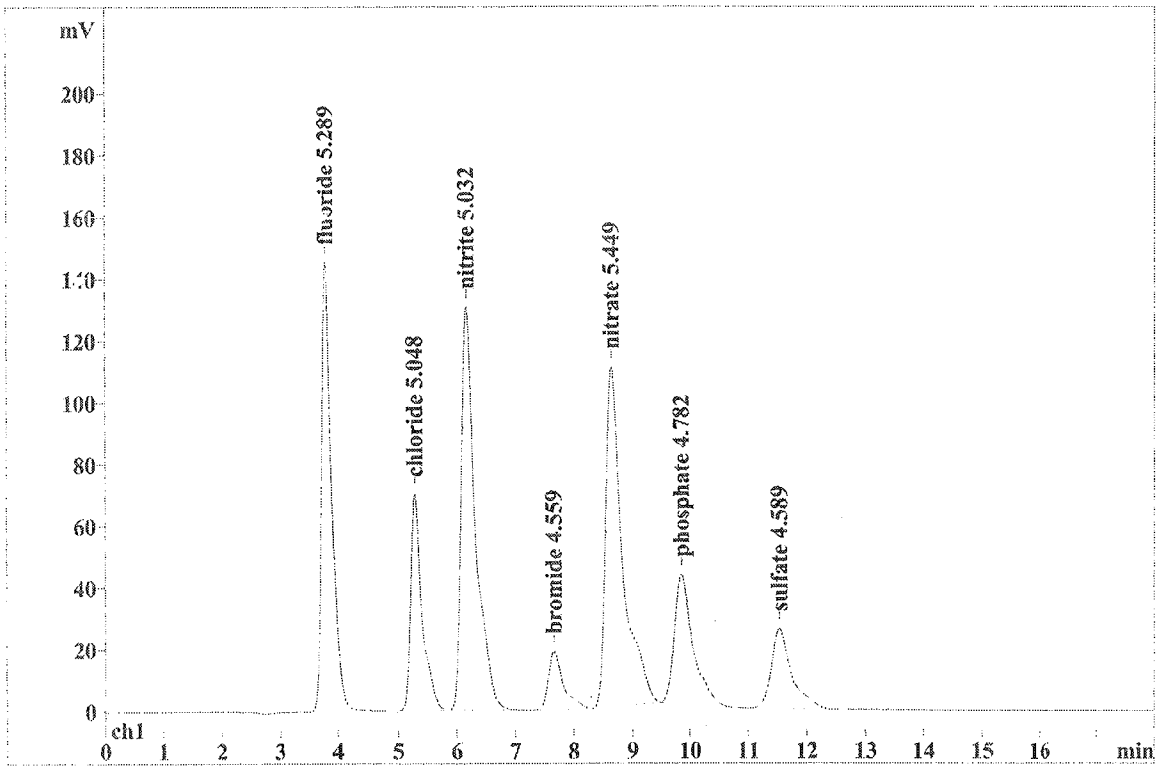
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	56.32	687.626	2.028	fluoride
2	5.29	25.42	340.944	1.898	chloride
3	6.18	53.40	846.132	1.948	nitrite
4	7.67	6.93	126.283	1.850	bromide
5	8.68	41.43	816.230	2.025	nitrate
6	9.85	15.39	350.647	1.884	phosphate
7	11.54	9.35	231.107	1.844	sulfate
7	18.00	208.23	3398.970	13.476	

This report has been created by IC Net
METROHM LTD

Report date: 9/26/2024 12:44:55 PM
Printed by: ERodel

Ident: AI32-09 S7
Analysis from: 9/23/2024 8:54:44 PM
File: _2024-09-23_20-54.chw Last save: 9/24/2024 10:00:16 AM
Modified!
Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133704

SAMPLE: METHOD 300/9056/4110B
: 5.0 PPM
Vial number: 9
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.80	145.64	1819.272	5.289	fluoride
2	5.28	70.16	928.396	5.048	chloride
3	6.17	130.80	2218.524	5.032	nitrite
4	7.66	18.87	337.174	4.559	bromide
5	8.65	110.28	2223.965	5.449	nitrate
6	9.85	41.94	940.563	4.782	phosphate
7	11.54	25.85	620.041	4.589	sulfate
7	18.00	543.53	9087.936	34.749	

This report has been created by IC Net
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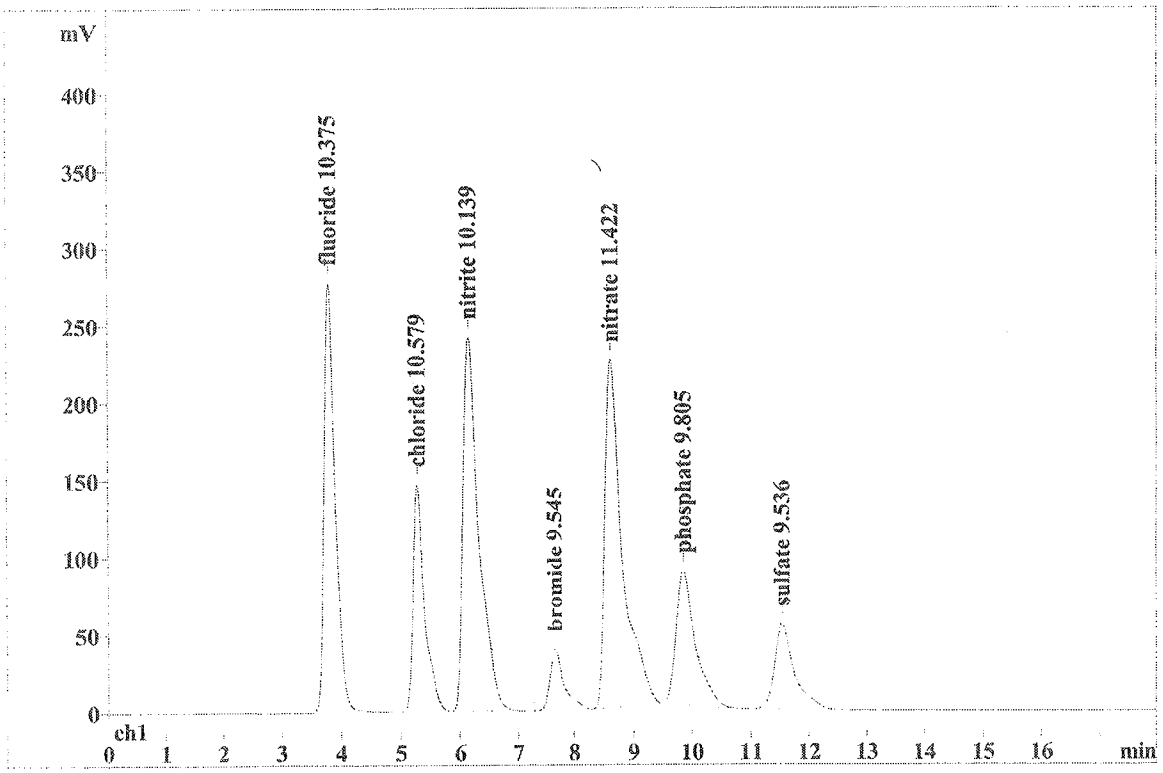
Report date: 9/26/2024 12:45:11 PM
Printed by: ERodel

Ident: AI32-10 S8
Analysis from: 9/23/2024 9:15:02 PM
File: _2024-09-23_21-15.chw Last save: 9/24/2024 10:00:16 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133705

SAMPLE: METHOD 300/9056/4110B
: 10.0 PPM
Vial number: 10
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.81	278.06	3583.919	10.375	fluoride
2	5.28	147.02	1959.558	10.579	chloride
3	6.15	242.06	4491.163	10.139	nitrite
4	7.65	39.78	725.291	9.545	bromide
5	8.62	225.13	4679.430	11.422	nitrate
6	9.86	86.92	1963.056	9.805	phosphate
7	11.54	55.42	1320.985	9.536	sulfate
7	18.00	1074.39	18723.403	71.400	

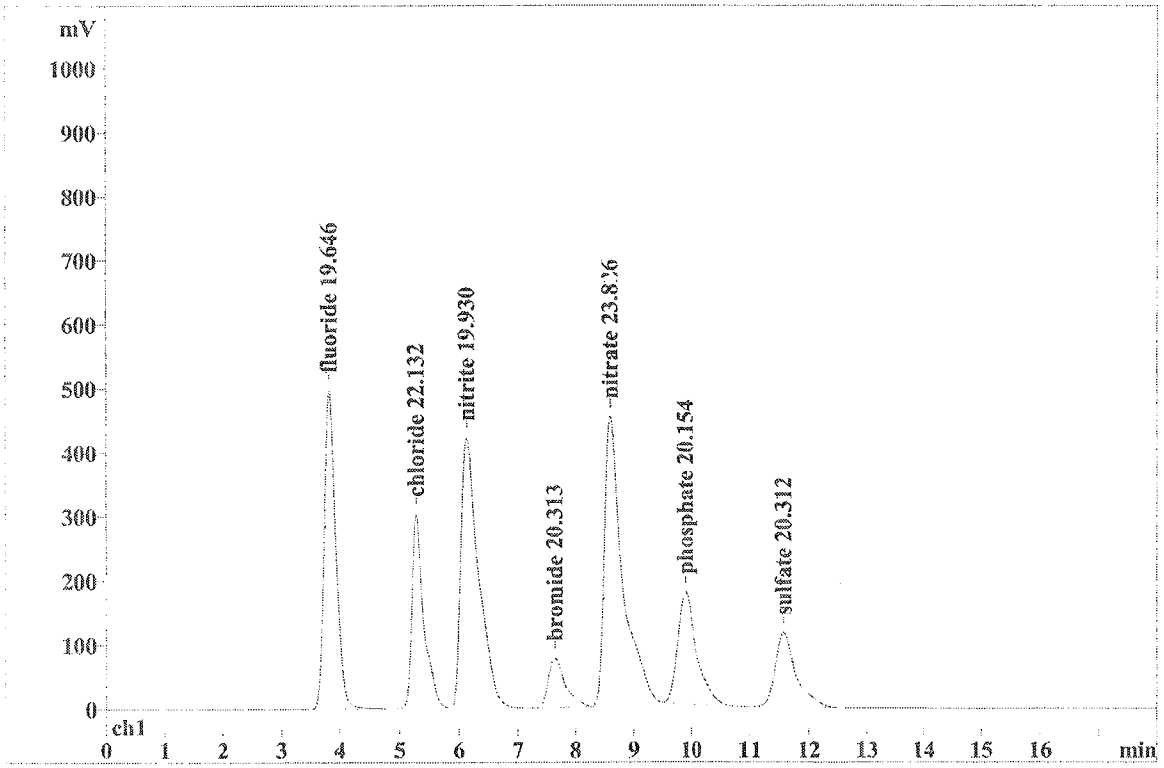
This report has been created by IC Net
METROHM LTD

Report date: 9/26/2024 12:45:29 PM
Printed by: ERodel

Ident: AI32-11 S9
Analysis from: 9/23/2024 9:35:19 PM
File: _2024-09-23_21-35.chw Last save: 9/24/2024 10:00:16 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133706

SAMPLE: METHOD 300/9056/8110B
: 20.0 PPM
Vial number: 11
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.83	396.76	6801.324	19.646	fluoride
2	5.28	302.58	4113.643	22.132	chloride
3	6.14	420.51	8848.846	19.930	nitrite
4	7.65	76.98	1563.402	20.313	bromide
5	8.61	451.02	9779.087	23.826	nitrate
6	9.89	174.73	4069.639	20.154	phosphate
7	11.57	116.83	2847.902	20.312	sulfate
7	18.00	2039.41	38023.843	146.314	

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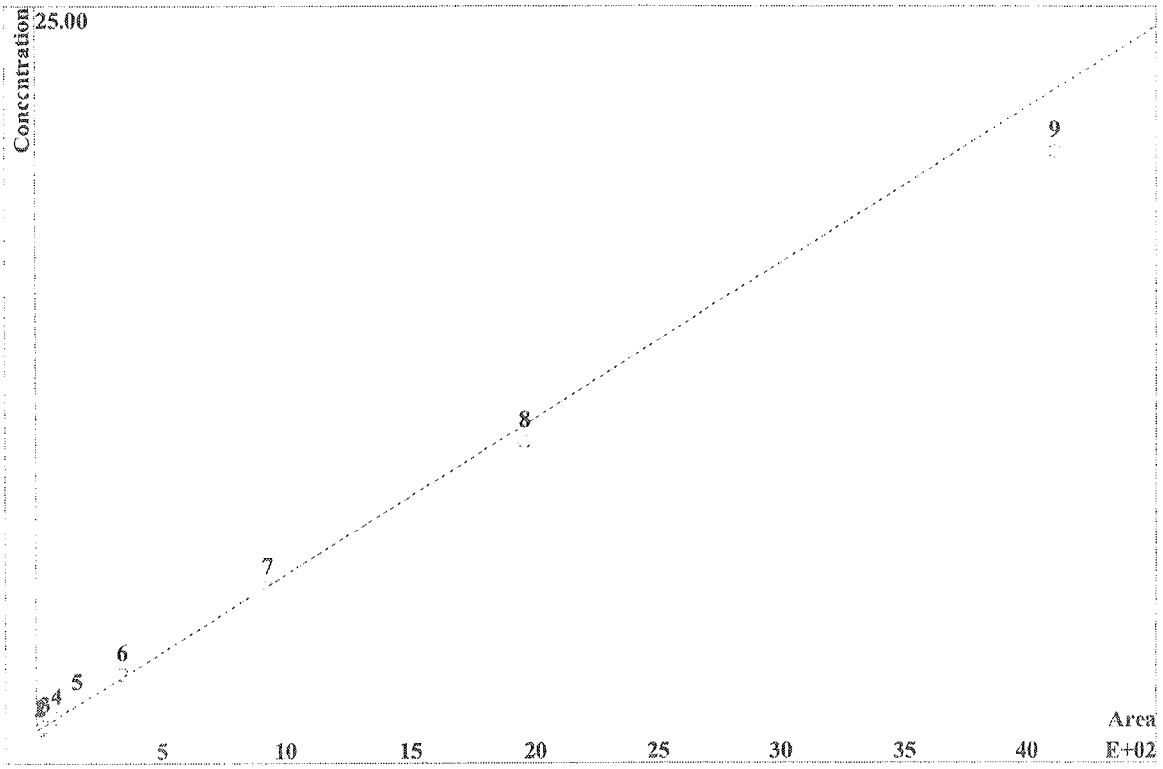
CALIBRATION OF COMPONENT chloride

Method: ICD7-I23.mtw
Equation: Q = 0.00536348·A + 0.0689113
RSD: 5.514 %
Correlation coefficient: 0.999364

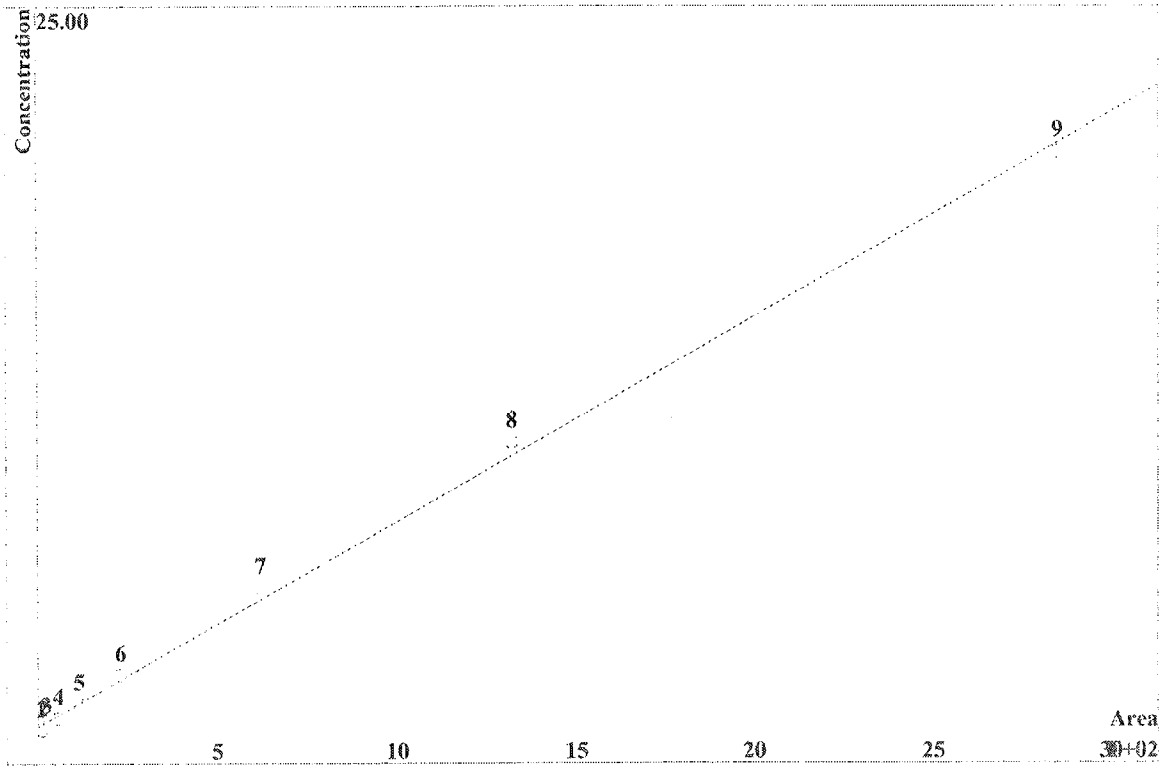


K3 = 0 K2 = 0 K1 = 0.00536348 K0 = 0.0689113
Base: Area
Ref.channel: ch1
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.5195	7.402	0.05	1	5.28	Yes	_2024-09-23_1i
2	1.048	15.06	0.1	1	5.28	Yes	_2024-09-23_1i
3	2.081	29.98	0.2	1	5.28	Yes	_2024-09-23_1i
4	5.49	77.04	0.5	1	5.28	Yes	_2024-09-23_1i
5	11.79	161.3	1	1	5.28	Yes	_2024-09-23_2i
6	25.42	340.9	2	1	5.28	Yes	_2024-09-23_2i
7	70.16	928.4	5	1	5.28	Yes	_2024-09-23_2i
8	147	1960	10	1	5.28	No	_2024-09-23_2
9	302.6	4114	20	1	5.28	No	_2024-09-23_2

CALIBRATION OF COMPONENT sulfate

Method: ICD7-I23.mtw
Equation: Q = 0.00705762·A + 0.212578
RSD: 6.995 %
Correlation coefficient: 0.999119



K3 = 0 K2 = 0 K1 = 0.00705762 K0 = 0.212578
Base: Area
Ref.channel: ch1
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.2767	7.774	0.05	1	11.54	Yes	_2024-09-23_1i
2	0.4793	12.87	0.1	1	11.54	Yes	_2024-09-23_1i
3	0.8799	23.13	0.2	1	11.54	Yes	_2024-09-23_1i
4	2.178	56.11	0.5	1	11.54	Yes	_2024-09-23_1i
5	4.493	113.7	1	1	11.54	Yes	_2024-09-23_2i
6	9.347	231.1	2	1	11.54	Yes	_2024-09-23_2i
7	25.85	620	5	1	11.54	Yes	_2024-09-23_2i
8	55.42	1321	10	1	11.54	Yes	_2024-09-23_2
9	116.8	2848	20	1	11.54	Yes	_2024-09-23_2

SECOND SOURCE VERIFICATION

IC Result Check FormVersion : I23/AI32(2024)

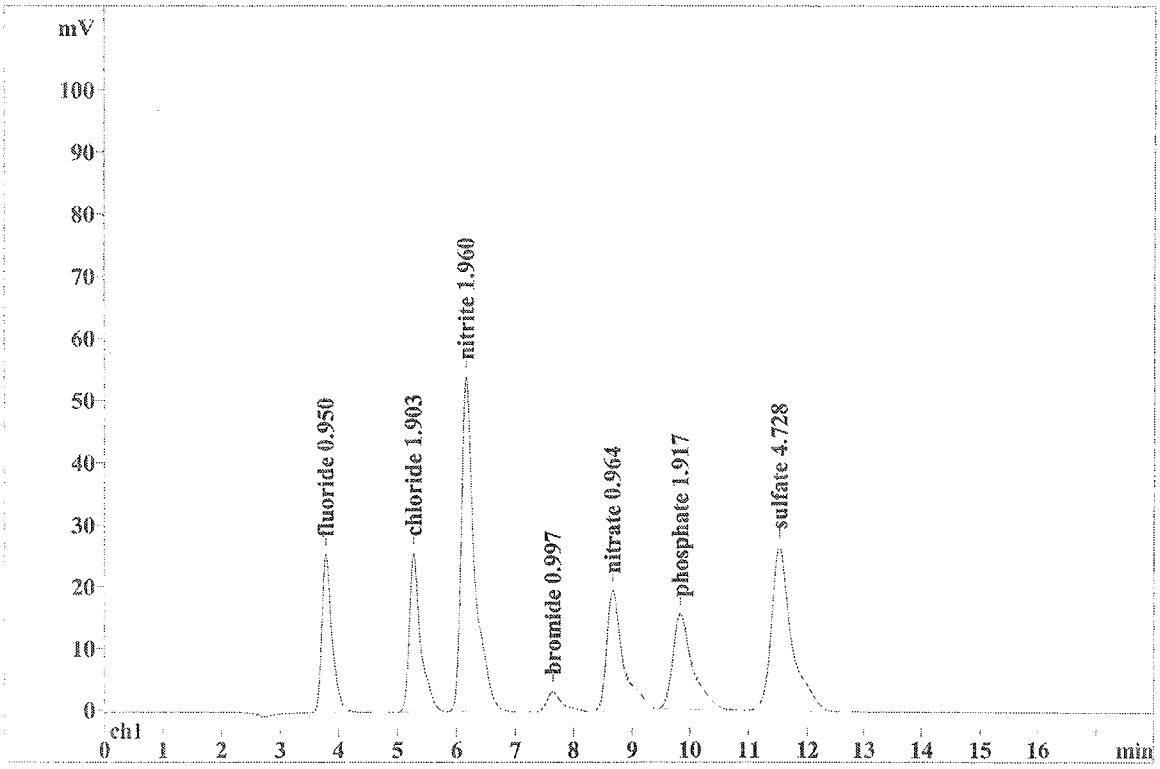
LFID	LSID	Selection	phosphate	nitrite	nitrate	iodide	fluoride	chloride	bromide	sulfate	RawNetID	DF
AI32-01	IB	PINOFCBS	0	0	0	0	0	0	0	0	_2024-09-23_18-12	1
AI32-12	ICV	PINOFCBS	95.9%	98%	96.4%	0%*	95%	95.2%	99.7%	94.6%	_2024-09-23_21-55	1
AI32-13	ICV1	PINOFCBS	96.4%	94.2%	98.1%	0%*	94.4%	92.4%	101%	105.8%	_2024-09-23_22-15	1
AI32-14	ICB	PINOFCBS	0	0	0	0	0	0	0	0	_2024-09-23_22-36	1

Report date: 9/26/2024 12:45:39 PM
Printed by: ERodel

Ident: AI32-12 ICV
Analysis from: 9/23/2024 9:55:36 PM
File: _2024-09-23_21-55.chw Last save: 9/24/2024 10:00:16 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133707

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 12
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.78	25.65	313.580	0.950	fluoride
2	5.27	25.67	342.027	1.903	chloride
3	6.17	54.00	851.459	1.960	nitrite
4	7.65	3.24	59.884	0.997	bromide
5	8.67	19.42	380.280	0.964	nitrate
6	9.84	15.39	357.454	1.917	phosphate
7	11.53	26.60	639.751	4.728	sulfate
7	18.00	169.98	2944.436	13.420	

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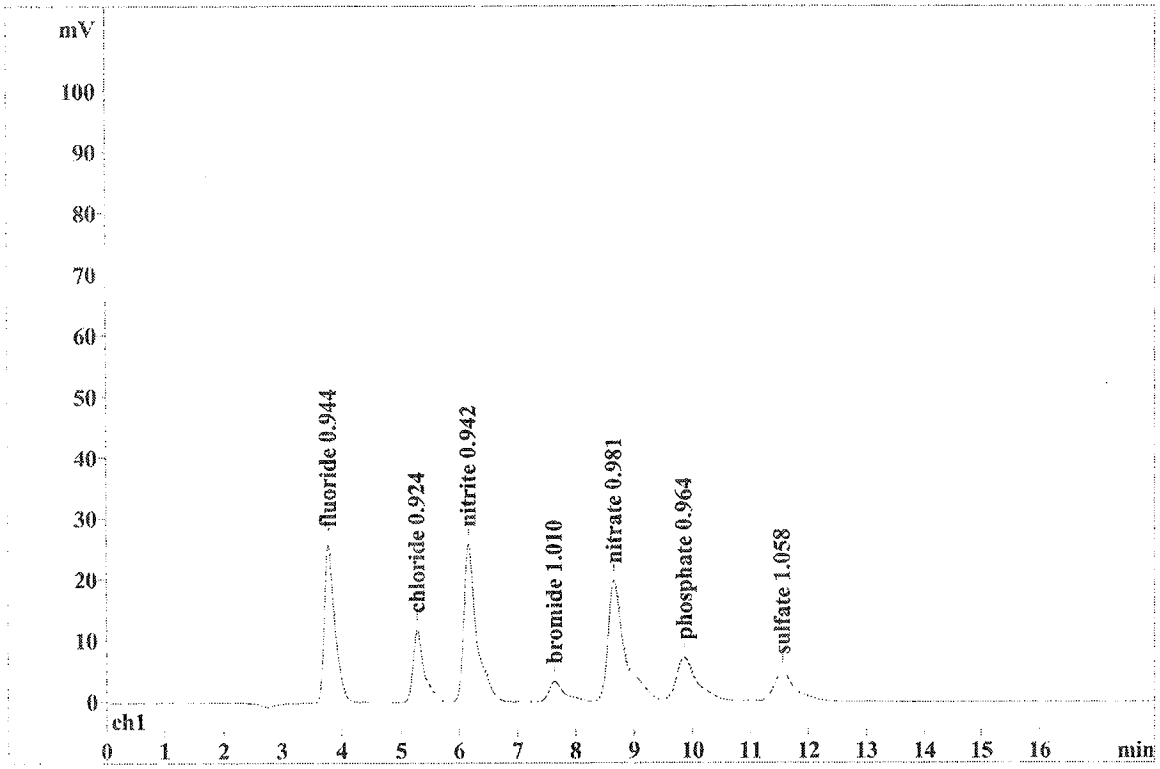
Report date: 9/26/2024 12:45:50 PM
Printed by: ERodel

Ident: AI32-13 ICV1
Analysis from: 9/23/2024 10:15:53 PM
File: _2024-09-23_22-15.chw Last save: 9/24/2024 10:00:16 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133708

SAMPLE: METHOD 300/9056/4110B
: 1.0 PPM
Vial number: 13
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

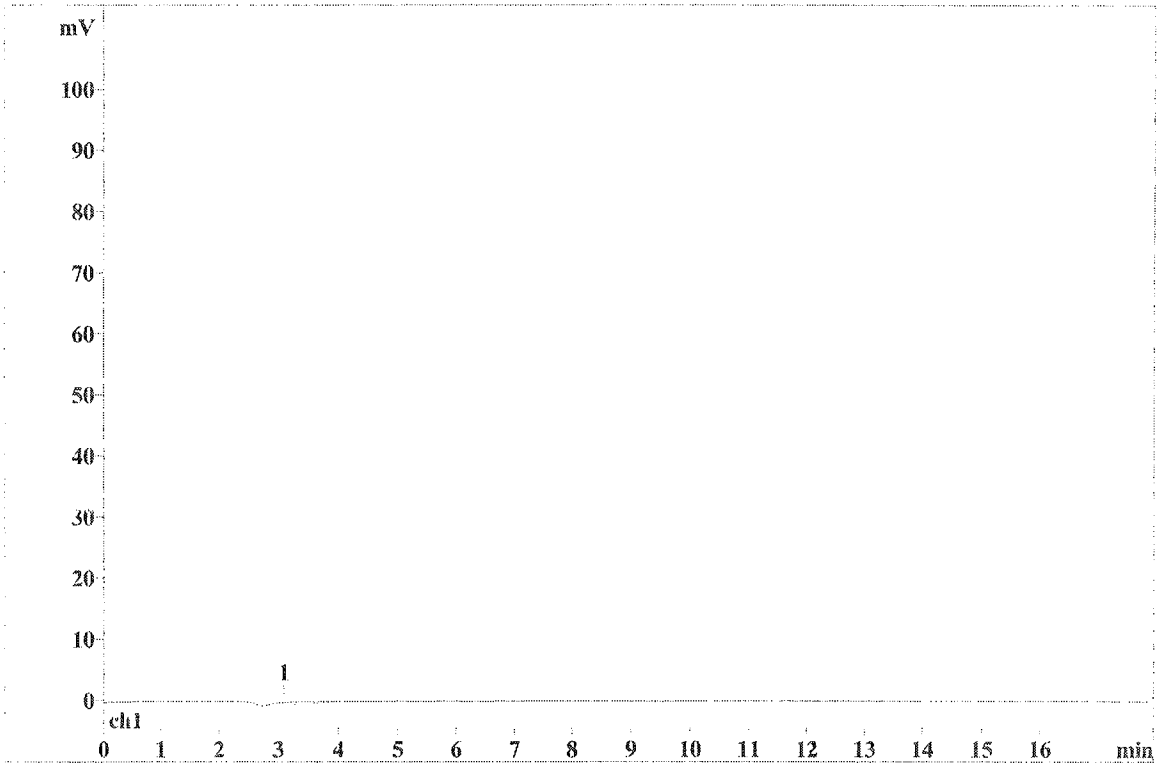
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	25.87	311.293	0.944	fluoride
2	5.28	11.77	159.516	0.924	chloride
3	6.17	25.83	398.134	0.942	nitrite
4	7.65	3.31	60.867	1.010	bromide
5	8.66	19.62	387.179	0.981	nitrate
6	9.86	6.95	163.371	0.964	phosphate
7	11.55	4.77	119.745	1.058	sulfate
7	18.00	98.12	1600.105	6.822	

This report has been created by IC Net
METROHM LTD

Report date: 9/26/2024 12:46:09 PM
Printed by: ERodel

Ident: AI32-14 ICB
Analysis from: 9/23/2024 10:36:11 PM
File: _2024-09-23_22-36.chw Last save: 9/24/2024 10:00:16 AM
Modified!
Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133709

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 14
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.06	0.37	18.095	0.000	

This report has been created by IC Net
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DAILY CALIBRATIONS

Continuing Calibration Summary Form

Client : CDM SMITH
Project : VA SALT LAKE CITY
SDG : 24I062
Method : E300.0
ICAL Ref. : 24AI32
InstrumentID: D7
Parameter : CHLORIDE

LFID	LSID	Recovery (%)	AnalysisDateTime
AJ02-01	CCV56	96.2	10/01/2411:47
AJ02-13	CCV58	97.6	10/01/2416:26
AJ02-25	CCV60	96.5	10/01/2420:37
AJ02-37	CCV62	94.6	10/02/2400:40
AJ02-42	CCV64	94.5	10/02/2402:21

CCV Acceptance Criteria: 90-110%

Continuing Calibration Summary Form

Client : CDM SMITH
Project : VA SALT LAKE CITY
SDG : 24I062
Method : E300.0
ICAL Ref. : 24AI32
InstrumentID: D7
Parameter : SULFATE

LFID	LSID	Recovery (%)	AnalysisDateTime
AJ02-01	CCV56	95.8	10/01/2411:47
AJ02-13	CCV58	95	10/01/2416:26
AJ02-25	CCV60	92.6	10/01/2420:37
AJ02-37	CCV62	91.1	10/02/2400:40
AJ02-42	CCV64	91.6	10/02/2402:21

CCV Acceptance Criteria: 90-110%

IC Result Check FormVersion : I23/AI32(2024)

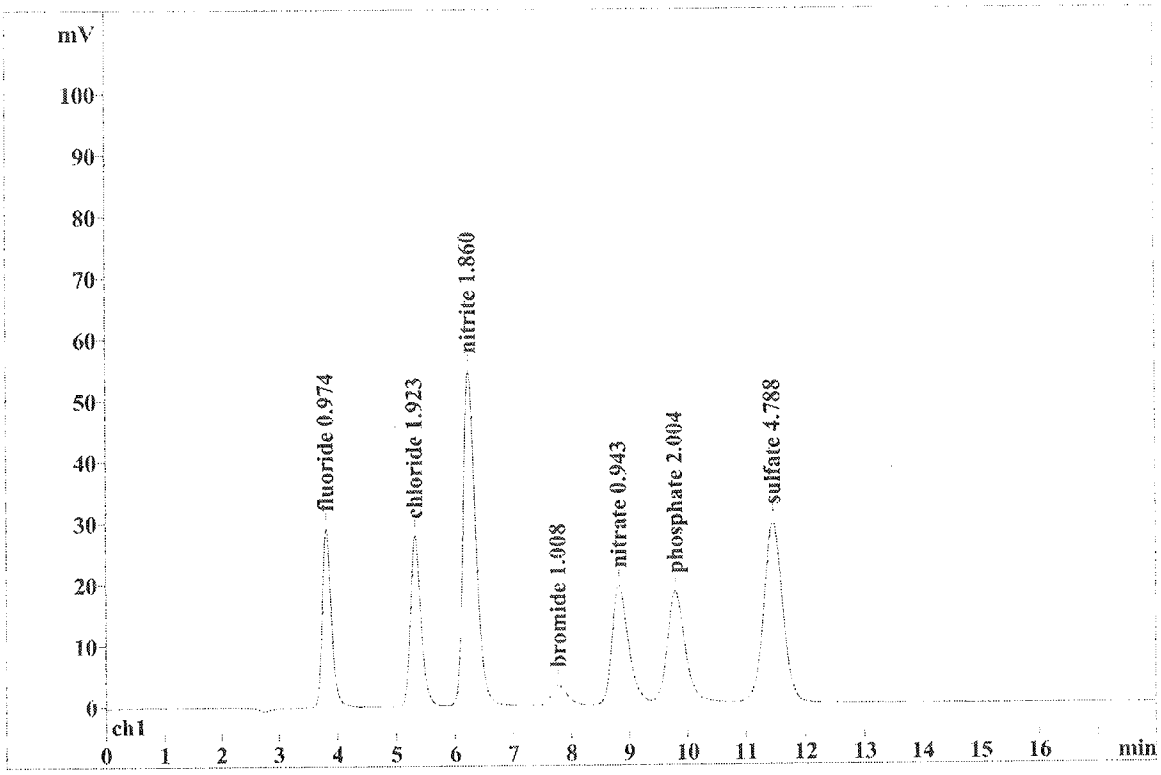
LFID	LSID	Selection	bromide	chloride	nitrate	iodide	fluoride	nitrite	phosphate	sulfate	RawNetID	DF
AJ02-01	CCV56	BCNOFIPS	100.8%	96.2%	94.3%	0%*	97.4%	93%	100.2%	95.8%	_2024-10-01_11-47	1
AJ02-02	CCB56	BCNOFIPS	0	0	0	0	0	0	0	0	_2024-10-01_12-07	1
AJ02-13	CCV58	BCNOFIPS	101.9%	97.6%	95.6%	0%*	97.2%	92.8%	96.7%	95%	_2024-10-01_16-26	1
AJ02-14	CCB58	BCNOFIPS	0	0	0	0	0	0	0	0	_2024-10-01_16-54	1
AJ02-25	CCV60	BCNOFIPS	99.6%	96.5%	90.3%	0%*	95.6%	90.9%	91.7%	92.6%	_2024-10-01_20-37	1
AJ02-26	CCB60	BCNOFIPS	0	0	0	0	0	0	0	0	_2024-10-01_20-57	1
AJ02-37	CCV62	BCNOFIPS	99.3%	94.6%	91%	0%*	96.1%	90%	92.9%	91.1%	_2024-10-02_00-40	1
AJ02-38	CCB62	BCNOFIPS	0	0	0	0	0	0	0	0	_2024-10-02_01-00	1
AJ02-42	CCV64	BCNOFIPS	98.9%	94.5%	91.6%	0%*	96%	90.7%	90%	91.6%	_2024-10-02_02-21	1
AJ02-43	CCB64	BCNOFIPS	0	0	0	0	0	0	0	0	_2024-10-02_02-42	1

Report date: 10/7/2024 1:22:57 PM
Printed by: ERodel

Ident: AJ02-01 CCV56
Analysis from: 10/1/2024 11:47:37 AM
File: _2024-10-01_11-47.chw Last save: 10/1/2024 12:05:37 PM

Method: ICD7-I23.mtw Last save: 9/28/2024 2:38:19 PM
Run operator: ERodel
Analysis number: 133968

SAMPLE: METHOD 300/9056/4110D
:
Vial number: 1
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.81	29.15	321.929	0.974	fluoride
2	5.33	27.84	345.769	1.923	chloride
3	6.24	54.71	806.736	1.860	nitrite
4	7.78	3.28	60.728	1.008	bromide
5	8.83	19.22	371.464	0.943	nitrate
6	9.80	17.96	374.994	2.004	phosphate
7	11.46	29.46	648.348	4.788	sulfate
7	18.00	181.61	2929.967	13.500	

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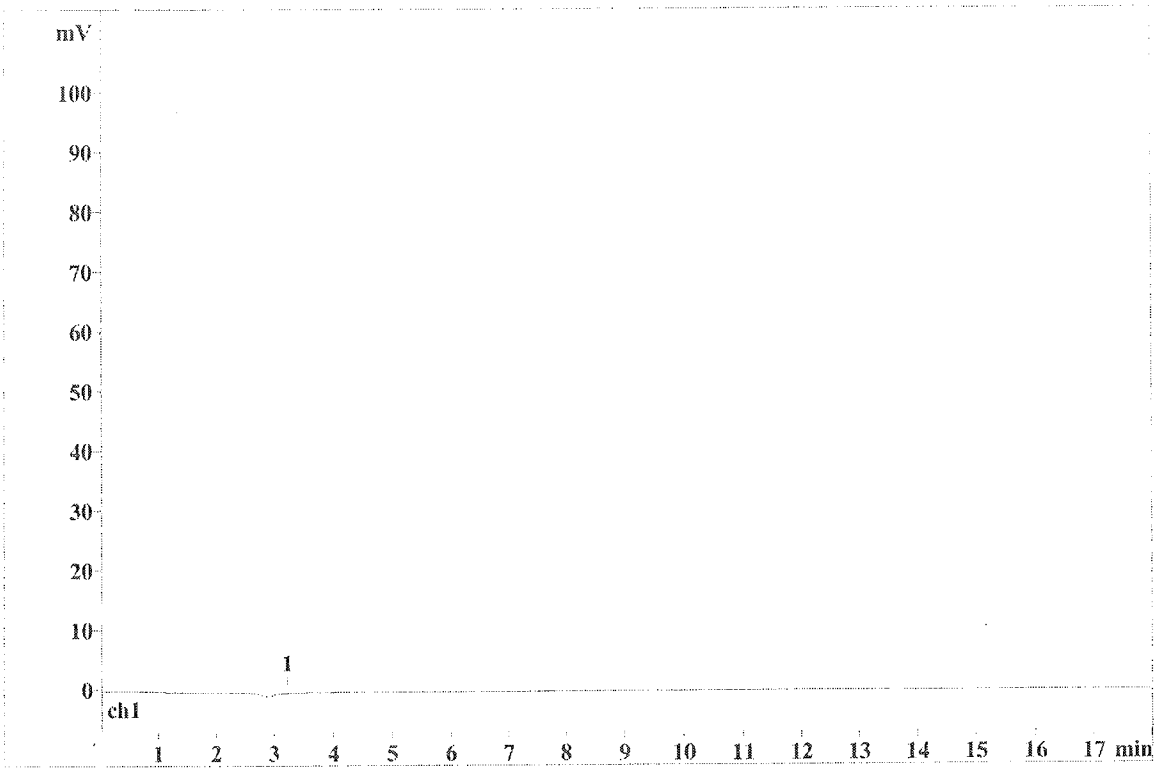
Report date: 10/7/2024 1:23:21 PM
Printed by: ERodel

Ident: AJ02-02 CCB56
Analysis from: 10/1/2024 12:07:52 PM
File: _2024-10-01_12-07.chw Last save: 10/1/2024 12:25:52 PM
Modified!
Method: ICD7-I23.mtw Last save: 9/28/2024 2:38:19 PM
Run operator: ERodel
Analysis number: 133969

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 2
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.22	0.36	18.674	0.000	

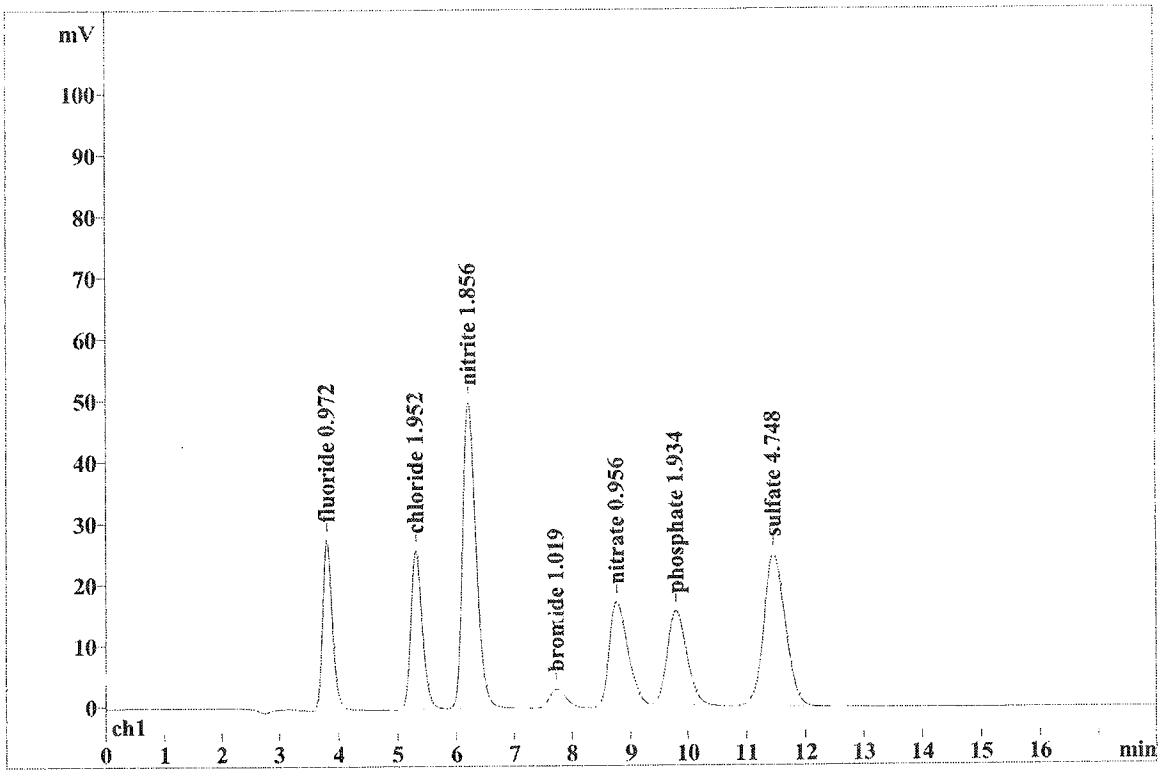
This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 1:44:15 PM
Printed by: ERodel

Ident: AJ02-13 CCV58
Analysis from: 10/1/2024 4:26:55 PM
File: _2024-10-01_16-26.chw Last save: 10/1/2024 4:44:55 PM

Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133981

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 13
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

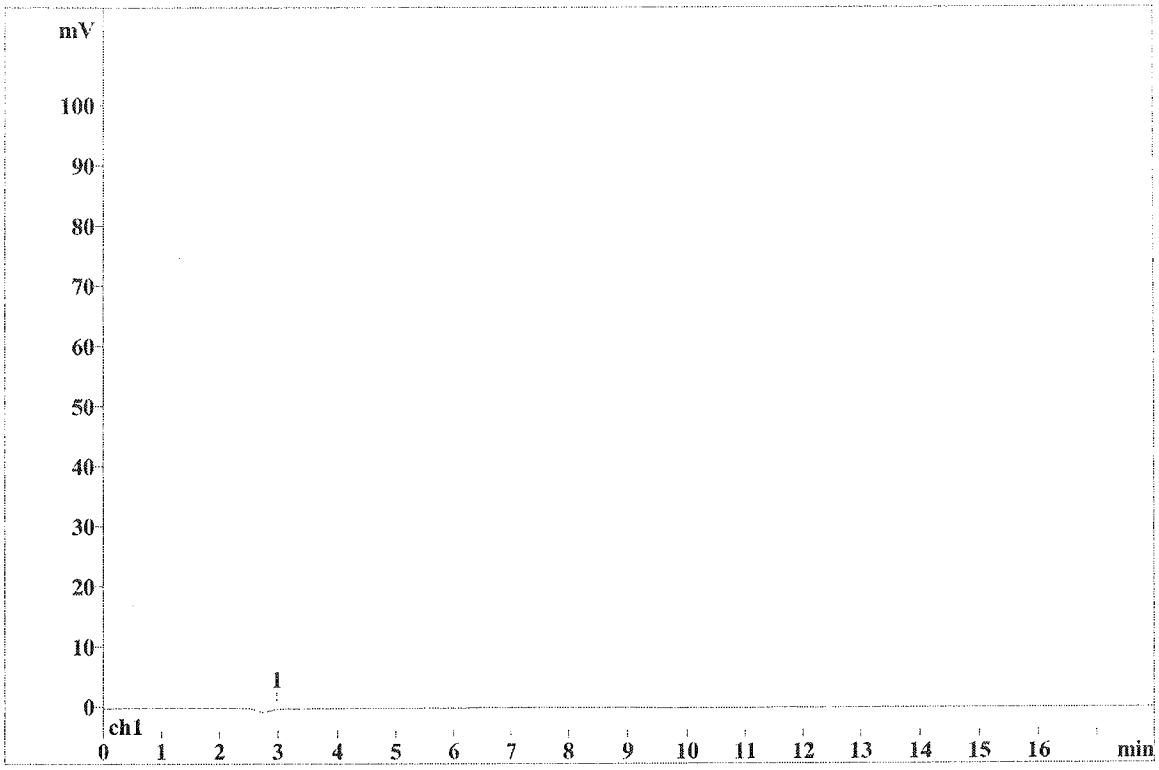
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.81	27.99	321.180	0.972	fluoride
2	5.32	25.96	351.027	1.952	chloride
3	6.22	49.94	804.904	1.856	nitrite
4	7.73	3.03	61.607	1.019	bromide
5	8.77	17.12	376.843	0.956	nitrate
6	9.80	15.40	360.826	1.934	phosphate
7	11.46	24.94	642.644	4.748	sulfate
7	18.00	164.39	2919.031	13.437	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 1:44:45 PM
Printed by: ERodel

Ident: AJ02-14 CCB58
Analysis from: 10/1/2024 4:54:54 PM
File: _2024-10-01_16-54.chw Last save: 10/1/2024 5:10:54 PM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analys s number: 133982

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 14
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	2.99	0.28	6.921	0.000	

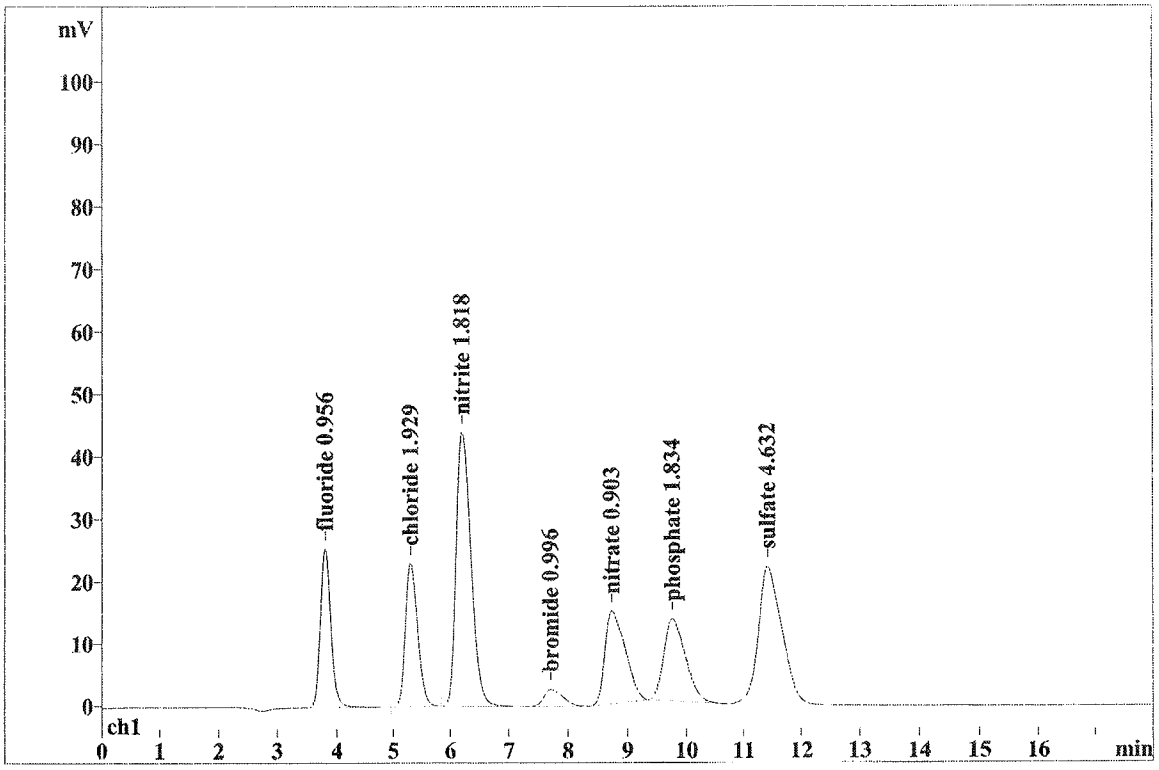
This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 1:54:30 PM
Printed by: ERodel

Ident: AJ02-25 CCV60
Analysis from: 10/1/2024 8:37:40 PM
File: _2024-10-01_20-37.chw Last save: 10/1/2024 8:55:40 PM

Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133993

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 25
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

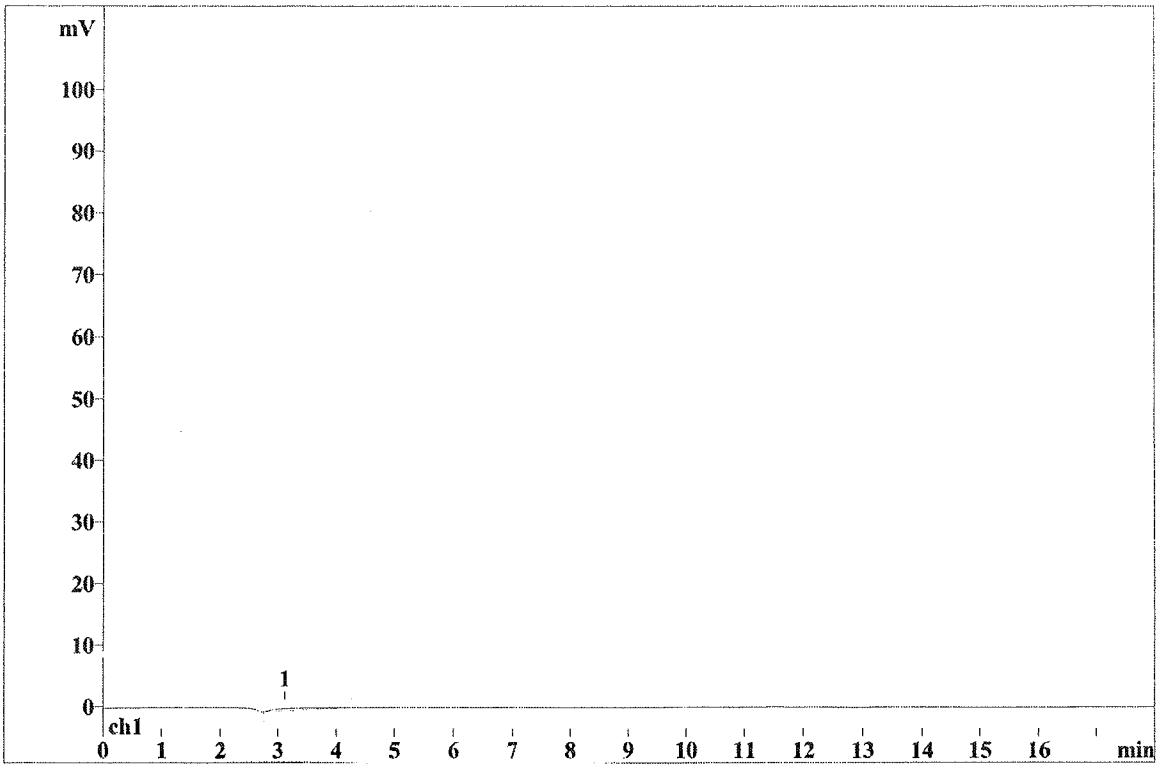
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.80	25.56	315.605	0.956	fluoride
2	5.31	23.08	346.874	1.929	chloride
3	6.21	43.90	788.200	1.818	nitrite
4	7.71	2.69	59.788	0.996	bromide
5	8.74	14.92	355.008	0.903	nitrate
6	9.76	13.25	340.573	1.834	phosphate
7	11.42	22.18	626.185	4.632	sulfate
7	18.00	145.58	2832.333	13.069	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 1:54:53 PM
Printed by: ERodel

Ident: AJ02-26 CCB60
Analysis from: 10/1/2024 8:57:55 PM
File: _2024-10-01_20-57.chw Last save: 10/1/2024 9:15:55 PM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133994

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 26
volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

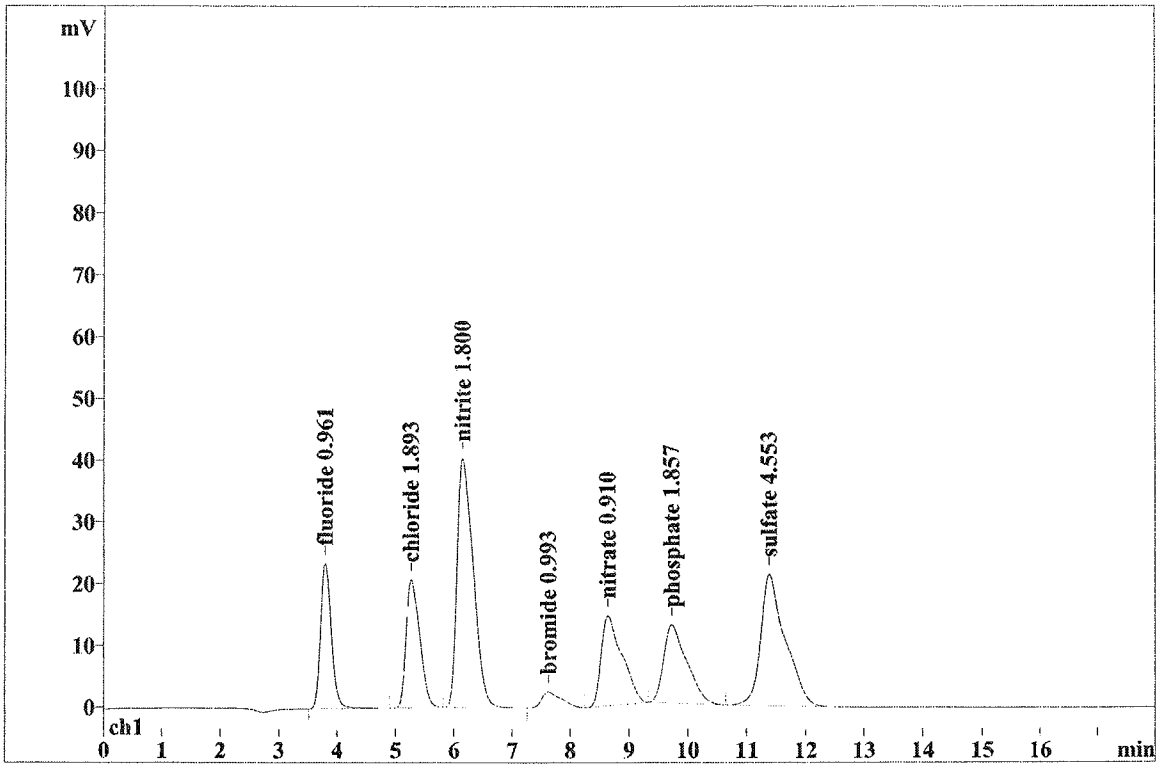
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.12	0.35	19.640	0.000	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 2:01:09 PM
Printed by: ERodel

Ident: AJ02-37 CCV62
Analysis from: 10/2/2024 12:40:38 AM
File: _2024-10-02_00-40.chw Last save: 10/2/2024 12:58:38 AM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 134005

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 37
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

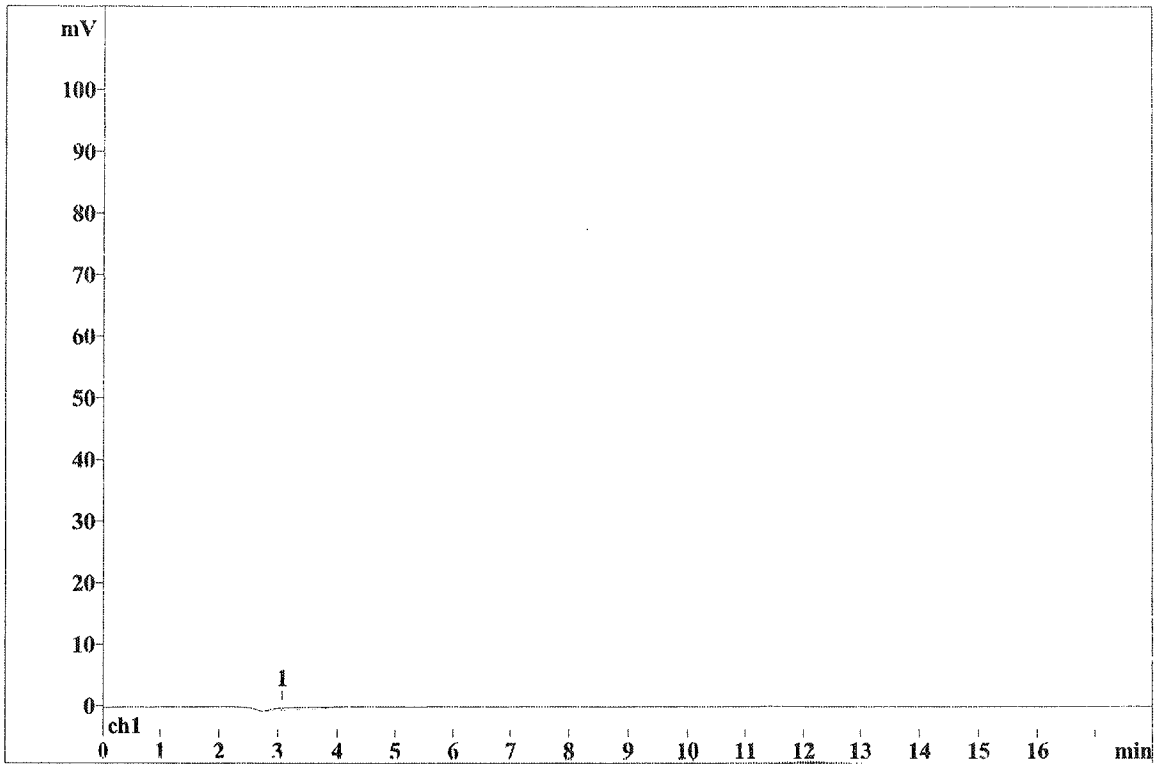
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	23.56	317.495	0.961	fluoride
2	5.27	20.77	340.019	1.893	chloride
3	6.16	40.31	780.271	1.800	nitrite
4	7.63	2.00	59.552	0.993	bromide
5	8.64	14.61	357.885	0.910	nitrate
6	9.73	12.71	345.238	1.857	phosphate
7	11.39	21.28	614.941	4.553	sulfate
7	18.00	135.85	2815.401	12.967	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 2:03:04 PM
Printed by: ERodel

Ident: AJ02-38 CCB62
Analysis from: 10/2/2024 1:00:53 AM
File: _2024-10-02_01-00.chw Last save: 10/2/2024 1:18:53 AM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 134006

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 38
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

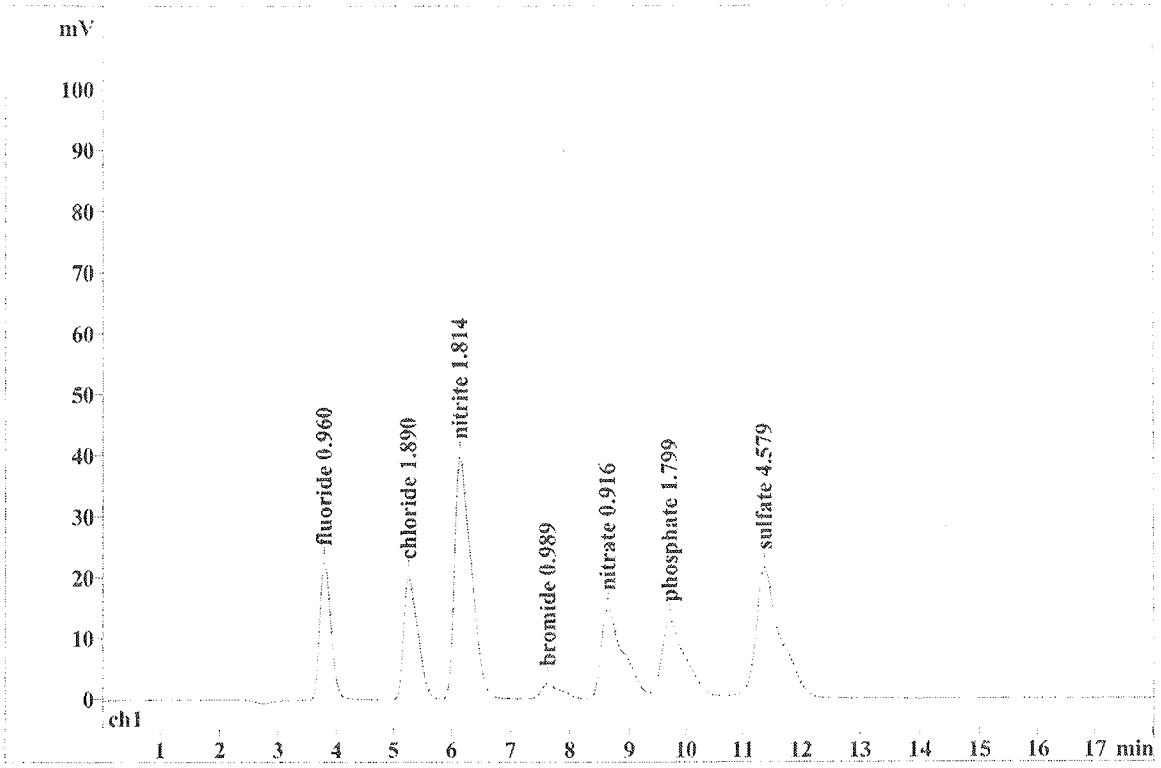
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.10	0.33	18.025	0.000	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 3:05:59 PM
Printed by: ERodel

Ident: AJ0C-42 CCV64
Analysis from: 10/2/2024 3:21:53 AM
File: _20C4-10-02_02-21.chw Last save: 10/2/2024 2:39:53 AM
Modified!
Method: ICD7-I23.mrw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 134010

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 42
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

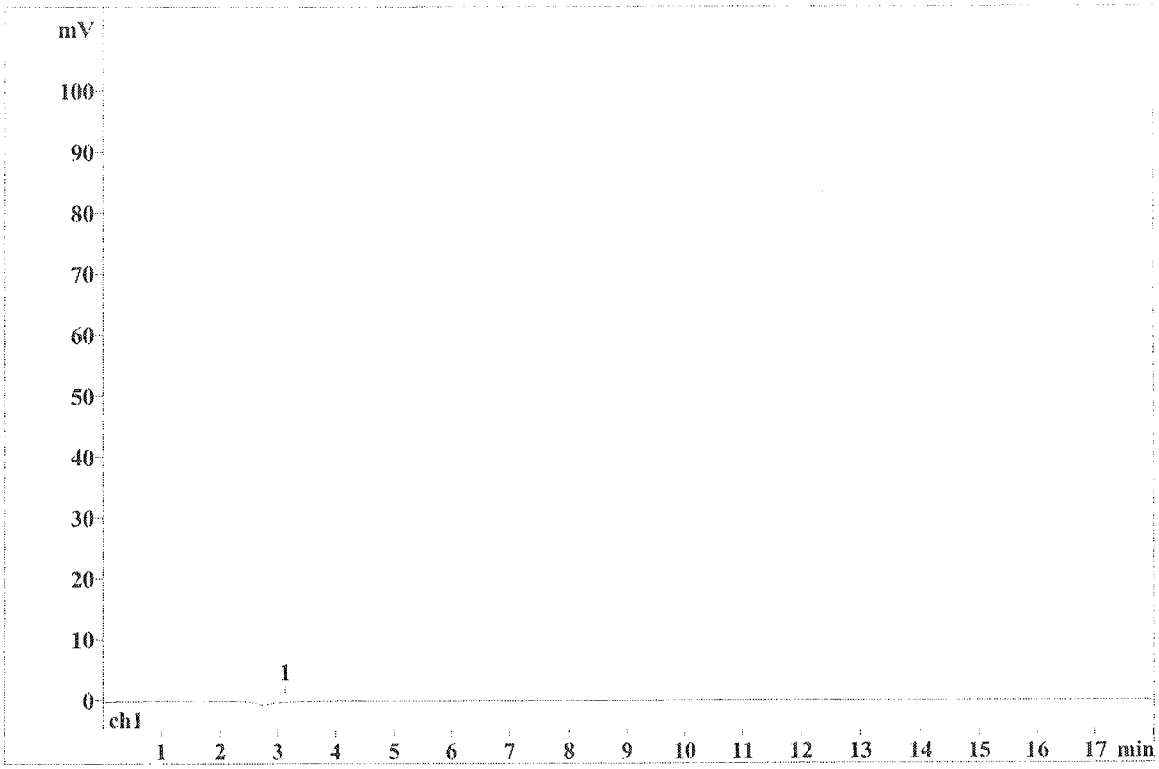
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	22.54	317.054	0.960	fluoride
2	5.26	20.24	339.578	1.890	chloride
3	6.15	39.77	786.275	1.814	nitrite
4	7.62	2.57	59.230	0.989	bromide
5	8.64	14.68	360.593	0.916	nitrate
6	9.72	12.29	333.450	1.799	phosphate
7	11.38	21.37	618.737	4.579	sulfate
7	18.00	133.47	2814.918	12.948	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 2:06:19 PM
Printed by: ERodel

Ident: AJ02-43 CCB64
Analysis from: 10/2/2024 2:42:08 AM
File: _2024-10-02_02-42.chw Last save: 10/2/2024 3:00:08 AM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 134011

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 43
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.13	0.34	21.386	0.000	

This report has been created by IC Net
METROHM LTD

ANALYTICAL LOG(S)

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
ION CHROMATOGRAPHY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence. For dillution preparation (sample aliquot/final volume), refer to sample info

Comments:

	Concentration (ppm)
S1	0.05
S2	0.1
S3	0.2
S4	0.5
S5	1.0
S6	2.0
S7	5.0
S8	10.0
S9	20.0

	Linearity (ppm)
F	2
Cl	5
NO_2	20
Br	20
NO_3	2
PO_4	20
SO_4	20

Book #: AD7-048
Instrument No.: D7
Pipette ID's: B42780066; D42763327; 439350100
Analytical Sequence: AI32
Method File: ICD7-I23.mtw
Analytical Batch: —

SOP #	Rev. #
☑ EMAX-300.0	14
☑ EMAX-4110B	7
☑ EMAX-9056	10
☐ EMAX-	
STANDARDS ID	
ICAL	SW3B-35-01-03
ICV	SW3B-35-02-01
ICV,	SW3B-35-02-02
LCS	—
MS	—

Filters Lot #:
0.45 µm:
0.22 µm:

Snap Seal Containers Lot #:
4 oz: 08024003
1.5 oz:

Column: Metrosep A Supp 5-150
Flow Rate: 0.70 ml/min

IC ELUENT PREPARATION — Expiration Date: 10/20/24

Std ID	Aliquot	Final Vol*
SP2-06-15-02	20 mL	2 L
SP2-06-15-03	20 mL	

IC REGENERANT PREPARATION — Expiration Date: 10/20/24

Std ID	Aliquot	Final Vol*
SP2-06-23-02	100 mL	1 L

* Reagent Water ID: SW1A-012-14-02

ELECTRONIC DATA ARCHIVAL	
Location	Date
☐ IC-METROHM	
☐ External Hard Drive	

Analyzed By: EIR
Date: 8/23/24

File Name	Method	Ident	Vial	Volume	Dilution	Amount	Internal Standard Amount	Calibration Level	Sample Info 1	Sample Info 2
2024-09-23_18-12.chw	ICD7-123.mtw	AI32-01 IB	1	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
2024-09-23_18-32.chw	ICD7-123.mtw	AI32-02 S0	2	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
2024-09-23_18-53.chw	ICD7-123.mtw	AI32-03 S1	3	1.0	1.0	1.0	100.0	1	METHOD 300/9056/4110B	0.05 PPM
2024-09-23_19-13.chw	ICD7-123.mtw	AI32-04 S2	4	1.0	1.0	1.0	100.0	2	METHOD 300/9056/4110B	0.1 PPM
2024-09-23_19-33.chw	ICD7-123.mtw	AI32-05 S3	5	1.0	1.0	1.0	100.0	3	METHOD 300/9056/4110B	0.2 PPM
2024-09-23_19-53.chw	ICD7-123.mtw	AI32-06 S4	6	1.0	1.0	1.0	100.0	4	METHOD 300/9056/4110B	0.5 PPM
2024-09-23_20-14.chw	ICD7-123.mtw	AI32-07 S5	7	1.0	1.0	1.0	100.0	5	METHOD 300/9056/4110B	1.0 PPM
2024-09-23_20-34.chw	ICD7-123.mtw	AI32-08 S6	8	1.0	1.0	1.0	100.0	6	METHOD 300/9056/4110B	2.0 PPM
2024-09-23_20-54.chw	ICD7-123.mtw	AI32-09 S7	9	1.0	1.0	1.0	100.0	7	METHOD 300/9056/4110B	5.0 PPM
2024-09-23_21-15.chw	ICD7-123.mtw	AI32-10 S8	10	1.0	1.0	1.0	100.0	8	METHOD 300/9056/4110B	10.0 PPM
2024-09-23_21-35.chw	ICD7-123.mtw	AI32-11 S9	11	1.0	1.0	1.0	100.0	9	METHOD 300/9056/4110B	20.0 PPM
2024-09-23_21-55.chw	ICD7-123.mtw	AI32-12 ICV	12	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
2024-09-23_22-15.chw	ICD7-123.mtw	AI32-13 ICV1	13	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	1.0 PPM
2024-09-23_22-36.chw	ICD7-123.mtw	AI32-14 ICB	14	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	

FINAL
ER 9/27/24

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence. For dillution preparation (sample aliquot/final volume), refer to sample info

Comments:

Book #	AD7-048
Instrument No.:	D7
Pipette ID's:	B42780066
	D42763327
	439350100
Analytical Sequence:	AJ02
Method File:	IC07-I23.mtw
Analytical Batch:	ICJ002W

SOP #	Rev. #
☑ EMAX-300.0	14
☐ EMAX-4110B	7
☐ EMAX-9056	10
☐ EMAX-	
STANDARDS ID	
ICAL	—
ICV	—
CCV	SW33-35-08-01
LCS	SW33-35-08-02
MS	SCP Refers to LCS Parent ID

Filters Lot #: Snap Seal Containers Lot #:

0.45 µm: 3200390424 oz:

0.22 µm: 32503615 1.5 oz: 095 24004

Column: Metrosep A Supp 5-150

Flow Rate: 0.70 ml/min

IC ELUENT PREPARATION Expiration Date: 10/27/27

Std ID	Aliquot	Final Vol*
SP2-06-15-02	20 mL	2 L
SP2-06-15-03	20 mL	

IC REGENERANT PREPARATION Expiration Date: 10/27/24

Std ID	Aliquot	Final Vol*
SP2-06-23-04	100 mL	1 L

* Reagent Water ID: SW1A-012424-02

ELECTRONIC DATA ARCHIVAL	
Location	Date
☐ IC-METROHM	
☐ External Hard Drive	

Analyzed By: EM

Date: 10/1/24

File Name	Method	Ident	Vial	Volume	Dilution	Amount	Internal Standard Amount	Calibration Level	Sample Info 1	Sample Info 2
_2024-10-01_11-47.chw	ICD7-123.mtw	AJ02-01 CCV56	1	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_12-07.chw	ICD7-123.mtw	AJ02-02 CCB56	2	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_12-28.chw	ICD7-123.mtw	AJ02-03 ICJ002WB	3	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_12-48.chw	ICD7-123.mtw	AJ02-04 ICJ002WL	4	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_13-08.chw	ICD7-123.mtw	AJ02-05 ICJ002WC	5	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_13-44.chw	ICD7-123.mtw	AJ02-06 J002-01	6	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_14-05.chw	ICD7-123.mtw	AJ02-07 J002-02	7	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_14-25.chw	ICD7-123.mtw	AJ02-08 J002-03	8	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_14-45.chw	ICD7-123.mtw	AJ02-09 J003-01	9	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_15-05.chw	ICD7-123.mtw	AJ02-10 J003-02I DF=2	10	1.0	1.0	2.0	100.0	0	METHOD 300/9056/4110B	1.0ml/20ml HIGH COND
_2024-10-01_15-26.chw	ICD7-123.mtw	AJ02-11 J004-01I DF=2	11	1.0	2.0	1.0	100.0	0	METHOD 300/9056/4110B	10ml/20ml HIGH COND
_2024-10-01_15-46.chw	ICD7-123.mtw	AJ02-12 J004-03	12	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_16-26.chw	ICD7-123.mtw	AJ02-13 CCV58	13	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_16-54.chw	ICD7-123.mtw	AJ02-14 CCB58	14	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_17-15.chw	ICD7-123.mtw	AJ02-15 J004-04I DF=2	15	1.0	2.0	1.0	100.0	0	METHOD 300/9056/4110B	0ml/20ml HIGH COND
_2024-10-01_17-35.chw	ICD7-123.mtw	AJ02-16 J001-13	16	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_17-55.chw	ICD7-123.mtw	AJ02-17 J003-01I DF=10	17	1.0	10.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/20ml
_2024-10-01_18-15.chw	ICD7-123.mtw	AJ02-18 J003-02J DF=10	18	1.0	10.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/20ml
_2024-10-01_18-36.chw	ICD7-123.mtw	AJ02-19 J004-01J DF=10	19	1.0	10.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/20ml
_2024-10-01_18-56.chw	ICD7-123.mtw	AJ02-20 J004-03I DF=20	20	1.0	20.0	1.0	100.0	0	METHOD 300/9056/4110B	4ml/20ml
_2024-10-01_19-16.chw	ICD7-123.mtw	AJ02-21 J004-04J DF=10	21	1.0	10.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/20ml
_2024-10-01_19-36.chw	ICD7-123.mtw	AJ02-22 I062-01I DF=20	22	1.0	20.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/40ml
_2024-10-01_19-57.chw	ICD7-123.mtw	AJ02-23 I062-01ID DF=20	23	1.0	20.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/40ml
_2024-10-01_20-17.chw	ICD7-123.mtw	AJ02-24 I062-01IM DF=20	24	1.0	20.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/40ml
_2024-10-01_20-37.chw	ICD7-123.mtw	AJ02-25 CCV60	25	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_20-57.chw	ICD7-123.mtw	AJ02-26 CCB60	26	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_21-18.chw	ICD7-123.mtw	AJ02-27 I062-01IS DF=20	27	1.0	20.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/40ml
_2024-10-01_21-38.chw	ICD7-123.mtw	AJ02-28 I062-01J DF=200	28	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-01_21-58.chw	ICD7-123.mtw	AJ02-29 I062-01JD DF=200	29	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-01_22-18.chw	ICD7-123.mtw	AJ02-30 I062-01JM DF=200	30	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-01_22-39.chw	ICD7-123.mtw	AJ02-31 I062-01JS DF=200	31	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-01_22-59.chw	ICD7-123.mtw	AJ02-32 I062-02I DF=5	32	1.0	5.0	1.0	100.0	0	METHOD 300/9056/4110B	4ml/20ml
_2024-10-01_23-19.chw	ICD7-123.mtw	AJ02-33 I062-02J DF=100	33	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-01_23-39.chw	ICD7-123.mtw	AJ02-34 I062-03I DF=5	34	1.0	5.0	1.0	100.0	0	METHOD 300/9056/4110B	4ml/20ml
_2024-10-02_00-00.chw	ICD7-123.mtw	AJ02-35 I062-03J DF=100	35	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-02_00-20.chw	ICD7-123.mtw	AJ02-36 I062-04I DF=5	36	1.0	5.0	1.0	100.0	0	METHOD 300/9056/4110B	4ml/20ml
_2024-10-02_00-40.chw	ICD7-123.mtw	AJ02-37 CCV62	37	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-02_01-00.chw	ICD7-123.mtw	AJ02-38 CCB62	38	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-02_01-21.chw	ICD7-123.mtw	AJ02-39 I062-04J DF=100	39	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-02_01-41.chw	ICD7-123.mtw	AJ02-40 I077-07I DF=5	40	1.0	5.0	1.0	100.0	0	METHOD 300/9056/4110B	4ml/20ml
_2024-10-02_02-01.chw	ICD7-123.mtw	AJ02-41 I077-07J DF=100	41	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-02_02-21.chw	ICD7-123.mtw	AJ02-42 CCV64	42	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-02_02-42.chw	ICD7-123.mtw	AJ02-43 CCB64	43	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	

FINAL
En 10/18/24

RETENTION TIME WINDOW

TWENTY FOUR HOUR RETENTION TIME WINDOW
METHOD 300.0

Lab name: **EMAX** **Method:** **EMAX-300.0**

Instrument ID: D7 (800 IC) IC column: METROSEP A SUPP 5
Column size: 150X4.0mm

Compound	ICAL Mean RT	from	to	RTW
FLUORIDE	3.79	3.70	3.88	0.090
CHLORIDE	5.28	5.15	5.42	0.135
NITRITE	6.17	6.02	6.32	0.151
BROMIDE	7.67	7.43	7.91	0.238
NITRATE	8.69	8.41	8.96	0.272
PHOSPHATE	9.85	9.46	10.25	0.393
SULFATE	11.54	11.00	12.07	0.537

ICD7-I23.MTW

RETENTION TIME WINDOW
METHOD 300.0

Lab name:	**EMAX**	**Method:**	**EMAX-300.0**
Instrument ID:	D7 (800IC)	IC column:	METROSEP A SUPP 5
		Column size:	150X4.0mm

Compound		Retention time Window
FLUORIDE	**(+/-)**	**0.151**
CHLORIDE	**(+/-)**	**0.195**
NITRITE	**(+/-)**	**0.242**
BROMIDE	**(+/-)**	**0.345**
NITRATE	**(+/-)**	**0.420**
PHOSPHATE	**(+/-)**	**0.601**
SULFATE	**(+/-)**	**0.840**
IODIDE	**(+/-)**	**0.920**

8/13/14

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I062

METHOD SM2320B
TOTAL ALKALINITY

A total of four(4) water samples were received on 09/13/24 to be analyzed for Total Alkalinity in accordance with Method SM2320B and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Alkalinity was not detected in ALI003WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. ALI003WL/ALI003WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
Sample duplicate was analyzed and RPD was within expected value.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

METHOD SM2320B
TOTAL ALKALINITY

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24I062

Matrix : WATER
InstrumentID : E5

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	PREP. FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	ALI003WB	ND	1	NA	5	5	09/19/2412:38	NA	24E5I0303	24E5I03	ALI003W	NA	NA
LCS1W	ALI003WL	71.6	1	NA	5	5	09/19/2412:45	NA	24E5I0304	24E5I03	ALI003W	NA	NA
LCD1W	ALI003WC	72.4	1	NA	5	5	09/19/2412:52	NA	24E5I0305	24E5I03	ALI003W	NA	NA
MW03RA-GW091124	I062-01	280	1	NA	5	5	09/19/2415:25	NA	24E5I0320	24E5I03	ALI003W	09/11/2410:45	09/13/24
MW03RA-GW091124DUP	I062-01D	285	1	NA	5	5	09/19/2415:34	NA	24E5I0321	24E5I03	ALI003W	09/11/2410:45	09/13/24
IW01-GW091124	I062-02	229	1	NA	5	5	09/19/2415:41	NA	24E5I0322	24E5I03	ALI003W	09/11/2411:11	09/13/24
MW03RB-GW091124	I062-03	230	1	NA	5	5	09/19/2415:48	NA	24E5I0323	24E5I03	ALI003W	09/11/2411:00	09/13/24
EW01-GW091124	I062-04	237	1	NA	5	5	09/19/2415:55	NA	24E5I0324	24E5I03	ALI003W	09/11/2415:21	09/13/24

Note that Alkalinity concentration is reported as:
Alkalinity to pH 4.5 for results greater than or equal to 20 mg/L
Alkalinity to pH 4.2 for results less than 20 mg/L

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : METHOD SM2320B

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID :	MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID :	ALI003WB	ALI003WL	ALI003WC
LAB FILE ID :	24E5I0303	24E5I0304	24E5I0305
DATE EXTRACTED :	NA	NA	NA
DATE ANALYZED :	09/19/2412:38	09/19/2412:45	09/19/2412:52
PREP BATCH :	ALI003W	ALI003W	ALI003W
CALIBRATION REF:	24E5I03	24E5I03	24E5I03

ACCESSION:

PARAMETER	MB RESULT (mg/L)	SPIKE AMT (mg/L)	BS RESULT (mg/L)	BS REC (%)	SPIKE AMT (mg/L)	BSD RESULT (mg/L)	BSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
ALKALINITY	ND	73.2	71.6	98	73.2	72.4	99	1	80-120	20

EMAX QUALITY CONTROL DATA
SAMPLE DUPLICATE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : METHOD SM2320B

MATRIX	: WATER	
DILUTION FACTOR	: 1	1
SAMPLE ID	: MW03RA-GW091124	MW03RA-GW091124DUP
LAB SAMPLE ID	: I062-01	I062-01D
LAB FILE ID	: 24E5I0320	24E5I0321
DATE PREPARED	: NA	NA
DATE ANALYZED	: 09/19/2415:25	09/19/2415:34
PREP BATCH	: ALI003W	ALI003W
CALIBRATION REF	: 24E5I03	24E5I03

ACCESSION:

PARAMETER	PARENT RESULT (mg/L)	DUP RESULT (mg/L)	RPD (%)	MAX RPD (%)
ALKALINITY	280	285	2	20

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
ALKALINITY

Note: For samples and relevent QCs/Standards analyzed, refer to attached analytical sequence.

☑ Titration end point: pH 4.5 ± 0.04

☑ Low alkalinity: pH 4.2 ± 0.04

Micropipette ID: N/A

MS/MSD amount of spike: N/A

Reagent Water: RWI-24-003

Comments:

Book#: AAL-052

Instrument No.: ☐ 53 ☑ E5

Analytical Batch: 24E5I03

Analytical Sequence: ALI003W

SOP #	Rev. #
☑ EMAX-2320B	8
☐ EMAX-	

STANDARDS ID		Conc. (mg/L)
0.02N HCL	SWRI-04-21-04	0.0205N
LCS	SWIA-03-29-03	73.2
MS/MSD	N/A	N/A
ICV	N/A	N/A

pH Buffer	ID
pH 4	SWIA-03-26-01
pH 7	SWIA-03-26-09
pH 10	SWIA-03-26-07
pH 8.0 (Check)	SWIA-03-25-10
pH Strip	HC446507

AW 9/19/24

Analyzed By: AW

Date: 09/19/24

PC-TitratION PLUS

pH and Alkalinity In-Run Report

Run Number 1728 **Analytical Batch#** 24E5I03

Seq. #	SampleID	Data File Name	RunDate	RunTime	pH	Volume @pH 8.3	Volume @pH 4.5	Volume @pH 4.2	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	Review Notes
1	ICV PH 8	24E5I03	09/19/24	12:26 PM	7.99	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	
2	INSTR. CHK.	24E5I03	09/19/24	12:33 PM	7.25	.00	.08	.09	.00	2.32	2.32	.00	.00	
3	ALI003WB	24E5I03	09/19/24	12:38 PM	5.81	.00	.03	.05	.00	.60	.60	.00	.00	
4	ALI003WL	24E5I03	09/19/24	12:45 PM	8.83	.92	1.75	-1.00	37.71	71.60	.00	67.78	3.83	
5	ALI003WC	24E5I03	09/19/24	12:52 PM	8.86	.94	1.77	-1.00	38.71	72.42	.00	67.43	4.99	
6	I052-01	24E5I03	09/19/24	1:02 PM	7.15	.00	17.81	-1.00	.00	730.11	730.11	.00	.00	
7	I052-04	24E5I03	09/19/24	1:08 PM	5.83	.00	.04	.07	.00	.67	.67	.00	.00	
8	I059-01	24E5I03	09/19/24	1:23 PM	6.93	.00	26.95	-1.00	.00	1,105.06	1,105.06	.00	.00	
9	I059-02	24E5I03	09/19/24	1:33 PM	6.80	.00	10.29	-1.00	.00	422.01	422.01	.00	.00	
10	I059-03	24E5I03	09/19/24	1:44 PM	6.92	.00	16.93	-1.00	.00	694.30	694.30	.00	.00	
11	I059-04	24E5I03	09/19/24	1:53 PM	7.15	.00	10.33	-1.00	.00	423.44	423.44	.00	.00	
12	I059-05	24E5I03	09/19/24	2:01 PM	7.24	.00	9.85	-1.00	.00	403.99	403.99	.00	.00	
13	I059-06	24E5I03	09/19/24	2:12 PM	7.07	.00	13.27	-1.00	.00	544.03	544.03	.00	.00	
14	I059-07	24E5I03	09/19/24	2:20 PM	7.27	.00	11.29	-1.00	.00	462.78	462.78	.00	.00	
15	I059-08	24E5I03	09/19/24	2:33 PM	6.80	.00	22.28	-1.00	.00	913.42	913.42	.00	.00	
16	I059-09	24E5I03	09/19/24	2:43 PM	7.19	.00	11.91	-1.00	.00	488.22	488.22	.00	.00	
17	I059-10	24E5I03	09/19/24	2:52 PM	7.03	.00	13.21	-1.00	.00	541.50	541.50	.00	.00	
18	I059-12	24E5I03	09/19/24	3:05 PM	6.98	.00	23.35	-1.00	.00	957.21	957.21	.00	.00	

Analyzed by: AW Reviewed by: AW Date: 09/19/24

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Run Number 1728 Analytical Batch# 24E5I03

Seq. #	SampleID	Data File Name	RunDate	RunTime	pH	Volume @pH 8.3	Volume @pH 4.5	Volume @pH 4.2	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	Review Notes
19	I059-13	24E5I03	09/19/24	3:18 PM	6.97	.00	20.03	-1.00	.00	821.25	821.25	.00	.00	
20	I062-01	24E5I03	09/19/24	3:25 PM	7.44	.00	6.84	-1.00	.00	280.31	280.31	.00	.00	
21	I062-01D	24E5I03	09/19/24	3:34 PM	7.41	.00	6.95	-1.00	.00	284.87	284.87	.00	.00	
22	I062-02	24E5I03	09/19/24	3:41 PM	7.45	.00	5.59	-1.00	.00	229.31	229.31	.00	.00	
23	I062-03	24E5I03	09/19/24	3:48 PM	7.36	.00	5.61	-1.00	.00	229.85	229.85	.00	.00	
24	I062-04	24E5I03	09/19/24	3:55 PM	7.43	.00	5.77	-1.00	.00	236.71	236.71	.00	.00	
25	RINSE	24E5I03	09/19/24	4:02 PM	6.16	.00	.05	.08	.00	.80	.80	.00	.00	

Analyzed by: AW Reviewed by: AW Date: 09/19/24

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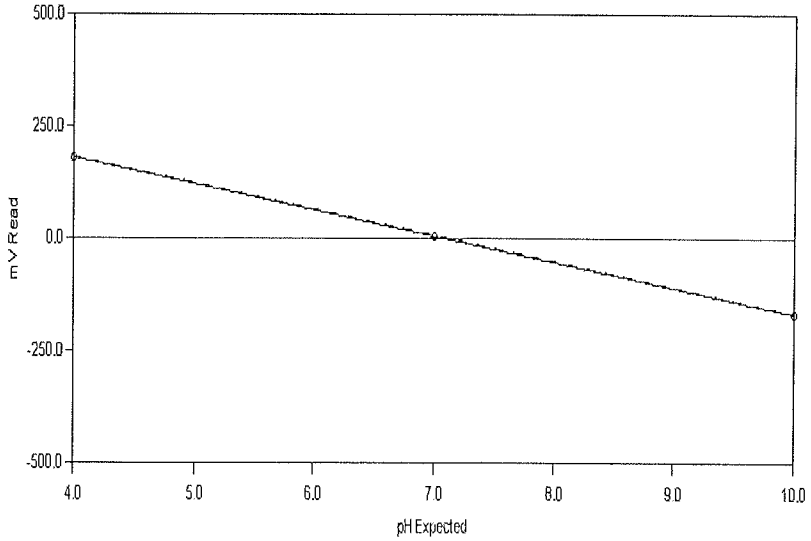
PC-TitratION PLUS
Calibration Report

Calibration Record # 1350



Calibration Settings

Calibration ID	PH CAL 4-7-10	Date	09/19/2024
Channel	1	Time	12:23 PM
Probe Type	pH	Temperature	296.29 K 23.14 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

Calibration Results

Slope	-57.553	CorrCoeff	1.0000
Intercept	5.817	Equation: Y = (-57.553) X + (5.817)	

Calibration Validity True Operator

	Result	Minimum	Maximum
Slope	-57.553	-65.00	-53.00
Intercept	5.817	-40.00	40.00
Correlation Coefficient	1.0000	0.99	1.00

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

Calibration Data	Standard	Reading
	4.00	179.19
	7.00	4.39
	10.00	-166.13

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PC-Titrate For Windows

Running List Report

Order Number - 24E5I03

	Schedule	Sample Id	Vial	Weight	Volume
1	PH CAL	CAL	1	.00	25.00
2	PH ONLY	ICV PH 8	4	.00	25.00
3	PH-ALK	INSTR. CHK.	5	.00	25.00
4	PH-ALK	ALI003WB	6	.00	25.00
5	PH-ALK	ALI003WL	7	.00	25.00
6	PH-ALK	ALI003WC	8	.00	25.00
7	PH-ALK	I052-01	9	.00	25.00
8	PH-ALK	I052-04	10	.00	25.00
9	PH-ALK	I059-01	11	.00	25.00
10	PH-ALK	I059-02	12	.00	25.00
11	PH-ALK	I059-03	13	.00	25.00
12	PH-ALK	I059-04	14	.00	25.00
13	PH-ALK	I059-05	15	.00	25.00
14	PH-ALK	I059-06	16	.00	25.00
15	PH-ALK	I059-07	17	.00	25.00
16	PH-ALK	I059-08	18	.00	25.00
17	PH-ALK	I059-09	19	.00	25.00
18	PH-ALK	I059-10	20	.00	25.00
19	PH-ALK	I059-12	21	.00	25.00
20	PH-ALK	I059-13	22	.00	25.00
21	PH-ALK	I062-01	23	.00	25.00
22	PH-ALK	I062-01D	24	.00	25.00
23	PH-ALK	I062-02	25	.00	25.00
24	PH-ALK	I062-03	26	.00	25.00
25	PH-ALK	I062-04	27	.00	25.00
26	PH-ALK	RINSE	28	.00	25.00

PC-TitratION PLUS by Man-Tech Associates, Inc.

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CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I062

METHOD SM4500-NO3E
NITRATE/NITRITE-N

A total of four(4) water samples were received on 09/13/24 to be analyzed for Nitrate/Nitrite-N in accordance with Method SM4500-NO3E and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Nitrogen, Nitrate-Nitrite was not detected in NAI005WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. NAI005WL/NAI005WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) MS was analyzed. Percent recovery for Nitrogen, Nitrate-Nitrite was within MS QC limits in I062-01M. Sample duplicate was analyzed and RPD was within expected value. Refer to Matrix QC summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

METHOD SM4500-NO3E
NITRATE/NITRITE-N

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24I062

Matrix : WATER
InstrumentID : J5

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DFxPREP FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	NAI005WB	ND	1	NA	0.05	0.01	09/23/2416:39	NA	24NAI00510	24NAI005	NAI005W	NA	NA
LCS1W	NAI005WL	0.525	1	NA	0.05	0.01	09/23/2416:39	NA	24NAI00511	24NAI005	NAI005W	NA	NA
LCD1W	NAI005WC	0.533	1	NA	0.05	0.01	09/23/2416:40	NA	24NAI00512	24NAI005	NAI005W	NA	NA
MW03RA-GW091124	I062-01	1.90	5	NA	0.25	0.05	09/23/2416:40	NA	24NAI00514	24NAI005	NAI005W	09/11/2410:45	09/13/24
MW03RA-GW091124DUP	I062-01D	1.89	5	NA	0.25	0.05	09/23/2416:40	NA	24NAI00515	24NAI005	NAI005W	09/11/2410:45	09/13/24
MW03RA-GW091124MS	I062-01M	4.15	5	NA	0.25	0.05	09/23/2416:40	NA	24NAI00516	24NAI005	NAI005W	09/11/2410:45	09/13/24
IW01-GW091124	I062-02	2.22	5	NA	0.25	0.05	09/23/2416:41	NA	24NAI00517	24NAI005	NAI005W	09/11/2411:11	09/13/24
MW03RB-GW091124	I062-03	2.19	5	NA	0.25	0.05	09/23/2416:41	NA	24NAI00518	24NAI005	NAI005W	09/11/2411:00	09/13/24
EW01-GW091124	I062-04	2.14	5	NA	0.25	0.05	09/23/2416:42	NA	24NAI00519	24NAI005	NAI005W	09/11/2415:21	09/13/24

EMAX QUALITY CONTROL DATA
SAMPLE DUPLICATE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : SM4500-NO3E

MATRIX	: WATER	
DILUTION FACTOR	: 5	5
SAMPLE ID	: MW03RA-GW091124	MW03RA-GW091124DUP
LAB SAMPLE ID	: I062-01	I062-01D
LAB FILE ID	: 24NAI00514	24NAI00515
DATE PREPARED	: NA	NA
DATE ANALYZED	: 09/23/2416:40	09/23/2416:40
PREP BATCH	: NAI005W	NAI005W
CALIBRATION REF	: 24NAI005	24NAI005

ACCESSION:

PARAMETER	PSResult (mg/L)	DUPResult (mg/L)	RPD (%)	QCLimit (%)
Nitrogen, Nitrate-Nitrite	1.90	1.89	1	20

PS: Parent Sample DUP: Sample Duplicate

EMAX QUALITY CONTROL DATA
MATRIX SPIKE SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : SM4500-NO3E

MATRIX	: WATER	% Moisture: NA
DILUTION FACTOR	: 5	5
SAMPLE ID	: MW03RA-GW091124	MW03RA-GW091124MS
LAB SAMPLE ID	: I062-01	I062-01M
LAB FILE ID	: 24NAI00514	24NAI00516
DATE PREPARED	: NA	NA
DATE ANALYZED	: 09/23/2416:40	09/23/2416:40
PREP BATCH	: NAI005W	NAI005W
CALIBRATION REF	: 24NAI005	24NAI005

ACCESSION:

PARAMETER	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	QCLimit (%)
Nitrogen, Nitrate-Nitrite	1.90	2.50	4.15	90.0	75-125

PS: Parent Sample MS: Matrix Spike

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : SM4500-NO3E

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: NAI005WB	NAI005WL	NAI005WC
LAB FILE ID	: 24NAI00510	24NAI00511	24NAI00512
DATE PREPARED	: NA	NA	NA
DATE ANALYZED	: 09/23/2416:39	09/23/2416:39	09/23/2416:40
PREP BATCH	: NAI005W	NAI005W	NAI005W
CALIBRATION REF	: 24NAI005	24NAI005	24NAI005

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Nitrogen, Nitrate-Nitrite	ND	0.500	0.525	105	0.500	0.533	107	2	80-120	20

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I062

METHOD SW9060
TOC

A total of four(4) water samples were received on 09/13/24 to be analyzed for TOC in accordance with Method SW9060 and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Total Organic Carbon was not detected in TCI004WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. TCI004WL/TCI004WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Total Organic Carbon was within MS QC limits in I062-01M/I062-01S. Sample duplicate was analyzed and RPD was within expected value. Refer to Matrix QC summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

METHOD SW9060
TOC

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24I062

Matrix : WATER
InstrumentID : 62

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DIL'N FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATE
MBLK1W	TCI004WB	ND	1	NA	1.00	0.250	09/23/2418:57	NA	TCI003-06	TCI003-02	TCI004W	NA	NA
LCS1W	TCI004WL	25.7	1	NA	1.00	0.250	09/23/2419:11	NA	TCI003-07	TCI003-02	TCI004W	NA	NA
LCD1W	TCI004WC	25.6	1	NA	1.00	0.250	09/23/2419:26	NA	TCI003-08	TCI003-02	TCI004W	NA	NA
MW03RA-GW091124	I062-01	7.95	1	NA	1.00	0.250	09/23/2419:41	NA	TCI003-09	TCI003-02	TCI004W	09/11/2410:45	09/13/24
MW03RA-GW091124DUP	I062-01D	7.51	1	NA	1.00	0.250	09/23/2419:56	NA	TCI003-10	TCI003-02	TCI004W	09/11/2410:45	09/13/24
MW03RA-GW091124MS	I062-01M	32.8	1	NA	1.00	0.250	09/23/2420:11	NA	TCI003-11	TCI003-02	TCI004W	09/11/2410:45	09/13/24
MW03RA-GW091124MSD	I062-01S	32.9	1	NA	1.00	0.250	09/23/2420:25	NA	TCI003-12	TCI003-02	TCI004W	09/11/2410:45	09/13/24
IW01-GW091124	I062-02	0.821J	1	NA	1.00	0.250	09/23/2420:40	NA	TCI003-13	TCI003-02	TCI004W	09/11/2411:11	09/13/24
MW04RB-GW091124	I062-03	8.08	1	NA	1.00	0.250	09/23/2420:55	NA	TCI003-14	TCI003-02	TCI004W	09/11/2411:00	09/13/24
EW01-GW091124	I062-04	0.765J	1	NA	1.00	0.250	09/23/2421:40	NA	TCI003-17	TCI003-15	TCI004W	09/11/2415:21	09/13/24

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : SW9060

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: TCI004WB	TCI004WL	TCI004WC
LAB FILE ID	: TCI003-06	TCI003-07	TCI003-08
DATE PREPARED	: NA	NA	NA
DATE ANALYZED	: 09/23/2418:57	09/23/2419:11	09/23/2419:26
PREP BATCH	: TCI004W	TCI004W	TCI004W
CALIBRATION REF	: TCI003-02	TCI003-02	TCI003-02

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Total Organic Carbon	ND	25.0	25.7	103	25.0	25.6	102	0	80-120	20

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : SW9060

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MW03RA-GW091124	MW03RA-GW091124MS	MW03RA-GW091124MSD
LAB SAMPLE ID	: I062-01	I062-01M	I062-01S
LAB FILE ID	: TCI003-09	TCI003-11	TCI003-12
DATE PREPARED	: NA	NA	NA
DATE ANALYZED	: 09/23/2419:41	09/23/2420:11	09/23/2420:25
PREP BATCH	: TCI004W	TCI004W	TCI004W
CALIBRATION REF	: TCI003-02	TCI003-02	TCI003-02

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Total Organic Carbon	7.95	25.0	32.8	99	25.0	32.9	100	0	80-120	20

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

EMAX QUALITY CONTROL DATA
SAMPLE DUPLICATE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I062
METHOD : SW9060

MATRIX : WATER

DILUTION FACTOR:	1	1
SAMPLE ID :	MW03RA-GW091124	MW03RA-GW091124DUP
LAB SAMPLE ID :	I062-01	I062-01D
LAB FILE ID :	TCI003-09	TCI003-10
DATE PREPARED :	NA	NA
DATE ANALYZED :	09/23/2419:41	09/23/2419:56
PREP BATCH :	TCI004W	TCI004W
CALIBRATION REF:	TCI003-02	TCI003-02

ACCESSION:

PARAMETER	PARENT RESULT (mg/L)	DUP RESULT (mg/L)	RPD (%)	MAX RPD (%)
Total Organic Carbon	7.95	7.51	6	20

	Date	Time
Start	9/23/24	16:08
End	9/24/24	10:18

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

☐ Sample was filtered. Filter ID:

Comments:

TCI004W: 24I062
24I080
24I087
24I097

TCI005W 24I081
24I048

MH 9/23/24

All samples pH<2

MH 9/23/24

Dilution prep values can be found in comment column on results table

Reagent Water ID #: SW1A-012-14-02

pH Strips Lot #: HC333744

2 M HCl SWP1-88-45-03

Book #: A62-046

Instrument No.: 62

MH 9/23/24 Micropipette ID: ☒ ~~642780221~~ C42780056

Micropipette ID: ☒ ~~539360056~~ C42761244

Micropipette ID: ☐ 942754082

Micropipette ID: ☐

Analytical Sequence: TCI003

Method File: TCI003

Analytical Batch: TCI004W, TCI005W

SOP #	Rev. #
☒ EMAX-5310B	5
☒ EMAX-9060	4
☐ EMAX-	

STANDARDS ID	CONC. (mg/L)
S0 SW1A-012-14-02	0
S1 SW7B-02-30-~~08~~07	1
S2	5
S3	10
S4	40
S5	80
~~S6~~ H09/103 SW7B-02-30-02	1
ICV/LCS SW7B-02-30-04	25
CCV SW7B-02-30-05	50
SW7B-02-30-08	25
SW7B-02-30-06	1

ELECTRONIC DATA ARCHIVAL	
Location	Date
☐ TOC	
☐	

Analyzed By: MH

Date: 9/23/24

	Type	Analysis	Sample Name	Sample ID	Dilution	Result	Comment
1	Standard	NPOC	ICAL - Instrum	TCI003-01	1.000		
2	Control	NPOC	ICV	TCI003-02	1.000	NPOC:25.67 mg/L	
3	Unknown	NPOC	ICB	TCI003-03	1.000	NPOC:0.2277 mg/L	
4	Unknown	NPOC	MRL	TCI003-04	1.000	NPOC:1.178 mg/L	
5	Unknown	NPOC	HCO3/CO3	TCI003-05	1.000	NPOC:0.4008 mg/L	
6	Unknown	NPOC	TCI004WB	TCI003-06	1.000	NPOC:0.1924 mg/L	
7	Unknown	NPOC	TCI004WL	TCI003-07	1.000	NPOC:25.66 mg/L	
8	Unknown	NPOC	TCI004WC	TCI003-08	1.000	NPOC:25.56 mg/L	
9	Unknown	NPOC	I062-01	TCI003-09	1.000	NPOC:7.952 mg/L	
10	Unknown	NPOC	I062-01D	TCI003-10	1.000	NPOC:7.509 mg/L	
11	Unknown	NPOC	I062-01M	TCI003-11	1.000	NPOC:32.77 mg/L	
12	Unknown	NPOC	I062-01S	TCI003-12	1.000	NPOC:32.86 mg/L	
13	Unknown	NPOC	I062-02	TCI003-13	1.000	NPOC:0.8210 mg/L	
14	Unknown	NPOC	I062-03	TCI003-14	1.000	NPOC:8.076 mg/L	
15	Control	NPOC	CCV1	TCI003-15	1.000	NPOC:24.88 mg/L	
16	Unknown	NPOC	CCB1	TCI003-16	1.000	NPOC:0.2298 mg/L	
17	Unknown	NPOC	I062-04	TCI003-17	1.000	NPOC:0.7654 mg/L	
18	Unknown	NPOC	I080-06	TCI003-18	1.000	NPOC:4.101 mg/L	
19	Unknown	NPOC	I080-07	TCI003-19	1.000	NPOC:10.68 mg/L	
20	Unknown	NPOC	I080-10	TCI003-20	1.000	NPOC:10.89 mg/L	
21	Unknown	NPOC	I077-07	TCI003-21	1.000	NPOC:0.7985 mg/L	
22	Unknown	NPOC	I087-02	TCI003-22	1.000	NPOC:1.064 mg/L	
23	Unknown	NPOC	I087-04	TCI003-23	1.000	NPOC:1.335 mg/L	
24	Unknown	NPOC	I087-05	TCI003-24	1.000	NPOC:1.094 mg/L	
25	Unknown	NPOC	I087-06	TCI003-25	1.000	NPOC:1.381 mg/L	
26	Unknown	NPOC	I087-07	TCI003-26	1.000	NPOC:11.75 mg/L	
27	Control	NPOC	CCV2	TCI003-27	1.000	NPOC:24.57 mg/L	
28	Unknown	NPOC	CCB2	TCI003-28	1.000	NPOC:0.2289 mg/L	
29	Unknown	NPOC	I087-08	TCI003-29	1.000	NPOC:1.557 mg/L	
30	Unknown	NPOC	I087-09	TCI003-30	1.000	NPOC:7.124 mg/L	
31	Unknown	NPOC	I087-09D	TCI003-31	1.000	NPOC:8.099 mg/L	
32	Unknown	NPOC	I087-09M	TCI003-32	1.000	NPOC:32.60 mg/L	
33	Unknown	NPOC	I087-09S	TCI003-33	1.000	NPOC:32.86 mg/L	
34	Unknown	NPOC	I087-10	TCI003-34	1.000	NPOC:0.8878 mg/L	
35	Unknown	NPOC	I087-12	TCI003-35	1.000	NPOC:1.613 mg/L	
36	Unknown	NPOC	I087-15	TCI003-36	1.000	NPOC:5.709 mg/L	
37	Unknown	NPOC	I087-16I	TCI003-37	3.000	NPOC:13.66 mg/L	DF=3, TAN, SUSPENDED SOLIDS
38	Unknown	NPOC	I087-17	TCI003-38	1.000	NPOC:8.129 mg/L	
39	Control	NPOC	CCV3	TCI003-39	1.000	NPOC:24.76 mg/L	
40	Unknown	NPOC	CCB3	TCI003-40	1.000	NPOC:0.2416 mg/L	
41	Unknown	NPOC	TCI005WB	TCI003-41	1.000	NPOC:0.1870 mg/L	
42	Unknown	NPOC	TCI005WL	TCI003-42	1.000	NPOC:25.48 mg/L	
43	Unknown	NPOC	TCI005WC	TCI003-43	1.000	NPOC:25.57 mg/L	
44	Unknown	NPOC	I081-04	TCI003-44	1.000	NPOC:0.9907 mg/L	
45	Unknown	NPOC	I081-04D	TCI003-45	1.000	NPOC:0.9787 mg/L	
46	Unknown	NPOC	I081-04M	TCI003-46	1.000	NPOC:25.27 mg/L	
47	Unknown	NPOC	I081-04S	TCI003-47	1.000	NPOC:25.36 mg/L	
48	Unknown	NPOC	I081-05	TCI003-48	1.000	NPOC:1.742 mg/L	
49	Unknown	NPOC	I048-01	TCI003-49	1.000	NPOC:4.615 mg/L	
50	Unknown	NPOC	I048-02	TCI003-50	1.000	NPOC:8.377 mg/L	
51	Control	NPOC	CCV4	TCI003-51	1.000	NPOC:50.05 mg/L	
52	Unknown	NPOC	CCB4	TCI003-52	1.000	NPOC:0.2590 mg/L	
53	Unknown	NPOC	I048-04	TCI003-53	1.000	NPOC:7.465 mg/L	
54	Unknown	NPOC	I048-05	TCI003-54	1.000	NPOC:5.572 mg/L	
55	Unknown	NPOC	I048-06	TCI003-55	1.000	NPOC:5.178 mg/L	
56	Unknown	NPOC	I048-07	TCI003-56	1.000	NPOC:4.930 mg/L	
57	Unknown	NPOC	I048-08I	TCI003-57	2.000	NPOC:14.30 mg/L	DF=2, ODOR
58	Unknown	NPOC	I048-11	TCI003-58	1.000	NPOC:3.186 mg/L	
59	Unknown	NPOC	I048-11D	TCI003-59	1.000	NPOC:3.133 mg/L	
60	Unknown	NPOC	I048-11M	TCI003-60	1.000	NPOC:27.83 mg/L	
61	Unknown	NPOC	I048-11S	TCI003-61	1.000	NPOC:27.91 mg/L	
62	Unknown	NPOC	I048-16	TCI003-62	1.000	NPOC:5.028 mg/L	
63	Control	NPOC	CCV5	TCI003-63	1.000	NPOC:25.24 mg/L	
64	Unknown	NPOC	CCB5	TCI003-64	1.000	NPOC:0.2397 mg/L	
65	Unknown	NPOC	I048-18	TCI003-65	1.000	NPOC:3.832 mg/L	
66	Unknown	NPOC	I048-19	TCI003-66	1.000	NPOC:4.785 mg/L	
67	Control	NPOC	CCV6	TCI003-67	1.000	NPOC:1.218 mg/L	

	Type	Analysis	Sample Name	Sample ID	Dilution	Result	Comment
68	Unknown	NPOC	CCB6	TCI003-68	1.000	NPOC:0.1934 mg/L	
69							
70							
71							
72							
73							
74							
75							
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89							
90							
91							
92							
93						MH	9/24/24
94							

	Type	Analysis	Sample Name	Sample ID	Dilution	Result	Comment
1	Standard	NPOC	ICAL - Instrum	TCI003-01	1.000		DF= Dilution Factor
2	Control	NPOC	ICV	TCI003-02	1.000	NPOC:25.67 mg/L	DF=X, Aliquot/Final Volume
3	Unknown	NPOC	ICB	TCI003-03	1.000	NPOC:0.2277 mg/L	
4	Unknown	NPOC	MRL	TCI003-04	1.000	NPOC:1.178 mg/L	
5	Unknown	NPOC	HCO3/CO3	TCI003-05	1.000	NPOC:0.4008 mg/L	
6	Unknown	NPOC	TCI004WB	TCI003-06	1.000	NPOC:0.1924 mg/L	
7	Unknown	NPOC	TCI004WL	TCI003-07	1.000	NPOC:25.66 mg/L	
8	Unknown	NPOC	TCI004WC	TCI003-08	1.000	NPOC:25.56 mg/L	
9	Unknown	NPOC	I062-01	TCI003-09	1.000	NPOC:7.952 mg/L	
10	Unknown	NPOC	I062-01D	TCI003-10	1.000	NPOC:7.509 mg/L	
11	Unknown	NPOC	I062-01M	TCI003-11	1.000	NPOC:32.77 mg/L	
12	Unknown	NPOC	I062-01S	TCI003-12	1.000	NPOC:32.86 mg/L	
13	Unknown	NPOC	I062-02	TCI003-13	1.000	NPOC:0.8210 mg/L	
14	Unknown	NPOC	I062-03	TCI003-14	1.000	NPOC:8.076 mg/L	
15	Control	NPOC	CCV1	TCI003-15	1.000	NPOC:24.88 mg/L	
16	Unknown	NPOC	CCB1	TCI003-16	1.000	NPOC:0.2298 mg/L	
17	Unknown	NPOC	I062-04	TCI003-17	1.000	NPOC:0.7654 mg/L	
18	Unknown	NPOC	I080-06	TCI003-18	1.000	NPOC:4.101 mg/L	
19	Unknown	NPOC	I080-07	TCI003-19	1.000	NPOC:10.68 mg/L	
20	Unknown	NPOC	I080-10	TCI003-20	1.000	NPOC:10.89 mg/L	
21	Unknown	NPOC	I077-07	TCI003-21	1.000	NPOC:0.7985 mg/L	
22	Unknown	NPOC	I087-02	TCI003-22	1.000	NPOC:1.064 mg/L	
23	Unknown	NPOC	I087-04	TCI003-23	1.000	NPOC:1.335 mg/L	
24	Unknown	NPOC	I087-05	TCI003-24	1.000	NPOC:1.094 mg/L	
25	Unknown	NPOC	I087-06	TCI003-25	1.000	NPOC:1.381 mg/L	
26	Unknown	NPOC	I087-07	TCI003-26	1.000	NPOC:11.75 mg/L	
27	Control	NPOC	CCV2	TCI003-27	1.000	NPOC:24.57 mg/L	
28	Unknown	NPOC	CCB2	TCI003-28	1.000	NPOC:0.2289 mg/L	
29	Unknown	NPOC	I087-08	TCI003-29	1.000	NPOC:1.557 mg/L	
30	Unknown	NPOC	I087-09	TCI003-30	1.000	NPOC:7.124 mg/L	
31	Unknown	NPOC	I087-09D	TCI003-31	1.000	NPOC:8.099 mg/L	
32	Unknown	NPOC	I087-09M	TCI003-32	1.000	NPOC:32.60 mg/L	
33	Unknown	NPOC	I087-09S	TCI003-33	1.000	NPOC:32.86 mg/L	
34	Unknown	NPOC	I087-10	TCI003-34	1.000	NPOC:0.8878 mg/L	
35	Unknown	NPOC	I087-12	TCI003-35	1.000	NPOC:1.613 mg/L	
36	Unknown	NPOC	I087-15	TCI003-36	1.000	NPOC:5.709 mg/L	
37	Unknown	NPOC	I087-16I	TCI003-37	3.000	NPOC:13.66 mg/L	DF=3X, 5ml/15ml
38	Unknown	NPOC	I087-17	TCI003-38	1.000	NPOC:8.129 mg/L	
39	Control	NPOC	CCV3	TCI003-39	1.000	NPOC:24.76 mg/L	
40	Unknown	NPOC	CCB3	TCI003-40	1.000	NPOC:0.2416 mg/L	
41	Unknown	NPOC	TCI005WB	TCI003-41	1.000	NPOC:0.1870 mg/L	
42	Unknown	NPOC	TCI005WL	TCI003-42	1.000	NPOC:25.48 mg/L	
43	Unknown	NPOC	TCI005WC	TCI003-43	1.000	NPOC:25.57 mg/L	
44	Unknown	NPOC	I081-04	TCI003-44	1.000	NPOC:0.9907 mg/L	
45	Unknown	NPOC	I081-04D	TCI003-45	1.000	NPOC:0.9787 mg/L	
46	Unknown	NPOC	I081-04M	TCI003-46	1.000	NPOC:25.27 mg/L	
47	Unknown	NPOC	I081-04S	TCI003-47	1.000	NPOC:25.36 mg/L	
48	Unknown	NPOC	I081-05	TCI003-48	1.000	NPOC:1.742 mg/L	
49	Unknown	NPOC	I048-01	TCI003-49	1.000	NPOC:4.615 mg/L	
50	Unknown	NPOC	I048-02	TCI003-50	1.000	NPOC:8.377 mg/L	
51	Control	NPOC	CCV4	TCI003-51	1.000	NPOC:50.05 mg/L	
52	Unknown	NPOC	CCB4	TCI003-52	1.000	NPOC:0.2590 mg/L	
53	Unknown	NPOC	I048-04	TCI003-53	1.000	NPOC:7.465 mg/L	
54	Unknown	NPOC	I048-05	TCI003-54	1.000	NPOC:5.572 mg/L	
55	Unknown	NPOC	I048-06	TCI003-55	1.000	NPOC:5.178 mg/L	
56	Unknown	NPOC	I048-07	TCI003-56	1.000	NPOC:4.930 mg/L	
57	Unknown	NPOC	I048-08I	TCI003-57	2.000	NPOC:14.30 mg/L	DF=2X, 7.5ml/15ml
58	Unknown	NPOC	I048-11	TCI003-58	1.000	NPOC:3.186 mg/L	
59	Unknown	NPOC	I048-11D	TCI003-59	1.000	NPOC:3.133 mg/L	
60	Unknown	NPOC	I048-11M	TCI003-60	1.000	NPOC:27.83 mg/L	
61	Unknown	NPOC	I048-11S	TCI003-61	1.000	NPOC:27.91 mg/L	
62	Unknown	NPOC	I048-16	TCI003-62	1.000	NPOC:5.028 mg/L	
63	Control	NPOC	CCV5	TCI003-63	1.000	NPOC:25.24 mg/L	
64	Unknown	NPOC	CCB5	TCI003-64	1.000	NPOC:0.2397 mg/L	
65	Unknown	NPOC	I048-18	TCI003-65	1.000	NPOC:3.832 mg/L	
66	Unknown	NPOC	I048-19	TCI003-66	1.000	NPOC:4.785 mg/L	
67	Control	NPOC	CCV6	TCI003-67	1.000	NPOC:1.218 mg/L	

	Type	Analysis	Sample Name	Sample ID	Dilution	Result	Comment
68	Unknown	NPOC	CCB6	TCI003-68	1.000	NPOC:0.1934 mg/L	
69							
70							
71							
72							
73							
74							
75							
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91							
92							
93							MH 9124124
94							

Instr.Information

System	TOC-9060/415.1/5310B
Detector	Combustion
Catalyst	Regular Sensitivity
Cell Length	long

Cal. Curve

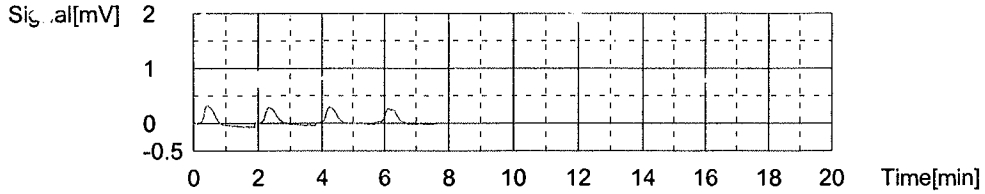
Sample Name:	ICAL - Instrument 62
Sample ID:	TCI003-01
Cal. Curve:	TCI003.2024_09_23_16_00_02.cal

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.6752	50uL	1	*******		09/23/24 04:08:43 PM
2	0.6460	50uL	1	*******		09/23/24 04:10:47 PM
3	0.5934	50uL	1	*******		09/23/24 04:12:51 PM
4	0.6340	50uL	1	*******		09/23/24 04:14:55 PM

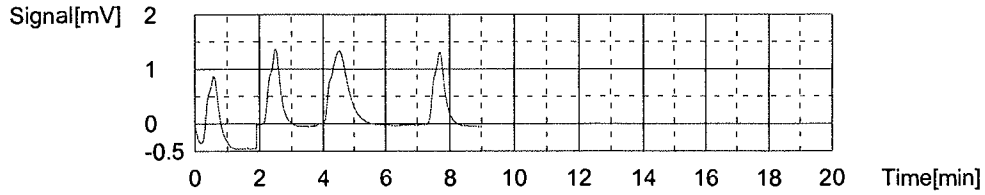
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 0.6371



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.952	50uL	1	*******		09/23/24 04:23:29 PM
2	3.204	50uL	1	*******		09/23/24 04:25:33 PM
3	3.078	50uL	1	*******		09/23/24 04:27:37 PM
4	3.095	50uL	1	*******		09/23/24 04:29:41 PM

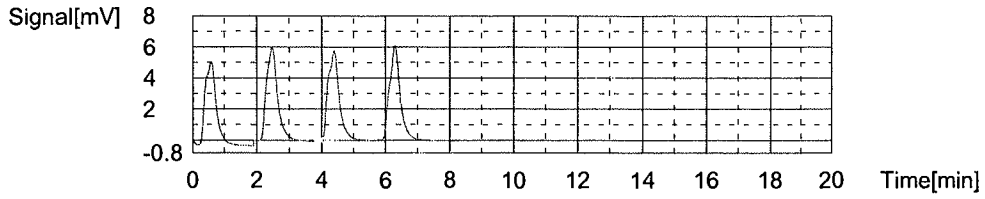
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 3.082



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	13.28	50uL	1	*******		09/23/24 04:38:15 PM
2	14.31	50uL	1	*******		09/23/24 04:40:19 PM
3	14.31	50uL	1	*******		09/23/24 04:42:23 PM
4	14.15	50uL	1	*******		09/23/24 04:44:27 PM

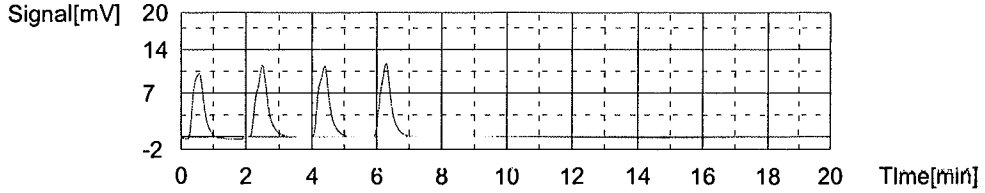
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 14.01



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	25.67	50uL	1	*******		09/23/24 04:53:03 PM
2	27.55	50uL	1	*******		09/23/24 04:55:07 PM
3	27.97	50uL	1	*******		09/23/24 04:57:11 PM
4	27.81	50uL	1	*******		09/23/24 04:59:15 PM

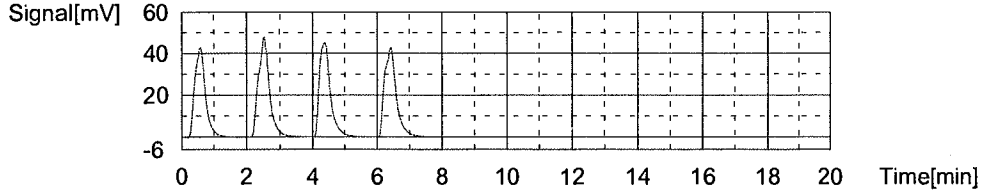
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 27.25



Conc: 40.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	102.5	50uL	1	*******		09/23/24 05:07:54 PM
2	111.4	50uL	1	*******		09/23/24 05:09:58 PM
3	110.6	50uL	1	*******		09/23/24 05:12:08 PM
4	109.9	50uL	1	*******		09/23/24 05:14:15 PM

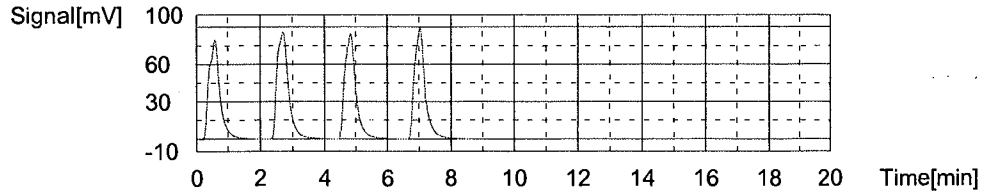
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 108.6



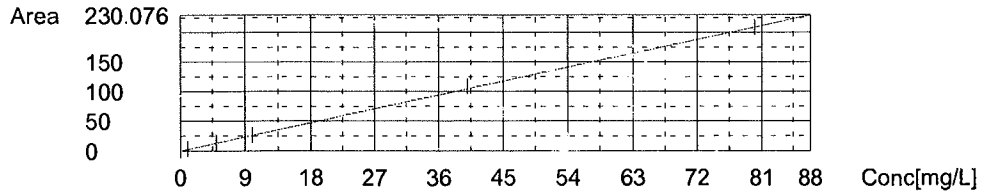
Conc: 80.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	198.1	50uL	1	*******		09/23/24 05:23:06 PM
2	214.2	50uL	1	*******		09/23/24 05:25:23 PM
3	211.4	50uL	1	*******		09/23/24 05:27:45 PM
4	211.9	50uL	1	*******		09/23/24 05:30:01 PM

Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 208.9



Slope: 2.615
Intercept 0.000
r^2 0.999677



Control Sample

Sample Name: ICV
Sample ID: TCI003-02
Method: TCI003.tpl
Chk. Result Control value: 25.67 / Control exceeds range!

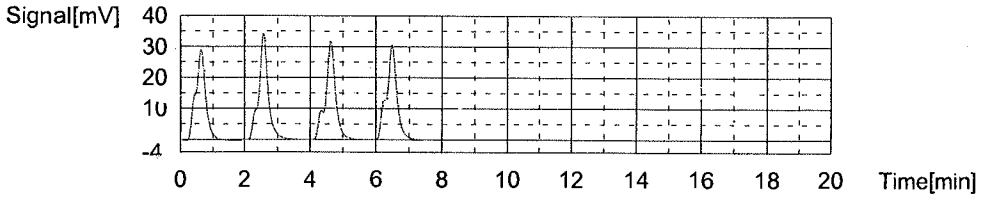
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:25.67 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.56	24.31mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:38:45 PM
2	68.97	26.38mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:40:56 PM
3	68.54	26.22mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:43:00 PM
4	67.37	25.77mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:45:05 PM

Mean Area 67.11
Mean Conc. 25.67mg/L



Sample

Sample Name: ICB
Sample ID: TCI003-03
Origin: TCI003.cal
Chk. Result

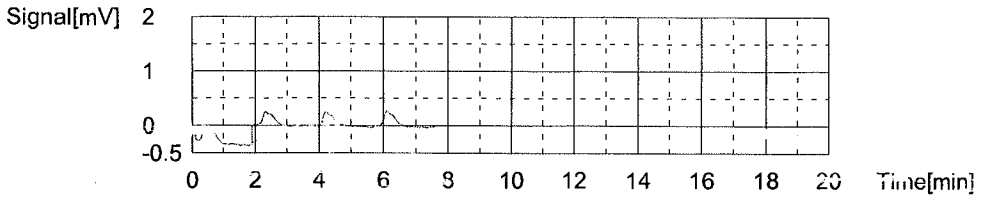
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2277 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7289	0.2788mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:53:42 PM
2	0.5318	0.2034mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:55:54 PM
3	0.5187	0.1984mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:57:58 PM
4	0.6014	0.2300mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:00:02 PM

Mean Area 0.5952
Mean Conc. 0.2277mg/L



Sample

Sample Name: MRL
Sample ID: TCI003-04
Origin: TCI003.cal
Chk. Result

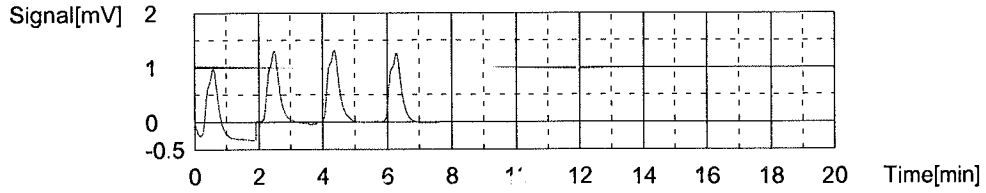
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.178 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.913	1.114mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:08:39 PM
2	3.137	1.200mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:10:43 PM
3	3.189	1.220mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:12:47 PM
4	3.085	1.180mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:14:52 PM

Mean Area 3.081
Mean Conc. 1.178mg/L



Sample

Sample Name: HCO3/CO3
Sample ID: TCI003-05
Origin: TCI003.cal
Chk. Result

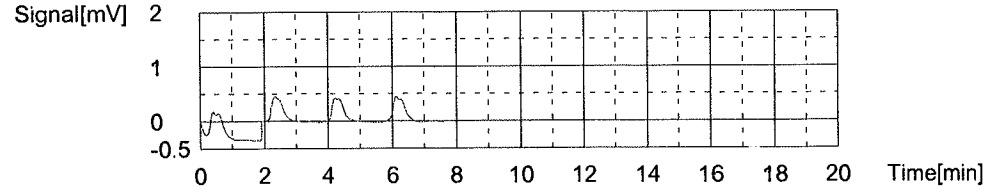
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.4008 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.068	0.4085mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:36:12 PM
2	1.025	0.3920mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:38:16 PM
3	1.014	0.3878mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:40:20 PM
4	1.085	0.4150mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:42:24 PM

Mean Area 1.048
Mean Conc. 0.4008mg/L



Sample

Sample Name: TCI004WB
Sample ID: TCI003-06
Origin: TCI003.cal
Chk. Result

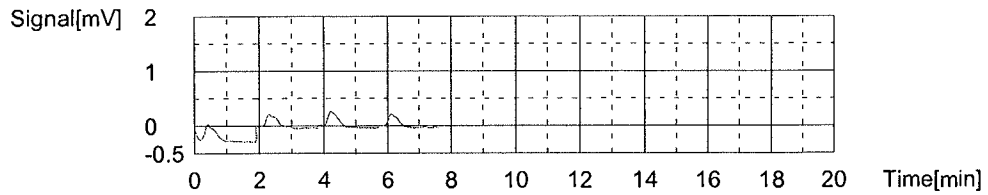
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.1924 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5659	0.2164mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:50:59 PM
2	0.4474	0.1711mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:53:03 PM
3	0.5584	0.2136mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:55:07 PM
4	0.4401	0.1683mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:57:11 PM

Mean Area 0.5030
Mean Conc. 0.1924mg/L



Sample

Sample Name: TCI004WL
Sample ID: TCI003-07
Origin: TCI003.cal
Chk. Result

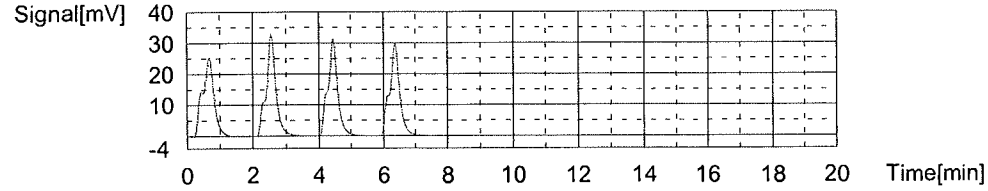
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.66 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.68	24.36mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:05:45 PM
2	68.70	26.28mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:07:50 PM
3	68.46	26.18mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:09:54 PM
4	67.52	25.83mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:11:58 PM

Mean Area 67.09
Mean Conc. 25.66mg/L



Sample

Sample Name: TCI004WC
Sample ID: TCI003-08
Origin: TCI003.cal
Chk. Result

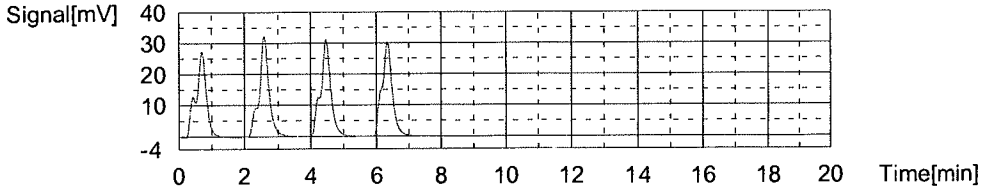
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.56 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.49	24.28mg/L	50uL	1		TCI003.202_09_23_16_00_02.cal	09/23/24 07:20:32 PM
2	67.30	25.74mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:22:37 PM
3	68.09	26.04mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:24:41 PM
4	68.38	26.15mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:26:45 PM

Mean Area 66.81
Mean Conc. 25.56mg/L



Sample

Sample Name: I062-01
Sample ID: TCI003-09
Origin: TCI003.cal
Chk. Result

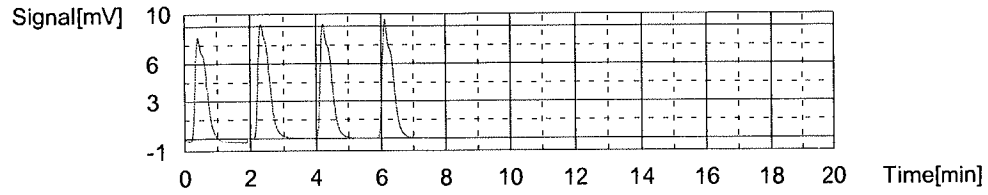
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:7.952 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.54	7.474mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:35:19 PM
2	21.19	8.105mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:37:24 PM
3	21.34	8.162mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:39:28 PM
4	21.09	8.067mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:41:32 PM

Mean Area 20.79
Mean Conc. 7.952mg/L



Sample

Sample Name: I062-01D
Sample ID: TCI003-10
Origin: TCI003.cal
Chk. Result

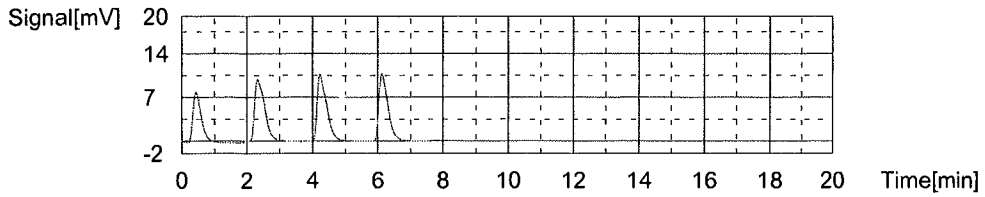
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:7.509 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.60	5.584mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:50:06 PM
2	21.32	8.155mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:52:11 PM
3	21.42	8.193mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:54:15 PM
4	21.19	8.105mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:56:19 PM

Mean Area 19.63
Mean Conc. 7.509mg/L



Sample

Sample Name: I062-01M
Sample ID: TCI003-11
Origin: TCI003.cal
Chk. Result

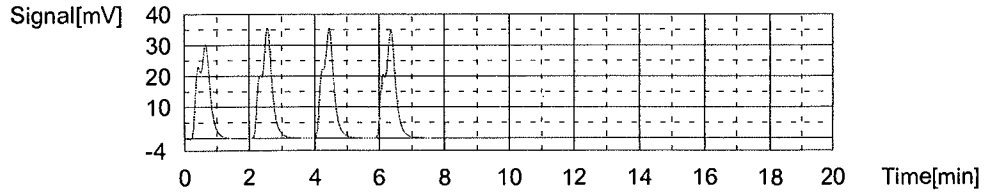
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:32.77 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.85	31.31mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:04:53 PM
2	87.19	33.35mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:06:57 PM
3	87.35	33.41mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:09:02 PM
4	86.33	33.02mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:11:07 PM

Mean Area 85.68
Mean Conc. 32.77mg/L



Sample

Sample Name: I062-01S
Sample ID: TCI003-12
Origin: TCI003.cal
Chk. Result

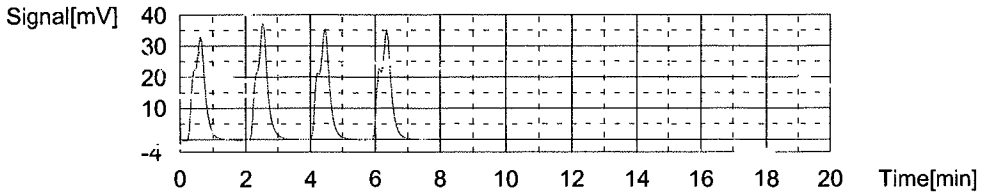
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:32.86 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	80.45	30.77mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:19:42 PM
2	88.08	33.69mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:21:46 PM
3	87.95	33.64mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:23:51 PM
4	87.20	33.35mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:25:55 PM

Mean Area 85.92
Mean Conc. 32.86mg/L



Sample

Sample Name: I062-02
Sample ID: TCI003-13
Origin: TCI003.cal
Chk. Result

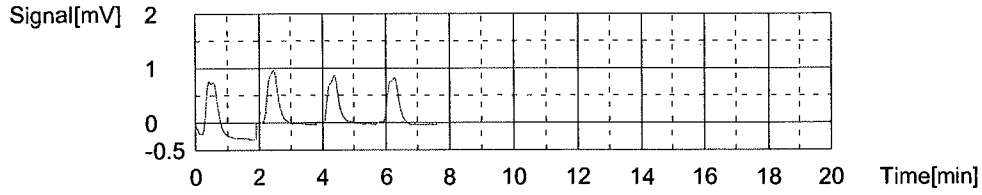
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.8210 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.381	0.9107mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:34:29 PM
2	2.220	0.8491mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:36:33 PM
3	2.040	0.7803mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:38:38 PM
4	1.945	0.7439mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:40:42 PM

Mean Area 2.147
Mean Conc. 0.8210mg/L



Sample

Sample Name: I062-03
Sample ID: TCI003-14
Origin: TCI003.cal
Chk. Result

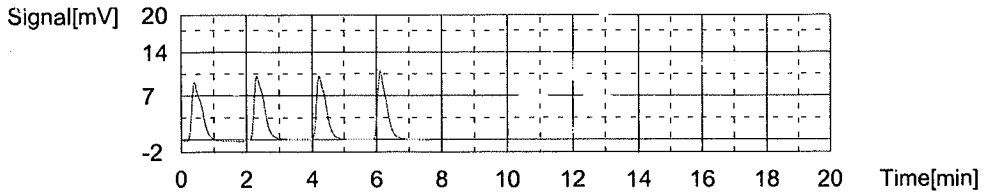
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:8.076 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.07	7.676mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:49:16 PM
2	21.59	8.258mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:51:20 PM
3	21.45	8.204mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:53:25 PM
4	21.35	8.166mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:55:29 PM

Mean Area 21.12
Mean Conc. 8.076mg/L



Control Sample

Sample Name: CCV1
Sample ID: TCI003-15
Method: TCI003.tpl
Chk. Result Control value: 24.88 / Control exceeds range!

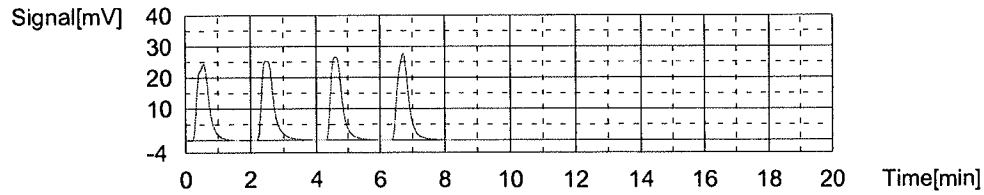
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:24.88 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.33	23.84mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:04:08 PM
2	65.59	25.09mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:06:25 PM
3	66.40	25.40mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:08:38 PM
4	65.85	25.19mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:10:54 PM

Mean Area 65.04
Mean Conc. 24.88mg/L



Sample

Sample Name: CCB1
Sample ID: TCI003-16
Origin: TCI003.cal
Chk. Result

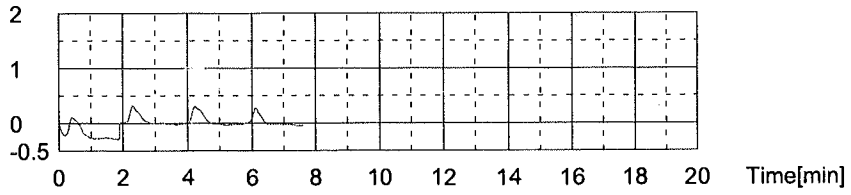
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2298 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7279	0.2784mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:19:28 PM
2	0.5832	0.2231mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:21:32 PM
3	0.6691	0.2559mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:23:37 PM
4	0.4234	0.1619mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:25:41 PM

Mean Area 0.6009
Mean Conc. 0.2298mg/L



Sample

Sample Name: I062-04
Sample ID: TCI003-17
Origin: TCI003.cal
Chk. Result

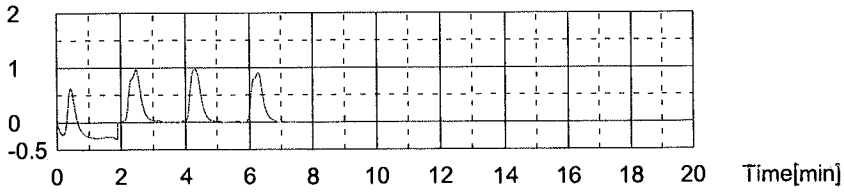
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.7654 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.422	0.5439mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:34:16 PM
2	2.172	0.8307mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:36:20 PM
3	2.169	0.8296mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:38:25 PM
4	2.242	0.8575mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:40:29 PM

Mean Area 2.001
Mean Conc. 0.7654mg/L



Sample

Sample Name: I080-06
Sample ID: TCI003-18
Origin: TCI003.cal
Chk. Result

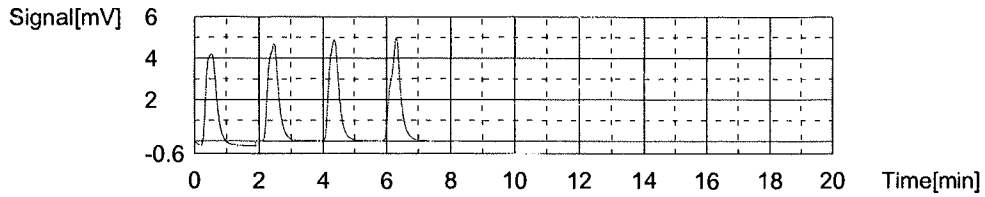
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.101 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.21	3.905mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:49:03 PM
2	10.77	4.119mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:51:07 PM
3	10.97	4.196mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:53:11 PM
4	10.94	4.184mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:55:16 PM

Mean Area 10.72
Mean Conc. 4.101mg/L



Sample

Sample Name: I080-07
Sample ID: TCI003-19
Origin: TCI003.cal
Chk. Result

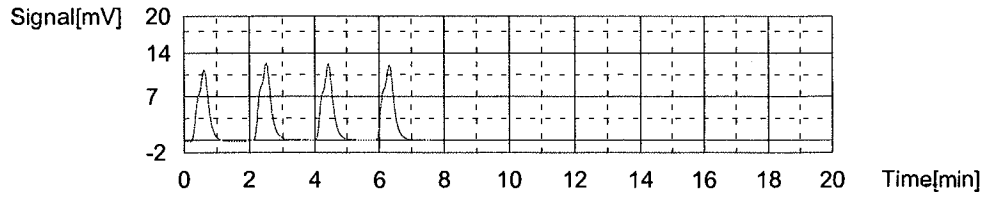
Type	Anal.	Dil.	Result
Unknown	NPOC	1.00	NPOC:10.68 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.43	10.11mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:03:50 PM
2	28.49	10.90mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:05:54 PM
3	28.23	10.80mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:07:58 PM
4	28.52	10.91mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:10:03 PM

Mean Area 27.92
Mean Conc. 10.68mg/L



Sample

Sample Name: I080-10
Sample ID: TCI003-20
Origin: TCI003.cal
Chk. Result

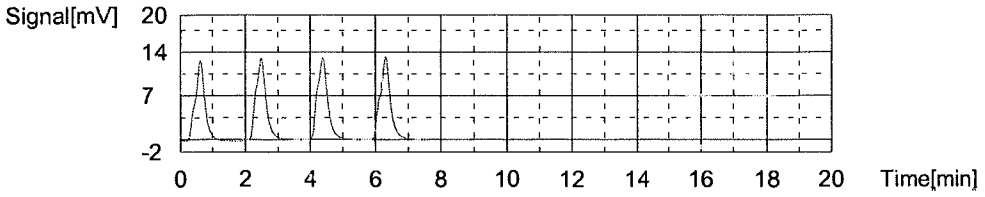
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:10.89 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.35	10.46mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:18:38 PM
2	28.78	11.01mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:20:42 PM
3	29.14	11.15mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:22:46 PM
4	28.64	10.95mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:24:51 PM

Mean Area 28.48
Mean Conc. 10.89mg/L



Sample

Sample Name: I077-07
Sample ID: TCI003-21
Origin: TCI003.cal
Chk. Result

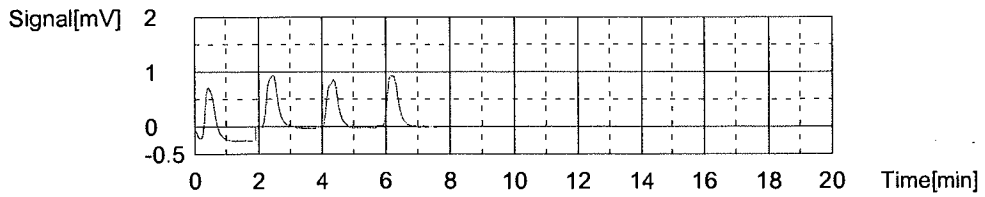
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.7985 g/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.969	0.7531mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:33:25 PM
2	2.195	0.8395mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:35:29 PM
3	2.054	0.7856mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:37:33 PM
4	2.133	0.8158mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:39:38 PM

Mean Area 2.088
Mean Conc. 0.7985mg/L



Sample

Sample Name: I087-02
Sample ID: TCI003-22
Origin: TCI003.cal
Chk. Result

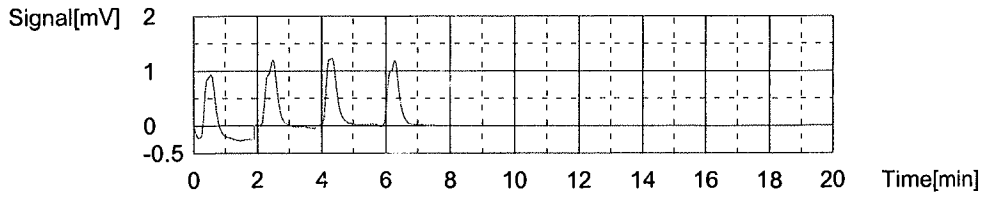
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.064 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.685	1.027mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:48:12 PM
2	2.825	1.081mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:50:16 PM
3	2.799	1.071mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:52:20 PM
4	2.820	1.079mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:54:25 PM

Mean Area 2.782
Mean Conc. 1.064mg/L



Sample

Sample Name: I087-04
Sample ID: TCI003-23
Origin: TCI003.cal
Chk. Result

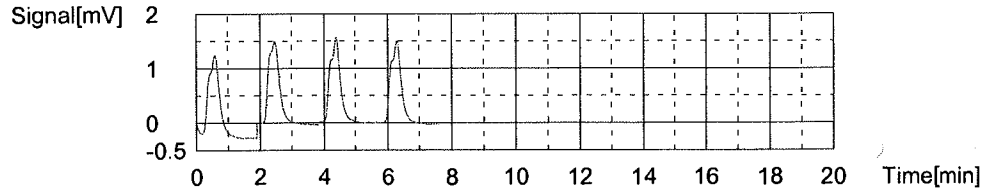
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.335 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.411	1.305mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:03:00 PM
2	3.518	1.346mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:05:04 PM
3	3.543	1.355mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:07:08 PM
4	3.494	1.336mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:09:13 PM

Mean Area 3.492
Mean Conc. 1.335mg/L



Sample

Sample Name: I087-05
Sample ID: TCI003-24
Origin: TCI003.cal
Chk. Result

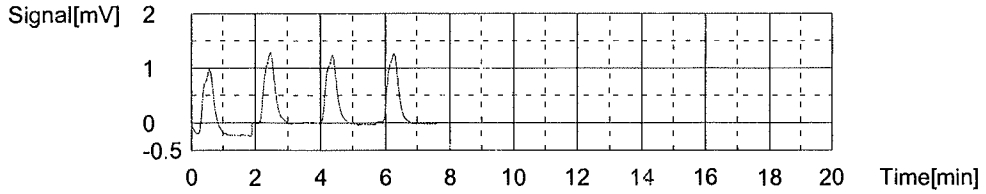
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.094 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.738	1.047mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:17:47 PM
2	2.885	1.103mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:19:52 PM
3	2.883	1.103mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:21:56 PM
4	2.938	1.124mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:24:00 PM

Mean Area 2.861
Mean Conc. 1.094mg/L



Sample

Sample Name: I087-06
Sample ID: TCI003-25
Origin: TCI003.cal
Chk. Result

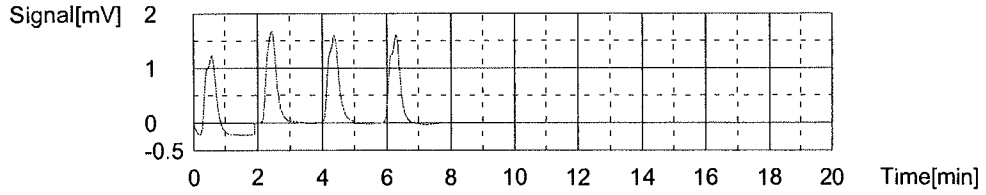
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.381 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.401	1.301mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:32:34 PM
2	3.522	1.347mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:34:39 PM
3	3.822	1.462mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:36:43 PM
4	3.698	1.414mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:38:48 PM

Mean Area 3.611
Mean Conc. 1.381mg/L



Sample

Sample Name: I087-07
Sample ID: TCI003-26
Origin: TCI003.cal
Chk. Result

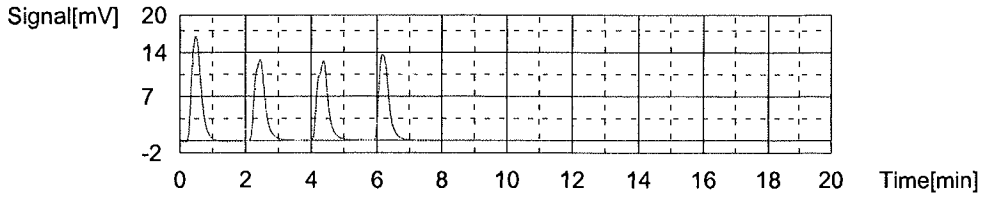
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:11.75 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.71	13.28mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:47:22 PM
2	29.19	11.16mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:49:27 PM
3	29.54	11.30mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:51:31 PM
4	29.43	11.26mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:53:35 PM

Mean Area 30.72
Mean Conc. 11.75mg/L



Control Sample

Sample Name: CCV2
Sample ID: TCI003-27
Method: TCI003.tpl
Chk. Result Control value: 24.57 / Control exceeds range!

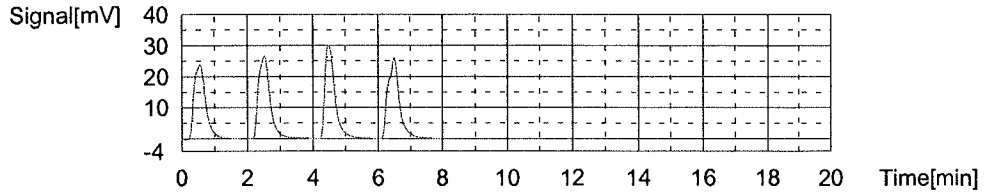
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:24.57 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.63	23.19mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:02:12 AM
2	66.11	25.29mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:04:25 AM
3	65.43	25.03mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:06:30 AM
4	64.81	24.79mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:08:43 AM

Mean Area 64.25
Mean Conc. 24.57mg/L



Sample

Sample Name: CCB2
Sample ID: TCI003-28
Origin: TCI003.cal
Chk. Result

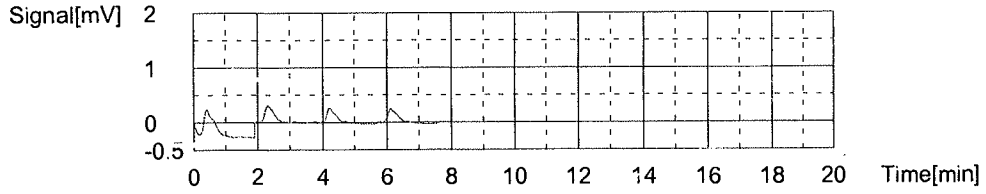
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2289 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9299	0.3557mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:17:17 AM
2	0.5357	0.2049mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:19:22 AM
3	0.4409	0.1686mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:21:26 AM
4	0.4871	0.1863mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:23:31 AM

Mean Area 0.5984
Mean Conc. 0.2289mg/L



Sample

Sample Name: I087-08
Sample ID: TCI003-29
Origin: TCI003.cal
Chk. Result

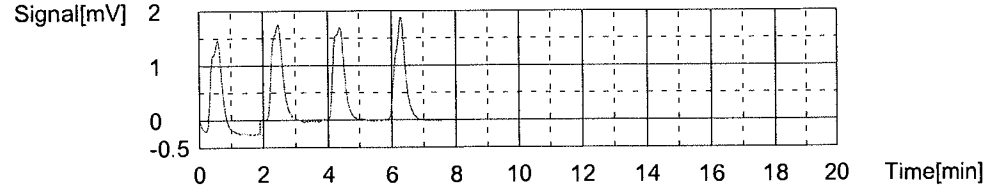
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.557 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.870	1.480mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:32:05 AM
2	4.160	1.591mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:34:09 AM
3	4.094	1.566mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:36:14 AM
4	4.164	1.593mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:38:18 AM

Mean Area 4.072
Mean Conc. 1.557mg/L



Sample

Sample Name: I087-09
Sample ID: TCI003-30
Origin: TCI003.cal
Chk. Result

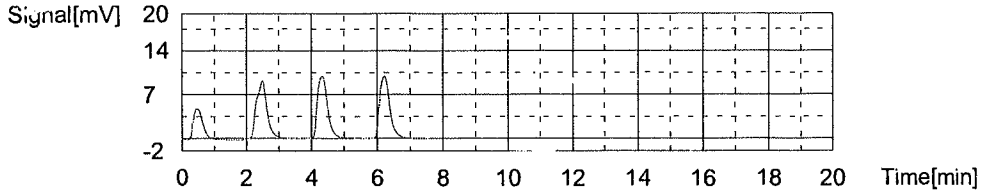
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:7.124 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.25	3.920mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:46:52 AM
2	21.18	8.101mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:48:56 AM
3	21.56	8.246mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:51:01 AM
4	21.51	8.227mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:53:05 AM

Mean Area 18.63
Mean Conc. 7.124mg/L



Sample

Sample Name: I087-090
Sample IO: TCI003-31
Origin: TCI003.cal
Chk. Result

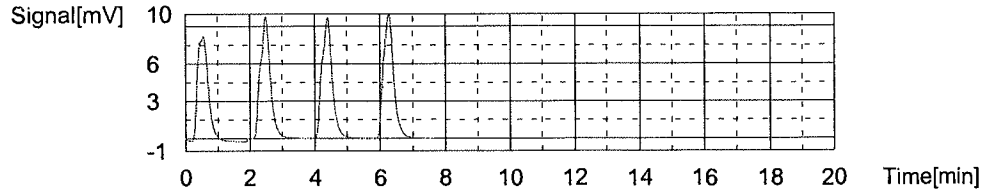
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:8.099 mg/L

1. Oet

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.75	7.554mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:01:40 AM
2	21.50	8.223mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:03:44 AM
3	21.81	8.342mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:05:49 AM
4	21.64	8.277mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:07:53 AM

Mean Area 21.18
Mean Conc. 8.099mg/L



Sample

Sample Name: I087-09M
Sample IO: TCI003-32
Origin: TCI003.cal
Chk. Result

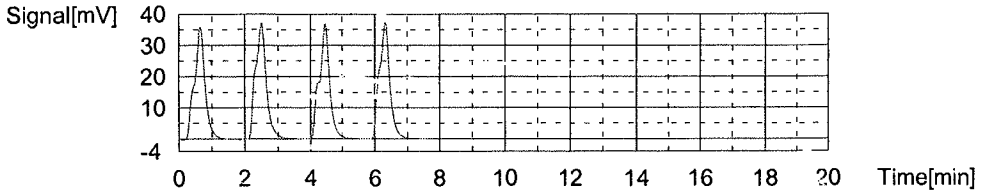
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:32.60 mg/L

1. Oet

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.11	31.02mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:16:28 AM
2	86.73	33.17mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:18:32 AM
3	86.56	33.11mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:20:37 AM
4	86.57	33.11mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:22:41 AM

Mean Area 85.24
Mean Conc. 32.60mg/L



Sample

Sample Name: I087-09S
Sample ID: TCI003-33
Origin: TCI003.cal
Chk. Result

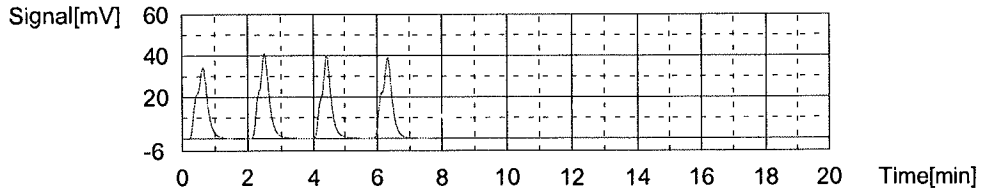
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:32.86 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.32	31.49mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:31:16 AM
2	87.43	33.44mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:33:20 AM
3	86.82	33.21mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:35:25 AM
4	87.13	33.33mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:37:29 AM

Mean Area 85.92
Mean Conc. 32.86mg/L



Sample

Sample Name: I087-10
Sample ID: TCI003-34
Origin: TCI003.cal
Chk. Result

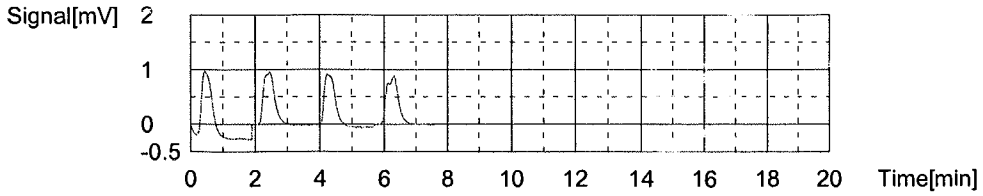
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.8878 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.601	0.9948mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:46:04 AM
2	2.309	0.8831mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:48:08 AM
3	2.161	0.8265mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:50:13 AM
4	2.214	0.8468mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:52:17 AM

Mean Area 2.321
Mean Conc. 0.8878mg/L



Sample

Sample Name: I087-12
Sample ID: TCI003-35
Origin: TCI003.cal
Chk. Result

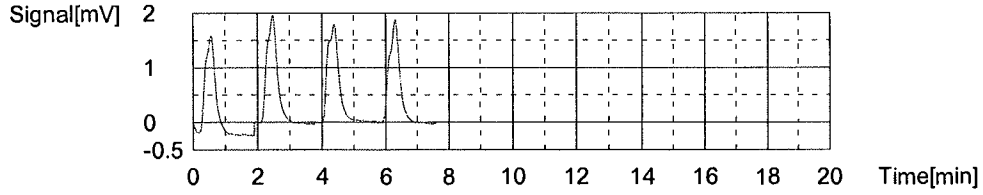
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.613 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.833	1.466mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:00:52 AM
2	4.433	1.696mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:02:56 AM
3	4.304	1.646mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:05:01 AM
4	4.296	1.643mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:07:05 AM

Mean Area 4.216
Mean Conc. 1.613mg/L



Sample

Sample Name: I087-15
Sample ID: TCI003-36
Origin: TCI003.cal
Chk. Result

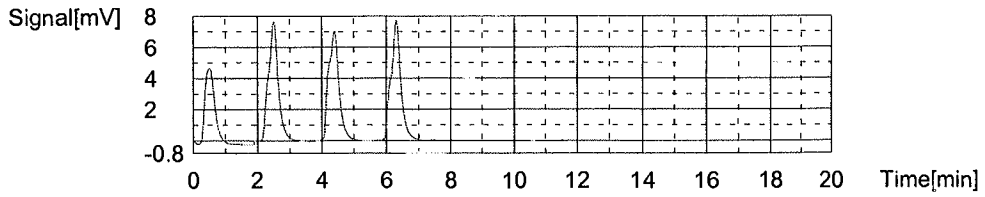
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:5.709 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.55	4.035mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:15:41 AM
2	16.35	6.254mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:17:45 AM
3	16.43	6.284mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:19:49 AM
4	16.38	6.265mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:21:54 AM

Mean Area 14.93
Mean Conc. 5.709mg/L



Sample

Sample Name: I087-16I
Sample ID: TCI003-37
Origin: TCI003.cal
Chk. Result

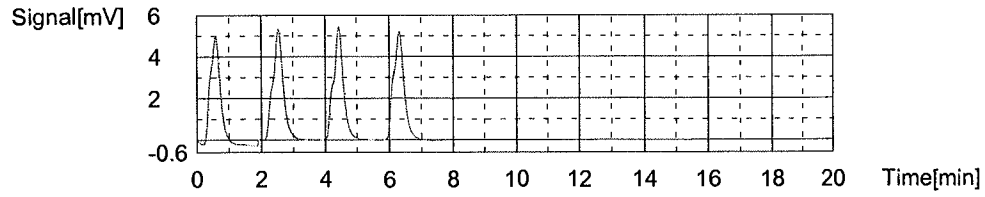
Type	Anal.	Dil.	Result
Unknown	NPOC	3.000	NPOC:13.66 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.34	13.01mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:30:29 AM
2	12.12	13.91mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:32:33 AM
3	12.09	13.87mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:34:37 AM
4	12.06	13.84mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:36:42 AM

Mean Area 11.90
Mean Conc. 13.66mg/L



Sample

Sample Name: I087-17
Sample ID: TCI003-38
Origin: TCI003.cal
Chk. Result

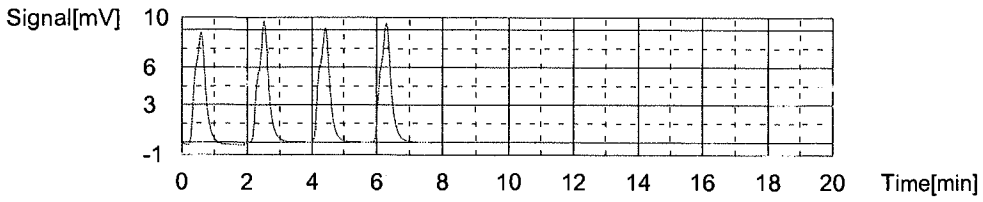
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:8.129 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.65	7.898mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:45:17 AM
2	21.38	8.177mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:47:21 AM
3	21.37	8.174mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:49:25 AM
4	21.61	8.265mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:51:30 AM

Mean Area 21.25
Mean Conc. 8.129mg/L



Control Sample

Sample Name: CCV3
Sample ID: TCI003-39
Method: TCI003.tpl
Chk. Result Control value: 24.76 / Control exceeds range!

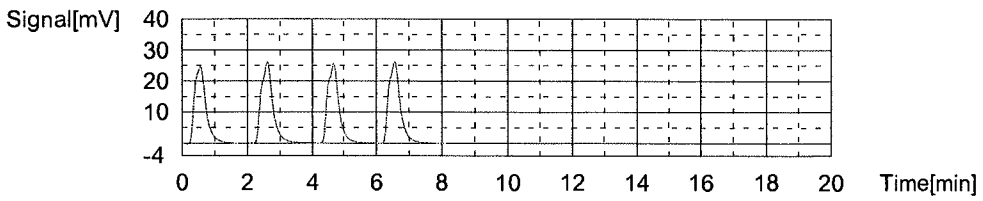
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:24.76 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.21	23.79mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:00:13 AM
2	65.78	25.16mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:02:27 AM
3	65.81	25.17mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:04:31 AM
4	65.17	24.93mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:06:49 AM

Mean Area 64.74
Mean Conc. 24.76mg/L



Sample

Sample Name: CCB3
Sample ID: TCI003-40
Origin: TCI003.cal
Chk. Result

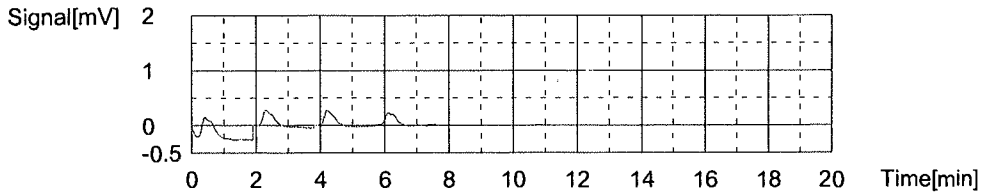
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2416 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8474	0.3241mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:15:25 AM
2	0.6174	0.2361mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:17:29 AM
3	0.5579	0.2134mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:19:33 AM
4	0.5038	0.1927mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:21:38 AM

Mean Area 0.6316
Mean Conc. 0.2416mg/L



Sample

Sample Name: TCI005WB
Sample ID: TCI003-41
Origin: TCI003.cal
Chk. Result

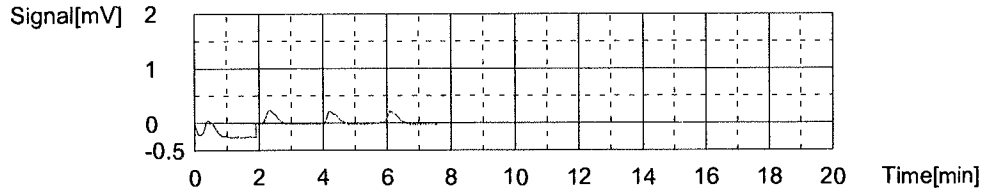
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.1870 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5539	0.2119mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:30:14 AM
2	0.4645	0.1777mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:32:18 AM
3	0.4945	0.1891mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:34:22 AM
4	0.4431	0.1695mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:36:27 AM

Mean Area 0.4890
Mean Conc. 0.1870mg/L



Sample

Sample Name: TCI005WL
Sample ID: TCI003-42
Origin: TCI003.cal
Chk. Result

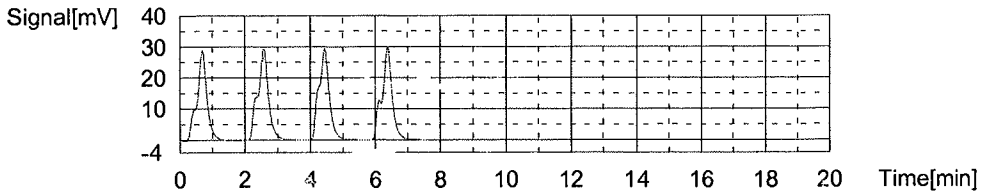
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.48 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.77	24.39mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:45:01 AM
2	68.21	26.09mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:47:06 AM
3	67.28	25.73mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:49:10 AM
4	67.22	25.71mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:51:15 AM

Mean Area 66.62
Mean Conc. 25.48mg/L



Sample

Sample Name: TCI005WC
Sample ID: TCI003-43
Origin: TCI003.cal
Chk. Result

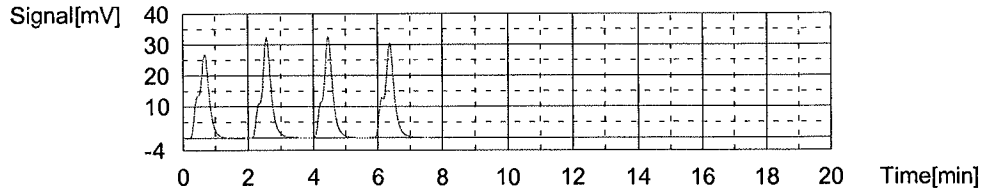
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.57 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.84	24.42mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:59:49 AM
2	68.30	26.12mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:01:54 AM
3	68.07	26.04mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:03:58 AM
4	67.16	25.69mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:06:03 AM

Mean Area 66.84
Mean Conc. 25.57mg/L



Sample

Sample Name: I081-04
Sample ID: TCI003-44
Origin: TCI003.cal
Chk. Result

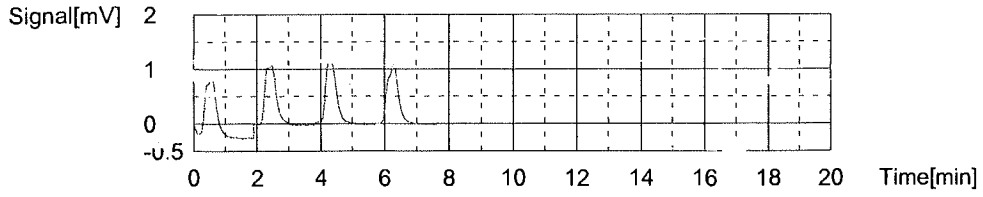
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.9907 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.517	0.9627mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:14:38 AM
2	2.687	1.028mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:16:43 AM
3	2.584	0.9883mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:18:47 AM
4	2.573	0.9841mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:20:52 AM

Mean Area 2.590
Mean Conc. 0.9907mg/L



Sample

Sample Name: I081-04D
Sample ID: TCI003-45
Origin: TCI003.cal
Chk. Result

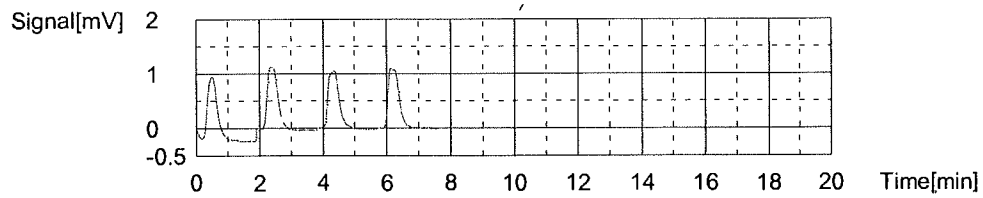
Type	Anal.	Dil.	Result
Unknc	NPOC	1.000	NPOC:0.978 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.391	0.9145mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:29:27 AM
2	2.634	1.007mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:31:32 AM
3	2.611	0.9987mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:33:36 AM
4	2.599	0.9941mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:35:41 AM

Mean Area 2.559
Mean Conc. 0.9787mg/L



Sample

Sample Name: I081-04M
Sample ID: TCI003-46
Origin: TCI003.cal
Chk. Result

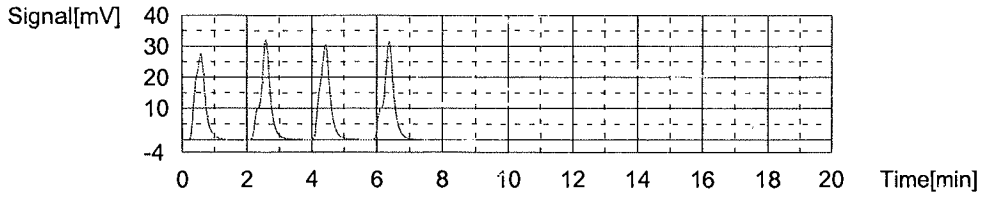
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.27 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.52	23.53mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:44:15 AM
2	68.17	26.07mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:46:20 AM
3	67.56	25.84mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:48:24 AM
4	67.00	25.63mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:50:28 AM

Mean Area 66.06
Mean Conc. 25.27mg/L



Sample

Sample Name: I081-04S
Sample ID: TCI003-47
Origin: TCI003.cal
Chk. Result

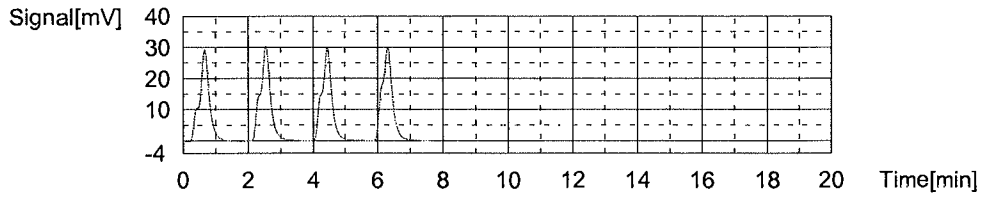
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.36 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.25	24.19mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:59:03 AM
2	67.87	25.96mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:01:08 AM
3	67.26	25.73mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:03:12 AM
4	66.85	25.57mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:05:17 AM

Mean Area 66.31
Mean Conc. 25.36mg/L



Sample

Sample Name: I081-05
Sample ID: TCI003-48
Origin: TCI003.cal
Chk. Result

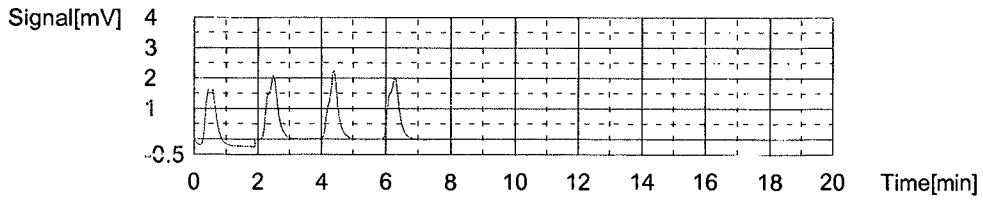
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.742 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.228	1.617mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:13:52 AM
2	4.854	1.857mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:16:00 AM
3	4.518	1.728mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:18:04 AM
4	4.613	1.764mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:20:08 AM

Mean Area 4.553
Mean Conc. 1.742mg/L



Sample

Sample Name: I048-01
Sample ID: TCI003-49
Origin: TCI003.cal
Chk. Result

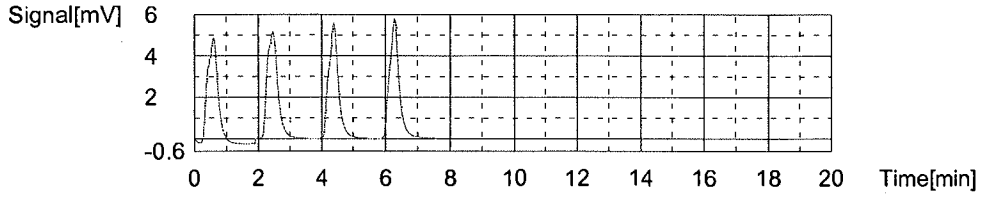
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.615 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.61	4.441mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:28:44 AM
2	12.24	4.682mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:30:49 AM
3	12.20	4.666mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:32:53 AM
4	12.21	4.670mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:34:57 AM

Mean Area 12.07
Mean Conc. 4.615mg/L



Sample

Sample Name: I048-02
Sample ID: TCI003-50
Origin: TCI003.cal
Chk. Result

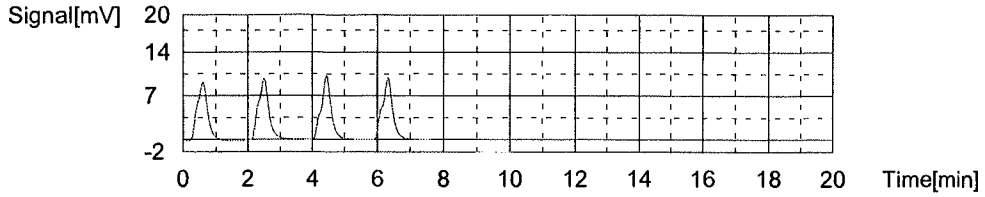
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:8.377 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.22	8.116mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:43:33 AM
2	22.12	8.460mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:45:37 AM
3	22.21	8.495mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:47:42 AM
4	22.06	8.438mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:49:47 AM

Mean Area 21.90
Mean Conc. 8.377mg/L



Control Sample

Sample Name: CCV4
Sample ID: TCI003-51
Method: TCI003.tpl
Chk. Result Control value: 50.05 / Control exceeds range!

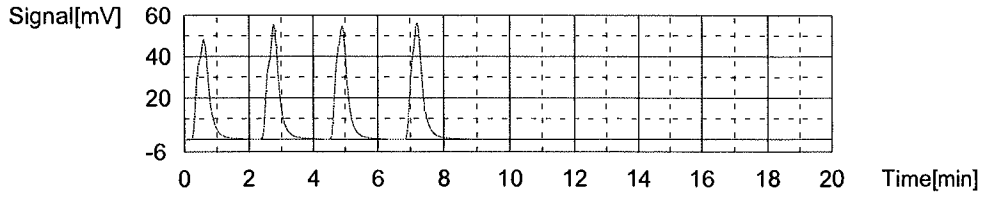
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:50.05 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	123.6	47.27mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:58:38 AM
2	133.2	50.95mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:00:57 AM
3	134.5	51.44mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:03:26 AM
4	132.1	50.53mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:05:47 AM

Mean Area 130.8
Mean Conc. 50.05mg/L



Sample

Sample Name: CCB4
Sample ID: TCI003-52
Origin: TCI003.cal
Chk. Result

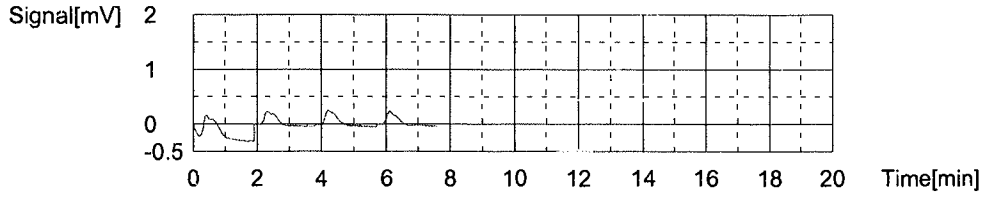
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2590 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.019	0.3897mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:14:22 AM
2	0.5637	0.2156mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:16:26 AM
3	0.6179	0.2363mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:18:31 AM
4	0.5079	0.1943mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:20:35 AM

Mean Area 0.6771
Mean Conc. 0.2590mg/L



Sample

Sample Name: I048-04
Sample ID: TCI003-53
Origin: TCI003.cal
Chk. Result

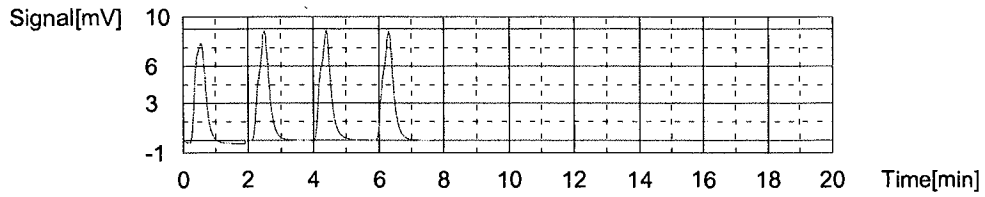
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:7.465 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.55	7.095mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:29:11 AM
2	19.40	7.420mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:31:15 AM
3	20.05	7.669mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:33:20 AM
4	20.07	7.676mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:35:24 AM

Mean Area 19.52
Mean Conc. 7.465mg/L



Sample

Sample Name: I048-05
Sample ID: TCI003-54
Origin: TCI003.cal
Chk. Result

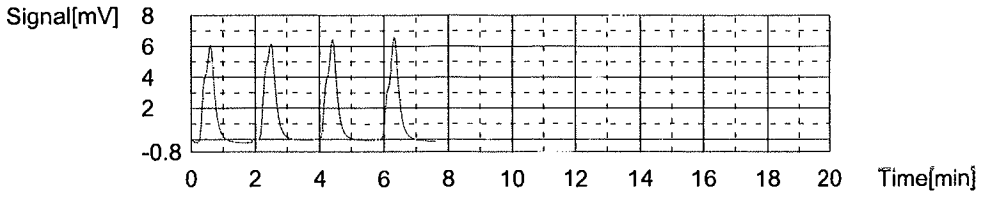
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:5.572 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.37	5.496mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:44:00 AM
2	14.61	5.588mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:46:04 AM
3	14.60	5.584mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:48:09 AM
4	14.69	5.619mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:50:13 AM

Mean Area 14.57
Mean Conc. 5.572mg/L



Sample

Sample Name: I048-06
Sample ID: TCI003-55
Origin: TCI003.cal
Chk. Result

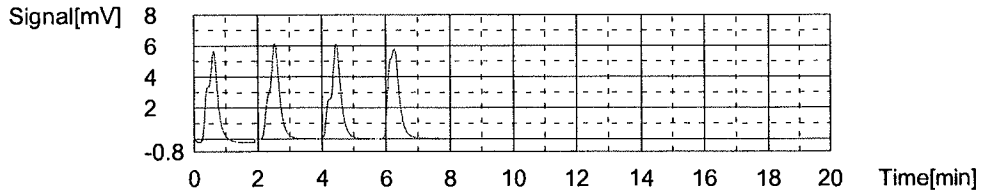
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:5.178 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.21	5.053mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:58:49 AM
2	13.51	5.167mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:00:53 AM
3	13.59	5.198mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:02:58 AM
4	13.84	5.294mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:05:04 AM

Mean Area 13.54
Mean Conc. 5.178mg/L



Sample

Sample Name: I048-07
Sample ID: TCI003-56
Origin: TCI003.cal
Chk. Result

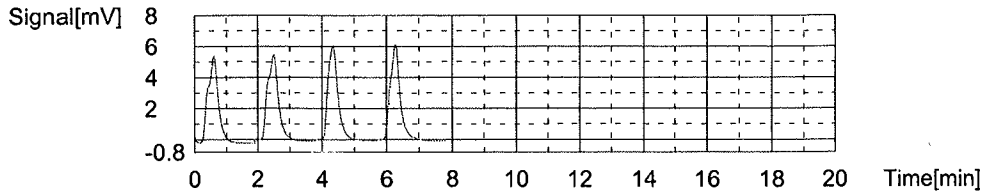
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.930 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.68	4.850mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:13:41 AM
2	12.87	4.923mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:15:45 AM
3	12.94	4.949mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:17:49 AM
4	13.07	4.999mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:20:04 AM

Mean Area 12.89
Mean Conc. 4.930mg/L



Sample

Sample Name: I048-08I
Sample ID: TCI003-57
Origin: TCI003.cal
Chk. Result

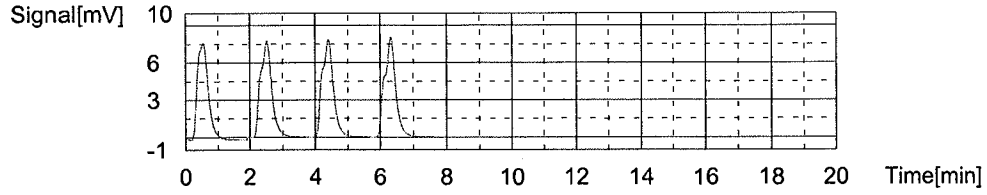
Type	Anal.	Dil.	Result
Unknown	NPOC	2.000	NPOC:14.30 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.21	13.93mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:28:40 AM
2	18.80	14.38mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:30:44 AM
3	18.97	14.51mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:32:49 AM
4	18.82	14.40mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:34:53 AM

Mean Area 18.70
Mean Conc. 14.30mg/L



Sample

Sample Name: I048-11
Sample ID: TCI003-58
Origin: TCI003.cal
Chk. Result

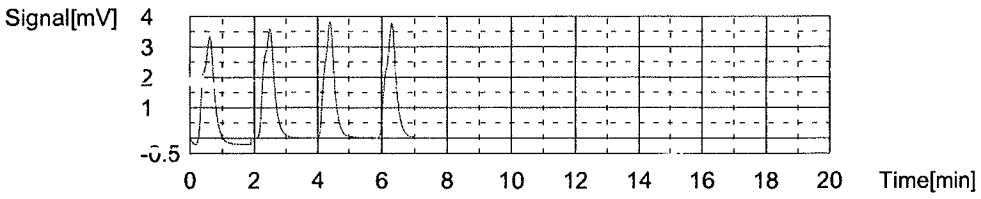
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.186 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.263	3.160mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:43:30 AM
2	8.410	3.217mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:45:34 AM
3	8.386	3.207mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:47:39 AM
4	8.257	3.158mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:49:43 AM

Mean Area 8.329
Mean Conc. 3.186mg/L



Sample

Sample Name: I048-11D
Sample ID: TCI003-59
Origin: TCI003.cal
Chk. Result

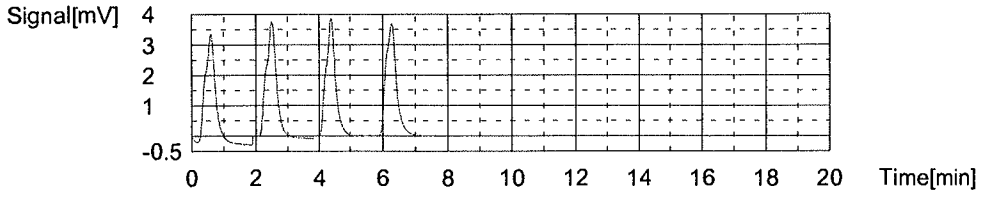
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.13[illegible] mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.775	2.974mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:58:19 AM
2	8.411	3.217mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:00:24 AM
3	8.304	3.176mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:02:28 AM
4	8.270	3.163mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:04:33 AM

Mean Area 8.190
Mean Conc. 3.133mg/L



Sample

Sample Name: I048-11M
Sample ID: TCI003-60
Origin: TCI003.cal
Chk. Result

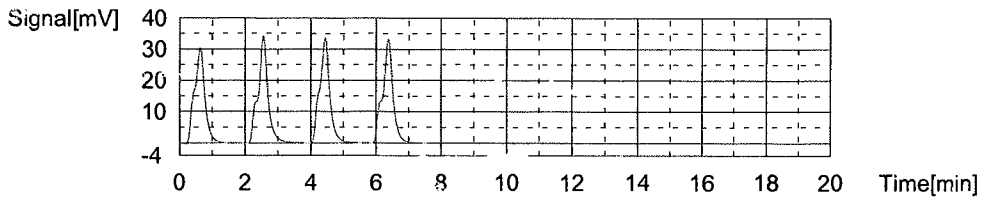
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:27.83 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Oil.	Ex.	Cal. Curve	Oate / Time
1	69.68	26.65mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:13:08 AM
2	73.77	28.22mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:15:13 AM
3	74.08	28.33mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:17:17 AM
4	73.52	28.12mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:19:22 AM

Mean Area 72.76
Mean Conc. 27.83mg/L



Sample

Sample Name: I048-11S
Sample ID: TCI003-61
Origin: TCI003.cal
Chk. Result

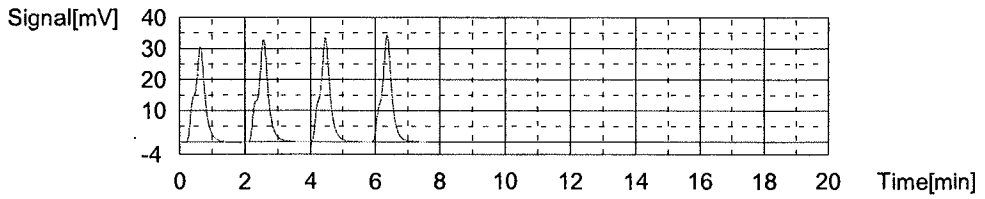
Type	Anal.	Oil.	Result
Unknown	NPOC	1.000	NPOC:27.91 mg/L

1. Oet

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Oil.	Ex.	Cal. Curve	Date / Time
1	69.77	26.69mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:27:58 AM
2	74.53	28.51mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:30:03 AM
3	74.12	28.35mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:32:07 AM
4	73.51	28.12mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:34:12 AM

Mean Area 72.98
Mean Conc. 27.91mg/L



Sample

Sample Name: I048-16
Sample ID: TCI003-62
Origin: TCI003.cal
Chk. Result

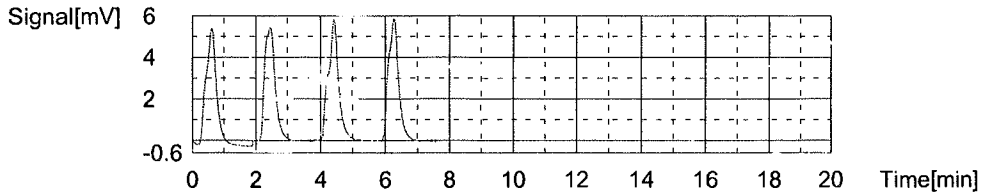
Type	Anal.	Oil.	Result
Unknown	NPOC	1.000	NPOC:5.028 mg/L

1. Oet

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.97	4.961mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:42:47 AM
2	13.09	5.007mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:44:52 AM
3	13.35	5.106mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:46:56 AM
4	13.17	5.037mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:49:01 AM

Mean Area 13.15
Mean Conc. 5.028mg/L



Control Sample

Sample Name: CCV5
Sample ID: TCI003-63
Method: TCI003.tpl
Chk. Result Control value: 25.24 / Control exceeds range!

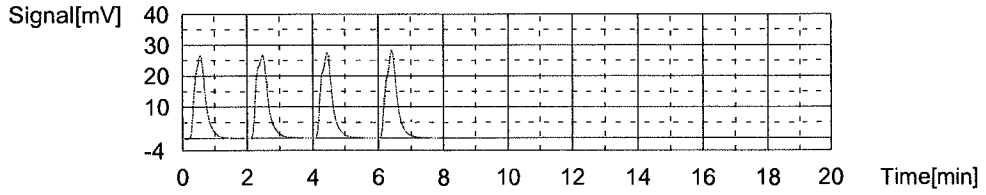
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:25.24 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.25	24.19mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:57:36 AM
2	67.15	25.68mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:59:45 AM
3	67.06	25.65mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:01:53 AM
4	66.45	25.42mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:04:03 AM

Mean Area 65.98
Mean Conc. 25.24mg/L



Sample

Sample Name: CCB5
Sample ID: TCI003-64
Origin: TCI003.cal
Chk. Result

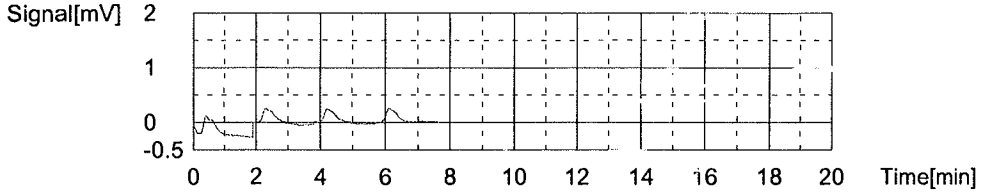
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2397 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7649	0.2926mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:12:39 AM
2	0.6131	0.2345mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:14:44 AM
3	0.5706	0.2182mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:16:48 AM
4	0.5581	0.2135mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:18:53 AM

Mean Area 0.6267
Mean Conc. 0.2397mg/L



Sample

Sample Name: I048-18
Sample ID: TCI003-65
OrigIn: TCI003.cal
Chk. Result

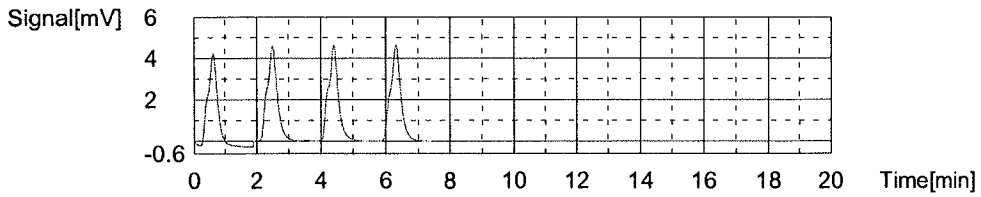
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.832 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.669	3.698mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:27:28 AM
2	10.14	3.878mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:29:32 AM
3	10.11	3.867mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:31:37 AM
4	10.16	3.886mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:33:41 AM

Mean Area 10.02
Mean Conc. 3.832mg/L



Sample

Sample Name: I048-19
Sample ID: TCI003-66
Origin: TCI003.cal
Chk. Result

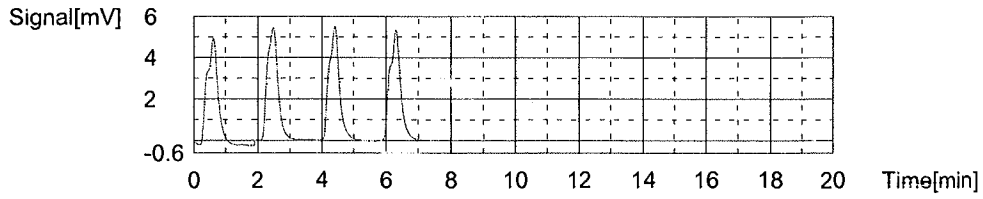
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.785 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.31	4.708mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:42:17 AM
2	12.58	4.812mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:44:22 AM
3	12.68	4.850mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:46:26 AM
4	12.47	4.770mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:48:31 AM

Mean Area 12.51
Mean Conc. 4.785mg/L



Control Sample

Sample Name: CCV6
Sample ID: TCI003 67
Method: TCI003.tpl
Chk. Result Control value: 1.218 / Control exceeds range!

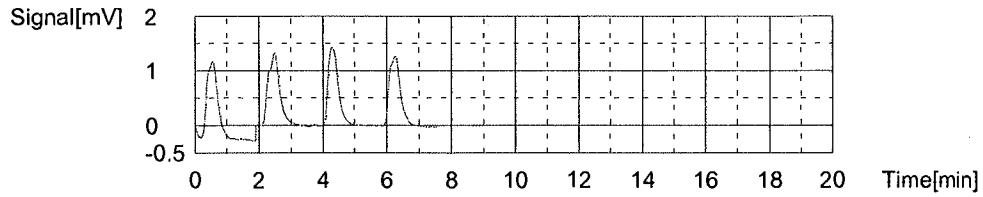
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:1.218 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.247	1.242mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:57:07 AM
2	3.225	1.234mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:59:11 AM
3	3.251	1.243mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 10:01:16 AM
4	3.020	1.155mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 10:03:20 AM

Mean Area 3.186
Mean Conc. 1.218mg/L



Sample

Sample Name: CCB6
Sample ID: TCI003 68
Origin: TCI003.cal
Chk. Result

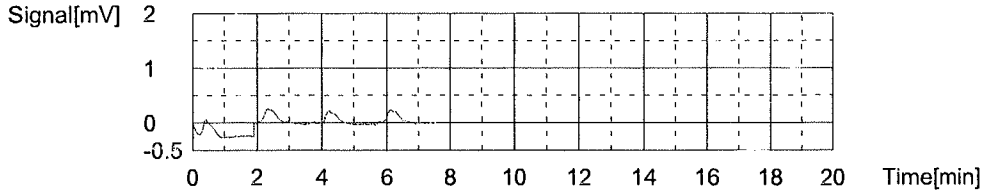
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.1934 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5025	0.1922mg/L	50uL	1		TCl003.2024_09_23_16_00_02.cal	09/24/24 10:11:56 AM
2	0.5370	0.2054mg/L	50uL	1		TCl003.2024_09_23_16_00_02.cal	09/24/24 10:14:00 AM
3	0.4861	0.1859mg/L	50uL	1		TCl003.2024_09_23_16_00_02.cal	09/24/24 10:16:05 AM
4	0.4966	0.1899mg/L	50uL	1		TCl003.2024_09_23_16_00_02.cal	09/24/24 10:18:09 AM

Mean Area 0.5056
Mean Conc. 0.1934mg/L



EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 10-09-2024
EMAX Batch No.: 24I077

Attn: Cherie Zakowski

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202

Subject: Laboratory Report
Project: VA SALT LAKE CITY

Enclosed is the Laboratory report for samples received on 09/14/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
MW23A-GW091224	I077-01	09/12/24	WATER	VOCS BY 8260C
MW23B-GW091224	I077-02	09/12/24	WATER	VOCS BY 8260C
MW23C-GW091224	I077-03	09/12/24	WATER	VOCS BY 8260C
MW32B-GW091224	I077-04	09/12/24	WATER	VOCS BY 8260C
TB05-GW091324	I077-05	09/13/24	WATER	VOCS BY 8260C
EB03-GW091324	I077-06	09/13/24	WATER	VOCS BY 8260C CANCELLED
MW42S-GW091224	I077-07	09/12/24	WATER	VOCS BY 8260C ANIONS BY IC NITRATE/NITRITE AS N TOTAL ALKALINITY TOTAL ORGANIC CARBON DISSOLVED GAS
MW08C-GW091324	I077-08	09/13/24	WATER	VOCS BY 8260C
MW26B-GW091324	I077-09	09/13/24	WATER	VOCS BY 8260C

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912023-25
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

Revised COC emailed from client on 9/17/24 1 of 2

CHAIN OF CUSTODY

LP 9/17/24

EMAX Laboratories, Inc.

3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE

EMAX CONTROL NO. 24I077
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEL 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE: DW=Drinking Water; GW=Ground Water; WW=Waste Water; SD=Solid Waste SL=Sl; SS=Soil/ Sediment; WP=Wipes PP=Pure P; AR=Air; O=Blanks (trip/rinse/fie

PRESERVATIVE: IC = Ice; HC = HCl; HN=HNO3; SH=NaO3; ST=Na2S2O3; ZA=Zinc Acetate; HS=H2SO4

ANALYSIS REQUIRED: VOCs (8260C); Anions (Cl, SO4); Nitrate/Nitrite (SM4500-NO3E); Alkalinity (SM2320B); TOC (SW9060); TDS (SM 2540C); Dissolved Gases (RSK-175)

TAT: ☐ Rush __24__hrs. ☐ Rush __48_hrs ☐ Rush_72_hrs ☐ 7 days ☐ 14 days ☒ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	PRESERVATIVE CODE HCl	IC	HS	IC	HS	IC	HCl	COMMENTS
1	MW23A-GW091224	MW23A	9/12/24	1350	3	40mL	VOA	GW		3							
2	MW23B-GW091224	MW23B	9/12/24	1227	3	40mL	VOA	GW		3							
3	MW23C-GW091224	MW23C	9/12/24	1535	3	40mL	VOA	GW		3							
4	MW32B-GW091224	MW32B	9/12/24	1155	3	40mL	VOA	GW		3							
5	TB05-GW091324		9/13/24	1300	3	40ml	VOA	O		3							
6	EB03-GW091324		9/13/24	0930	8	—	—	O		3	X	X	X	X		3	
7	~~MW42S-GW091324~~ MW EB 9/13/24		9/12/24	1101													
8	MW42S-GW091224	MW42S	9/12/24	1101	8	—	—	GW		3	1	1	1	1		3	
9	MW08C-GW091324	MW08C	9/13/24	1125	3	40mL	VOA	GW		3							

Instructions
Please CC Maria Day at daymk@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s
1	3.6	

SAMPLER

COURIER/AIRBILL FEDEX

RELINQUISHED BY	Date	Time	RECEIVED BY
Emma Goldberg Emma Goldberg CDM SMITH	9/13/24	1530	
	9/14/24	10:00	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

CHAIN OF CUSTODY

EMAX Laboratories, Inc.
3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE
EMAX CONTROL NO. 24I077
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEI 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE: DW=Drinking Water; GW=Ground Water; WW=Waste Water; SD=Solid Waste SL=Sl; SS=Soil/ Sediment; WP=Wipes PP=Pure P; AR=Air; O=Blanks (trip/rinse/fie

PRESERVATIVE: IC = Ice; HC = HCl; HN=HNO3; SH=NaO3; ST=Na2S2O3; ZA=Zinc Acetate; HS=H2SO4

ANALYSIS REQUIRED: VOCs (8260C); Anions (Cl, SO4); Nitrate/Nitrite (SM4500-NO3E); Alkalinity (SM2320B); TOC (SW9060); TDS (SM 2540C); Dissolved Gases (RSK-175)

TAT: ☐ Rush __24__hrs. ☐ Rush __48_hrs ☐ Rush_72_hrs ☐ 7 days ☐ 14 days ☒ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	PRESERVATIVE CODE HCl	IC	HS	IC	HS	IC	HCl	COMMENTS
(1) 1	MW23A-GW091224	MW23A	9/12/24	1350	3	40mL	VOA	GW		3							
(2) 2	MW23B-GW091224	MW23B	9/12/24	1227	3	40mL	VOA	GW		3							
(3) 3	MW23C-GW091224	MW23C	9/12/24	1535	3	40mL	VOA	GW		3							
(4) 4	MW32B-GW091224	MW32B	9/12/24	1155	3	40mL	VOA	GW		3							
(5) 5	TB05-GW091324		9/13/24	1300	3	40mL	VOA	O		3							
(6) 6	EB03-GW091324		9/13/24	0930	8	—	—	O		3	1	1	1	1		3	
7	~~MW42S-GW091324~~		9/12/24	1101													
(7) 8	MW42S-GW091224	MW42S	9/12/24	1101	8	—	—	GW		3	1	1	1	1		3	
(8) 9	MW08C-GW091324	MW08C	9/13/24	1125	3	40mL	VOA	GW		3							

Instructions
Please CC Maria Day at dayml@cdmsmith.com w/ lah acknowledgement

Cooler #	Temp. (oC)	Sample #s
1	3.6	

SAMPLER
COURIER/AIRBILL FEDEX

RELINQUISHED BY	Date	Time	RECEIVED BY
~~Emma Goldberg~~ Emma Goldberg CDM SMITH	9/13/24	1530	
	9/14/24	10:00	

NOTICE: Turn-around-time (TAT) for samples shall not hegin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next husiness day. The client is responsihle for all cost associated with sample disposal. Samples shall he disposed of as soon as practical (hut not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined hy CA Title 22 as non-hazardous shall he $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

CHAIN OF CUSTODY

EMAX Laboratories, Inc.
3051 Fujita St, Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE
EMAX CONTROL NO. 24I077
PROJECT CODE: 275859

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEL 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	1C = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sl	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

ANALYSIS REQUIRED: VOCs (8260C); Anions (Cl, SO4); Nitrate/Nitrite (SM4500-NO3E); Alkalinity (SM2320B); TOC (SW9060); TDS (SM 2540C); Dissolved Gases (RSK-175)

TAT
- ☐ Rush __24__hrs.
- ☐ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☑ 21 days

	SAMPLE ID		SAMPLING			CONTAINER			MATRIX CODE	QC	PRESERVATIVE CODE									COMMENTS
LAB	CLIENT	LOCATION	DATE	TIME	NO.	SIZE	TYPE			HCl	1C	HS	IC	HS	IC	HCl			
(9) 1	MW26B GW 091324	MW26B	9/13/24	1303	3	40mL	VOA	GW		3									
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			

Instructions
Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s

SAMPLER
COURIER/AIRBILL FEDEX

RELINQUISHED BY	Date	Time	RECEIVED BY
Emma Goldberg Emma Goldberg CDM Smith	9/13/24	1530	
	9/14/24	10:00	AM

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

EMAX LABORATORIES, INC.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 241077
☑ Fedex ☐ UPS ☐ GSO ☐ Others	2794 8151 9964	Recipient Nahdeen Nacana
☐ EMAX Courier ☐ Client Delivery		Date 09/14/24 Time 10:00

COC INSPECTION

☑ Client Name	☑ Client PM/FC	☐ Sampler Name	☑ Sampling Date/Time	☑ Sample ID	☑ Matrix
☑ Address	☑ Tel # / Fax #	☐ Courier Signature	☑ Analysis Required	☐ Preservative (if any)	☑ TAT
Safety Issues (if any)	☐ High concentrations expected	☐ From Superfund Site	☐ Rad screening required		

Note: _____

PACKAGING INSPECTION

Container	☑ Cooler	☐ Box	☐ Other		
Condition	☑ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☑ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☐ _____
Temperatures (Cool. ≤6 °C but not frozen)	☑ Cooler 1 3.0 °C	☐ Cooler 2 _____ °C	☐ Cooler 3 _____ °C	☐ Cooler 4 _____ °C	☐ Cooler 5 _____ °C
	☐ Cooler 6 _____ °C	☐ Cooler 7 _____ °C	☐ Cooler 8 _____ °C	☐ Cooler 9 _____ °C	☐ Cooler 10 _____ °C
Thermometer:	*A - S/N* 24041221	*B - S/N* _____	*C - S/N* _____	(D) *S/N* 230044057	

Comments: ☐ Temperature is out of range. PM was informed IMMEDIATELY.

Note: _____

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
6	22	~~D15~~ D5 D22	received 250 mL ZnAcNaOH pres. poly for nitrate/nitrite/TOC *	R3, R2

09/16/24

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

NOTES/OBSERVATIONS: * label reads H_2SO_4 preserved, pH = 12. R8

SAMPLE MATRIX IS DRINKING WATER? ☐ YES ☑ NO

LEGEND:

☐ Continue to next page.

Code	Description- Sample Management
D1	Analysis is not indicated in _____
D2	Analysis mismatch COC vs label
D3	Sample ID mismatch COC vs label
D4	Sample ID is not indicated in _____
D5	Container [improper] [leaking] [broken]
D6	Date/Time is not indicated in _____
D7	Date/Time mismatch COC vs label
D8	Sample listed in COC is not received
D9	Sample received is not listed in COC
D10	No initial/date on corrections in COC/label
D11	Container count mismatch COC vs received
D12	Container size mismatch COC vs received

Code	Description-Sample Management
D13	Out of Holding Time
D14	Bubble is >6mm
D15	No trip blank in cooler
D16	Preservation not indicated in _____
D17	Preservation mismatch COC vs label
D18	Insufficient chemical preservative
D19	Insufficient Sample
D20	No filtration info for dissolved analysis
D21	No sample for moisture determination
(D22)	~~preservation mismatch COC/label vs received~~
D23	_____
D24	_____

Code	Description-Sample Management
R1	Proceed as indicated in ☐ COC ☐ Label
R2	Refer to attached instruction
R3	Cancel the analysis
R4	Use vial with smallest bubble first
R5	Log-in with latest sampling date and time+1 min
R6	Adjust pH as necessary
R7	Filter and preserved as necessary
R8	Inform client
R9	_____
R10	_____
R11	_____
R12	_____

REVIEWS:

Sample Labeling Nahdeen Nacana Date 09/16/24 09/16/24

SRF _____ Date 9/16/24

PM _____ Date 9/16/24

Outlook

RE: VA Salt Lake City SDG 24I077-Wrong preservation container received

From Zakowski, Cherie <ZakowskiCA@cdmsmith.com>
Date Tue 9/17/2024 9:33 AM
To Linh Pham <LPham@emaxlabs.com>
Cc Caspar Pang <CPang@emaxlabs.com>; Cecilia Chavez <CChavez@emaxlabs.com>; Tyler Kosaka <TKosaka@emaxlabs.com>

1 attachments (666 KB)
Revised COC - 24I077.pdf;

Hi: Please see attached. For that sample below we only need VOCs. This should solve the problem with the wrong bottle issue. Please let me know if this works and/or if you have further questions.

Thanks

Cherie Zakowski
Project Manager/Scientist
CDM Smith
555 17th Street, Suite 500
Denver, CO 80202
Direct Phone: 720-264-1109
Main Phone: 303-383-2300

From: Linh Pham <LPham@emaxlabs.com>
Sent: Monday, September 16, 2024 5:48 PM
To: Zakowski, Cherie <ZakowskiCA@cdmsmith.com>
Cc: Caspar Pang <CPang@emaxlabs.com>; Cecilia Chavez <CChavez@emaxlabs.com>; Tyler Kosaka <TKosaka@emaxlabs.com>
Subject: VA Salt Lake City SDG 24I077-Wrong preservation container received
Importance: High

Hello Cherie,
Attached please find COC and SRFs of VA Salt Lake SDG 24I077

24I077-06: Sample ID EB03-GW091324. TOC/Nitrite/Nitrite sample was received in the bottle preserved with Zn Acetate/NaOH with PH=12 instead of H2SO4.
Please advise if the lab should take an aliquot from unpreserved poly, preserved with H2SO4 and proceed with NO3/NO2 and TOC analyses.

Thank you

Linh Pham
Project Coordinator

Phone: 310-618-8889 ext. 120

EMAX Laboratories, Inc.

3051 Fujita St

Torrance, CA90505

EMAX will be closed in observance of the upcoming holidays:

Indigenous Peoples' Day (Monday 10/14/2024)

Veterans' Day (Monday 11/11/2024)

Thanksgiving (Thursday/Friday 11/28-11/29/2024)

From: Linh Pham <LPham@emaxlabs.com>
Sent: Wednesday, September 11, 2024 11:18 AM
To: Zakowski, Cherie <ZakowskiCA@cdmsmith.com>
Cc: Caspar Pang <CPang@emaxlabs.com>
Subject: Login for VA Salt Lake City SDG 24I027 and 24I028

Hello Cherie,
Attached please find logins for SDG 24I027 and 24I028. Please review and let us know if you have any questions.

Thank you

Linh Pham

Project Coordinator

Phone: 310-618-8889 ext. 120

EMAX Laboratories, Inc.

3051 Fujita St

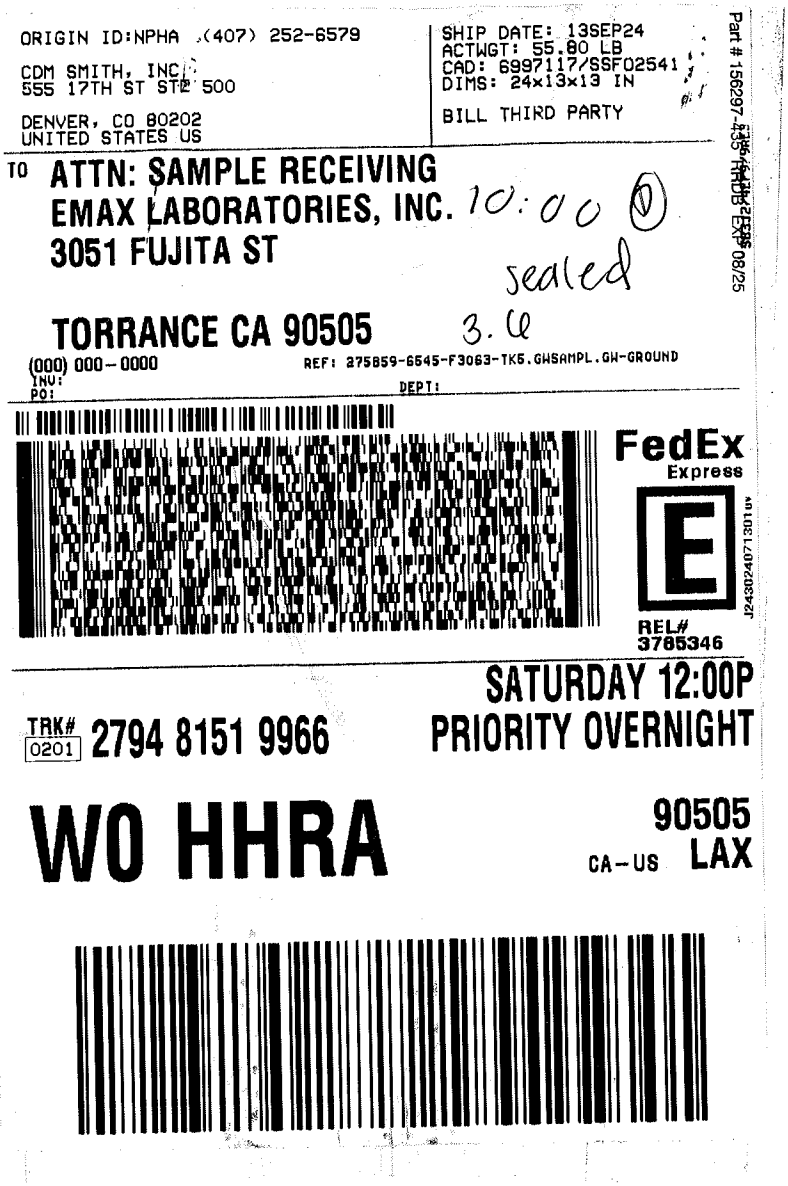
Torrance, CA90505

EMAX will be closed in observance of the upcoming holidays:

Indigenous Peoples' Day (Monday 10/14/2024)

Veterans' Day (Monday 11/11/2024)

Thanksgiving (Thursday/Friday 11/28-11/29/2024)



ORIGIN ID:NPHA (407) 252-6579

CDM SMITH, INC.
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHIP DATE: 13SEP24
ACTWGT: 55.80 LB
CAD: 6997117/SSF02541
DIMS: 24x13x13 IN

BILL THIRD PARTY

Part # 156297-435 RADB EXP 08/25

TO **ATTN: SAMPLE RECEIVING**
EMAX LABORATORIES, INC. 10:00 (1)
3051 FUJITA ST

sealed

TORRANCE CA 90505 3.6

(000) 000-0000 REF: 275859-6545-F3063-TK5.GWSAMPL.GW-GROUND
INV:
PO: DEPT:

FedEx Express

E

J243024071301uv

REL# 3785346

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 0201 **2794 8151 9966**

W0 HHRA

90505
CA-US **LAX**

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range or estimated value.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

SDG#: 24I077

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I077

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of nine(9) water samples were received on 09/14/24 to be analyzed for Volatile Organics by GC/MS in accordance with Method SW5030B/8260C and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Instrument Performance and Calibration
Instrument tune check was performed prior to calibration. Result was within acceptance criteria. Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using secondary source (ICV). Continuing calibration (CCV) was carried out at a frequency required by the project. All project calibration requirements were satisfied except for Chloroform, 1,2-Dichloropropane, Toluene in CCV(Data File ID: RIV658) and 1,2-Dichloropropane in CCV(Data File ID: RIV678) were slightly biased high. However, analytes in question were not detected in associated field samples. Note that" Minimum Response Factor" for all analytes were within method recommended response factors with the exception of Acetone and 2-Butanone.However, percent recoveries for all target analytes were within 70-130% on all calibration points. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, two(2) method blanks were analyzed. VO01I25B and VO01I26B were compliant to project requirement. Refer to sample result summary forms for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, two(2) sets of LCS/LCD were analyzed. All analytes were within LCS limits in VO01I25L/VO01I25C and VO01I26L/VO01I26C, except for results qualified with [*]. Refer to LCS summary forms for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met with the exception of those that were discussed within the associated QC parameter.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24I077
Instrument ID : 01

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	V001I25L	1	NA	09/26/2407:37	09/26/2407:37	RIV659	RHV134	V001I25	Lab Control Sample (LCS)
LCD1W	V001I25C	1	NA	09/26/2408:06	09/26/2408:06	RIV660	RHV134	V001I25	LCS Duplicate
MBLK1W	V001I25B	1	NA	09/26/2409:04	09/26/2409:04	RIV662	RHV134	V001I25	Method Blank
TB05-GW091324	24I077-05	1	NA	09/26/2410:32	09/26/2410:32	RIV665	RHV134	V001I25	Field Sample
MW23C-GW091224	24I077-03	1	NA	09/26/2414:32	09/26/2414:32	RIV673	RHV134	V001I25	Field Sample
LCS2W	V001I26L	1	NA	09/26/2420:13	09/26/2420:13	RIV679	RHV134	V001I26	Lab Control Sample (LCS)
LCD2W	V001I26C	1	NA	09/26/2420:43	09/26/2420:43	RIV680	RHV134	V001I26	LCS Duplicate
MBLK2W	V001I26B	1	NA	09/26/2421:43	09/26/2421:43	RIV682	RHV134	V001I26	Method Blank
MW23A-GW091224	24I077-01N	1	NA	09/26/2423:12	09/26/2423:12	RIV685	RHV134	V001I26	Field Sample
MW23B-GW091224	24I077-02N	1	NA	09/26/2423:42	09/26/2423:42	RIV686	RHV134	V001I26	Field Sample
MW32B-GW091224	24I077-04N	1	NA	09/27/2400:12	09/27/2400:12	RIV687	RHV134	V001I26	Field Sample
MW42S-GW091224	24I077-07N	1	NA	09/27/2400:42	09/27/2400:42	RIV688	RHV134	V001I26	Field Sample
EB03-GW091324	24I077-06	1	NA	09/27/2401:11	09/27/2401:11	RIV689	RHV134	V001I26	Field Sample
MW08C-GW091324	24I077-08	1	NA	09/27/2402:39	09/27/2402:39	RIV692	RHV134	V001I26	Field Sample
MW26B-GW091324	24I077-09	1	NA	09/27/2403:09	09/27/2403:09	RIV693	RHV134	V001I26	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/12/24 13:50
Project	: VA SALT LAKE CITY	Date Received:	09/14/24
Batch No.	: 24I077	Date Extracted:	09/26/24 23:12
Sample ID	: MW23A-GW091224	Date Analyzed:	09/26/24 23:12
Lab Samp ID:	24I077-01N	Dilution Factor:	1
Lab File ID:	RIV685	Matrix:	WATER
Ext Btch ID:	VOO1126	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.51J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	6.0	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.98	10.0	100	70-130
Bromofluorobenzene	9.15	10.0	92	70-130
Toluene-d8	11.0	10.0	110	70-130
Dibromofluoromethane	10.2	10.0	102	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV685.D Vial: 9
Acq On : 26 Sep 2024 11:12 pm Operator: DNguye/CLingl
Sample : 24I077-01N Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 3 12:51 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1060647	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	839668	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	433214	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	330316	10.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.40%		
41) 1,2-Dichloroethane-d4	7.98	65	286153	9.98	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.80%		
54) Toluene-d8	11.03	98	1129293	11.00	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.00%		
76) 4-Bromofluorobenzene	16.01	95	503080	9.15	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.50%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	389249	6.03	ug/l	95
47) Bromodichloromethane	9.74	83	23669	0.51	ug/l	97
61) Tetrachloroethene	12.32	164	3583	0.13	ug/l	97

(#) = qualifier out of range (m) = manual integration

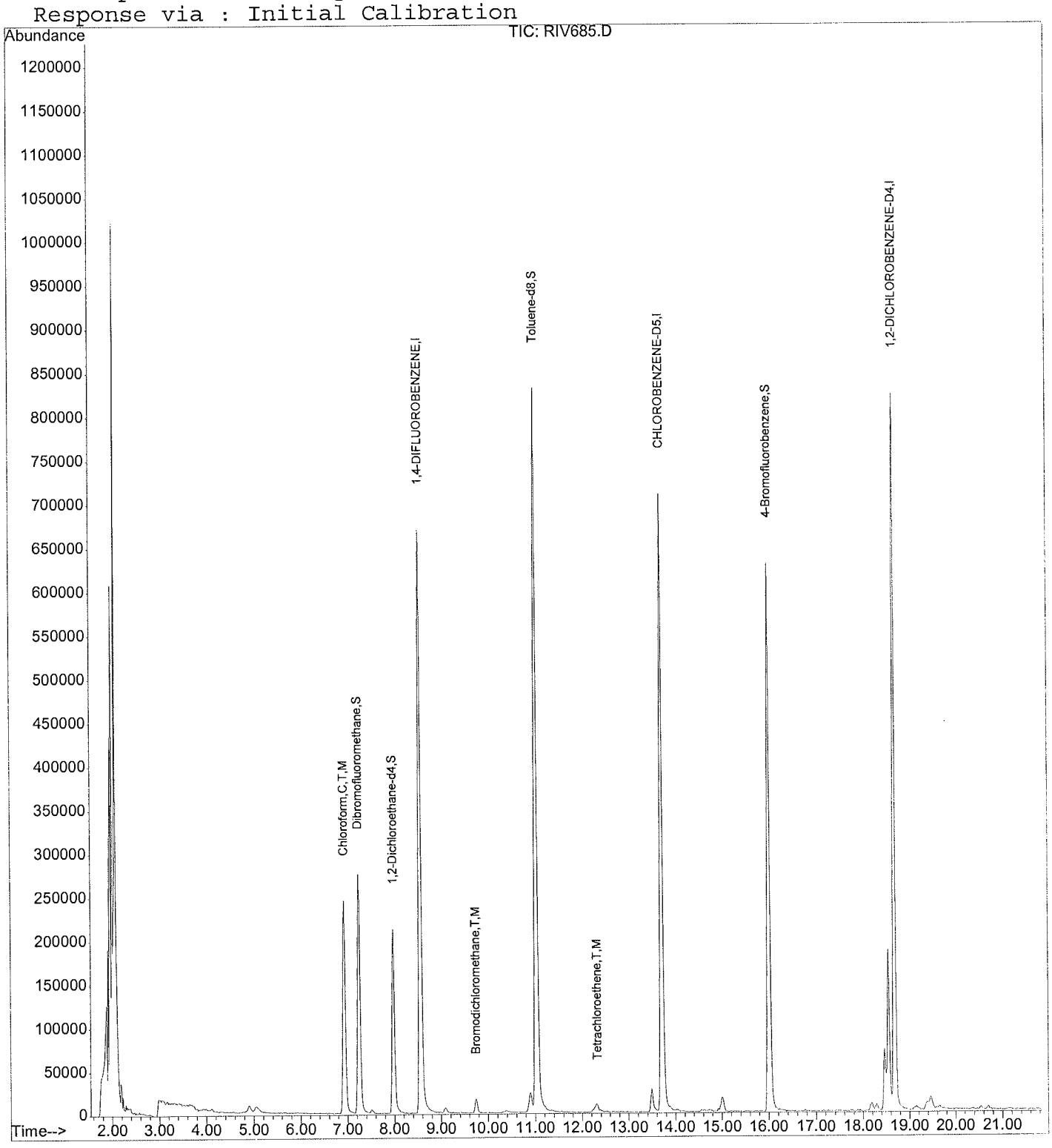
Quantitation Report

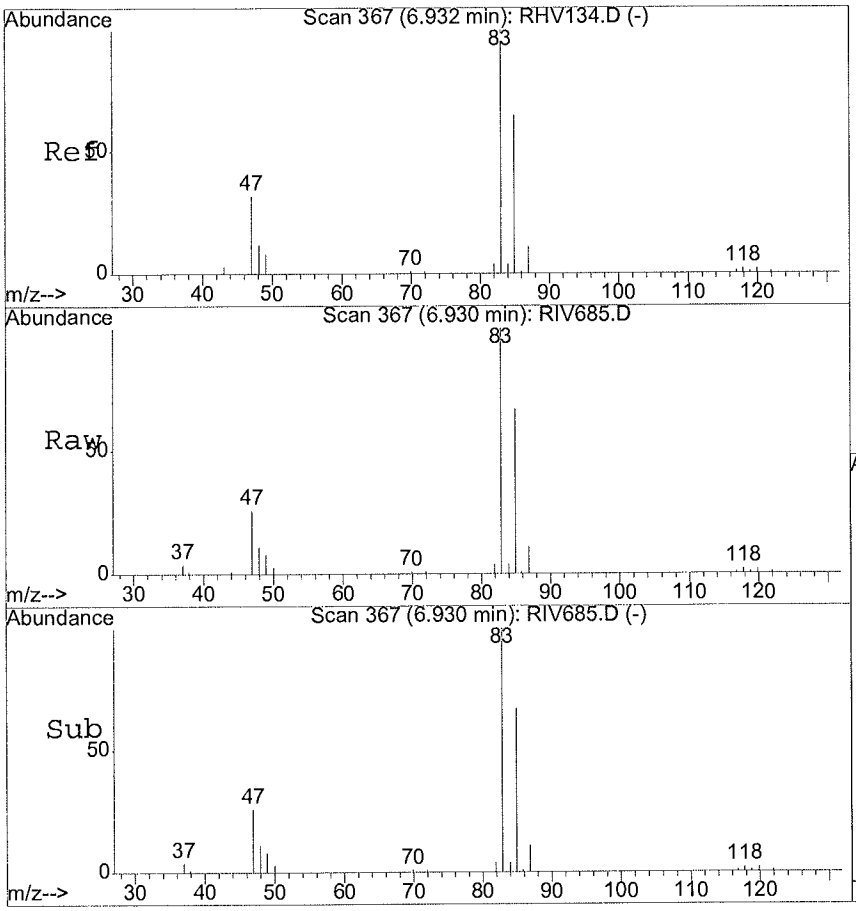
Data File : D:\HPCHEM\1\DATA\24I26\RIV685.D
Acq On : 26 Sep 2024 11:12 pm
Sample : 24I077-01N
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:51 2024

Vial: 9
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

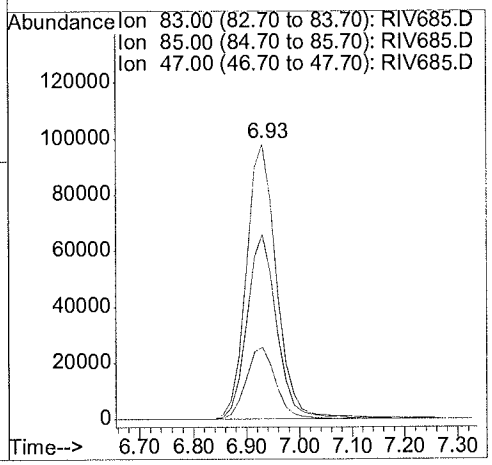


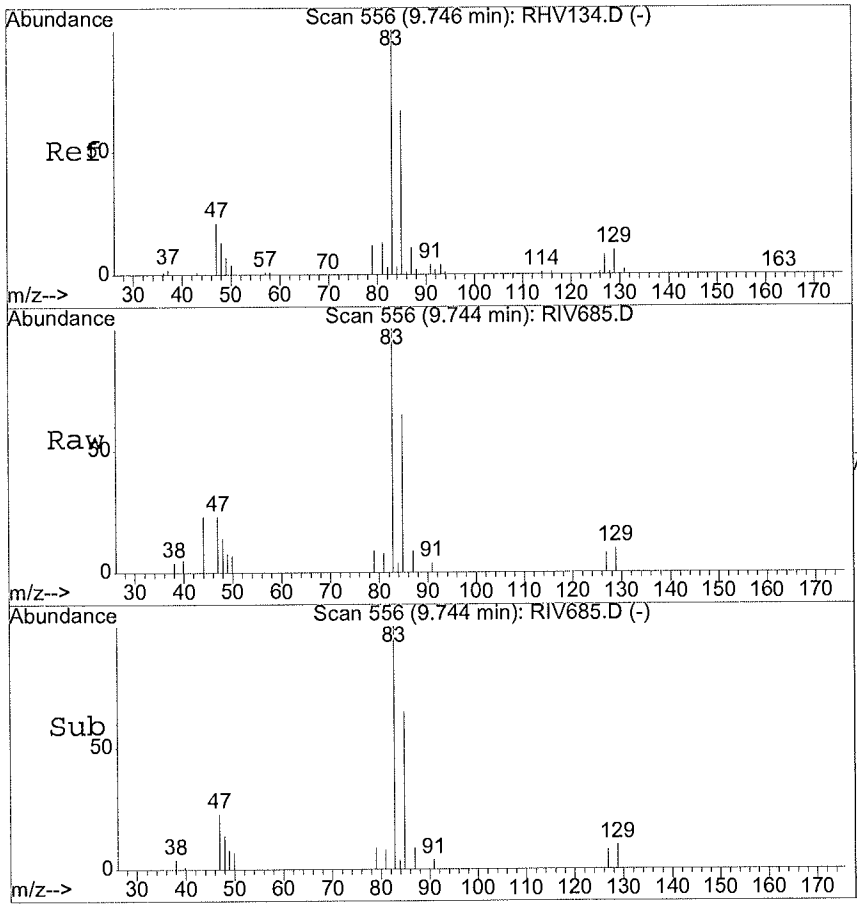


#31
Chloroform
Concen: 6.03 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV685.D
Acq: 26 Sep 2024 11:12 pm

Tgt Ion: 83 Resp: 389249

Ion	Ratio	Lower	Upper
83	100		
85	65.7	38.4	98.4
47	25.5	0.0	59.6

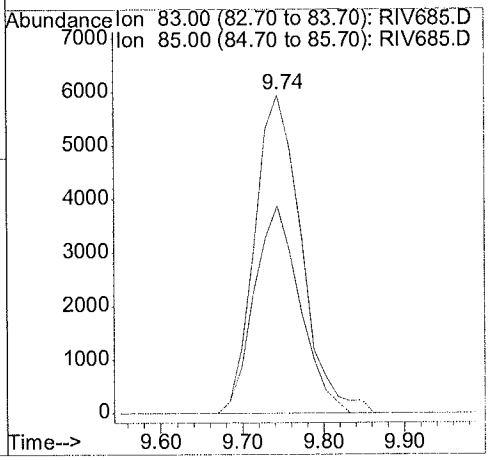


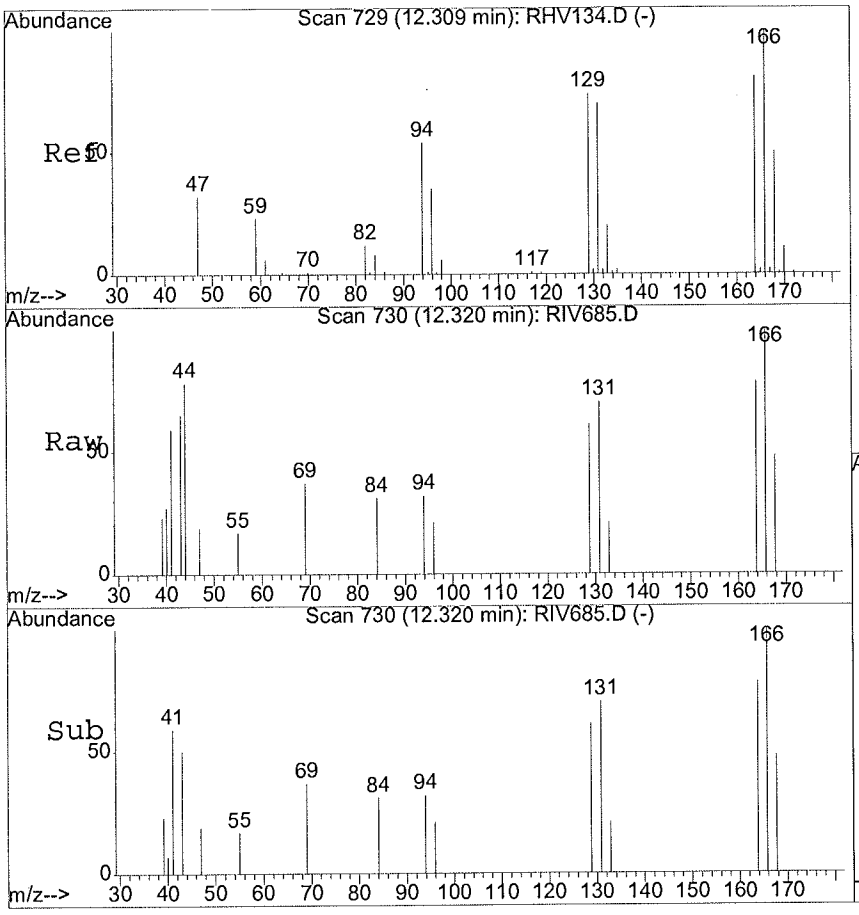


#47
Bromodichloromethane
Concen: 0.51 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RIV685.D
Acq: 26 Sep 2024 11:12 pm

Tgt Ion: 83 Resp: 23669

Ion	Ratio	Lower	Upper
83	100		
85	64.0	36.5	96.5

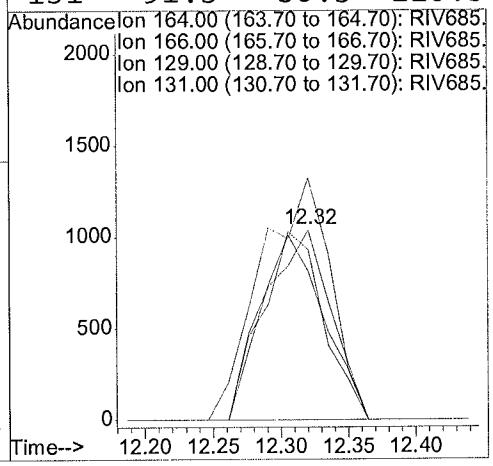




#61
Tetrachloroethene
Concen: 0.13 ug/l
RT: 12.32 min Scan# 730
Delta R.T. 0.01 min
Lab File: RIV685.D
Acq: 26 Sep 2024 11:12 pm

Tgt Ion:164 Resp: 3583

Ion	Ratio	Lower	Upper
164	100		
166	132.8	98.2	158.2
129	91.8	62.8	122.8
131	91.3	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/12/24 12:27
Project	: VA SALT LAKE CITY	Date Received:	09/14/24
Batch No.	: 24I077	Date Extracted:	09/26/24 23:42
Sample ID	: MW23B-GW091224	Date Analyzed:	09/26/24 23:42
Lab Samp ID:	24I077-02N	Dilution Factor:	1
Lab File ID:	RIV686	Matrix:	WATER
Ext Btch ID:	VO01I26	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.59J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	9.2	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	0.28J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	1.7J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	1.7	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.5	10.0	105	70-130
Bromofluorobenzene	9.25	10.0	93	70-130
Toluene-d8	10.6	10.0	106	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV686.D
Acq On : 26 Sep 2024 11:42 pm
Sample : 24I077-02N
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:52 2024

Vial: 10
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	949585	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	790870	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	395039	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	302185	10.47	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.70%		
41) 1,2-Dichloroethane-d4	7.98	65	269997	10.52	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.20%		
54) Toluene-d8	11.03	98	1029238	10.65	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.50%		
76) 4-Bromofluorobenzene	16.01	95	463748	9.25	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.50%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	532813	9.23	ug/l	95
47) Bromodichloromethane	9.74	83	24539	0.59	ug/l	97
67) Ethylbenzene	13.89	91	42068	0.28	ug/l	96
68) m-Xylene & p-Xylene	14.02	91	198441	1.69	ug/l	95
69) o-Xylene	14.85	91	191293	1.69	ug/l	95

(#) = qualifier out of range (m) = manual integration

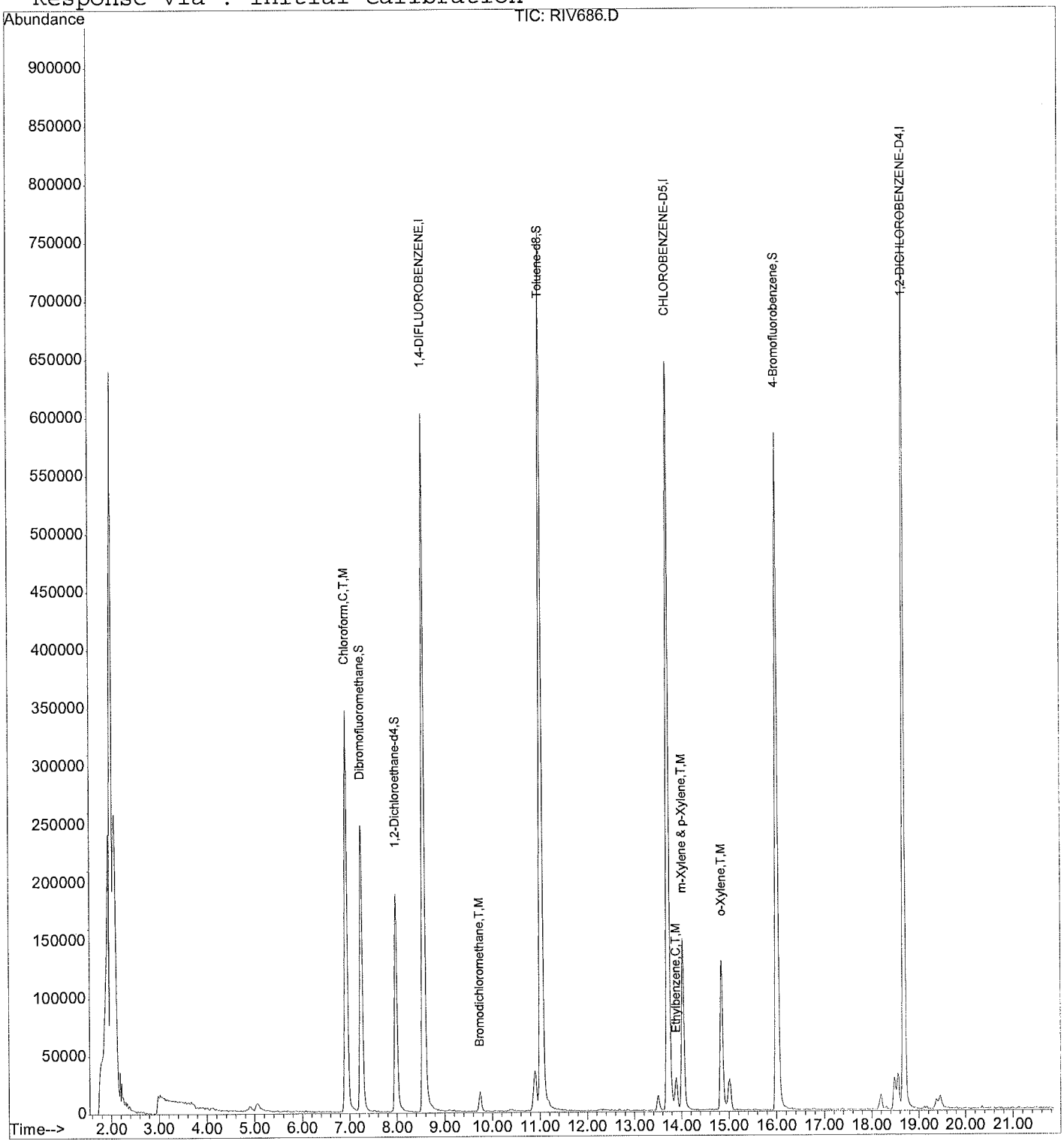
Quantitation Report

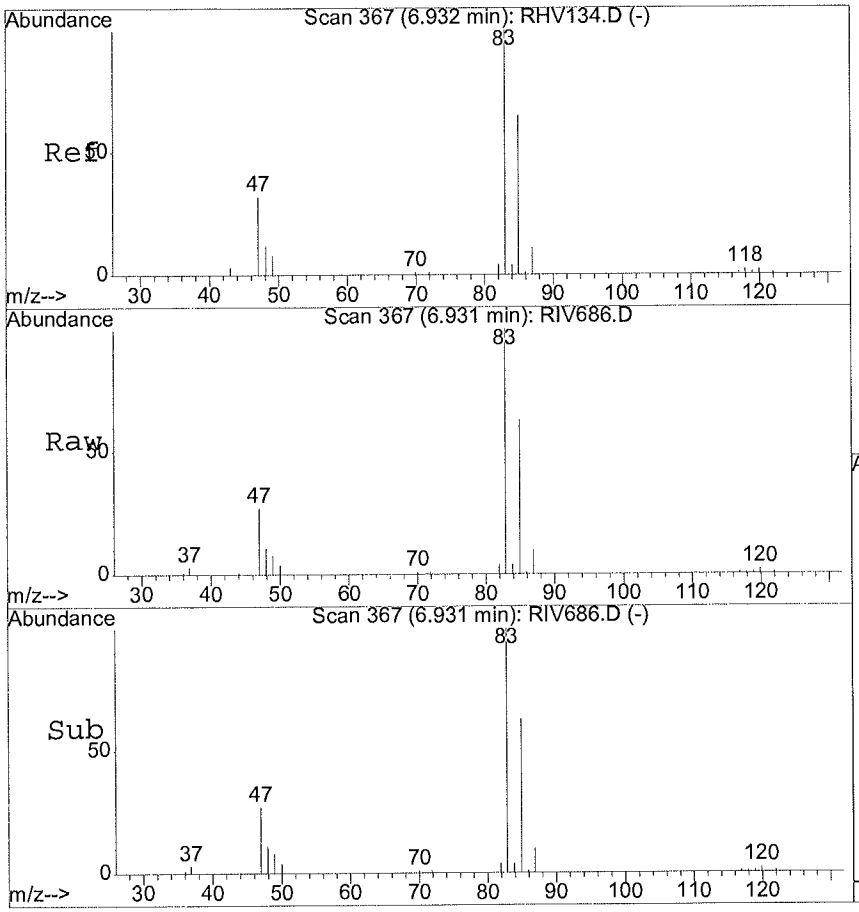
Data File : D:\HPCHEM\1\DATA\24I26\RIV686.D
Acq On : 26 Sep 2024 11:42 pm
Sample : 24I077-02N
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:52 2024

Vial: 10
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

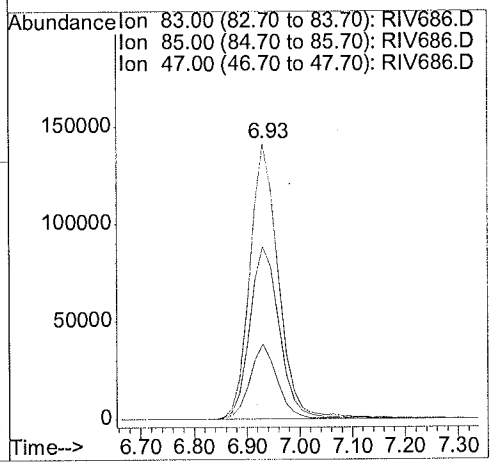


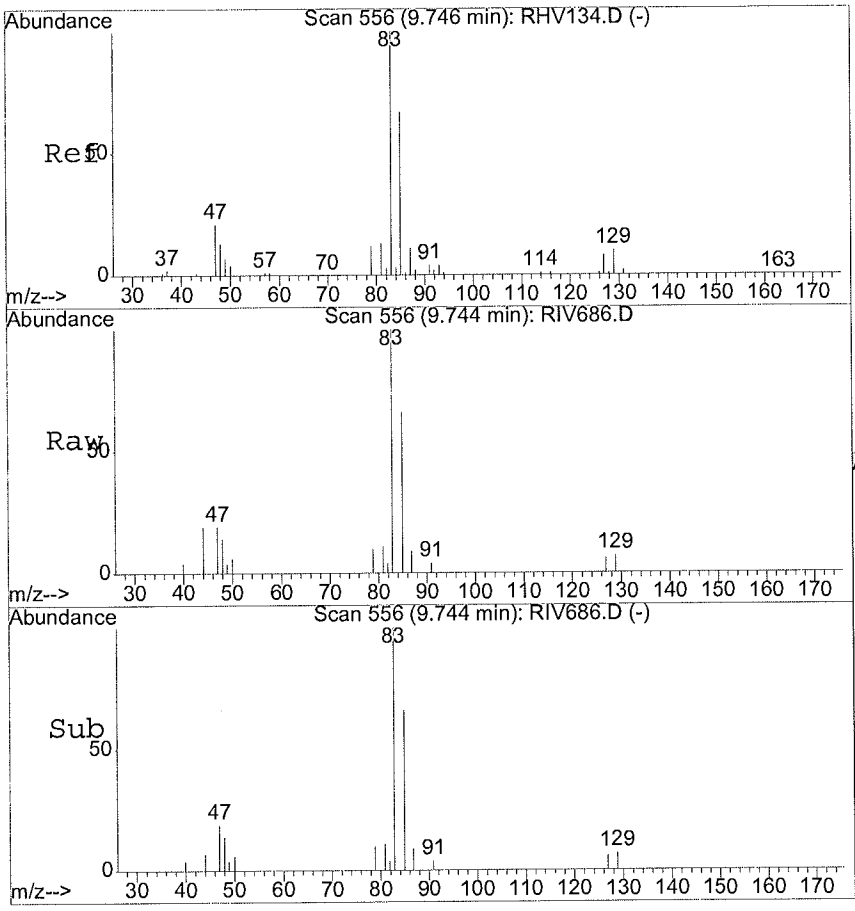


#31
Chloroform
Concen: 9.23 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV686.D
Acq: 26 Sep 2024 11:42 pm

Tgt Ion: 83 Resp: 532813

Ion	Ratio	Lower	Upper
83	100		
85	65.2	38.4	98.4
47	25.9	0.0	59.6

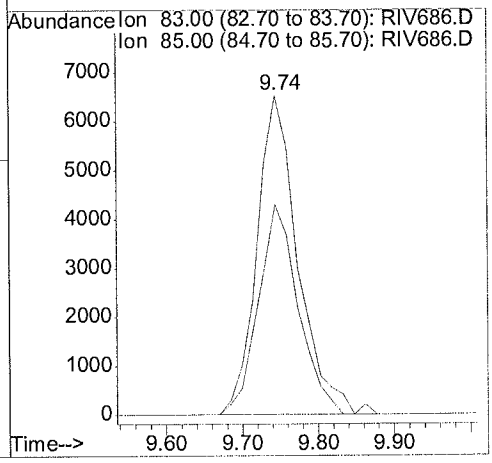


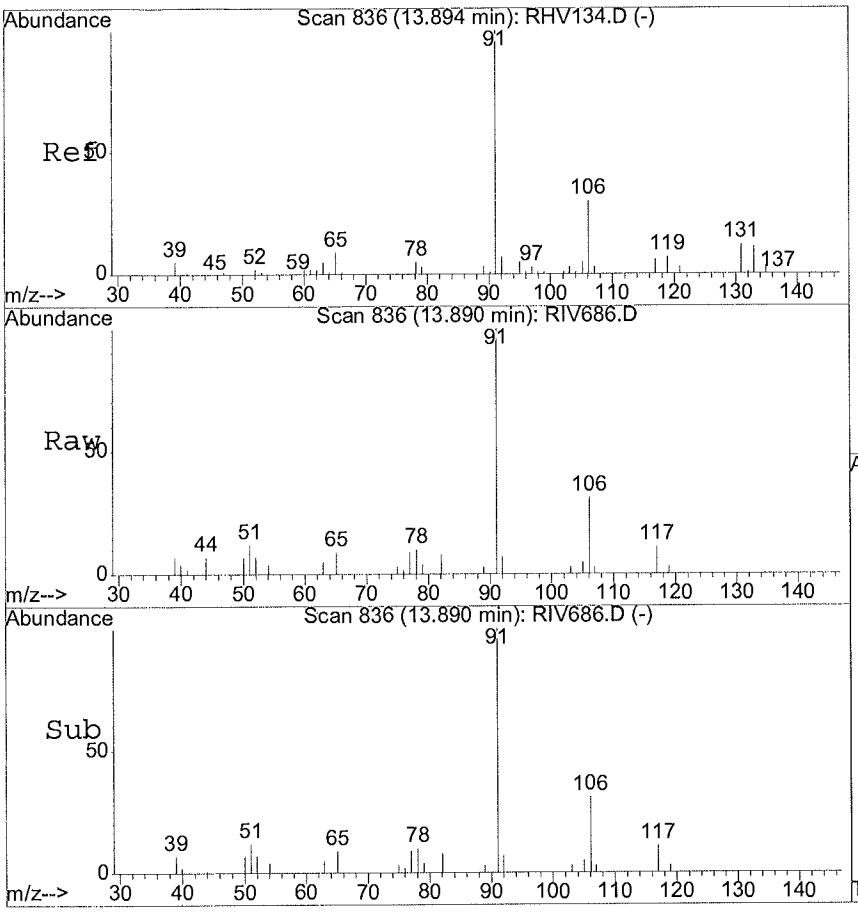


#47
Bromodichloromethane
Concen: 0.59 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RIV686.D
Acq: 26 Sep 2024 11:42 pm

Tgt Ion: 83 Resp: 24539

Ion	Ratio	Lower	Upper
83	100		
85	64.2	36.5	96.5

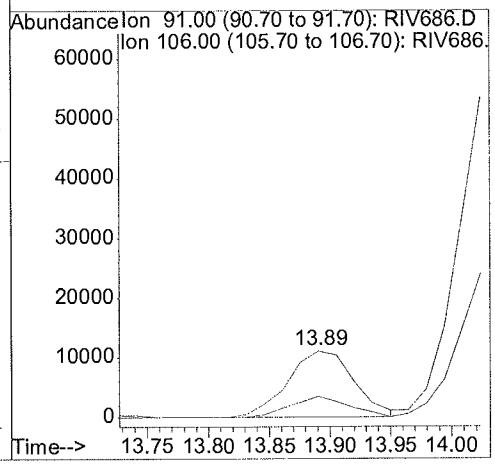


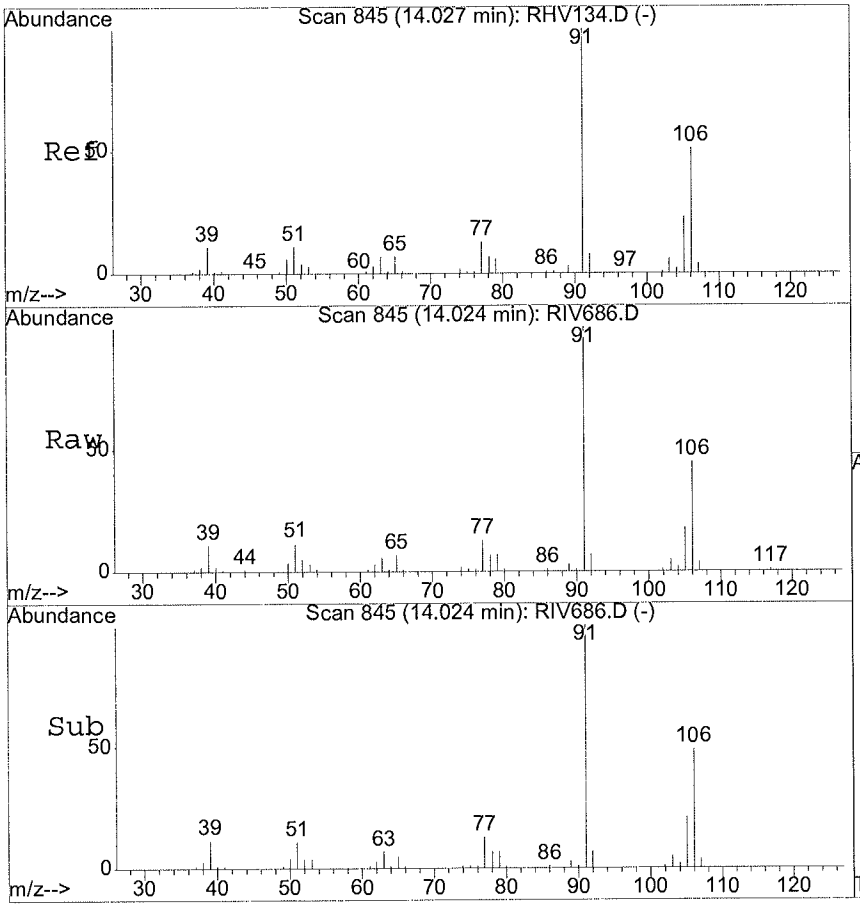


#67
Ethylbenzene
Concen: 0.28 ug/l
RT: 13.89 min Scan# 836
Delta R.T. -0.00 min
Lab File: RIV686.D
Acq: 26 Sep 2024 11:42 pm

Tgt Ion: 91 Resp: 42068

Ion	Ratio	Lower	Upper
91	100		
106	27.3	0.0	59.6

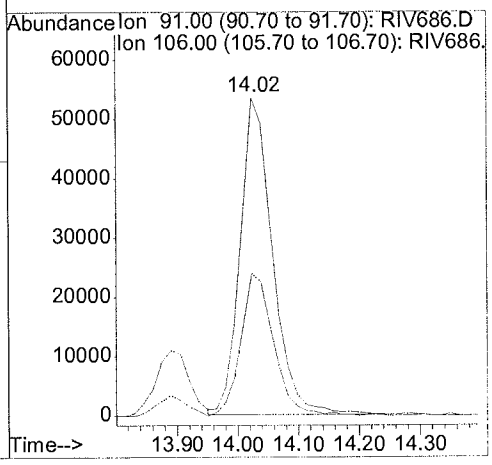


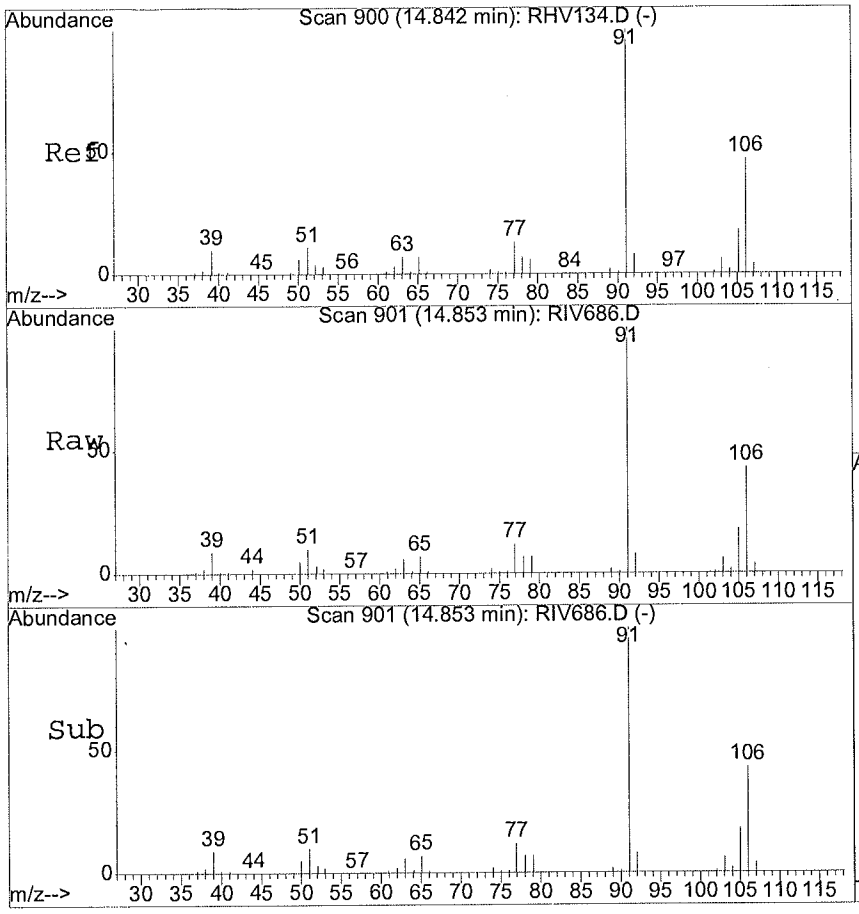


#68
m-Xylene & p-Xylene
Concen: 1.69 ug/l
RT: 14.02 min Scan# 845
Delta R.T. -0.00 min
Lab File: RIV686.D
Acq: 26 Sep 2024 11:42 pm

Tgt Ion: 91 Resp: 198441

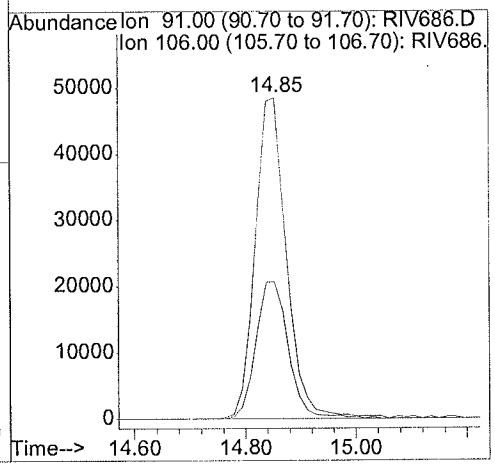
Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.5	79.5





#69
o-Xylene
Concen: 1.69 ug/l
RT: 14.85 min Scan# 901
Delta R.T. 0.01 min
Lab File: RIV686.D
Acq: 26 Sep 2024 11:42 pm

Tgt Ion: 91	Resp:	191293	
Ion	Ratio	Lower	Upper
91	100		
106	44.4	17.6	77.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/12/24 15:35
Project	: VA SALT LAKE CITY	Date Received:	09/14/24
Batch No.	: 24I077	Date Extracted:	09/26/24 14:32
Sample ID	: MW23C-GW091224	Date Analyzed:	09/26/24 14:32
Lab Samp ID:	24I077-03	Dilution Factor:	1
Lab File ID:	RIV673	Matrix:	WATER
Ext Btch ID:	VOQ1I25	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.9	10.0	109	70-130
Bromofluorobenzene	9.09	10.0	91	70-130
Toluene-d8	10.5	10.0	105	70-130
Dibromofluoromethane	10.6	10.0	106	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV673.D Vial: 18
Acq On : 26 Sep 2024 2:32 pm Operator: DNguye/CLingl
Sample : 24I077-03 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 15:56 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

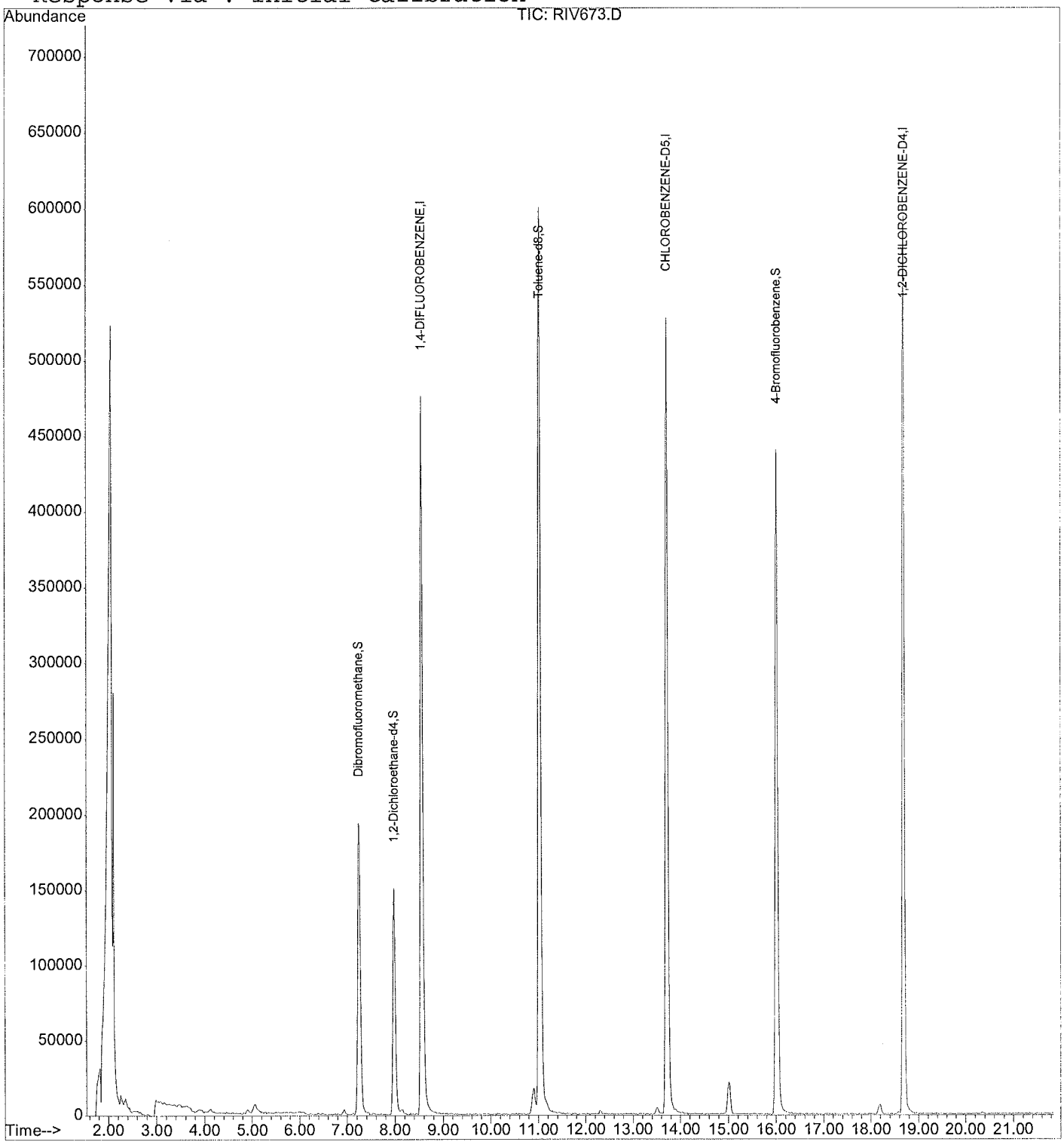
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	722810	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	616812	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	309986	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	233492	10.62	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.20%			
41) 1,2-Dichloroethane-d4	7.98	65	212798	10.89	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.90%			
54) Toluene-d8	11.03	98	792425	10.51	ug/l	0.00
Spiked Amount 10.000			Recovery = 105.10%			
76) 4-Bromofluorobenzene	16.01	95	357535	9.09	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.90%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV673.D Vial: 18
Acq On : 26 Sep 2024 2:32 pm Operator: DNguye/CLing
Sample : 24I077-03 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 15:56 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/12/24 11:55
Project	: VA SALT LAKE CITY	Date Received:	09/14/24
Batch No.	: 24I077	Date Extracted:	09/27/24 00:12
Sample ID	: MW32B-GW091224	Date Analyzed:	09/27/24 00:12
Lab Samp ID:	24I077-04N	Dilution Factor:	1
Lab File ID:	RIV687	Matrix:	WATER
Ext Btch ID:	VO01I26	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.12J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.2	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.58J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.4	10.0	104	70-130
Bromofluorobenzene	9.20	10.0	92	70-130
Toluene-d8	10.8	10.0	108	70-130
Dibromofluoromethane	10.3	10.0	103	70-130

Notes:
Sample Amount : 25ml
Prepared by : DNguye
Final Volume : 25ml
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV687.D Vial: 11
Acq On : 27 Sep 2024 12:12 am Operator: DNguye/CLingl
Sample : 24I077-04N Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 3 12:53 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	943355	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	776289	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	400009	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	295764	10.31	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.10%		
41) 1,2-Dichloroethane-d4	7.98	65	265995	10.43	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.30%		
54) Toluene-d8	11.03	98	1025006	10.80	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.00%		
76) 4-Bromofluorobenzene	16.01	95	466826	9.20	ug/l	0.00
Spiked Amount 10.000			Recovery =	92.00%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	128063	2.23	ug/l	92
47) Bromodichloromethane	9.74	83	4791	0.12	ug/l	81
61) Tetrachloroethene	12.31	164	15374	0.58	ug/l	92

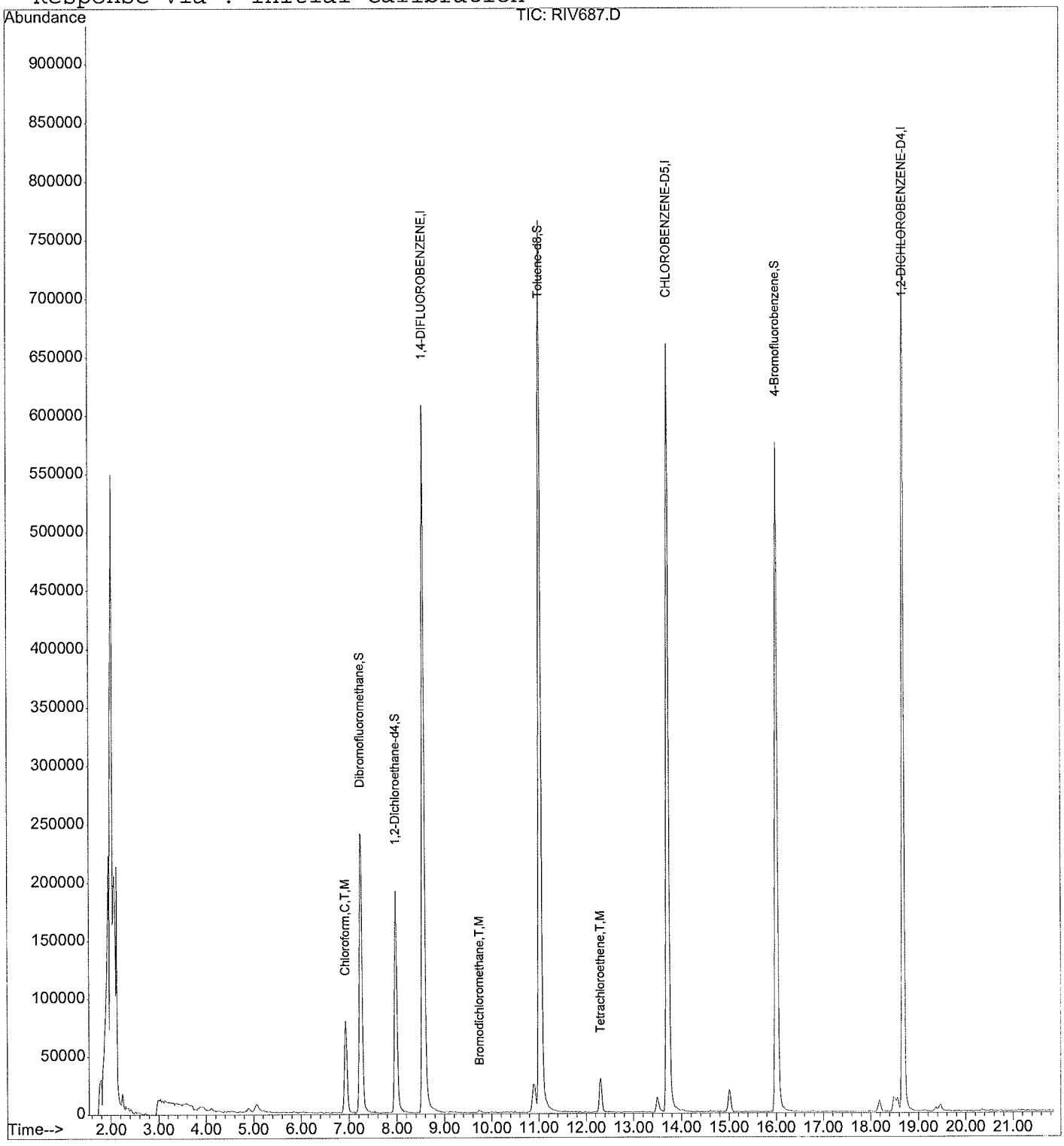
(#) = qualifier out of range (m) = manual integration

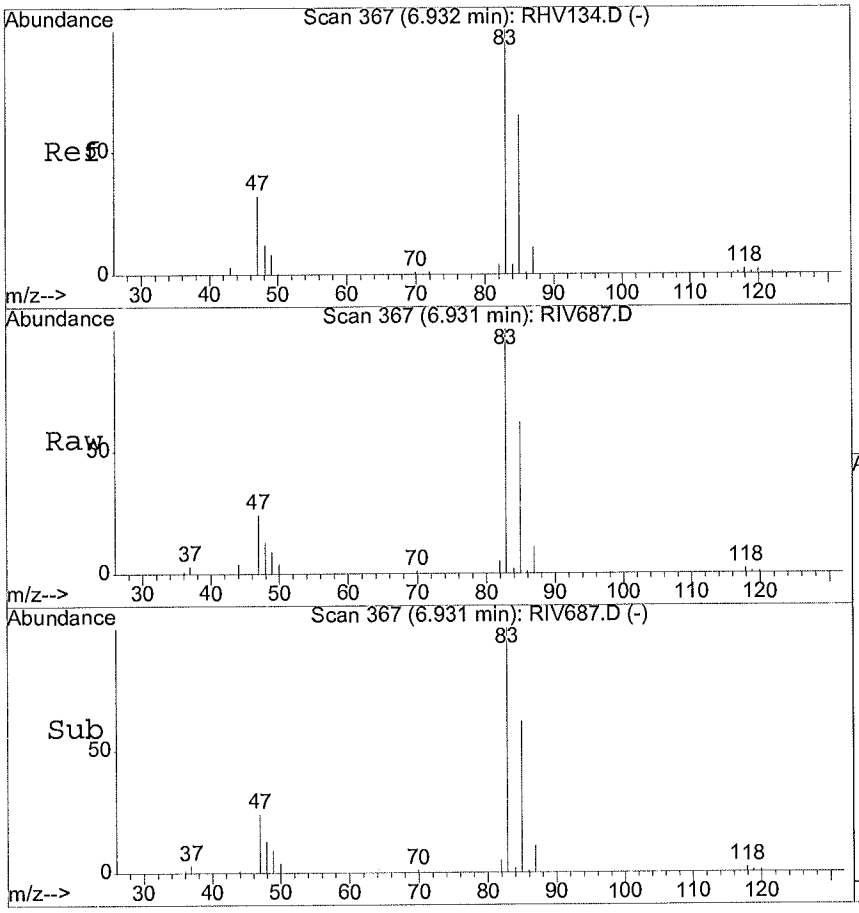
Data File : D:\HPCHEM\1\DATA\24I26\RIV687.D
Acq On : 27 Sep 2024 12:12 am
Sample : 24I077-04N
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:53 2024

Vial: 11
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

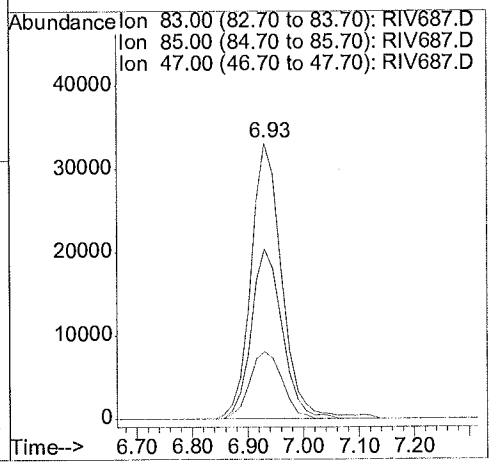


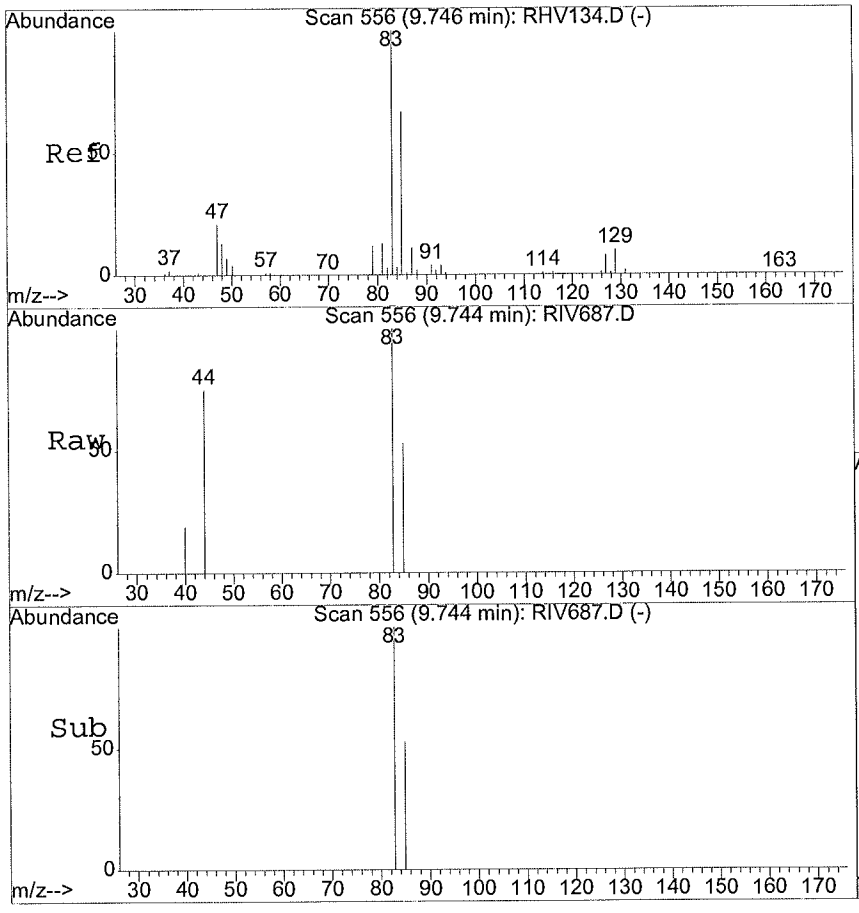


#31
Chloroform
Concen: 2.23 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV687.D
Acq: 27 Sep 2024 12:12 am

Tgt Ion: 83 Resp: 128063

Ion	Ratio	Lower	Upper
83	100		
85	61.5	38.4	98.4
47	25.7	0.0	59.6

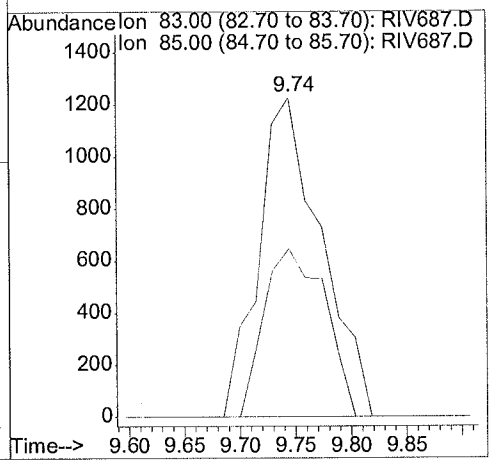


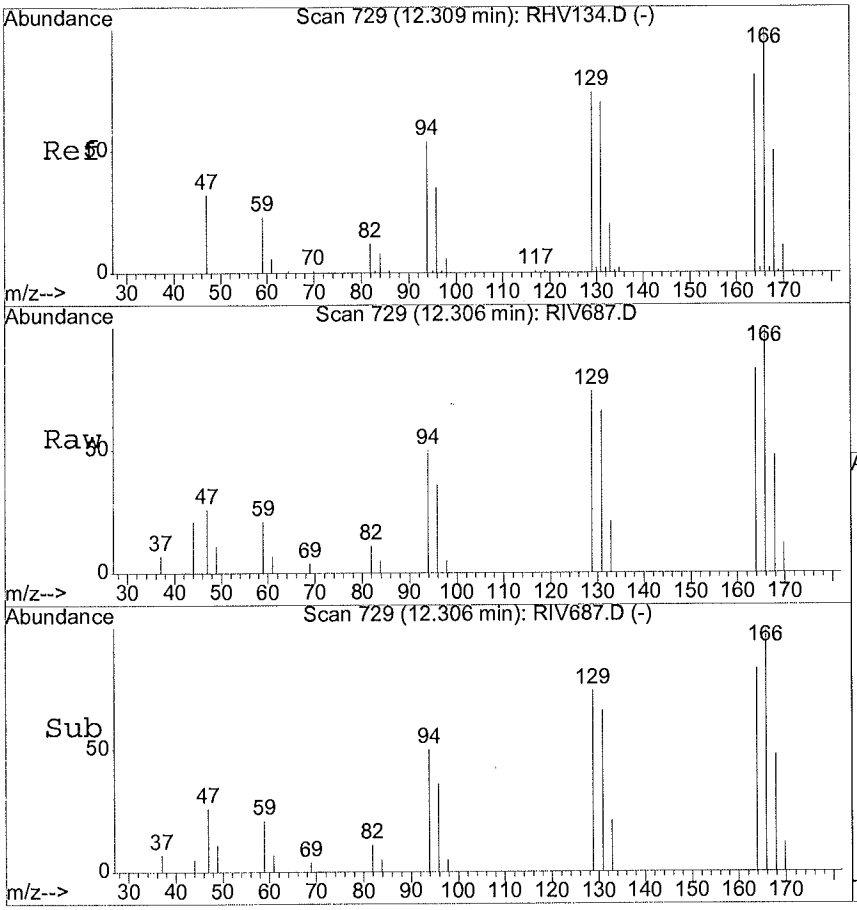


#47
Bromodichloromethane
Concen: 0.12 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RIV687.D
Acq: 27 Sep 2024 12:12 am

Tgt Ion: 83 Resp: 4791

Ion	Ratio	Lower	Upper
83	100		
85	51.5	36.5	96.5

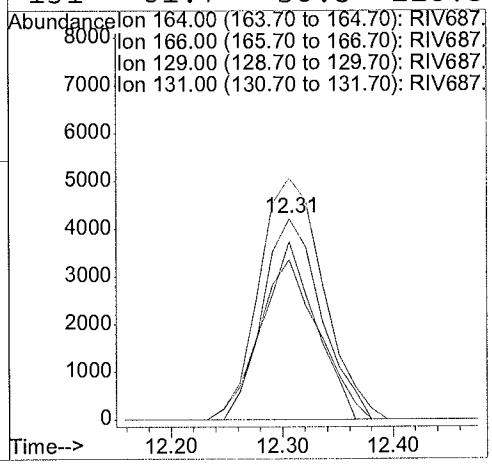




#61
Tetrachloroethene
Concen: 0.58 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV687.D
Acq: 27 Sep 2024 12:12 am

Tgt Ion:164 Resp: 15374

Ion	Ratio	Lower	Upper
164	100		
166	131.8	98.2	158.2
129	79.0	62.8	122.8
131	81.7	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/13/24 13:00
Project	: VA SALT LAKE CITY	Date Received:	09/14/24
Batch No.	: 24I077	Date Extracted:	09/26/24 10:32
Sample ID	: TB05-GW091324	Date Analyzed:	09/26/24 10:32
Lab Samp ID:	24I077-05	Dilution Factor:	1
Lab File ID:	RIV665	Matrix:	WATER
Ext Btch ID:	VO01I25	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.7	10.0	107	70-130
Bromofluorobenzene	9.24	10.0	92	70-130
Toluene-d8	10.8	10.0	108	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV665.D
Acq On : 26 Sep 2024 10:32 am
Sample : 24I077-05
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:33 2024

Vial: 10
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	829479	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	710727	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	355939	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	264527	10.49	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.90%		
41) 1,2-Dichloroethane-d4	7.97	65	239132	10.66	ug/l	-0.02
Spiked Amount 10.000			Recovery =	106.60%		
54) Toluene-d8	11.03	98	936133	10.78	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.80%		
76) 4-Bromofluorobenzene	15.99	95	417059	9.24	ug/l	-0.02
Spiked Amount 10.000			Recovery =	92.40%		
Target Compounds						Qvalue

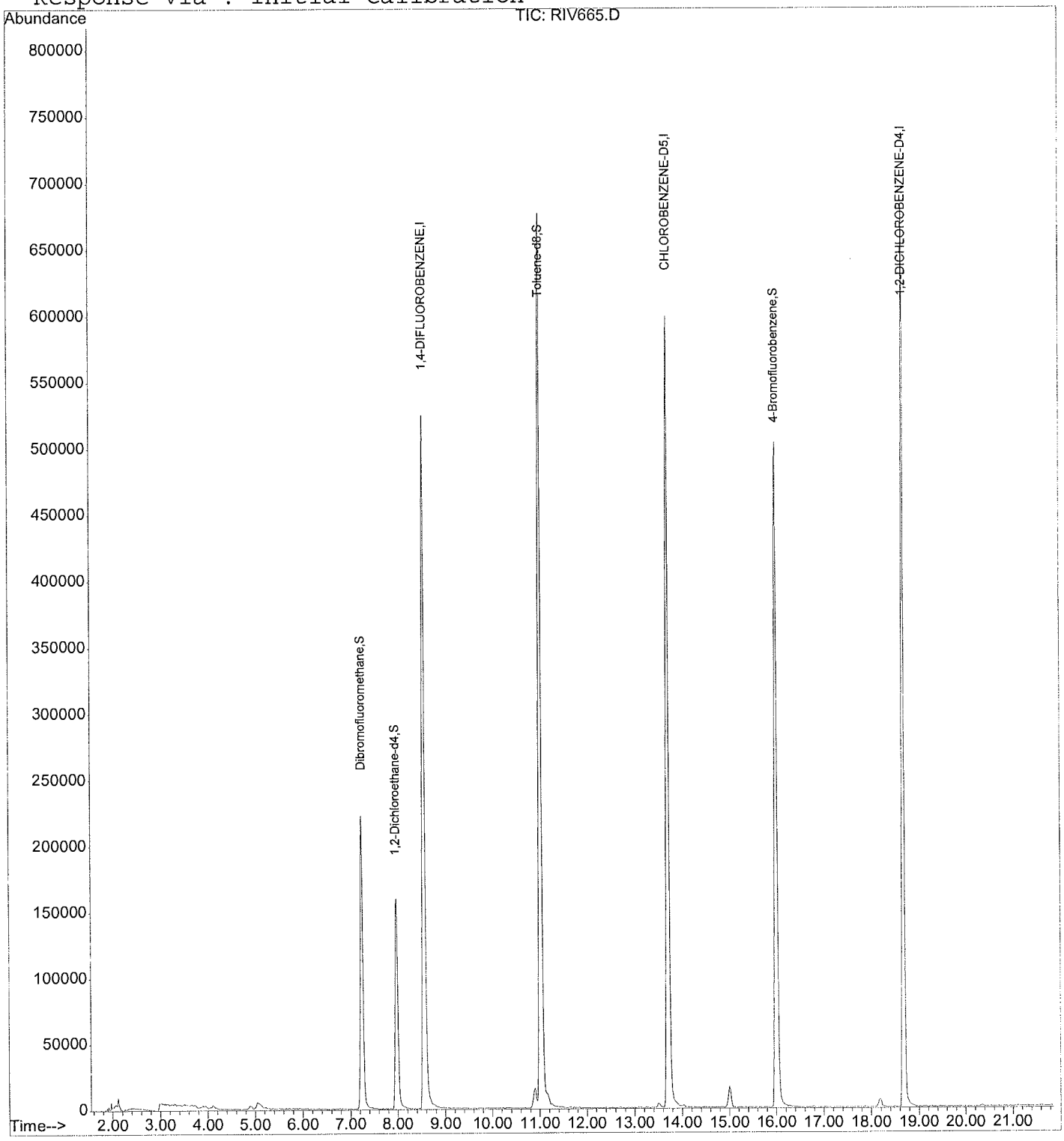
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV665.D
Acq On : 26 Sep 2024 10:32 am
Sample : 24I077-05
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:33 2024

Vial: 10
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/13/24 09:30
Project	: VA SALT LAKE CITY	Date Received:	09/14/24
Batch No.	: 24I077	Date Extracted:	09/27/24 01:11
Sample ID	: EB03-GW091324	Date Analyzed:	09/27/24 01:11
Lab Samp ID:	24I077-06	Dilution Factor:	1
Lab File ID:	RIV689	Matrix:	WATER
Ext Btch ID:	VOO1I26	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	4.6J	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.7	10.0	107	70-130
Bromofluorobenzene	9.40	10.0	94	70-130
Toluene-d8	11.0	10.0	110	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV689.D
Acq On : 27 Sep 2024 1:11 am
Sample : 24I077-06
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:54 2024

Vial: 13
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	951655	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	789488	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	391375	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	302010	10.44	ug/l	0.02
Spiked Amount 10.000			Recovery =	104.40%		
41) 1,2-Dichloroethane-d4	7.98	65	274349	10.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.60%		
54) Toluene-d8	11.03	98	1061910	11.00	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.00%		
76) 4-Bromofluorobenzene	16.01	95	466638	9.40	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.00%		
Target Compounds						Qvalue
13) Acetone	4.12	43	29256	4.60	ug/l	99

(#) = qualifier out of range (m) = manual integration

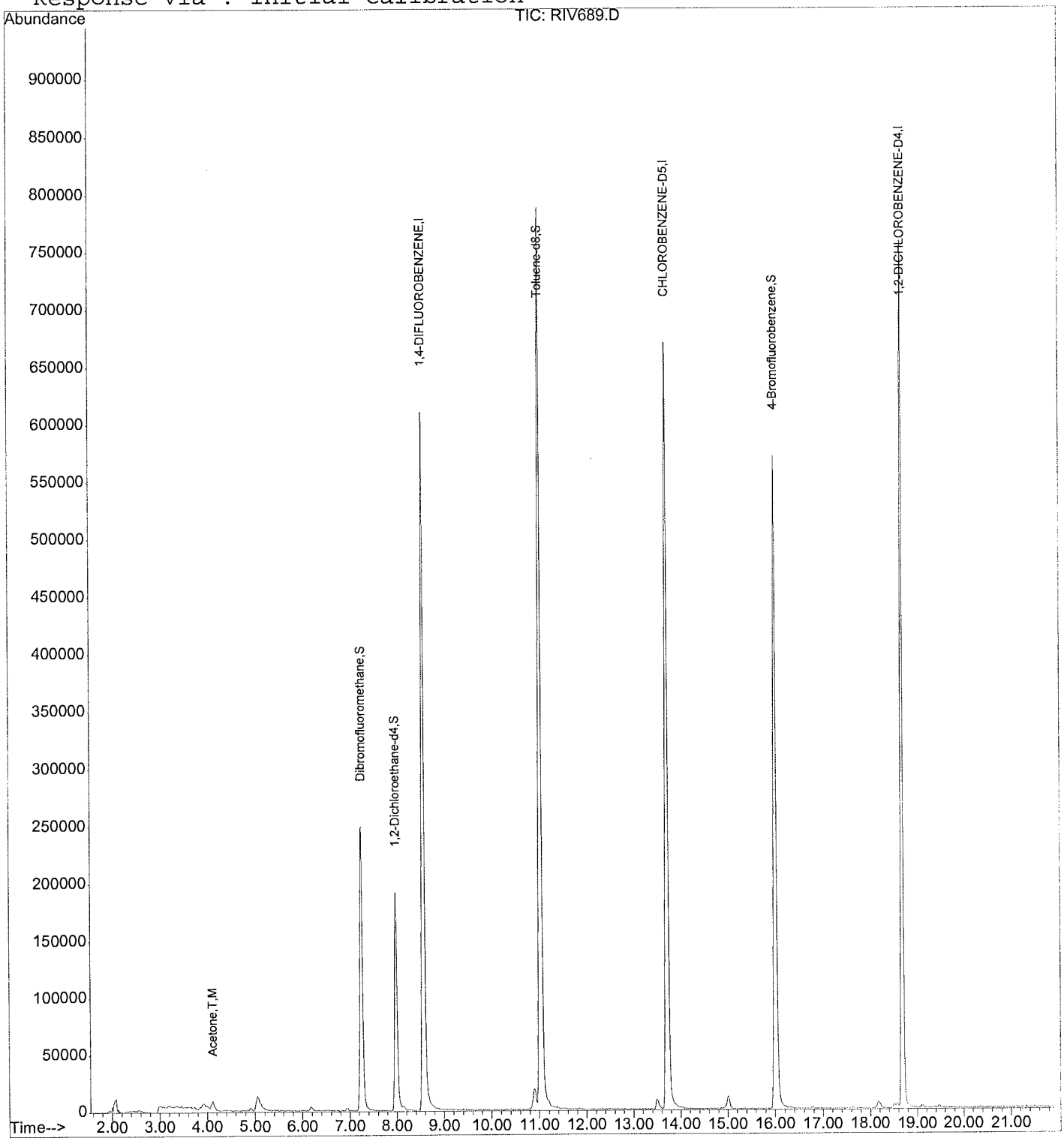
Quantitation Report

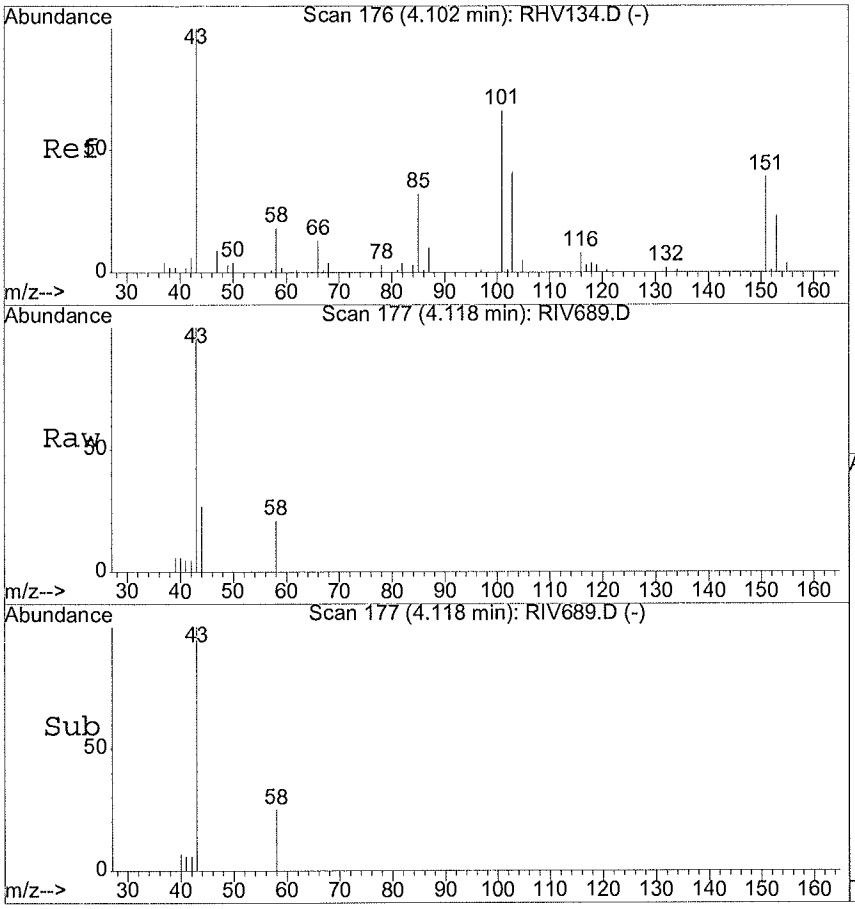
Data File : D:\HPCHEM\1\DATA\24I26\RIV689.D
Acq On : 27 Sep 2024 1:11 am
Sample : 24I077-06
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:54 2024

Vial: 13
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

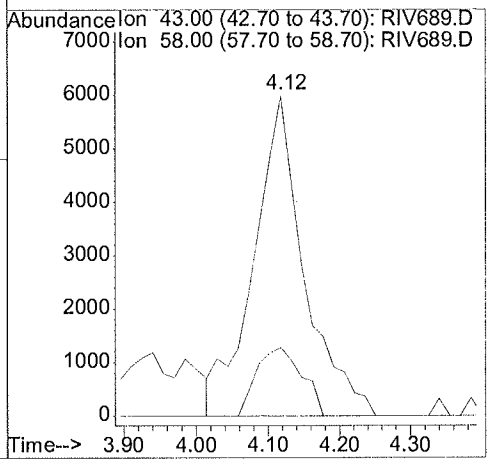




#13
Acetone
Concen: 4.60 ug/l
RT: 4.12 min Scan# 177
Delta R.T. 0.02 min
Lab File: RIV689.D
Acq: 27 Sep 2024 1:11 am

Tgt Ion: 43 Resp: 29256

Ion	Ratio	Lower	Upper
43	100		
58	19.3	0.0	49.5



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/12/24 11:01
Project	: VA SALT LAKE CITY	Date Received:	09/14/24
Batch No.	: 24I077	Date Extracted:	09/27/24 00:42
Sample ID	: MW42S-GW091224	Date Analyzed:	09/27/24 00:42
Lab Samp ID:	24I077-07N	Dilution Factor:	1
Lab File ID:	RIV688	Matrix:	WATER
Ext Btch ID:	V001I26	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.28J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.8	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.10J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	12	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.10J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.5	10.0	105	70-130
Bromofluorobenzene	9.26	10.0	93	70-130
Toluene-d8	10.9	10.0	109	70-130
Dibromofluoromethane	10.3	10.0	103	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV688.D
Acq On : 27 Sep 2024 12:42 am
Sample : 24I077-07N
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:54 2024

Vial: 12
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

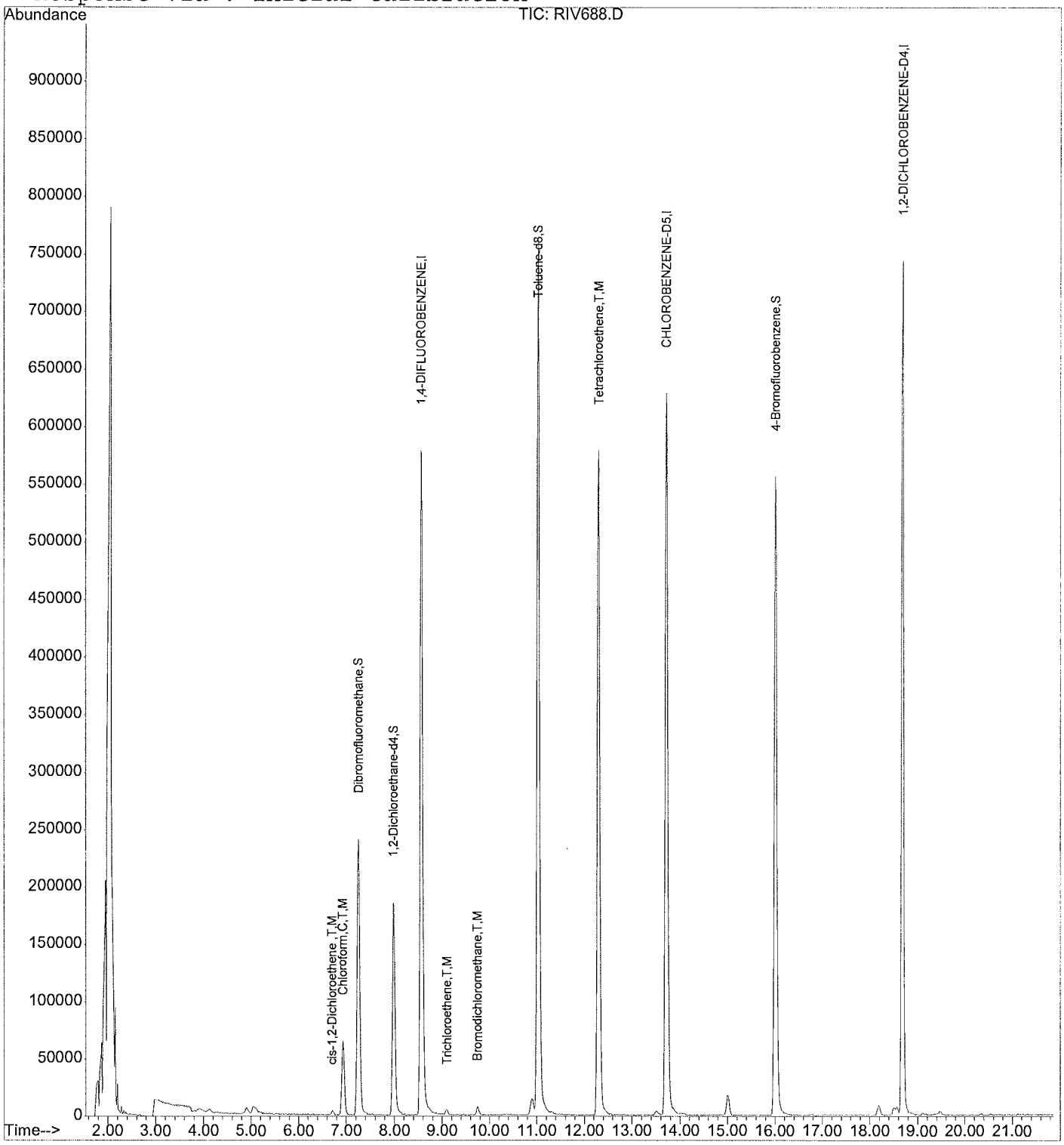
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	919239	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	757833	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	384601	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	288053	10.31	ug/l	0.01
Spiked Amount 10.000			Recovery = 103.10%			
41) 1,2-Dichloroethane-d4	7.98	65	261206	10.51	ug/l	0.00
Spiked Amount 10.000			Recovery = 105.10%			
54) Toluene-d8	11.03	98	1011447	10.92	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.20%			
76) 4-Bromofluorobenzene	16.01	95	451991	9.26	ug/l	0.00
Spiked Amount 10.000			Recovery = 92.60%			
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.71	96	3231	0.10	ug/l	85
31) Chloroform	6.93	83	102934	1.84	ug/l	93
44) Trichloroethene	9.11	130	3311	0.10	ug/l	93
47) Bromodichloromethane	9.74	83	11290	0.28	ug/l	94
61) Tetrachloroethene	12.31	164	301271	11.68	ug/l	94

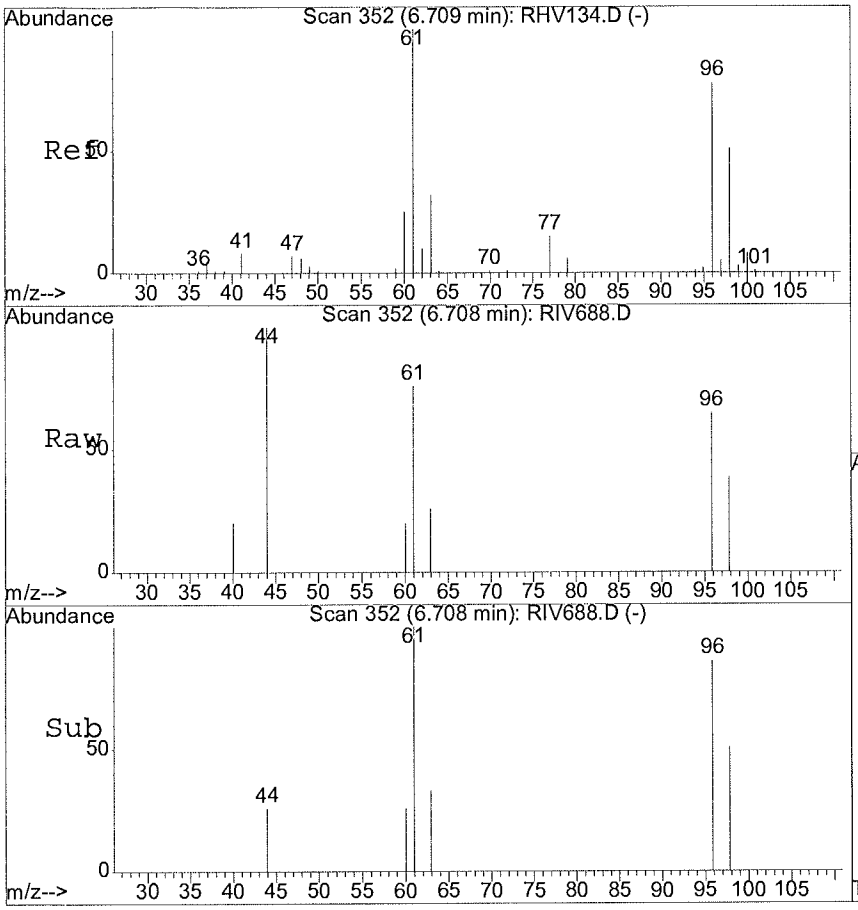
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I26\RIV688.D Vial: 12
Acq On : 27 Sep 2024 12:42 am Operator: DNguye/CLing
Sample : 24I077-07N Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 3 12:54 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

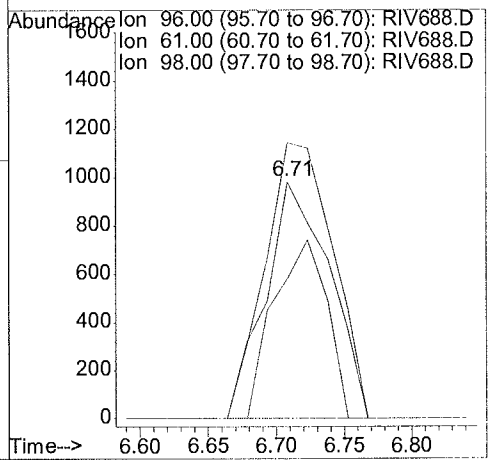


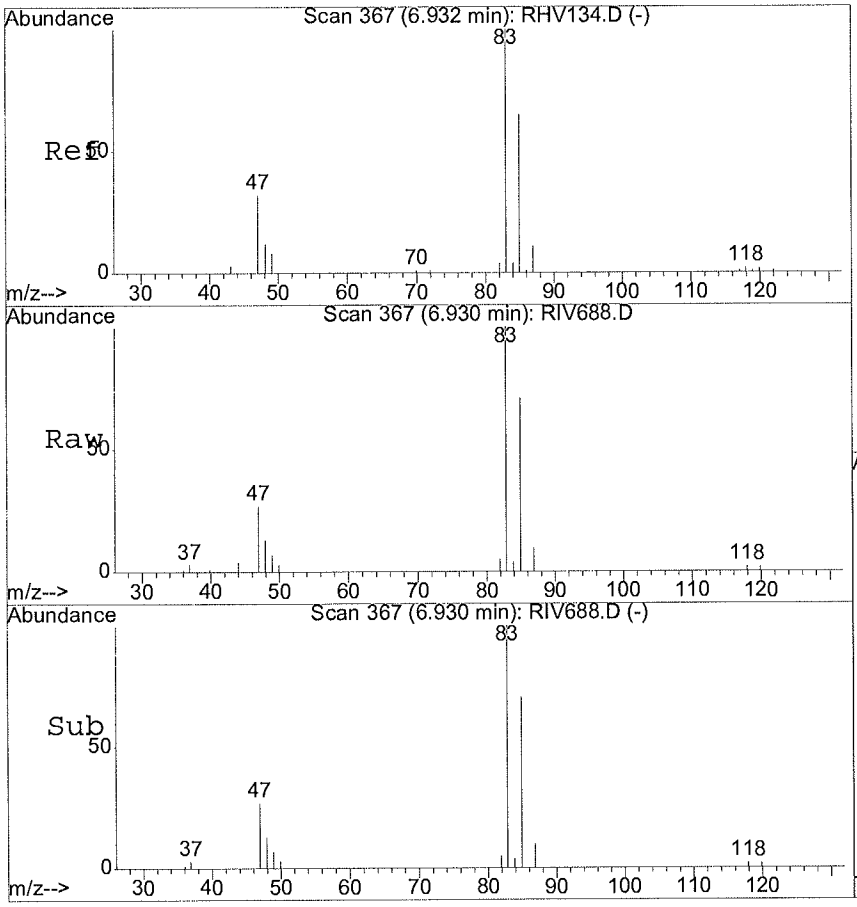


#30
cis-1,2-Dichloroethene
Concen: 0.10 ug/l
RT: 6.71 min Scan# 352
Delta R.T. -0.00 min
Lab File: RIV688.D
Acq: 27 Sep 2024 12:42 am

Tgt Ion: 96 Resp: 3231

Ion	Ratio	Lower	Upper
96	100		
61	123.5	119.2	179.2
98	62.3	35.1	95.1

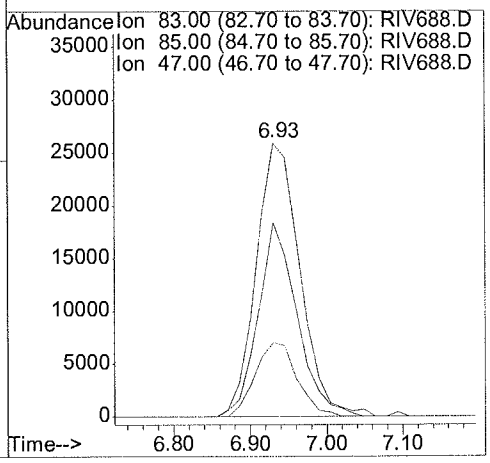


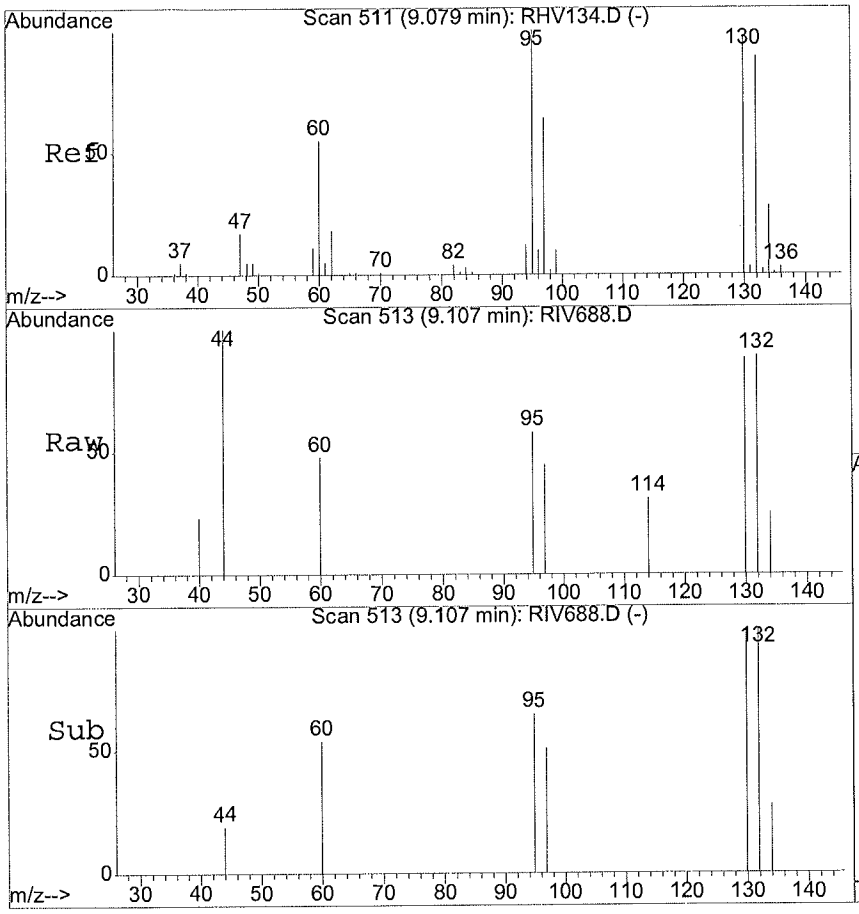


#31
Chloroform
Concen: 1.84 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV688.D
Acq: 27 Sep 2024 12:42 am

Tgt Ion: 83 Resp: 102934

Ion	Ratio	Lower	Upper
83	100		
85	63.2	38.4	98.4
47	25.9	0.0	59.6

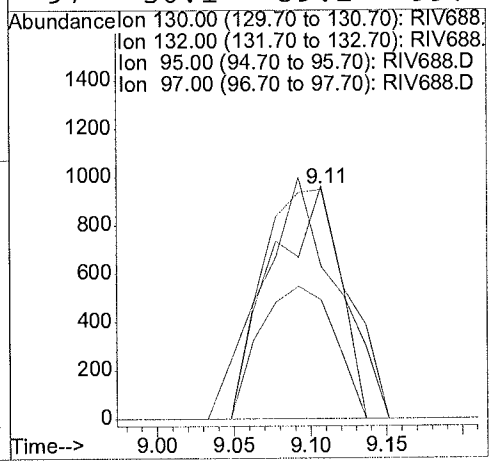


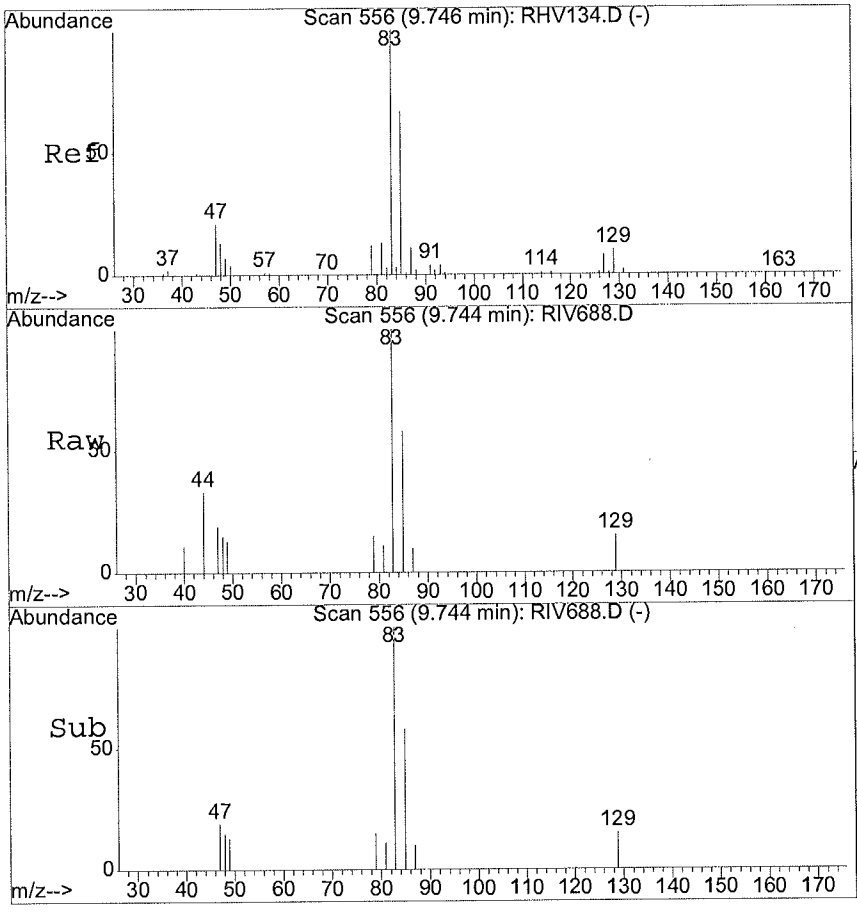


#44
Trichloroethene
Concen: 0.10 ug/l
RT: 9.11 min Scan# 513
Delta R.T. 0.03 min
Lab File: RIV688.D
Acq: 27 Sep 2024 12:42 am

Tgt Ion:130 Resp: 3311

Ion	Ratio	Lower	Upper
130	100		
132	100.2	62.7	122.7
95	102.4	72.0	132.0
97	56.1	39.1	99.1

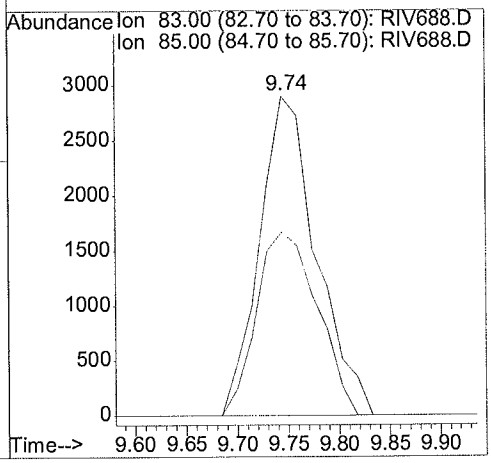


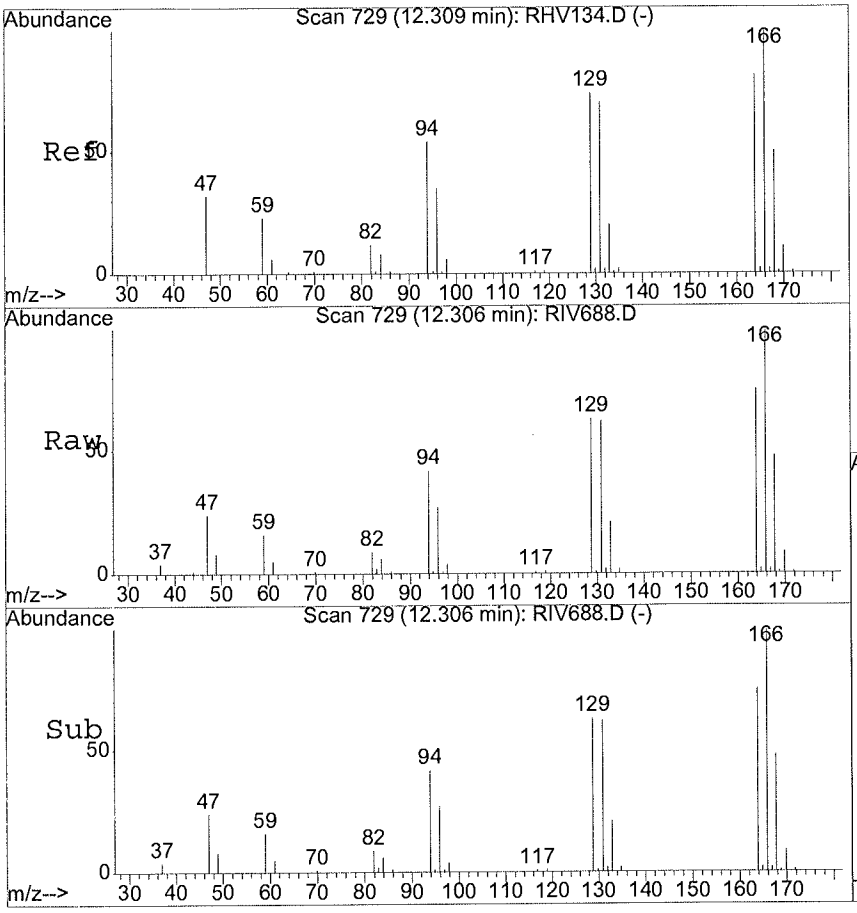


#47
Bromodichloromethane
Concen: 0.28 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RIV688.D
Acq: 27 Sep 2024 12:42 am

Tgt Ion: 83 Resp: 11290

Ion	Ratio	Lower	Upper
83	100		
85	61.4	36.5	96.5

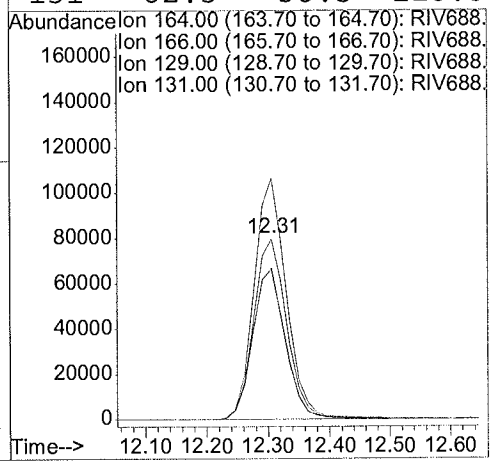




#61
Tetrachloroethene
Concen: 11.68 ug/l
RT: 12.31 min Scan# 729
Delta R.T. -0.00 min
Lab File: RIV688.D
Acq: 27 Sep 2024 12:42 am

Tgt Ion:164 Resp: 301271

Ion	Ratio	Lower	Upper
164	100		
166	130.0	98.2	158.2
129	83.0	62.8	122.8
131	82.3	58.3	118.3



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/13/24 11:25
Project	: VA SALT LAKE CITY	Date Received:	09/14/24
Batch No.	: 24I077	Date Extracted:	09/27/24 02:39
Sample ID	: MW0BC-GW091324	Date Analyzed:	09/27/24 02:39
Lab Samp ID:	24I077-0B	Dilution Factor:	1
Lab File ID:	RIV692	Matrix:	WATER
Ext Btch ID:	V001I26	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	0.40J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	0.33J	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.B	10.0	10B	70-130
Bromofluorobenzene	9.14	10.0	91	70-130
Toluene-dB	11.0	10.0	110	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV692.D Vial: 16
Acq On : 27 Sep 2024 2:39 am Operator: DNguye/CLingl
Sample : 24I077-08 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 3 12:56 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	902644	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	738878	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	378561	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	289215	10.54	ug/l	0.01
Spiked Amount 10.000			Recovery = 105.40%			
41) 1,2-Dichloroethane-d4	7.98	65	262541	10.76	ug/l	0.00
Spiked Amount 10.000			Recovery = 107.60%			
54) Toluene-d8	11.03	98	993974	11.01	ug/l	0.00
Spiked Amount 10.000			Recovery = 110.10%			
76) 4-Bromofluorobenzene	16.01	95	438758	9.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 91.40%			
Target Compounds						Qvalue
68) m-Xylene & p-Xylene	14.04	91	44122	0.40	ug/l	93
69) o-Xylene	14.85	91	34781	0.33	ug/l	93

(#) = qualifier out of range (m) = manual integration

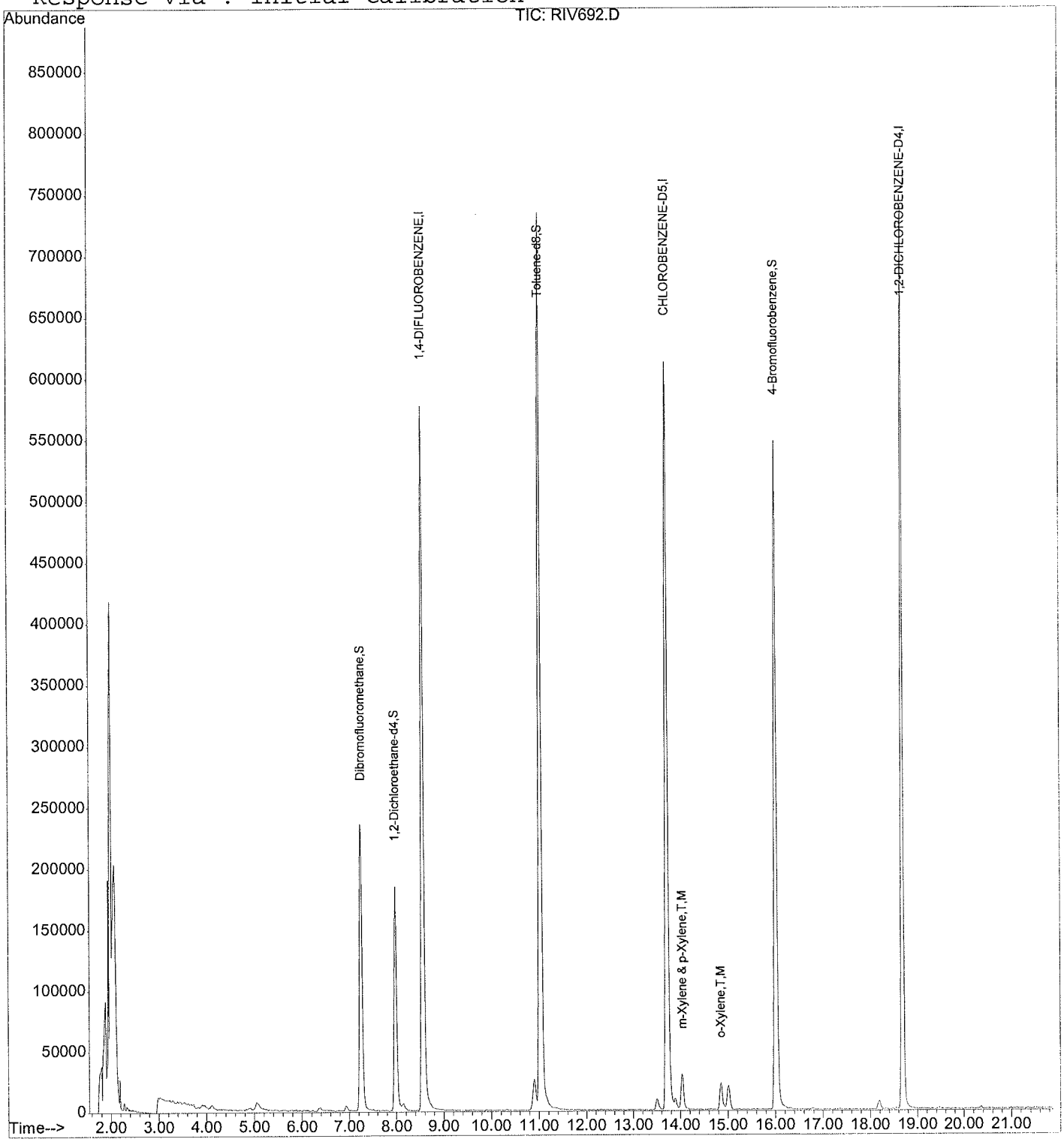
Quantitation Report

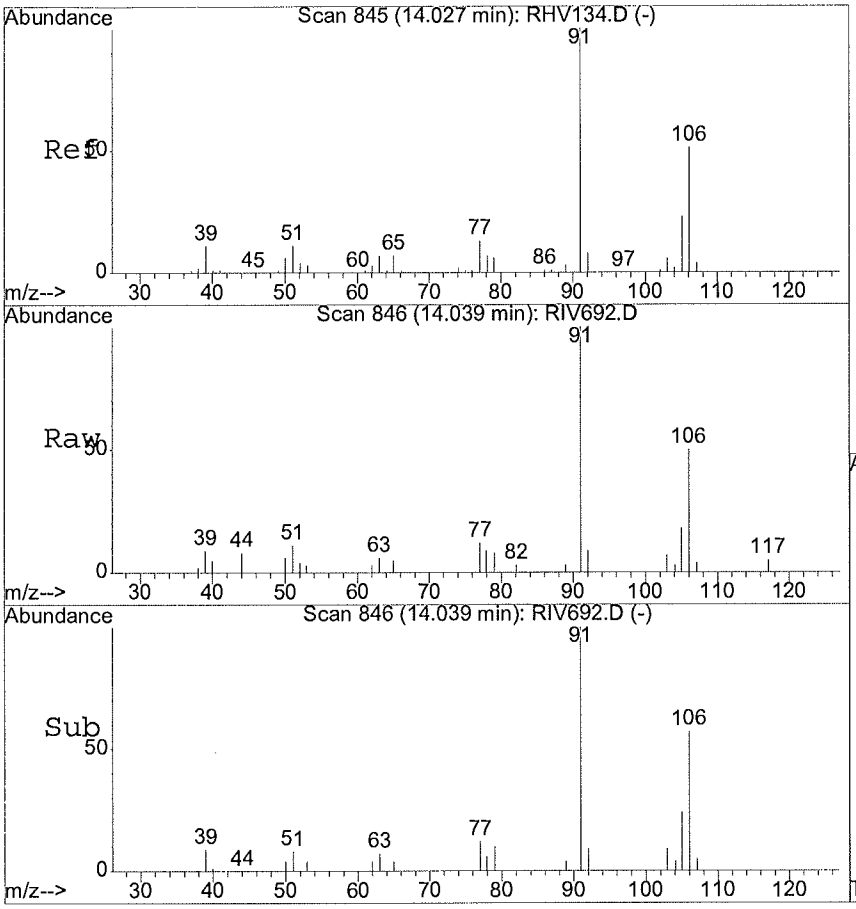
Data File : D:\HPCHEM\1\DATA\24I26\RIV692.D
Acq On : 27 Sep 2024 2:39 am
Sample : 24I077-08
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:56 2024

Vial: 16
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

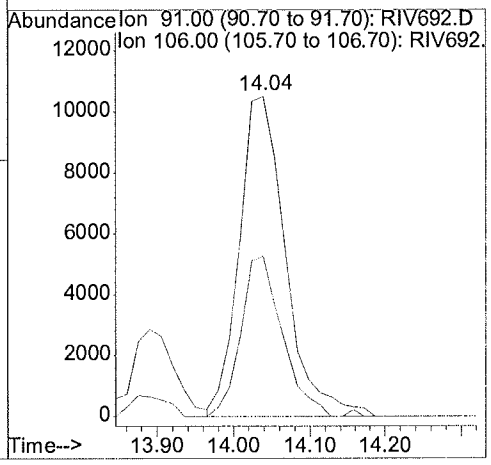


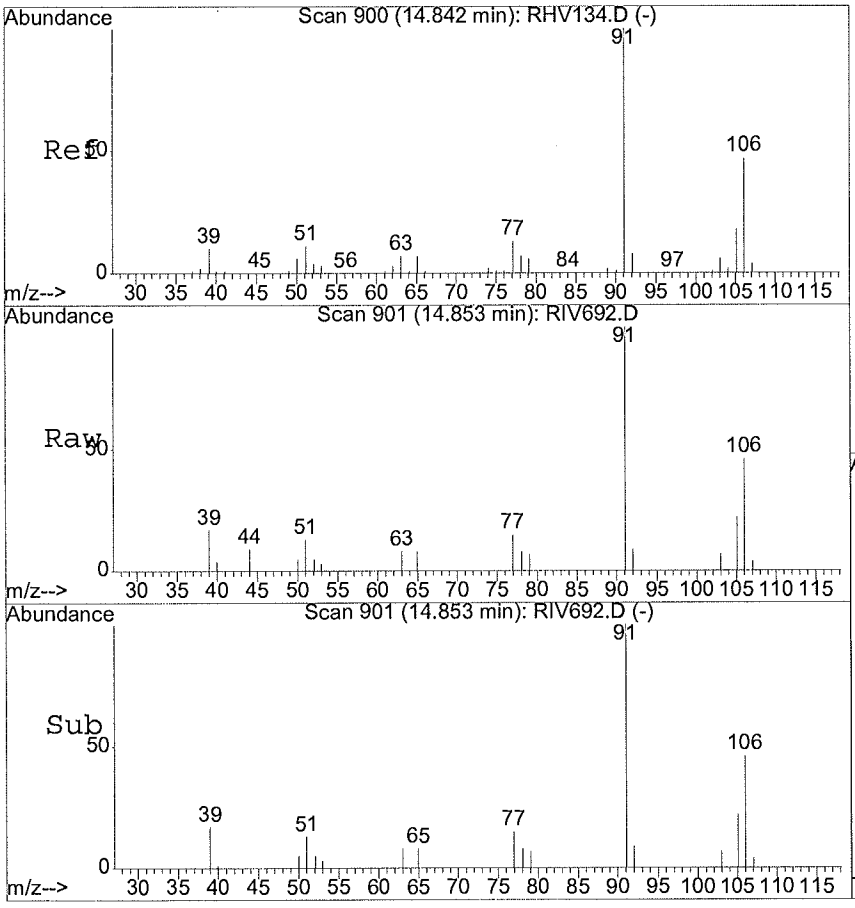


#68
m-Xylene & p-Xylene
Concen: 0.40 ug/l
RT: 14.04 min Scan# 846
Delta R.T. 0.01 min
Lab File: RIV692.D
Acq: 27 Sep 2024 2:39 am

Tgt Ion: 91 Resp: 44122

Ion	Ratio	Lower	Upper
91	100		
106	44.7	19.5	79.5

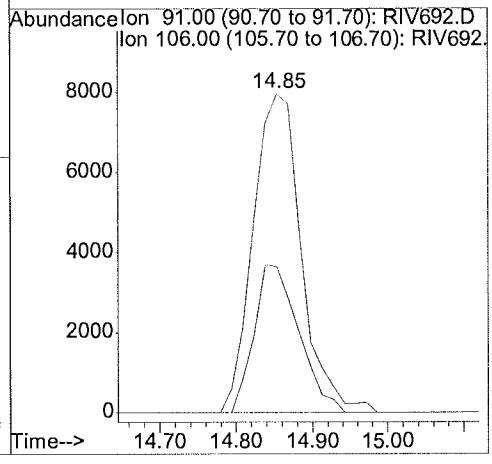




#69
o-Xylene
Concen: 0.33 ug/l
RT: 14.85 min Scan# 901
Delta R.T. 0.01 min
Lab File: RIV692.D
Acq: 27 Sep 2024 2:39 am

Tgt Ion: 91 Resp: 34781

Ion	Ratio	Lower	Upper
91	100		
106	43.0	17.6	77.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/13/24 13:03
Project	: VA SALT LAKE CITY	Date Received:	09/14/24
Batch No.	: 24I077	Date Extracted:	09/27/24 03:09
Sample ID	: MW26B-GW091324	Date Analyzed:	09/27/24 03:09
Lab Samp ID:	24I077-09	Dilution Factor:	1
Lab File ID:	RIV693	Matrix:	WATER
Ext Btch ID:	VO01I26	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.60J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	10	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	0.63J	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	0.62J	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.4	10.0	114	70-130
Bromofluorobenzene	9.39	10.0	94	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	10.8	10.0	108	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV693.D Vial: 17
Acq On : 27 Sep 2024 3:09 am Operator: DNguye/CLingl
Sample : 24I077-09 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 3 12:56 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

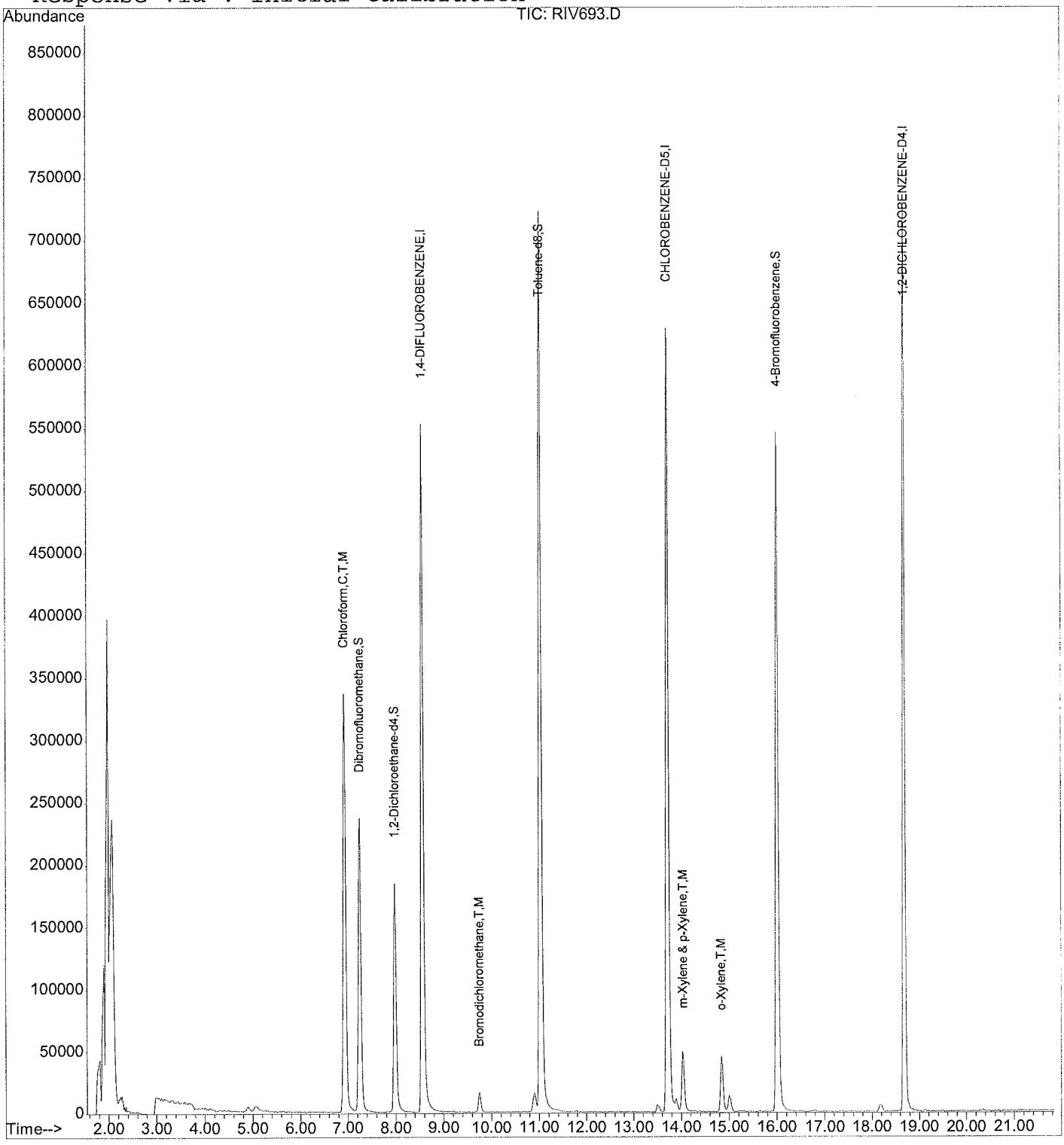
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	862593	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	740716	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	369869	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	283747	10.82	ug/l	0.01
Spiked Amount 10.000			Recovery =	108.20%		
41) 1,2-Dichloroethane-d4	7.98	65	266339	11.42	ug/l	0.00
Spiked Amount 10.000			Recovery =	114.20%		
54) Toluene-d8	11.03	98	964605	10.65	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.50%		
76) 4-Bromofluorobenzene	16.01	95	440711	9.39	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.90%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	528421	10.07	ug/l	95
47) Bromodichloromethane	9.75	83	22592	0.60	ug/l	99
68) m-Xylene & p-Xylene	14.04	91	68847	0.63	ug/l	95
69) o-Xylene	14.84	91	65208	0.62	ug/l	94

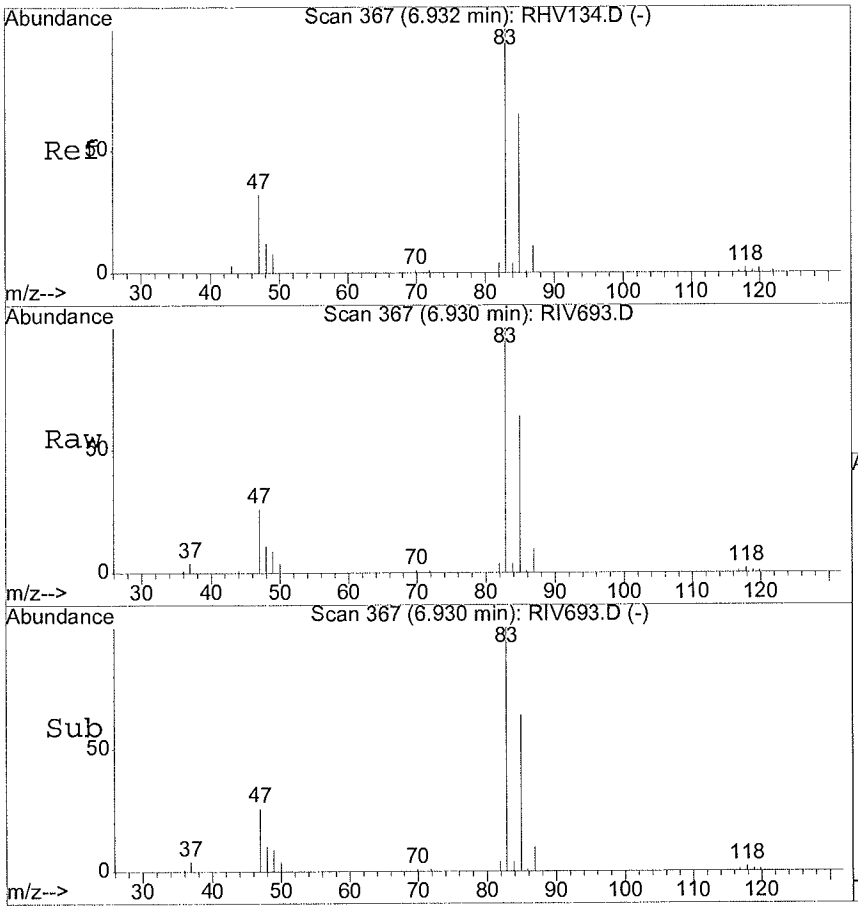
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I26\RIV693.D Vial: 17
Acq On : 27 Sep 2024 3:09 am Operator: DNguye/CLing
Sample : 24I077-09 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 3 12:56 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

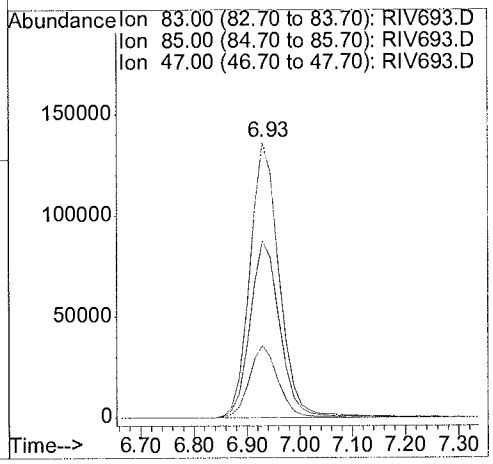


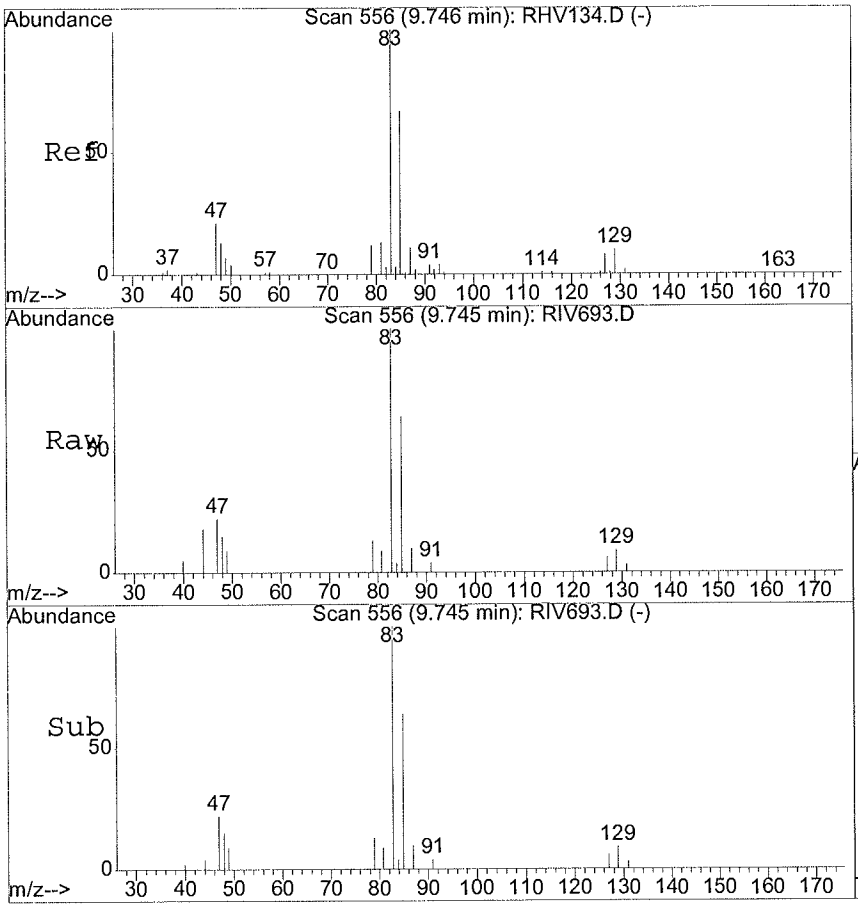


#31
Chloroform
Concen: 10.07 ug/l
RT: 6.93 min Scan# 367
Delta R.T. -0.00 min
Lab File: RIV693.D
Acq: 27 Sep 2024 3:09 am

Tgt Ion: 83 Resp: 528421

Ion	Ratio	Lower	Upper
83	100		
85	65.2	38.4	98.4
47	25.9	0.0	59.6

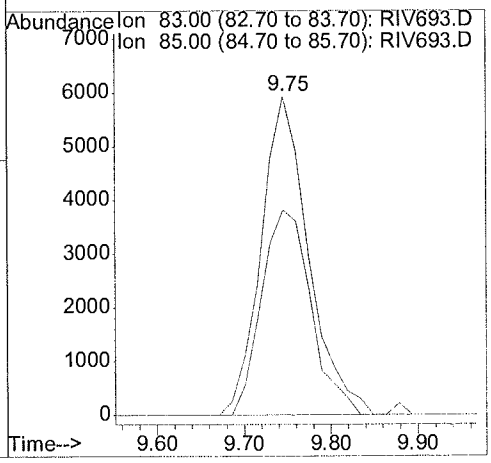


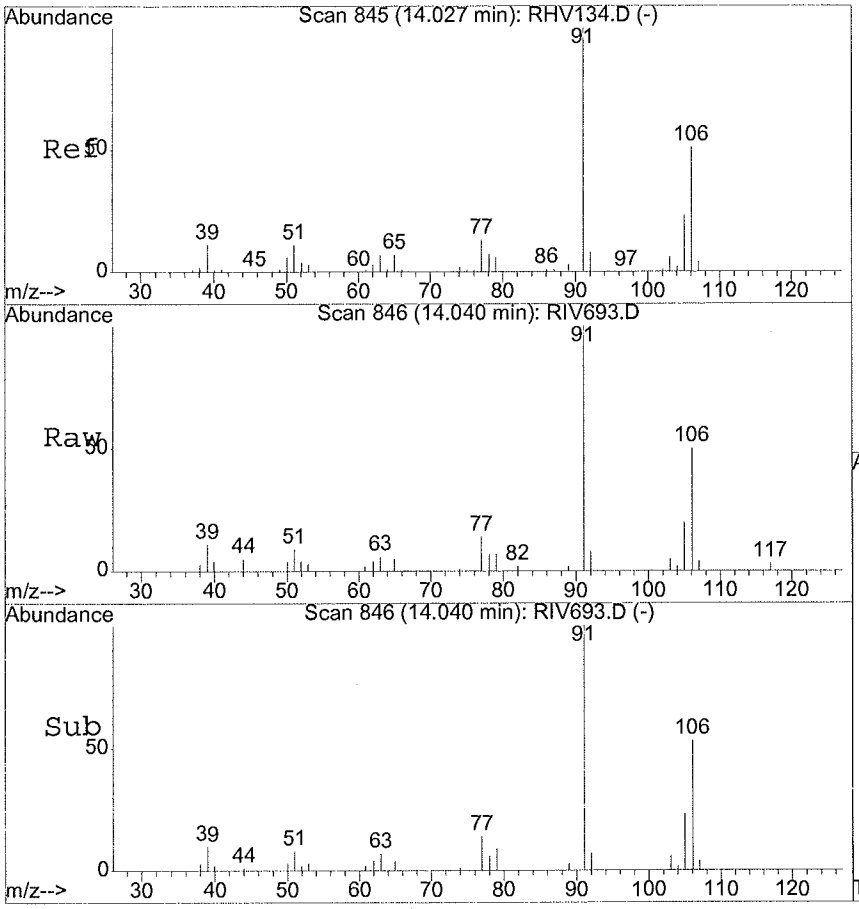


#47
Bromodichloromethane
Concen: 0.60 ug/l
RT: 9.75 min Scan# 556
Delta R.T. 0.00 min
Lab File: RIV693.D
Acq: 27 Sep 2024 3:09 am

Tgt Ion: 83 Resp: 22592

Ion	Ratio	Lower	Upper
83	100		
85	67.1	36.5	96.5

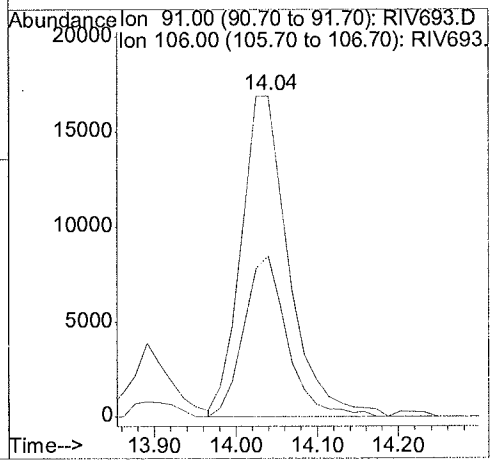


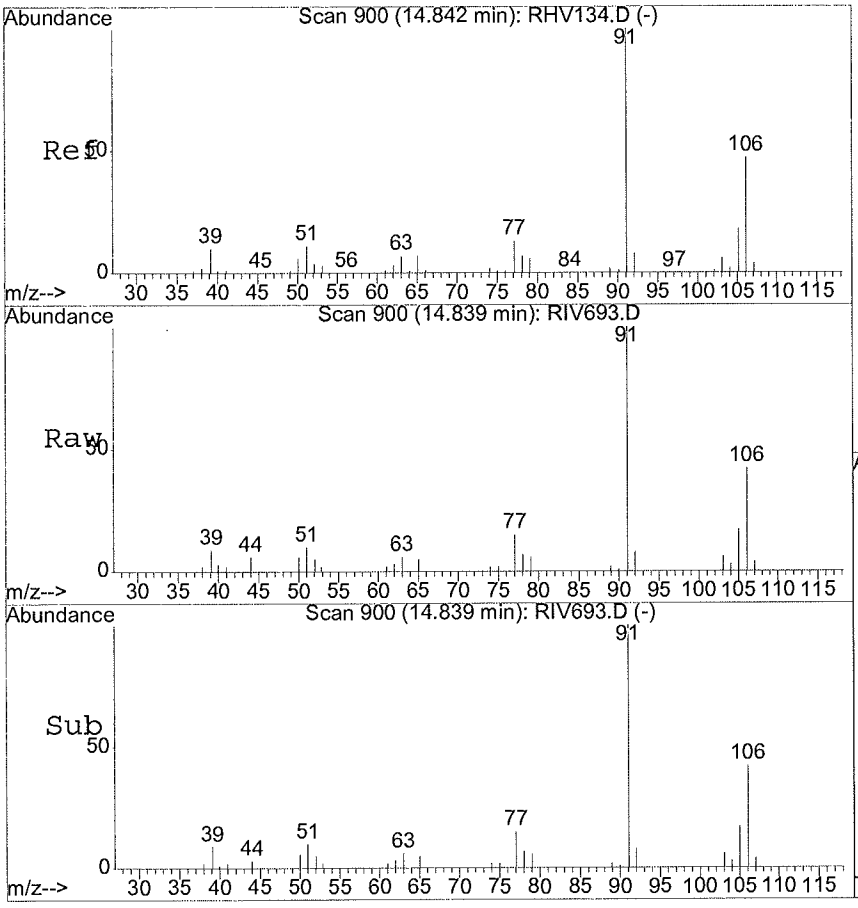


#68
m-Xylene & p-Xylene
Concen: 0.63 ug/l
RT: 14.04 min Scan# 846
Delta R.T. 0.01 min
Lab File: RIV693.D
Acq: 27 Sep 2024 3:09 am

Tgt Ion: 91 Resp: 68847

Ion	Ratio	Lower	Upper
91	100		
106	45.8	19.5	79.5

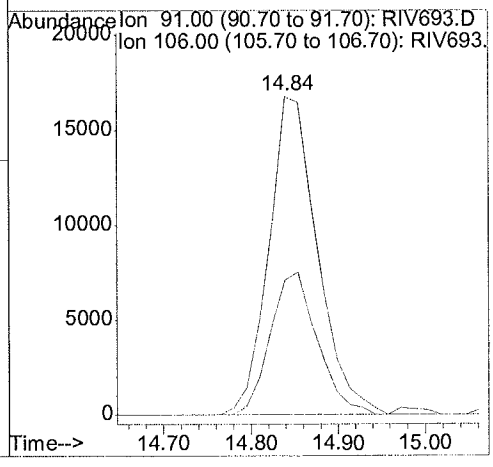




#69
o-Xylene
Concen: 0.62 ug/l
RT: 14.84 min Scan# 900
Delta R.T. -0.00 min
Lab File: RIV693.D
Acq: 27 Sep 2024 3:09 am

Tgt Ion: 91 Resp: 65208

Ion	Ratio	Lower	Upper
91	100		
106	43.4	17.6	77.6



QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/26/24 09:04
Project	: VA SALT LAKE CITY	Date Received:	09/26/24
Batch No.	: 24I077	Date Extracted:	09/26/24 09:04
Sample ID	: MBLK1W	Date Analyzed:	09/26/24 09:04
Lab Samp ID:	V001I25B	Dilution Factor:	1
Lab File ID:	RIV662	Matrix:	WATER
Ext Btch ID:	V001I25	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.0	10.0	100	70-130
Bromofluorobenzene	9.43	10.0	94	70-130
Toluene-d8	11.2	10.0	112	70-130
Dibromofluoromethane	10.3	10.0	103	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I077
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: V001I25B	V001I25L	V001I25C
LAB FILE ID	: RIV662	RIV659	RIV660
DATE PREPARED	: 09/26/24 09:04	09/26/24 07:37	09/26/24 08:06
DATE ANALYZED	: 09/26/24 09:04	09/26/24 07:37	09/26/24 08:06
PREP BATCH	: V001I25	V001I25	V001I25
CALIBRATION REF	: RHV134	RHV134	RHV134

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	9.80	98	10.0	9.48	95	3	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	11.2	112	10.0	10.9	109	3	71-121	20
1,1,2-Trichloroethane	ND	10.0	13.4	134*	10.0	13.5	135*	1	80-119	20
1,1-Dichloroethane	ND	10.0	12.3	123	10.0	12.1	121	2	77-125	20
1,1-Dichloroethene	ND	10.0	9.47	95	10.0	9.22	92	3	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	8.83	88	10.0	9.12	91	3	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	8.53	85	10.0	8.63	86	1	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.26	83	10.0	7.96	80	4	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	10.7	107	10.0	10.8	108	1	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.71	97	10.0	9.65	97	1	80-119	20
1,2-Dichloroethane	ND	10.0	10.9	109	10.0	10.8	108	1	73-128	20
1,2-Dichloropropane	ND	10.0	13.9	139*	10.0	13.6	136*	2	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	7.72	77	10.0	7.88	79	2	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.41	94	10.0	9.52	95	1	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.43	94	10.0	9.39	94	0	79-118	20
2-Butanone	ND	50.0	59.4	119	50.0	60.1	120	1	56-143	20
2-Hexanone	ND	50.0	61.9	124	50.0	61.2	122	1	57-139	20
Acetone	ND	50.0	57.1	114	50.0	56.1	112	2	39-160	20
Benzene	ND	10.0	12.6	126*	10.0	12.5	125*	1	79-120	20
Bromochloromethane	ND	10.0	12.5	125*	10.0	12.2	122*	2	78-120	20
Bromodichloromethane	ND	10.0	11.9	119	10.0	12.1	121	2	79-125	20
Bromoform	ND	10.0	9.79	98	10.0	9.60	96	2	66-130	20
Bromomethane	ND	10.0	10.1	101	10.0	9.83	98	3	53-141	20
Carbon Disulfide	ND	10.0	12.9	129	10.0	12.5	125	3	64-133	20
Carbon Tetrachloride	ND	10.0	8.61	86	10.0	8.28	83	4	72-136	20
Chlorobenzene	ND	10.0	11.5	115	10.0	11.4	114	1	82-118	20
Chloroethane	ND	10.0	13.0	130	10.0	11.9	119	9	60-138	20
Chloroform	ND	10.0	12.1	121	10.0	11.7	117	3	79-124	20
Chloromethane	ND	10.0	10.7	107	10.0	9.86	99	8	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	11.9	119	10.0	11.9	119	0	78-123	20
Dibromochloromethane	ND	10.0	13.0	130*	10.0	12.9	129*	1	74-126	20
Dichlorodifluoromethane	ND	10.0	9.68	97	10.0	8.64	86	11	32-152	20
Ethylbenzene	ND	10.0	11.9	119	10.0	11.6	116	3	79-121	20
Isopropylbenzene	ND	10.0	11.5	115	10.0	11.6	116	1	72-131	20
m,p-Xylene	ND	20.0	22.5	113	20.0	22.0	110	2	80-121	20
4-Methyl-2-Pentanone	ND	50.0	64.9	130	50.0	65.5	131*	1	67-130	20
Methylene Chloride	ND	10.0	11.8	118	10.0	11.7	117	1	74-124	20
tert-Butyl Methyl Ether	ND	10.0	13.8	138*	10.0	13.4	134*	3	71-124	20
o-Xylene	ND	10.0	12.7	127*	10.0	12.3	123*	3	78-122	20
Styrene	ND	10.0	12.6	126*	10.0	12.3	123	2	78-123	20
Tetrachloroethene	ND	10.0	10.6	106	10.0	10.2	102	4	74-129	20
Toluene	ND	10.0	12.0	120	10.0	12.1	121	1	80-121	20
Trans-1,2-DCE	ND	10.0	10.4	104	10.0	10.3	103	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	12.5	125*	10.0	12.4	124	1	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	12.2	122	10.0	12.0	120	2	73-127	20
TCE	ND	10.0	11.0	110	10.0	10.7	107	3	79-123	20
Trichlorofluoromethane	ND	10.0	8.32	83	10.0	7.49	75	10	65-141	20
Vinyl Chloride	ND	10.0	11.2	112	10.0	11.1	111	1	58-137	20
1,2-Dibromoethane	ND	10.0	12.4	124*	10.0	12.0	120	3	77-121	20
Vinyl Acetate	ND	10.0	6.95	70	10.0	6.50	65	7	54-146	20
Trichlorotrifluoroethane	ND	10.0	11.7	117	10.0	11.0	110	6	70-136	20
Methyl Acetate	ND	10.0	12.0	120	10.0	11.6	116	3	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	10.2	102	10.0	9.97	100	70-130
Bromofluorobenzene	10.0	9.19	92	10.0	9.60	96	70-130
Toluene-d8	10.0	10.9	109	10.0	10.9	109	70-130
Dibromofluoromethane	10.0	9.94	99	10.0	9.97	100	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate
* Out of QC Limit

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/26/24 21:43
Project	: VA SALT LAKE CITY	Date Received:	09/26/24
Batch No.	: 24I077	Date Extracted:	09/26/24 21:43
Sample ID	: MBLK2W	Date Analyzed:	09/26/24 21:43
Lab Samp ID:	V001I26B	Dilution Factor:	1
Lab File ID:	RIV682	Matrix:	WATER
Ext Btch ID:	V001I26	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	8.20	10.0	82	70-130
Bromofluorobenzene	8.18	10.0	82	70-130
Toluene-d8	11.6	10.0	116	70-130
Dibromofluoromethane	9.41	10.0	94	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I077
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK2W	LCS2W	LCD2W
LAB SAMPLE ID	: VO01I26B	VO01I26L	VO01I26C
LAB FILE ID	: RIV682	RIV679	RIV680
DATE PREPARED	: 09/26/24 21:43	09/26/24 20:13	09/26/24 20:43
DATE ANALYZED	: 09/26/24 21:43	09/26/24 20:13	09/26/24 20:43
PREP BATCH	: VO01I26	VO01I26	VO01I26
CALIBRATION REF	: RHV134	RHV134	RHV134

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	10.3	103	10.0	9.68	97	6	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	10.6	106	10.0	10.2	102	4	71-121	20
1,1,2-Trichloroethane	ND	10.0	12.7	127*	10.0	12.6	126*	1	80-119	20
1,1-Dichloroethane	ND	10.0	12.1	121	10.0	11.2	112	8	77-125	20
1,1-Dichloroethene	ND	10.0	9.52	95	10.0	9.21	92	3	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	9.01	90	10.0	8.80	88	2	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	8.83	88	10.0	8.68	87	2	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.22	82	10.0	7.72	77	6	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	10.1	101	10.0	9.86	99	2	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.43	94	10.0	9.14	91	3	80-119	20
1,2-Dichloroethane	ND	10.0	10.9	109	10.0	9.83	98	10	73-128	20
1,2-Dichloropropane	ND	10.0	13.2	132*	10.0	12.2	122	8	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	7.67	77	10.0	7.53	75	2	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.34	93	10.0	9.08	91	3	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.49	95	10.0	9.16	92	4	79-118	20
2-Butanone	ND	50.0	58.4	117	50.0	53.4	107	9	56-143	20
2-Hexanone	ND	50.0	61.0	122	50.0	57.9	116	5	57-139	20
Acetone	ND	50.0	56.8	114	50.0	51.8	104	9	39-160	20
Benzene	ND	10.0	12.5	125*	10.0	11.8	118	6	79-120	20
Bromochloromethane	ND	10.0	11.8	118	10.0	10.7	107	10	78-120	20
Bromodichloromethane	ND	10.0	11.8	118	10.0	11.0	110	7	79-125	20
Bromoform	ND	10.0	8.40	84	10.0	8.70	87	4	66-130	20
Bromomethane	ND	10.0	8.10	81	10.0	7.50	75	8	53-141	20
Carbon Disulfide	ND	10.0	10.6	106	10.0	9.13	91	15	64-133	20
Carbon Tetrachloride	ND	10.0	9.37	94	10.0	8.92	89	5	72-136	20
Chlorobenzene	ND	10.0	11.3	113	10.0	10.9	109	4	82-118	20
Chloroethane	ND	10.0	9.81	98	10.0	9.24	92	6	60-138	20
Chloroform	ND	10.0	11.6	116	10.0	10.8	108	7	79-124	20
Chloromethane	ND	10.0	8.05	81	10.0	8.08	81	0	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	11.4	114	10.0	11.0	110	4	78-123	20
Dibromochloromethane	ND	10.0	12.5	125	10.0	12.0	120	4	74-126	20
Dichlorodifluoromethane	ND	10.0	8.71	87	10.0	9.04	90	4	32-152	20
Ethylbenzene	ND	10.0	11.8	118	10.0	11.6	116	2	79-121	20
Isopropylbenzene	ND	10.0	11.5	115	10.0	12.3	123	7	72-131	20
m,p-Xylene	ND	20.0	22.7	114	20.0	21.9	110	4	80-121	20
4-Methyl-2-Pentanone	ND	50.0	64.7	129	50.0	58.0	116	11	67-130	20
Methylene Chloride	ND	10.0	11.0	110	10.0	10.5	105	5	74-124	20
tert-Butyl Methyl Ether	ND	10.0	13.2	132*	10.0	11.8	118	11	71-124	20
o-Xylene	ND	10.0	12.4	124*	10.0	12.0	120	3	78-122	20
Styrene	ND	10.0	12.5	125*	10.0	12.1	121	3	78-123	20
Tetrachloroethene	ND	10.0	11.2	112	10.0	11.3	113	1	74-129	20
Toluene	ND	10.0	11.8	118	10.0	11.7	117	1	80-121	20
Trans-1,2-DCE	ND	10.0	10.2	102	10.0	9.53	95	7	75-124	20
cis-1,3-Dichloropropene	ND	10.0	12.8	128*	10.0	11.8	118	8	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	12.4	124	10.0	11.8	118	5	73-127	20
TCE	ND	10.0	11.0	110	10.0	10.2	102	8	79-123	20
Trichlorofluoromethane	ND	10.0	6.63	66	10.0	6.61	66	0	65-141	20
Vinyl Chloride	ND	10.0	9.06	91	10.0	9.21	92	2	58-137	20
1,2-Dibromoethane	ND	10.0	11.6	116	10.0	11.2	112	4	77-121	20
Vinyl Acetate	ND	10.0	6.47	65	10.0	7.01	70	8	54-146	20
Trichlorotrifluoroethane	ND	10.0	12.9	129	10.0	12.7	127	2	70-136	20
Methyl Acetate	ND	10.0	10.6	106	10.0	10.7	107	1	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	9.99	100	10.0	9.62	96	70-130
Bromofluorobenzene	10.0	9.00	90	10.0	9.05	91	70-130
Toluene-d8	10.0	10.7	107	10.0	10.9	109	70-130
Dibromofluoromethane	10.0	10.5	105	10.0	9.72	97	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate
* Out of QC Limit

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV662.D
Acq On : 26 Sep 2024 9:04 am
Sample : VO01I25B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:31 2024

Vial: 7
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	943303	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	775446	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	378369	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	295013	10.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.80%		
41) 1,2-Dichloroethane-d4	7.98	65	256210	10.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.50%		
54) Toluene-d8	11.03	98	1059266	11.18	ug/l	0.00
Spiked Amount 10.000			Recovery =	111.80%		
76) 4-Bromofluorobenzene	16.01	95	452551	9.43	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.30%		

Target Compounds Qvalue

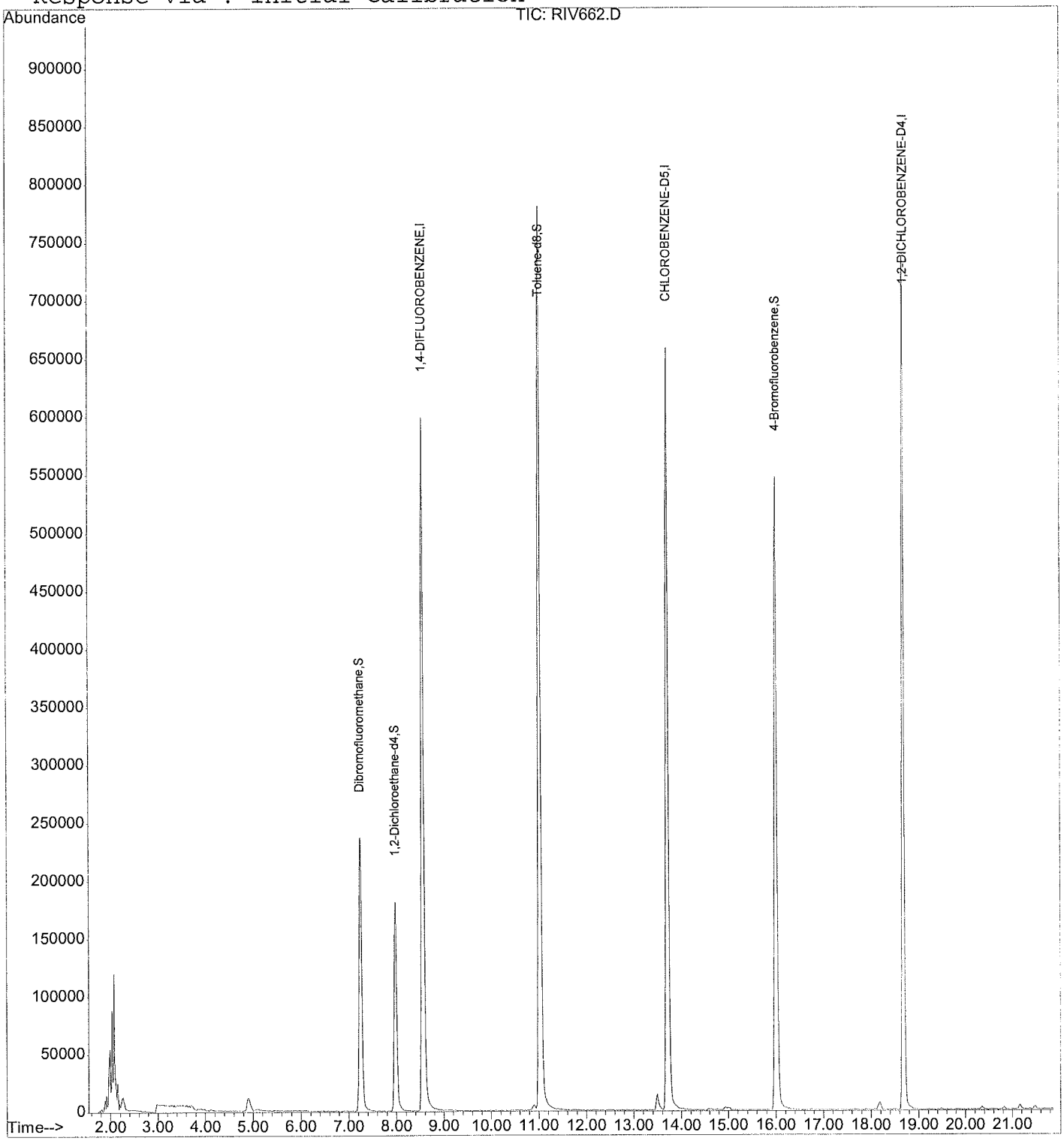
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV662.D
Acq On : 26 Sep 2024 9:04 am
Sample : VO01I25B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 3 12:31 2024

Vial: 7
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV659.D Vial: 4
Acq On : 26 Sep 2024 7:37 am Operator: DNguye/CLingl
Sample : VO01I25L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 7:59 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	909812	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	754115	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	396770	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	275108	9.94	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.40%		
41) 1,2-Dichloroethane-d4	7.98	65	251692	10.23	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.30%		
54) Toluene-d8	11.03	98	1002617	10.88	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.80%		
76) 4-Bromofluorobenzene	16.01	95	462630	9.19	ug/l	0.00
Spiked Amount 10.000			Recovery =	91.90%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	289675	9.68	ug/l	97
5) Chloromethane	2.56	50	232099	10.69	ug/l	96
6) Vinyl chloride	2.70	62	213744	11.17	ug/l	96
7) Bromomethane	3.23	94	171731	10.13	ug/l	99
8) Chloroethane	3.26	64	192617	12.96	ug/l	89
9) Dichlorofluoromethane	3.36	67	434571	13.26	ug/l	98
10) Trichlorofluoromethane	3.63	101	362033	8.32	ug/l	100
11) Acrolein	4.03	56	22803	24.87	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	207832	11.66	ug/l	92
13) Acetone	4.10	43	231579	57.09	ug/l	87
14) 1,1-Dichloroethene	4.26	61	416718	9.47	ug/l	97
15) tert-Butyl alcohol	4.37	59	356360	291.11	ug/l	100
16) Iodomethane	4.66	142	440156	11.06	ug/l	82
17) Methyl acetate	4.68	43	112888	12.00	ug/l	96
18) Methylene chloride	4.89	49	361432	11.81	ug/l	90
19) Carbon disulfide	4.92	76	979841	12.86	ug/l	99
20) Acrylonitrile	5.06	53	232156	64.20	ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	691419	13.81	ug/l	91
22) trans-1,2-Dichloroethene	5.29	61	418943	10.45	ug/l	99
23) Isopropyl ether (DIPE)	5.69	45	1125765	14.06	ug/l	99
24) Vinyl acetate	5.86	43	203098	6.95	ug/l	97
25) 1,1-Dichloroethane	5.85	63	601953	12.25	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	934161	12.62	ug/l	95
28) 2-Butanone	6.44	43	356106	59.45	ug/l	96
29) 2,2-Dichloropropane	6.65	77	451886	9.23	ug/l	98
30) cis-1,2-Dichloroethene	6.71	96	367635	11.89	ug/l	95
31) Chloroform	6.93	83	668992	12.09	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV659.D Vial: 4
Acq On : 26 Sep 2024 7:37 am Operator: DNguye/CLingl
Sample : VO01I25L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 7:59 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	235242	12.52	ug/l	97
33)	Tetrahydrofuran	7.23	42	36882	11.03	ug/l	93
35)	1,1,1-Trichloroethane	7.52	97	535211	9.80	ug/l	97
36)	Cyclohexane	7.54	84	438882	11.16	ug/l	100
38)	1,1-Dichloropropene	7.74	110	140265	9.38	ug/l	99
39)	Carbon tetrachloride	7.89	119	390595	8.61	ug/l	99
40)	tert-Amyl methyl ether (TA	7.91	73	738796	13.58	ug/l	99
42)	Benzene	8.14	78	1265107	12.63	ug/l	98
43)	1,2-Dichloroethane	8.11	62	342481	10.93	ug/l	99
44)	Trichloroethene	9.08	130	350892	11.01	ug/l	96
45)	Methylcyclohexane	9.17	83	490541	11.19	ug/l	90
46)	1,2-Dichloropropane	9.36	63	317197	13.87	ug/l	88
47)	Bromodichloromethane	9.73	83	476320	11.93	ug/l	96
48)	1,4-Dioxane	9.77	88	24406	215.57	ug/l	94
49)	Dibromomethane	9.83	93	148970	11.70	ug/l	93
50)	2-Chloroethyl vinyl ether	10.23	63	39853	5.57	ug/l	94
51)	4-Methyl-2-pentanone	10.28	43	887998	64.93	ug/l	97
52)	cis-1,3-Dichloropropene	10.62	75	505697	12.52	ug/l	98
55)	Toluene	11.17	91	1360263	12.04	ug/l	99
56)	Ethyl methacrylate	11.45	69	282856	14.84	ug/l	92
57)	trans-1,3-Dichloropropene	11.48	75	399418	12.19	ug/l	98
58)	1,1,2-Trichloroethane	11.74	97	221041	13.35	ug/l	94
59)	2-Hexanone	11.76	43	565311	61.87	ug/l	98
60)	1,3-Dichloropropane	12.19	76	407909	13.84	ug/l	98
61)	Tetrachloroethene	12.31	164	271868	10.59	ug/l	93
62)	Dibromochloromethane	12.66	129	284205	12.99	ug/l	99
63)	1,2-Dibromoethane	13.03	107	206350	12.38	ug/l	97
64)	1-Chlorohexane	13.31	91	551131	10.52	ug/l	100
65)	Chlorobenzene	13.79	112	893476	11.50	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	342036	13.19	ug/l	96
67)	Ethylbenzene	13.88	91	1679461	11.87	ug/l	98
68)	m-Xylene & p-Xylene	14.02	91	2512285	22.49	ug/l	97
69)	o-Xylene	14.84	91	1365801	12.69	ug/l	95
70)	Styrene	14.91	104	994671	12.62	ug/l	97
71)	Isopropylbenzene	15.52	105	1697085	11.51	ug/l	98
73)	Bromoform	15.56	173	142708	9.79	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.62	53	62477	7.05	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	264564	11.16	ug/l	95
77)	1,2,3-Trichloropropane	16.14	110	72969	8.37	ug/l	88
78)	n-Propylbenzene	16.29	91	2101437	8.33	ug/l	98
79)	Bromobenzene	16.38	156	378369	9.91	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV659.D Vial: 4
Acq On : 26 Sep 2024 7:37 am Operator: DNguye/CLingl
Sample : VO01I25L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 7:59 2024 Quant Results File: VO01H09.RES

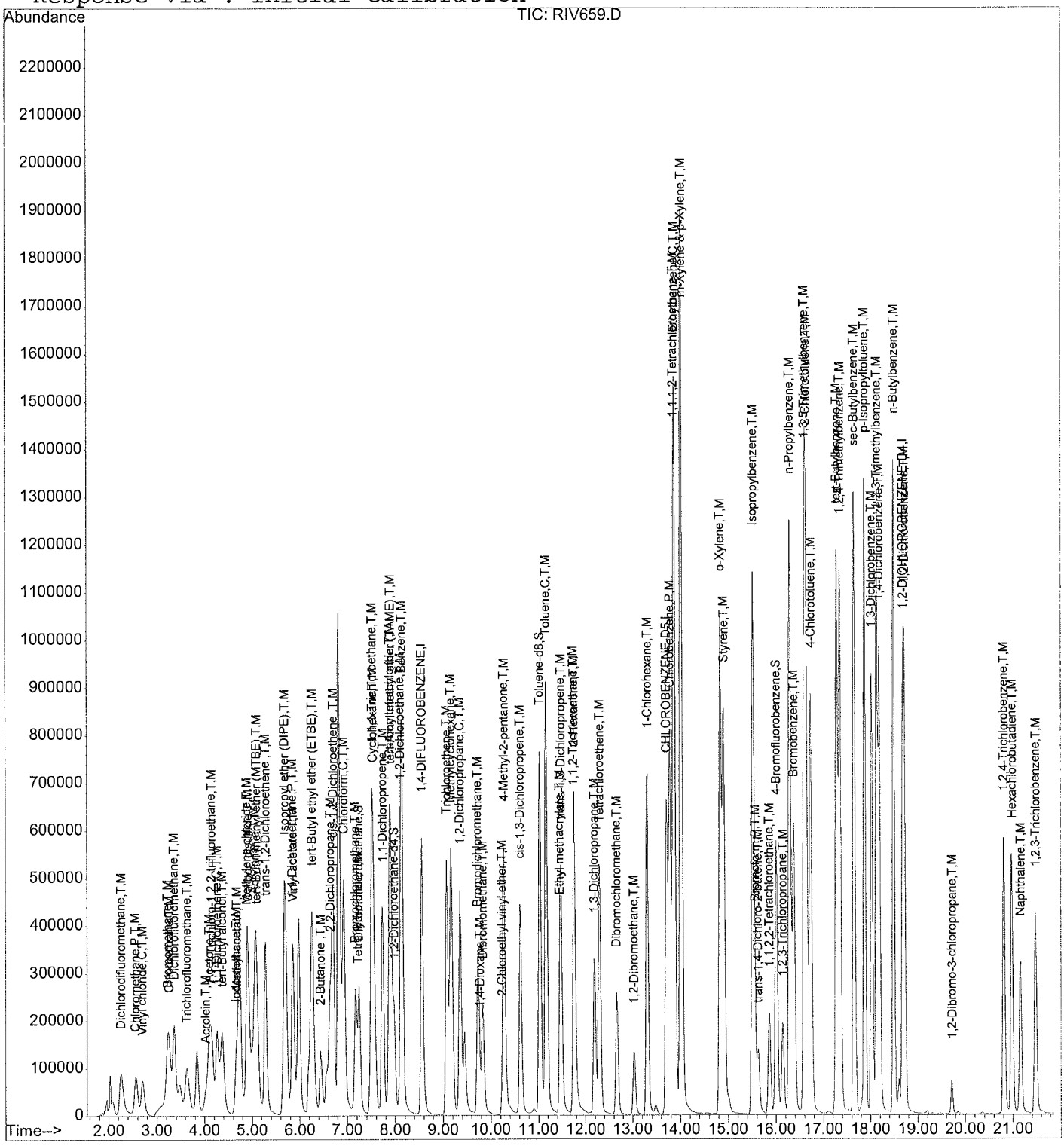
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1285832	7.72	ug/l	97
81)	2-Chlorotoluene	16.63	91	1400572	8.46	ug/l	97
82)	4-Chlorotoluene	16.73	91	1163268	8.22	ug/l	97
83)	tert-Butylbenzene	17.28	134	339856	9.23	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	1313775	8.26	ug/l	97
85)	sec-Butylbenzene	17.65	105	1849113	8.23	ug/l	97
86)	p-Isopropyltoluene	17.87	119	1436028	7.51	ug/l	95
87)	1,3-Dichlorobenzene	18.02	146	744584	9.41	ug/l	92
88)	1,2,3-Trimethylbenzene	18.14	105	1291368	8.37	ug/l	98
89)	1,4-Dichlorobenzene	18.19	146	721119	9.43	ug/l	92
90)	n-Butylbenzene	18.50	91	1360619	7.77	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	632458	9.71	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.73	157	39241	10.69	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	377558	8.53	ug/l	97
94)	Hexachlorobutadiene	20.98	225	220823	7.60	ug/l	99
95)	Naphthalene	21.16	128	556981	8.83	ug/l	97
96)	1,2,3-Trichlorobenzene	21.47	180	298812	8.83	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I25\RIV659.D Vial: 4
Acq On : 26 Sep 2024 7:37 am Operator: DNguye/CLing
Sample : VO01I25L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 7:59 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV660.D Vial: 5
Acq On : 26 Sep 2024 8:06 am Operator: DNguye/CLingl
Sample : VO01I25C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 8:28 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	911963	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	755903	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	413304	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	276362	9.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.70%		
41) 1,2-Dichloroethane-d4	7.98	65	245785	9.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.70%		
54) Toluene-d8	11.03	98	1008876	10.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.20%		
76) 4-Bromofluorobenzene	16.01	95	503623	9.60	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.27	85	259250	8.64	ug/l	97
5) Chloromethane	2.57	50	214524	9.86	ug/l	96
6) Vinyl chloride	2.71	62	212651	11.08	ug/l	99
7) Bromomethane	3.24	94	167050	9.83	ug/l	96
8) Chloroethane	3.26	64	176963	11.88	ug/l	77
9) Dichlorofluoromethane	3.36	67	426671	12.99	ug/l	99
10) Trichlorofluoromethane	3.63	101	326715	7.49	ug/l	89
11) Acrolein	4.03	56	20629	22.45	ug/l	70
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	195697	10.95	ug/l	95
13) Acetone	4.10	43	228400	56.13	ug/l	87
14) 1,1-Dichloroethene	4.26	61	406720	9.22	ug/l	96
15) tert-Butyl alcohol	4.38	59	350091	285.31	ug/l	97
16) Iodomethane	4.66	142	435562	10.92	ug/l	83
17) Methyl acetate	4.69	43	109001	11.56	ug/l	94
18) Methylene chloride	4.89	49	360325	11.75	ug/l	90
19) Carbon disulfide	4.92	76	952775	12.47	ug/l	100
20) Acrylonitrile	5.06	53	238407	65.78	ug/l	98
21) tert-Butyl methyl ether (M	5.09	73	670997	13.37	ug/l	91
22) trans-1,2-Dichloroethene	5.29	61	412192	10.26	ug/l	99
23) Isopropyl ether (DIPE)	5.70	45	1099144	13.70	ug/l	100
24) Vinyl acetate	5.86	43	190355	6.50	ug/l	96
25) 1,1-Dichloroethane	5.86	63	598328	12.15	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	937975	12.64	ug/l	95
28) 2-Butanone	6.44	43	360590	60.06	ug/l	96
29) 2,2-Dichloropropane	6.65	77	432898	8.82	ug/l	98
30) cis-1,2-Dichloroethene	6.71	96	367623	11.86	ug/l	95
31) Chloroform	6.93	83	651370	11.74	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I25\RIV660.D Vial: 5
Acq On : 26 Sep 2024 8:06 am Operator: DNguye/CLingl
Sample : VO01I25C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 8:28 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	230087	12.22	ug/l	99
33)	Tetrahydrofuran	7.23	42	35655	10.64	ug/l	91
35)	1,1,1-Trichloroethane	7.51	97	518788	9.48	ug/l	97
36)	Cyclohexane	7.54	84	414534	10.52	ug/l	99
38)	1,1-Dichloropropene	7.74	110	138071	9.21	ug/l	99
39)	Carbon tetrachloride	7.89	119	376583	8.28	ug/l	99
40)	tert-Amyl methyl ether (TA	7.91	73	744726	13.66	ug/l	98
42)	Benzene	8.14	78	1255004	12.50	ug/l	98
43)	1,2-Dichloroethane	8.11	62	340687	10.85	ug/l	98
44)	Trichloroethene	9.08	130	341988	10.70	ug/l	96
45)	Methylcyclohexane	9.17	83	456830	10.39	ug/l	91
46)	1,2-Dichloropropane	9.36	63	311164	13.57	ug/l	86
47)	Bromodichloromethane	9.73	83	482310	12.06	ug/l	97
48)	1,4-Dioxane	9.79	88	26132	230.27	ug/l	95
49)	Dibromomethane	9.82	93	148532	11.64	ug/l	92
50)	2-Chloroethyl vinyl ether	10.23	63	40084	5.59	ug/l	95
51)	4-Methyl-2-pentanone	10.26	43	898519	65.55	ug/l	97
52)	cis-1,3-Dichloropropene	10.62	75	503951	12.45	ug/l	96
55)	Toluene	11.17	91	1372417	12.12	ug/l	98
56)	Ethyl methacrylate	11.45	69	284344	14.89	ug/l	90
57)	trans-1,3-Dichloropropene	11.48	75	394381	12.00	ug/l	100
58)	1,1,2-Trichloroethane	11.74	97	223822	13.49	ug/l	95
59)	2-Hexanone	11.76	43	560265	61.20	ug/l	97
60)	1,3-Dichloropropane	12.19	76	426331	14.43	ug/l	98
61)	Tetrachloroethene	12.29	164	262361	10.20	ug/l	93
62)	Dibromochloromethane	12.66	129	282248	12.87	ug/l	99
63)	1,2-Dibromoethane	13.03	107	200247	11.99	ug/l	99
64)	1-Chlorohexane	13.30	91	532097	10.13	ug/l	99
65)	Chlorobenzene	13.79	112	884998	11.37	ug/l	97
66)	1,1,1,2-Tetrachloroethane	13.86	131	332696	12.80	ug/l	97
67)	Ethylbenzene	13.88	91	1645643	11.61	ug/l	98
68)	m-Xylene & p-Xylene	14.01	91	2459069	21.97	ug/l	97
69)	o-Xylene	14.84	91	1325370	12.28	ug/l	95
70)	Styrene	14.91	104	970223	12.28	ug/l	98
71)	Isopropylbenzene	15.52	105	1712514	11.58	ug/l	98
73)	Bromoform	15.55	173	145721	9.60	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.62	53	65277	7.07	ug/l	94
75)	1,1,2,2-Tetrachloroethane	15.86	83	269082	10.90	ug/l	97
77)	1,2,3-Trichloropropane	16.14	110	78524	8.64	ug/l	87
78)	n-Propylbenzene	16.29	91	2209408	8.41	ug/l	98
79)	Bromobenzene	16.38	156	397736	10.00	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV660.D Vial: 5
Acq On : 26 Sep 2024 8:06 am Operator: DNguye/CLingl
Sample : VO01I25C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 8:28 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1367312	7.88	ug/l	97
81)	2-Chlorotoluene	16.63	91	1382575	8.02	ug/l	92
82)	4-Chlorotoluene	16.73	91	1313461	8.92	ug/l	99
83)	tert-Butylbenzene	17.28	134	326469	8.51	ug/l	92
84)	1,2,4-Trimethylbenzene	17.36	105	1318820	7.96	ug/l	97
85)	sec-Butylbenzene	17.65	105	1835944	7.85	ug/l	95
86)	p-Isopropyltoluene	17.87	119	1471680	7.39	ug/l	96
87)	1,3-Dichlorobenzene	18.02	146	784229	9.52	ug/l	93
88)	1,2,3-Trimethylbenzene	18.13	105	1328573	8.26	ug/l	98
89)	1,4-Dichlorobenzene	18.19	146	748557	9.39	ug/l	93
90)	n-Butylbenzene	18.48	91	1419686	7.78	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	654980	9.65	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.73	157	41248	10.79	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	397915	8.63	ug/l	98
94)	Hexachlorobutadiene	20.98	225	223778	7.39	ug/l	97
95)	Naphthalene	21.16	128	597470	9.09	ug/l	97
96)	1,2,3-Trichlorobenzene	21.47	180	321495	9.12	ug/l	96

(#) = qualifier out of range (m) = manual integration

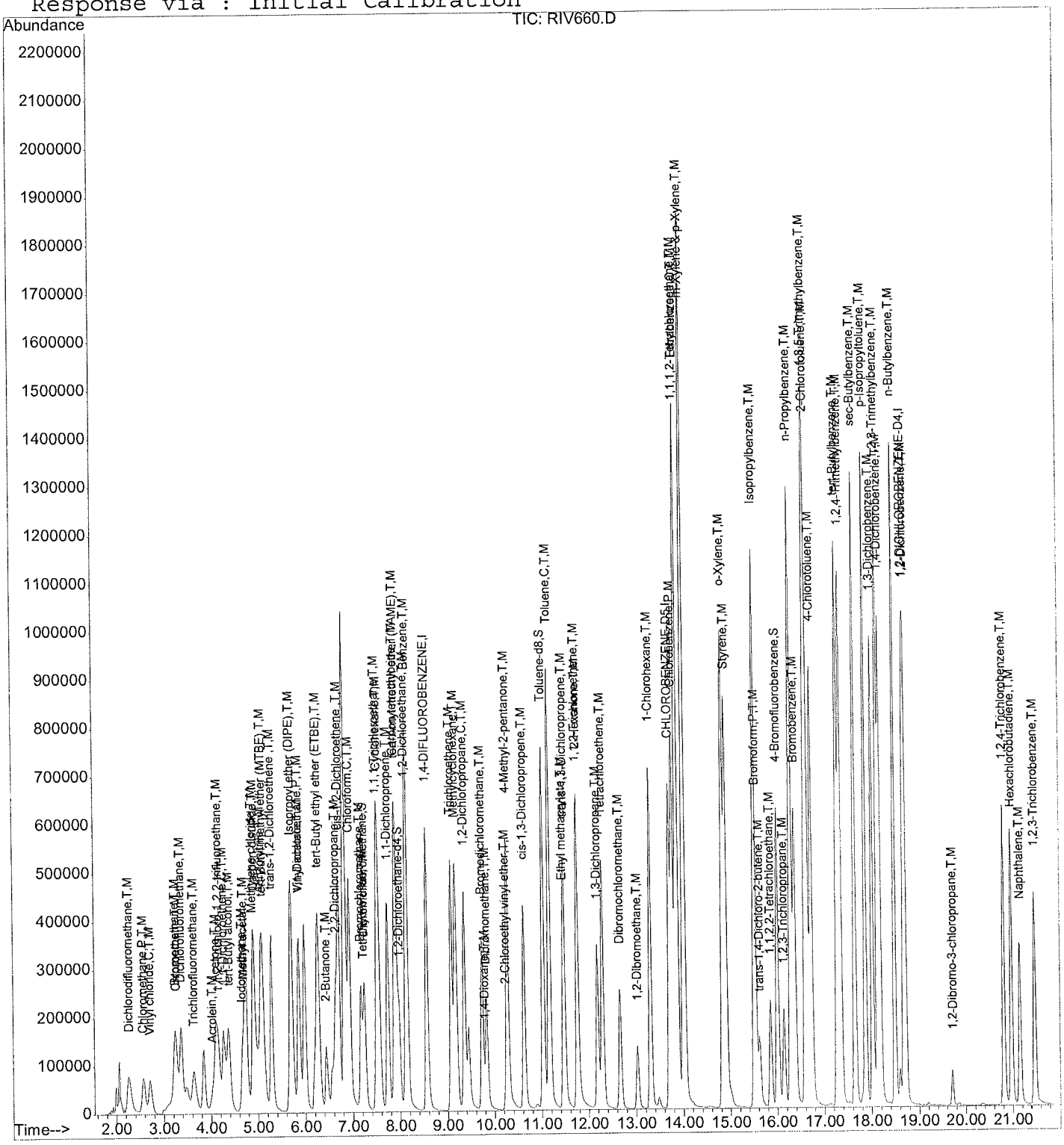
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV660.D
Acq On : 26 Sep 2024 8:06 am
Sample : VO01I25C
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Sep 26 8:28 2024

Vial: 5
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV682.D Vial: 6
Acq On : 26 Sep 2024 9:43 pm Operator: DNguye/CLingl
Sample : VO01I26B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 3 12:45 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4 DIFLUOROBENZENE	8.56	114	1221359	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	957052	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	431621	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	349492	9.41	ug/l	0.01
Spiked Amount 10.000			Recovery =	94.10%		
41) 1,2-Dichloroethane-d4	7.98	65	270866	8.20	ug/l	0.00
Spiked Amount 10.000			Recovery =	82.00%		
54) Toluene-d8	11.03	98	1361637	11.64	ug/l	0.00
Spiked Amount 10.000			Recovery =	116.40%		
76) 4-Bromofluorobenzene	16.01	95	447660	8.17	ug/l	0.00
Spiked Amount 10.000			Recovery =	81.70%		

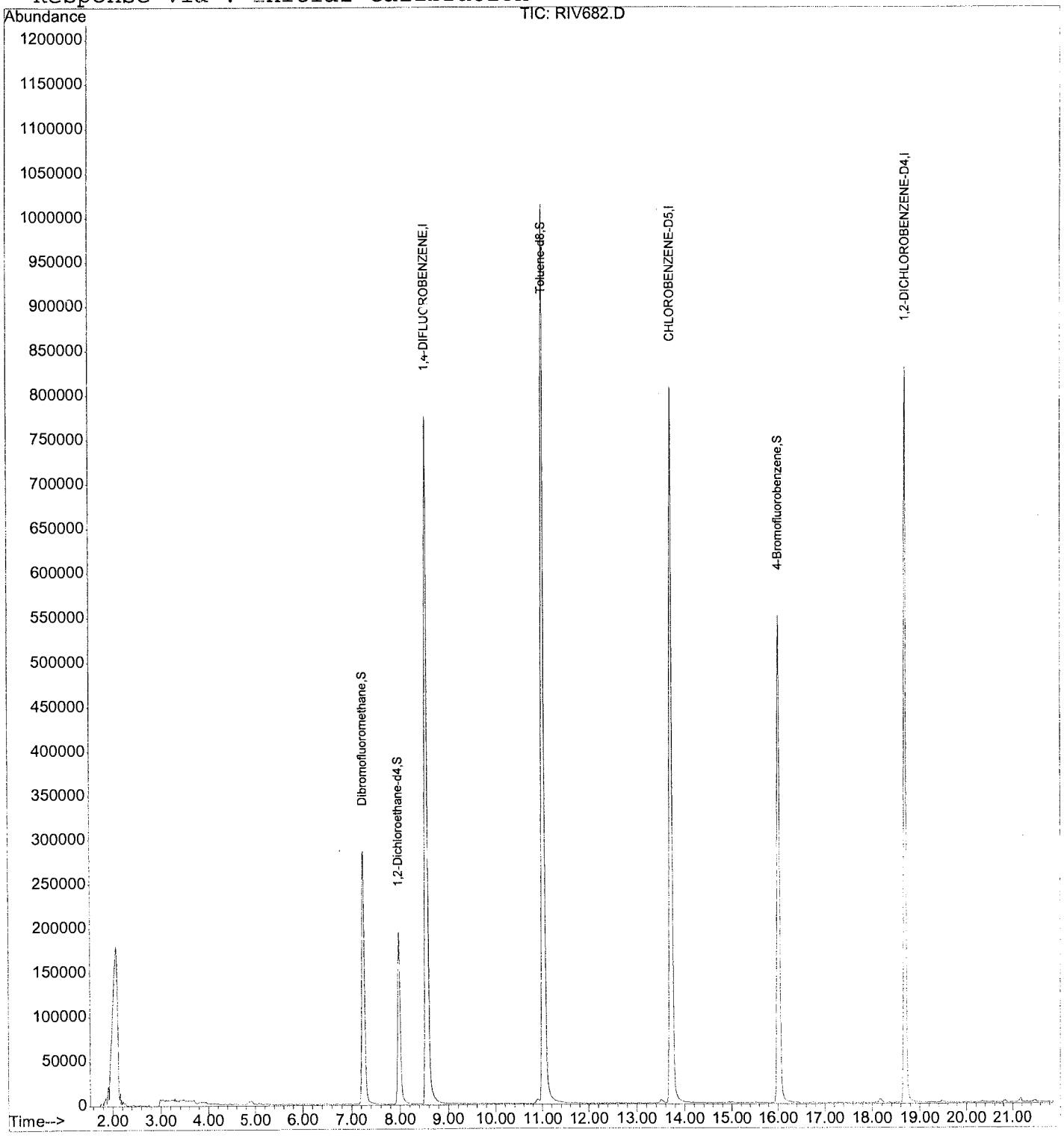
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I26\RIV682.D Vial: 6
Acq On : 26 Sep 2024 9:43 pm Operator: DNguye/CLing
Sample : VO01I26B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 3 12:45 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV679.D Vial: 3
Acq On : 26 Sep 2024 8:13 pm Operator: DNguye/CLingl
Sample : VO01I26L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 20:35 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	985289	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	824828	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	473876	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.25	111	315198	10.52	ug/l	0.01
Spiked Amount 10.000			Recovery =	105.20%		
41) 1,2-Dichloroethane-d4	7.98	65	266014	9.99	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.90%		
54) Toluene-d8	11.03	98	1081051	10.72	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.20%		
76) 4-Bromofluorobenzene	16.01	95	540812	9.00	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	282497	8.71	ug/l	99
5) Chloromethane	2.57	50	189155	8.05	ug/l	98
6) Vinyl chloride	2.70	62	187936	9.06	ug/l	96
7) Bromomethane	3.24	94	148740	8.10	ug/l	94
8) Chloroethane	3.26	64	157973	9.81	ug/l	63
9) Dichlorofluoromethane	3.36	67	506151	14.26	ug/l	99
10) Trichlorofluoromethane	3.63	101	312575	6.63	ug/l	96
11) Acrolein	4.04	56	37245	37.51	ug/l	87
12) 1,1,2-Trichloro-1,2,2-trif	4.14	151	248823	12.89	ug/l	97
13) Acetone	4.10	43	249400	56.76	ug/l	88
14) 1,1-Dichloroethene	4.26	61	453664	9.52	ug/l	79
15) tert-Butyl alcohol	4.38	59	379009	285.89	ug/l	97
16) Iodomethane	4.66	142	455148	10.56	ug/l	83
17) Methyl acetate	4.69	43	108229	10.62	ug/l	95
18) Methylene chloride	4.89	49	365828	11.04	ug/l	90
19) Carbon disulfide	4.91	76	876231	10.62	ug/l	99
20) Acrylonitrile	5.06	53	241386	61.64	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	717846	13.24	ug/l	92
22) trans-1,2-Dichloroethene	5.28	61	441894	10.18	ug/l	99
23) Isopropyl ether (DIPE)	5.70	45	1149826	13.26	ug/l	98
24) Vinyl acetate	5.86	43	204701	6.47	ug/l	95
25) 1,1-Dichloroethane	5.86	63	644704	12.12	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	992632	12.39	ug/l	94
28) 2-Butanone	6.44	43	378801	58.39	ug/l	97
29) 2,2-Dichloropropane	6.65	77	609598	11.49	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	382169	11.41	ug/l	99
31) Chloroform	6.93	83	694822	11.60	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I26\RIV679.D Vial: 3
Acq On : 26 Sep 2024 8:13 pm Operator: DNguye/CLingl
Sample : VO01I26L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 20:35 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	240598	11.83	ug/l	98
33)	Tetrahydrofuran	7.22	42	39861	11.01	ug/l	94
35)	1,1,1-Trichloroethane	7.52	97	609899	10.31	ug/l	98
36)	Cyclohexane	7.54	84	497833	11.69	ug/l	99
38)	1,1-Dichloropropene	7.74	110	162141	10.01	ug/l	99
39)	Carbon tetrachloride	7.89	119	460510	9.37	ug/l	99
40)	tert-Amyl methyl ether (TA	7.91	73	788680	13.39	ug/l	99
42)	Benzene	8.14	78	1352744	12.47	ug/l	98
43)	1,2-Dichloroethane	8.13	62	369341	10.89	ug/l	100
44)	Trichloroethene	9.08	130	378560	10.97	ug/l	97
45)	Methylcyclohexane	9.17	83	537555	11.32	ug/l	91
46)	1,2-Dichloropropane	9.36	63	326086	13.17	ug/l	90
47)	Bromodichloromethane	9.74	83	509539	11.79	ug/l	97
48)	1,4-Dioxane	9.79	88	26286	214.39	ug/l	93
49)	Dibromomethane	9.83	93	156678	11.37	ug/l	93
50)	2-Chloroethyl vinyl ether	10.23	63	50495	6.51	ug/l	95
51)	4-Methyl-2-pentanone	10.28	43	958139	64.69	ug/l	97
52)	cis-1,3-Dichloropropene	10.63	75	560457	12.82	ug/l	96
55)	Toluene	11.17	91	1464482	11.85	ug/l	99
56)	Ethyl methacrylate	11.46	69	301051	14.44	ug/l	89
57)	trans-1,3-Dichloropropene	11.48	75	445404	12.43	ug/l	98
58)	1,1,2-Trichloroethane	11.76	97	230117	12.71	ug/l	92
59)	2-Hexanone	11.76	43	609183	61.00	ug/l	98
60)	1,3-Dichloropropane	12.19	76	436173	13.53	ug/l	98
61)	Tetrachloroethene	12.31	164	314227	11.19	ug/l	93
62)	Dibromochloromethane	12.68	129	299502	12.51	ug/l	98
63)	1,2-Dibromoethane	13.03	107	211703	11.61	ug/l	99
64)	1-Chlorohexane	13.31	91	658114	11.48	ug/l	100
65)	Chlorobenzene	13.79	112	956400	11.26	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	363596	12.82	ug/l	98
67)	Ethylbenzene	13.88	91	1822367	11.78	ug/l	97
68)	m-Xylene & p-Xylene	14.02	91	2768033	22.66	ug/l	96
69)	o-Xylene	14.84	91	1461063	12.41	ug/l	96
70)	Styrene	14.91	104	1078544	12.51	ug/l	98
71)	Isopropylbenzene	15.52	105	1853776	11.49	ug/l	98
73)	Bromoform	15.56	173	146254	8.40	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.62	53	76262	7.21	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	300040	10.60	ug/l	95
77)	1,2,3-Trichloropropane	16.14	110	81396	7.81	ug/l	91
78)	n-Propylbenzene	16.29	91	2482824	8.24	ug/l	98
79)	Bromobenzene	16.38	156	433841	9.51	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV679.D Vial: 3
Acq On : 26 Sep 2024 8:13 pm Operator: DNguye/CLingl
Sample : VO01I26L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 20:35 2024 Quant Results File: VO01H09.RES

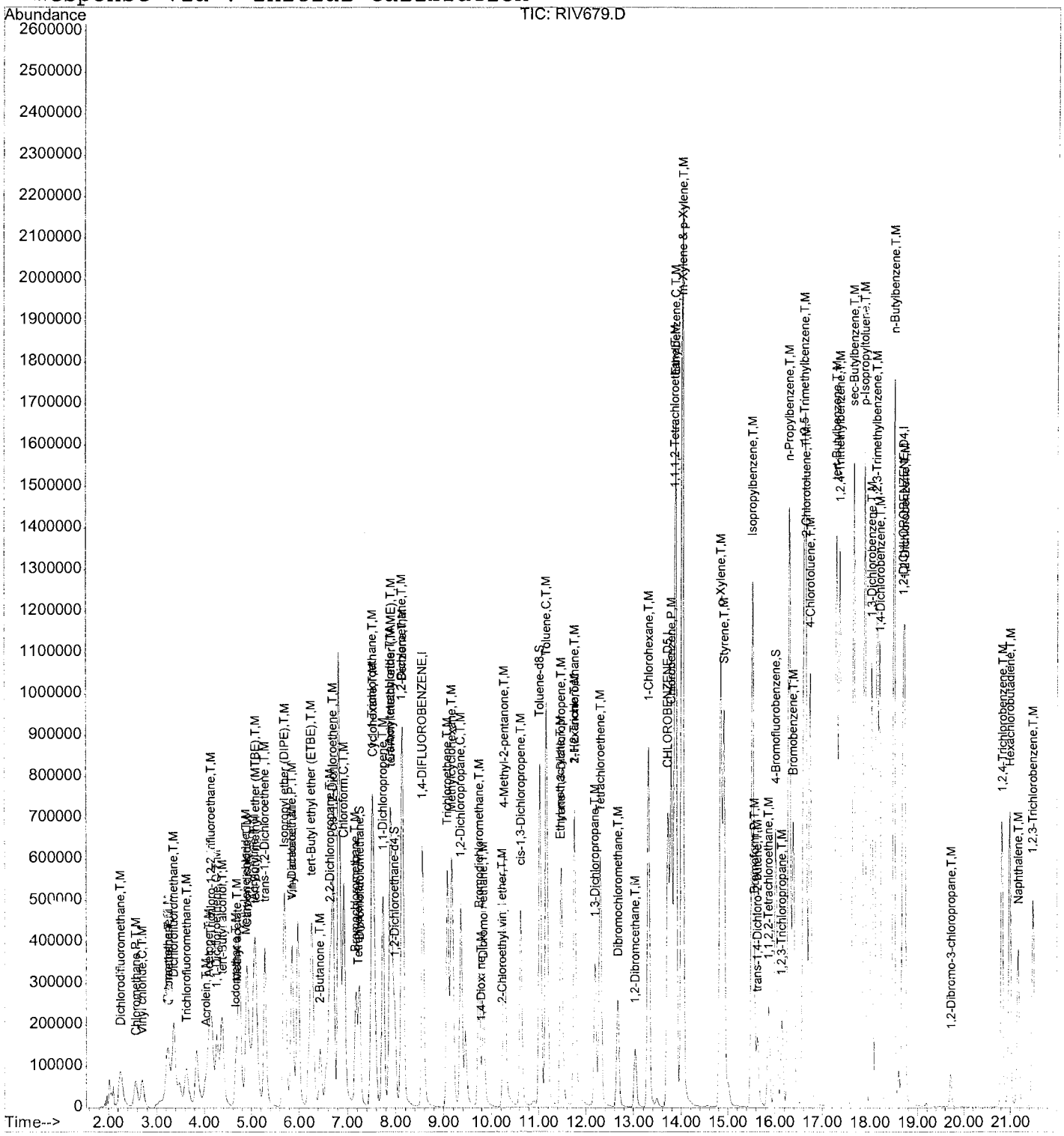
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1524696	7.67	ug/l	97
81)	2-Chlorotoluene	16.65	91	1590039	8.04	ug/l	97
82)	4-Chlorotoluene	16.73	91	1368515	8.10	ug/l	97
83)	tert-Butylbenzene	17.28	134	404144	9.19	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	1562601	8.22	ug/l	97
85)	sec-Butylbenzene	17.65	105	2251759	8.39	ug/l	95
86)	p-Isopropyltoluene	17.87	119	1773665	7.77	ug/l	95
87)	1,3-Dichlorobenzene	18.02	146	882768	9.34	ug/l	92
88)	1,2,3-Trimethylbenzene	18.13	105	1488469	8.07	ug/l	97
89)	1,4-Dichlorobenzene	18.20	146	865791	9.49	ug/l	93
90)	n-Butylbenzene	18.50	91	1743001	8.34	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	733822	9.43	ug/l	96
92)	1,2-Dibromo-3-chloropropan	19.73	157	44369	10.12	ug/l	99
93)	1,2,4-Trichlorobenzene	20.82	180	466871	8.83	ug/l	97
94)	Hexachlorobutadiene	20.98	225	288863	8.32	ug/l	99
95)	Naphthalene	21.16	128	649797	8.62	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	363999	9.01	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I26\RIV679.D Vial: 3
Acq On : 26 Sep 2024 8:13 pm Operator: DNguye/CLing
Sample : VO01I26L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 20:35 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV680.D Vial: 4
Acq On : 26 Sep 2024 8:43 pm Operator: DNguye/CLingl
Sample : VO01I26C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 21:05 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	1040113	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	835899	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	482024	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	307428	9.72	ug/l	0.01
Spiked Amount 10.000			Recovery = 97.20%			
41) 1,2-Dichloroethane-d4	7.98	65	270598	9.62	ug/l	0.00
Spiked Amount 10.000			Recovery = 96.20%			
54) Toluene-d8	11.03	98	1111252	10.88	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.80%			
76) 4-Bromofluorobenzene	16.01	95	553488	9.05	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.50%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.27	85	309286	9.04	ug/l	97
5) Chloromethane	2.57	50	200362	8.08	ug/l	94
6) Vinyl chloride	2.70	62	201460	9.21	ug/l	98
7) Bromomethane	3.24	94	145376	7.50	ug/l	98
8) Chloroethane	3.29	64	156946	9.24	ug/l	92
9) Dichlorofluoromethane	3.38	67	464429	12.39	ug/l	99
10) Trichlorofluoromethane	3.63	101	329003	6.61	ug/l	94
11) Acrolein	4.04	56	34505	32.92	ug/l	82
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	259485	12.74	ug/l	96
13) Acetone	4.12	43	241401	51.83	ug/l	85
14) 1,1-Dichloroethene	4.26	61	463415	9.21	ug/l	82
15) tert-Butyl alcohol	4.38	59	371532	265.48	ug/l	98
16) Iodomethane	4.68	142	462868	10.17	ug/l	82
17) Methyl acetate	4.69	43	115230	10.71	ug/l	96
18) Methylene chloride	4.90	49	365915	10.46	ug/l	90
19) Carbon disulfide	4.92	76	795406	9.13	ug/l	100
20) Acrylonitrile	5.06	53	233721	56.54	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	677645	11.84	ug/l	94
22) trans-1,2-Dichloroethene	5.29	61	436802	9.53	ug/l	99
23) Isopropyl ether (DIPE)	5.70	45	1124038	12.28	ug/l	98
24) Vinyl acetate	5.86	43	234264	7.01	ug/l	97
25) 1,1-Dichloroethane	5.86	63	631311	11.24	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	973041	11.50	ug/l	95
28) 2-Butanone	6.44	43	365915	53.43	ug/l	97
29) 2,2-Dichloropropane	6.65	77	608717	10.87	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	387241	10.95	ug/l	98
31) Chloroform	6.93	83	683937	10.81	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I26\RIV680.D Vial: 4
Acq On : 26 Sep 2024 8:43 pm Operator: DNguye/CLingl
Sample : VO01I26C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 21:05 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.18	49	230493	10.73 ug/l	98
33)	Tetrahydrofuran	7.23	42	34713	9.08 ug/l	93
35)	1,1,1-Trichloroethane	7.52	97	604343	9.68 ug/l	98
36)	Cyclohexane	7.55	84	573903	12.77 ug/l	99
38)	1,1-Dichloropropene	7.74	110	161370	9.44 ug/l	99
39)	Carbon tetrachloride	7.89	119	462611	8.92 ug/l	100
40)	tert-Amyl methyl ether (TA	7.91	73	769184	12.37 ug/l	98
42)	Benzene	8.14	78	1348922	11.78 ug/l	97
43)	1,2-Dichloroethane	8.13	62	352027	9.83 ug/l	96
44)	Trichloroethene	9.09	130	371976	10.21 ug/l	96
45)	Methylcyclohexane	9.18	83	661677	13.20 ug/l	90
46)	1,2-Dichloropropane	9.36	63	319747	12.23 ug/l	89
47)	Bromodichloromethane	9.74	83	501379	10.99 ug/l	97
48)	1,4-Dioxane	9.79	88	25195	194.66 ug/l	88
49)	Dibromomethane	9.83	93	150733	10.36 ug/l	92
50)	2-Chloroethyl vinyl ether	10.23	63	49735	6.08 ug/l	96
51)	4-Methyl-2-pentanone	10.28	43	906782	58.00 ug/l	97
52)	cis-1,3-Dichloropropene	10.63	75	546299	11.83 ug/l	97
55)	Toluene	11.17	91	1463341	11.68 ug/l	99
56)	Ethyl methacrylate	11.46	69	284287	13.46 ug/l	90
57)	trans-1,3-Dichloropropene	11.49	75	428428	11.79 ug/l	99
58)	1,1,2-Trichloroethane	11.76	97	230366	12.56 ug/l	95
59)	2-Hexanone	11.77	43	584839	57.91 ug/l	97
60)	1,3-Dichloropropane	12.20	76	421079	12.89 ug/l	98
61)	Tetrachloroethene	12.31	164	320310	11.26 ug/l	93
62)	Dibromochloromethane	12.68	129	290654	11.98 ug/l	99
63)	1,2-Dibromoethane	13.03	107	207475	11.23 ug/l	98
64)	1-Chlorohexane	13.31	91	654652	11.27 ug/l	99
65)	Chlorobenzene	13.79	112	941375	10.93 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.88	131	358168	12.46 ug/l	98
67)	Ethylbenzene	13.89	91	1817676	11.59 ug/l	98
68)	m-Xylene & p-Xylene	14.02	91	2706563	21.86 ug/l	97
69)	o-Xylene	14.84	91	1431466	11.99 ug/l	96
70)	Styrene	14.91	104	1054802	12.08 ug/l	97
71)	Isopropylbenzene	15.52	105	2010045	12.29 ug/l	98
73)	Bromoform	15.56	173	154001	8.70 ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.64	53	76065	7.07 ug/l	98
75)	1,1,2,2-Tetrachloroethane	15.86	83	293271	10.19 ug/l	95
77)	1,2,3-Trichloropropane	16.16	110	80517	7.60 ug/l	92
78)	n-Propylbenzene	16.30	91	2538561	8.28 ug/l	98
79)	Bromobenzene	16.39	156	423540	9.13 ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I26\RIV680.D Vial: 4
Acq On : 26 Sep 2024 8:43 pm Operator: DNguye/CLingl
Sample : VO01I26C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 21:05 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

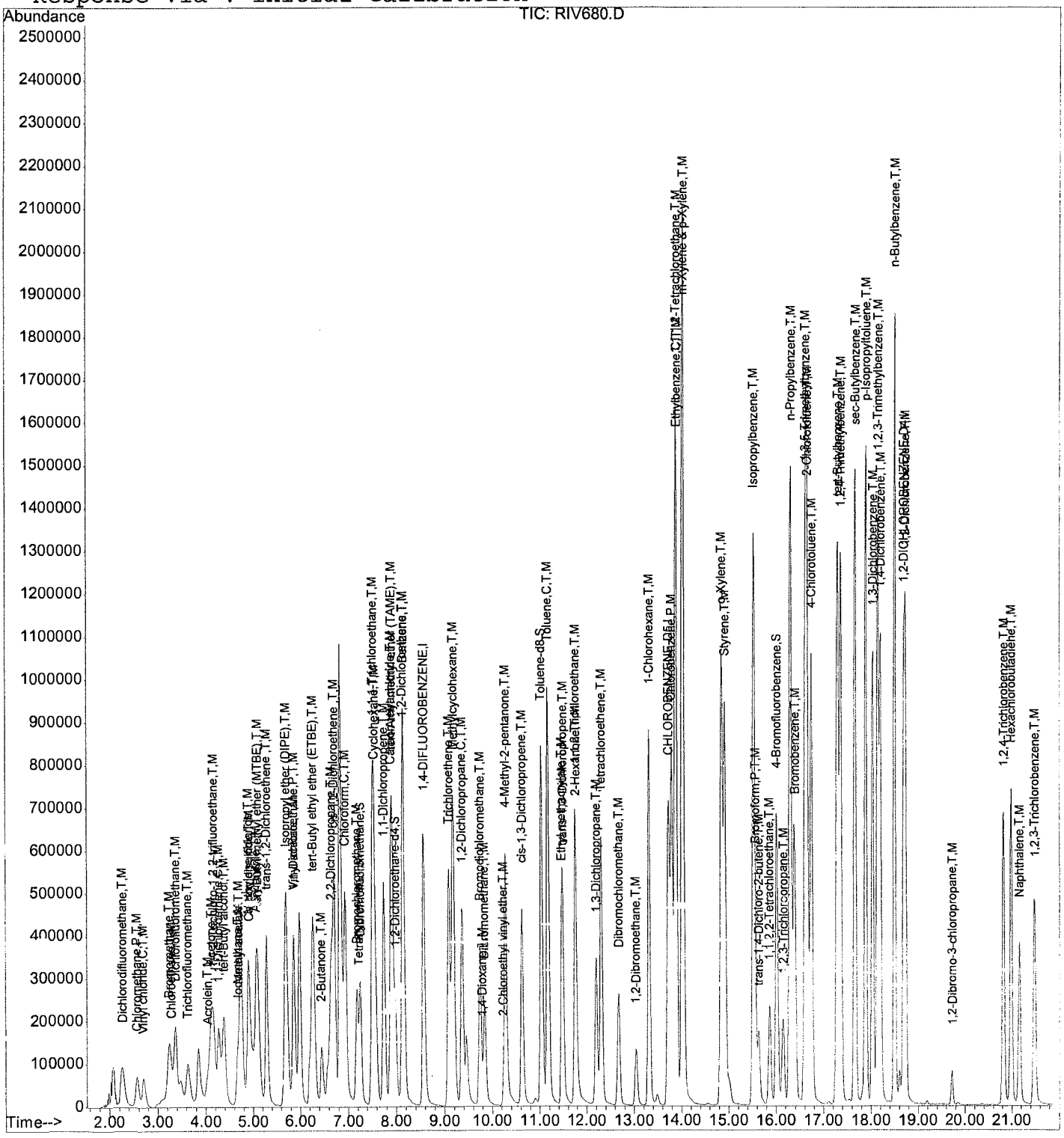
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1522799	7.53 ug/l	96
81)	2-Chlorotoluene	16.64	91	1562005	7.77 ug/l	96
82)	4-Chlorotoluene	16.73	91	1391835	8.10 ug/l	96
83)	tert-Butylbenzene	17.30	134	390242	8.72 ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	1491805	7.72 ug/l	97
85)	sec-Butylbenzene	17.67	105	2202646	8.07 ug/l	96
86)	p-Isopropyltoluene	17.89	119	1766052	7.60 ug/l	96
87)	1,3-Dichlorobenzene	18.04	146	872419	9.08 ug/l	91
88)	1,2,3-Trimethylbenzene	18.14	105	1469225	7.83 ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	851767	9.16 ug/l	92
90)	n-Butylbenzene	18.50	91	1753680	8.25 ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	723752	9.14 ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.73	157	43976	9.86 ug/l	98
93)	1,2,4-Trichlorobenzene	20.82	180	467064	8.68 ug/l	97
94)	Hexachlorobutadiene	20.98	225	293901	8.32 ug/l	99
95)	Naphthalene	21.16	128	638953	8.33 ug/l	97
96)	1,2,3-Trichlorobenzene	21.49	180	361554	8.80 ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I26\RIV680.D Vial: 4
Acq On : 26 Sep 2024 8:43 pm Operator: DNguye/CLing
Sample : VO01I26C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 21:05 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



INITIAL CALIBRATIONS

FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RHV128 BFB Injection Date: 08/09/24

Instrument ID: 01New BFB Injection Time: 08:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	22.371
75	30 - 60% of mass 95	48.380
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.009
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	63.433
175	5 - 9% of mass 174	4.766(7.51)1
176	95 - 101% % of mass 174	63.900(100.74)1
177	5 - 9% % of mass 176	3.518(5.51)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	VO01H091	RHV129	08/09/24	17:28
2	VSTD0.5	VO01H092	RHV130	08/09/24	18:14
3	VSTD1	VO01H093	RHV131	08/09/24	18:45
4	VSTD2	VO01H094	RHV132	08/09/24	19:15
5	VSTD5	VO01H095	RHV133	08/09/24	19:46
6	VSTD10	VO01H096	RHV134	08/09/24	20:17
7	VSTD20	VO01H097	RHV135	08/09/24	20:47
8	VSTD30	VO01H098	RHV136	08/09/24	21:17
9	VSTD50	VO01H099	RHV137	08/09/24	21:47
10	VSTD100	VO01H0910	RHV138	08/09/24	22:17
11	VSTD50	IVO01H0901	RHV141	08/09/24	23:47

SC 9/6/24

Instrument ID :01New
Beginning DateTime :08/09/24 17:28
Spike Units :PPB
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09

M	IDX	Parameters	.3 17:28 RHV129	.5 18:14 RHV130	1 18:45 RHV131	2 19:15 RHV132	5 19:46 RHV133	10 20:17 RHV134	20 20:47 RHV135	30 21:17 RHV136	50 21:47 RHV137	100 22:17 RHV138	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5598
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	0.294	0.267	0.306	0.355	0.373	0.382	0.341	0.302	0.303	0.367	0.329	12.04	2.2409
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	------	------	0.198	0.243	0.240	0.256	0.235	0.215	0.227	0.293	0.239	11.82	2.5406
	6	Vinyl chloride	------	0.156	0.190	0.208	0.226	0.239	0.223	0.215	0.226	------	0.210	12.57	2.6789
	7	Bromomethane	------	0.184	0.164	0.185	0.189	0.191	0.184	0.176	0.180	0.224	0.186	8.61	3.2215
	8	Chloroethane	------	------	0.130	0.152	0.155	0.167	0.164	0.160	0.172	0.207	0.163	13.37	3.2780
	9	Dichlorofluoromethane	0.318	0.396	0.330	0.390	0.368	0.364	0.359	0.325	0.333	0.419	0.360	9.43	3.3422
	10	Trichlorofluoromethane	0.445	0.411	0.467	0.538	0.487	0.548	0.458	0.439	0.451	0.539	0.478	9.99	3.5541
5	11	Acrolein	------	------	0.008	0.009	0.010	0.010	0.010	0.010	0.011	0.013	0.010	14.81	4.0169
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.177	0.172	0.193	0.214	0.204	0.203	0.196	0.188	0.185	0.227	0.196	8.61	4.1334
5	13	Acetone	------	------	0.064	0.060	0.047	0.045	0.044	0.040	0.038	0.046	0.048	19.26	4.0965
	14	1,1-Dichloroethene	0.488	0.489	0.449	0.487	0.508	0.496	0.473	0.450	0.449	0.550	0.484	6.44	4.2548
25	15	tert-Butyl alcohol	------	0.014	0.010	0.013	0.015	0.014	0.014	0.012	0.013	0.015	0.013	12.10	4.3721
	16	Iodomethane	------	------	0.377	0.458	0.445	0.458	0.447	0.437	0.441	------	0.437	6.31	4.6629
	17	Methyl acetate	------	------	0.099	0.113	0.100	0.102	0.099	0.097	0.099	0.118	0.103	7.37	4.6835
	18	Methylene chloride	------	------	0.313	0.346	0.348	0.331	0.330	0.318	0.316	0.388	0.336	7.35	4.8854
	19	Carbon disulfide	------	------	0.758	0.794	0.829	0.885	0.883	0.876	------	------	0.838	6.33	4.9044
5	20	Acrylonitrile	------	0.040	0.035	0.034	0.038	0.039	0.041	0.041	0.040	0.049	0.040	11.32	5.0586
	21	tert-Butyl methyl ether (MTBE)	0.484	0.584	0.504	0.567	0.597	0.569	0.561	0.524	0.503	0.609	0.550	7.89	5.0949
	22	trans-1,2-Dichloroethene	0.408	0.450	0.410	0.451	0.467	0.453	0.433	0.421	0.418	0.496	0.441	6.34	5.2756
	23	Isopropyl ether (DIPE)	0.747	0.914	0.786	0.930	0.929	0.892	0.899	0.876	0.850	0.974	0.880	7.83	5.6919
	24	Vinyl acetate	------	------	0.258	0.297	0.326	0.339	0.338	0.309	0.320	0.385	0.321	11.40	5.8521
	25	1,1-Dichloroethane	0.494	0.584	0.490	0.548	0.556	0.540	0.541	0.523	0.517	0.608	0.540	6.83	5.8534
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	0.693	0.887	0.762	0.890	0.871	0.841	0.824	0.770	0.732	0.864	0.813	8.56	6.2652
5	28	2-Butanone	------	0.078	0.064	0.059	0.064	0.064	0.068	0.063	0.061	0.073	0.066	9.12	6.4397
	29	2,2-Dichloropropane	0.523	0.593	0.540	0.575	0.569	0.560	0.533	0.475	0.460	0.554	0.538	7.93	6.6504
	30	cis-1,2-Dichloroethene	0.281	0.356	0.307	0.348	0.348	0.349	0.337	0.334	0.333	0.405	0.340	9.52	6.7052
	31	Chloroform	------	0.746	0.623	0.657	0.642	0.622	0.573	0.518	0.501	0.590	0.608	12.21	6.9302
	32	Bromochloromethane	0.170	0.219	0.191	0.214	0.210	0.209	0.214	0.201	0.199	0.239	0.206	8.79	7.1690
	33	Tetrahydrofuran	------	------	------	0.040	0.044	0.033	0.036	0.032	0.033	0.039	0.037	11.65	7.2154
	34	Dibromofluoromethane	------	------	0.228	0.300	0.331	0.330	0.333	0.303	------	------	0.304	13.19	7.2427
	35	1,1,1-Trichloroethane	0.567	0.600	0.589	0.677	0.668	0.643	0.598	0.534	0.514	0.612	0.600	8.89	7.5186
	36	Cyclohexane	------	0.377	0.404	0.405	0.431	0.451	0.422	0.448	0.435	0.518	0.432	9.21	7.5376
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	0.164	0.155	0.141	0.172	0.165	0.165	0.165	0.163	0.159	0.195	0.164	8.22	7.7393
	39	Carbon tetrachloride	0.455	0.526	0.473	0.559	0.547	0.537	0.502	0.445	0.428	0.517	0.499	9.16	7.8934
	40	tert-Amyl methyl ether (TAME)	0.537	0.641	0.550	0.622	0.638	0.616	0.625	0.569	0.542	0.638	0.598	7.20	7.9082
	41	1,2-Dichloroethane-d4	------	0.236	0.244	0.281	0.295	0.299	0.295	0.244	------	------	0.270	10.30	7.9794
	42	Benzene	1.010	1.115	1.033	1.169	1.166	1.150	1.146	1.089	1.041	1.093	1.101	5.25	8.1453
	43	1,2-Dichloroethane	0.260	0.363	0.331	0.403	0.390	0.380	0.358	0.310	0.296	0.353	0.344	13.08	8.1201
	44	Trichloroethene	0.357	0.373	0.311	0.361	0.353	0.358	0.348	0.331	0.321	0.389	0.350	6.77	9.0827
	45	Methylcyclohexane	0.332	0.439	0.466	0.481	0.513	0.508	0.482	0.520	0.505	0.576	0.482	13.31	9.1761
	46	1,2-Dichloropropane	0.236	0.244	0.212	0.250	0.260	0.259	0.261	0.248	0.248	0.295	0.251	8.42	9.3642
	47	Bromodichloromethane	0.496	0.542	0.423	0.460	0.442	0.440	0.420	0.374	0.359	0.431	0.439	12.12	9.7405
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	11.23	9.7789
	49	Dibromomethane	------	0.150	0.129	0.149	0.143	0.144	0.142	0.128	0.124	0.150	0.140	7.18	9.8339
	50	2-Chloroethyl vinyl ether	------	------	0.062	0.068	0.080	0.077	0.085	0.081	0.080	0.096	0.079	13.01	10.2376
5	51	4-Methyl-2-pentanone	------	0.131	0.117	0.143	0.166	0.164	0.171	0.154	0.145	0.162	0.150	11.85	10.2833
	52	cis-1,3-Dichloropropene	0.400	0.436	0.389	0.461	0.477	0.469	0.467	0.434	0.418	0.488	0.444	7.60	10.6294
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7258
	54	Toluene-d8	------	1.100	1.053	1.248	1.330	1.303	1.278	1.245	------	------	1.222	8.56	11.0382
	55	Toluene	1.555	1.555	1.437	1.605	1.638	1.573	1.453	1.455	1.346	1.369	1.498	6.69	11.1731
	56	Ethyl methacrylate	------	------	0.177	0.245	0.276	0.269	0.273	0.267	0.263	------	0.253	13.78	11.4743
	57	trans-1,3-Dichloropropene	0.363	0.427	0.376	0.459	0.489	0.467	0.444	0.420	0.413	0.488	0.435	10.00	11.4902
	58	1,1,2-Trichloroethane	0.194	0.236	0.189	0.205	0.244	0.222	0.220	0.215	0.212	0.258	0.219	9.84	11.7598
5	59	2-Hexanone	------	------	0.068	0.092	0.120	0.123	0.125	0.118	0.113	0.133	0.111	19.21	11.7765
	60	1,3-Dichloropropane	0.339	0.404	0.332	0.401	0.422	0.401	0.399	0.377	0.379	0.453	0.391	9.24	12.2013
	61	Tetrachloroethene	0.370	0.377	0.312	0.341	0.357	0.333	0.312	0.315	0.311	0.376	0.340	8.13	12.3080
	62	Dibromochloromethane	0.268	0.307	0.274	0.302	0.305	0.302	0.288	0.268	0.265	0.323	0.290	7.03	12.6754
	63	1,2-Dibromoethane	0.214	0.207	0.192	0.234	0.237	0.222	0.222	0.216	0.209	0.257	0.221	8.26	13.0428
	64	1-Chlorohexane	0.751	0.724	0.651	0.718	0.720	0.688	0.661	0.660	0.640	0.735	0.695	5.71	13.3198
	65	Chlorobenzene	1.082	1.040	0.928	1.089	1.115	1.066	1.014	0.972	0.937	1.054	1.030	6.31	13.7954
	66	1,1,1,2-Tetrachloroethane	0.290	0.328	0.314	0.370	0.376	0.366	0.345	0.332	0.323	0.397	0.344	9.54	13.8724
	67	Ethylbenzene	2.008	1.922	1.791	2.055	2.067	1.983	1.821	1.697	1.538	------	1.876	9.54	13.8900
2	68	m-Xylene & p-Xylene	1.528	1.571	1.410	1.591	1.626	1.518	1.367	1.237	------	------	1.481	8.93	14.0303
	69	o-Xylene	1.498	1.486	1.362	1.570	1.624	1.537	1.412	1.334	1.209	1.246	1.428	9.71	14.8487
	70	Styrene	0.963	1.019	0.935	1.109	1.170	1.098	1.067	1.033	0.983	1.072	1.045	6.93	14.9213
	71	Isopropylbenzene	1.985	1.917	1.830	2.078	2.181	2.057	1.872	1.728	------	------	1.956	7.56	15.5303
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6932
	73	Bromoform	------	0.376	0.269	0.348	0.402	0.377	0.377	0.379	0.410	------	0.367	11.93	15.5692
	74	trans-1,4-Dichloro-2-butene	------	------	------	0.191	0.231	0.224	0.232	0.225	0.238	------	0.223	7.51	15.6316
	75	1,1,2,2-Tetrachloroethane	0.460	0.561	0.535	0.610	0.661	0.606	0.639	0.639	0.664	------	0.597	11.29	15.8686
	76	4-Bromofluorobenzene	------	1.390	1.021	1.263	1.333	1.267	1.303	1.304	------	------	1.269	9.24	16.0203
	77	1,2,3-Trichloropropane	------	0.244	0.179	0.227	0.239	0.210	0.219	0.210	0.231	------	0.220	9.42	16.1618
	78	n-Propylbenzene	7.567	6.929	6.113	6.581	6.854	6.362	5.996	5.951	5.583	5.634	6.357	9.90	16.3050
	79	Bromobenzene	0.894	0.895	0.868	0.938	0.992	0.935	0.922	0.936	0.976	1.272	0.963	11.94	16.3939
	80	1,3,5-Trimethylbenzene	4.576	4.567	3.999	4.333	4.564	4.102	3.906	3.860	3.838	4.232	4.198	7.15	16.6132
	81	2-Chlorotoluene	4.564	4.597	3.970	4.164	4.382	4.089	3.890	3.789	3.894	4.392	4.173	7.05	16.6487
	82	4-Chlorotoluene	3.871	3.608	3.320	3.679	3.843	3.527	3.314	3.363	3.295	3.827	3.565	6.57	16.7421
	83	tert-Butylbenzene	0.948	0.959	0.791	0.928	0.917	0.882	0.875	0.886	0.933	1.164	0.928	10.33	17.3006
	84	1,2,4-Trimethylbenzene	4.447	4.090	3.741	4.254	4.366	4.041	3.776	3.749	3.634	4.005	4.010	7.06	17.3643
	85	sec-Butylbenzene	6.545	6.419	5.647	5.896	6.288	5.756	5.371	5.189	4.780	4.731	5.662	11.41	17.6621
	86	p-Isopropyltoluene	5.535	5.175	4.648	5.172	5.348	4.885	4.630	4.432	4.129	4.240	4.820	9.96	17.8887
	87	1,3-Dichlorobenzene	2.269	2.110	1.787	1.923	2.095	1.957	1.882	1.851	1.844	2.222	1.994	8.46	18.0384
	88	1,2,3-Trimethylbenzene	4.048	4.258	3.772	4.188	4.333	4.012	3.750	3.534	3.376	3.632	3.890	8.36	18.1451
	89	1,4-Dichlorobenzene	2.157	2.027	1.747	1.944	1.979	1.894	1.841	1.773	1.783	2.137	1.928	7.64	18.1999
	90	n-Butylbenzene	5.407	5.018	4.310	4.829	4.796	4.561	4.150	3.867	3.573	3.613	4.412	13.97	18.5006
	91	1,2-Dichlorobenzene	1.635	1.734	1.465	1.679	1.775	1.646	1.608	1.513	1.521	1.844	1.642	7.38	18.7273
	92	1,2-Dibromo-3-chloropropane	------	0.074	0.073	0.093	0.103	0.100	0.104	0.094	0.098	------	0.093	13.33	19.7229
	93	1,2,4-Trichlorobenzene	1.191	1.246	0.938	1.132	1.163	1.119	1.109	1.030	1.009	1.220	1.116	8.77	20.8162
	94	Hexachlorobutadiene	0.799	0.758	0.701	0.716	0.764	0.746	0.711	0.672	0.658	0.800	0.732	6.72	20.9895
	95	Naphthalene	1.491	1.639	1.286	1.575	1.681	1.652	1.661	1.527	1.541	1.852	1.591	9.31	21.1673
	96	1,2,3-Trichlorobenzene	0.847	0.845	0.759	0.897	0.903	0.875	0.850	0.800	0.789	0.960	0.853	7.02	21.4829

Spike Amount = Nominal Amount * M
Ave_%RSD : 9.5 Max_%RSD : 19.3

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
13	Acetone	0.01114	0.04263	0.9952
59	2-Hexanone	-0.03118	0.12619	0.9976

SW
9/16/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :01New
Beginning DateTime :08/09/24 17:28
Spike Units :PPB
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25
Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09

M	IDX	Parameters	.3 17:28 RHV129	.5 18:14 RHV130	1 18:45 RHV131	2 19:15 RHV132	5 19:46 RHV133	10 20:17 RHV134	20 20:47 RHV135	30 21:17 RHV136	50 21:47 RHV137	100 22:17 RHV138	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5598
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	89	81	93	108	113	116	104	92	92	112	10.5	12.04	2.2409
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	------	------	83	102	100	107	98	90	95	123	8.2	11.82	2.5406
	6	Vinyl chloride	------	74	90	99	108	114	106	102	108	------	9.2	12.57	2.6789
	7	Bromomethane	------	99	88	99	102	103	99	95	97	120	5.3	8.61	3.2215
	8	Chloroethane	------	------	80	93	95	102	101	98	106	127	8.7	13.37	3.2780
	9	Dichlorofluoromethane	88	110	92	108	102	101	100	90	92	116	7.6	9.43	3.3422
	10	Trichlorofluoromethane	93	86	98	113	102	115	96	92	94	113	8.3	9.99	3.5541
5	11	Acrolein	------	------	80	90	100	100	100	100	110	130	8.8	14.81	4.0169
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	90	88	98	109	104	104	100	96	94	116	6.6	8.61	4.1334
5	13	Acetone	------	------	97	115	101	100	101	91	88	109	14.6	19.26	4.0965
	14	1,1-Dichloroethene	101	101	93	101	105	102	98	93	93	114	4.7	6.44	4.2548
25	15	tert-Butyl alcohol	------	108	77	100	115	108	108	92	100	115	9.4	12.10	4.3721
	16	Iodomethane	------	------	86	105	102	105	102	100	101	------	4.1	6.31	4.6629
	17	Methyl acetate	------	------	96	110	97	99	96	94	96	115	5.7	7.37	4.6835
	18	Methylene chloride	------	------	93	103	104	99	98	95	94	115	5.4	7.35	4.8854
	19	Carbon disulfide	------	------	90	95	99	106	105	105	------	------	5.2	6.33	4.9044
5	20	Acrylonitrile	------	100	88	85	95	98	102	102	100	122	6.9	11.32	5.0586
	21	tert-Butyl methyl ether (MTBE)	88	106	92	103	109	103	102	95	91	111	6.8	7.89	5.0949
	22	trans-1,2-Dichloroethene	93	102	93	102	106	103	98	95	95	112	5.1	6.34	5.2756
	23	Isopropyl ether (DIPE)	85	104	89	106	106	101	102	100	97	111	5.9	7.83	5.6919
	24	Vinyl acetate	------	------	80	93	102	106	105	96	100	120	7.9	11.40	5.8521
	25	1,1-Dichloroethane	91	108	91	101	103	100	100	97	96	113	5.1	6.83	5.8534
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	85	109	94	109	107	103	101	95	90	106	7.3	8.56	6.2652
5	28	2-Butanone	------	118	97	89	97	97	103	95	92	111	7.1	9.12	6.4397
	29	2,2-Dichloropropane	97	110	100	107	106	104	99	88	86	103	6	7.93	6.6504
	30	cis-1,2-Dichloroethene	83	105	90	102	102	103	99	98	98	119	6.3	9.52	6.7052
	31	Chloroform	------	123	102	108	106	102	94	85	82	97	9.1	12.21	6.9302
	32	Bromochloromethane	83	106	93	104	102	101	104	98	97	116	6.4	8.79	7.1690
	33	Tetrahydrofuran	------	------	------	108	119	99	97	86	89	105	10	11.65	7.2154
	34	Dibromofluoromethane	------	------	75	99	109	99	110	100	------	------	8.9	13.19	7.2427
	35	1,1,1-Trichloroethane	94	100	98	113	111	107	100	89	86	102	6.6	8.89	7.5186
	36	Cyclohexane	------	87	94	94	100	104	98	104	101	120	6.3	9.21	7.5376
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	10^	95	86	105	101	101	101	99	97	119	4.9	8.22	7.7395
	39	Carbon tetrachloride	91	105	95	112	110	108	101	89	89	104	7.8	9.16	7.8934
	40	tert-Amyl methyl ether (TAME)	90	107	92	104	107	103	105	95	91	107	6.5	7.20	7.9082
	41	1,2-Dichloroethane-d4	------	87	90	104	109	111	109	90	------	------	9.3	10.30	7.9794
	42	Benzene	92	101	94	106	106	104	104	99	95	99	4.4	5.25	8.1453
	43	1,2-Dichloroethane	76	106	96	117	113	110	104	90	86	103	10.5	13.08	8.1201
	44	Trichloroethene	102	107	89	103	101	102	99	95	92	111	5.1	6.77	9.0827
	45	Methylcyclohexane	69	91	97	100	106	105	100	108	105	120	8.8	13.31	9.1761
	46	1,2-Dichloropropane	94	97	84	100	104	103	104	99	99	118	5.5	8.42	9.3642
	47	Bromodichloromethane	113	123	96	105	101	100	96	85	82	98	8.5	12.12	9.7405
20	48	1,4-Dioxane	------	------	------	85	93	102	104	93	103	120	0	11.23	9.7789
	49	Dibromomethane	------	107	92	106	102	103	101	91	89	107	6.1	7.18	9.8339
	50	2-Chloroethyl vinyl ether	------	------	78	86	101	97	108	103	101	122	9	13.01	10.2376
5	51	4-Methyl-2-pentanone	------	87	78	95	111	109	114	103	97	108	9.7	11.85	10.2833
	52	cis-1,3-Dichloropropene	90	98	88	104	107	106	105	98	94	110	6.4	7.60	10.6294
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7258
	54	Toluene-d8	------	90	86	102	109	107	105	102	------	------	6.8	8.56	11.0382
	55	Toluene	104	104	96	107	109	105	97	97	90	91	5.8	6.69	11.1731
	56	Ethyl methacrylate	------	------	70	97	109	106	108	106	104	------	9.4	13.78	11.4743
	57	trans-1,3-Dichloropropene	83	98	86	106	112	107	102	97	95	112	8	10.00	11.4902
	58	1,1,2-Trichloroethane	89	108	86	94	111	101	100	98	97	118	7.5	9.84	11.7598
5	59	2-Hexanone	------	------	103	97	105	102	102	95	90	106	14.4	19.21	11.7765
	60	1,3-Dichloropropane	87	103	85	103	108	103	102	96	97	116	6.9	9.24	12.2013
	61	Tetrachloroethene	109	111	92	100	105	98	92	93	91	111	7	8.13	12.3080
	62	Dibromochloromethane	92	106	94	104	105	104	99	92	91	111	6.1	7.03	12.6754
	63	1,2-Dibromoethane	97	94	87	106	107	100	100	98	95	116	6.1	8.26	13.0428
	64	1-Chlorohexane	108	104	94	103	104	99	95	95	92	106	5	5.71	13.3198
	65	Chlorobenzene	105	101	90	106	108	103	98	94	91	102	5.2	6.31	13.7954
	66	1,1,1,2-Tetrachloroethane	84	95	91	108	109	106	100	97	94	115	7.8	9.54	13.8724
	67	Ethylbenzene	107	102	95	110	110	106	97	90	82	------	7.8	9.54	13.8900
2	68	m-Xylene & p-Xylene	103	106	95	107	110	102	92	84	------	------	7.2	8.93	14.0303
	69	o-Xylene	105	104	95	110	114	108	99	93	85	87	8.1	9.71	14.8487
	70	Styrene	92	98	89	106	112	105	102	99	94	103	5.6	6.93	14.9213
	71	Isopropylbenzene	101	98	94	106	112	105	96	88	------	------	6.1	7.56	15.5303
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6932
	73	Bromoform	------	102	73	95	110	103	103	103	112	------	8	11.93	15.5692
	74	trans-1,4-Dichloro-2-butene	------	------	------	86	104	100	104	101	107	------	5	7.51	15.6316
	75	1,1,2,2-Tetrachloroethane	77	94	90	102	111	102	107	107	111	------	8.8	11.29	15.8686
	76	4-Bromofluorobenzene	------	110	80	100	105	100	103	103	------	------	5.7	9.24	16.0203
	77	1,2,3-Trichloropropane	------	111	81	103	109	95	100	95	105	------	7	9.42	16.1618
	78	n-Propylbenzene	119	109	96	104	108	100	94	94	88	89	7.9	9.90	16.3050
	79	Bromobenzene	93	93	90	97	103	97	96	97	101	132	7.3	11.94	16.3939
	80	1,3,5-Trimethylbenzene	109	109	95	103	109	98	93	92	91	101	6.1	7.15	16.6132
	81	2-Chlorotoluene	109	110	95	100	105	98	93	91	93	105	6	7.05	16.6487
	82	4-Chlorotoluene	109	101	93	103	108	99	93	94	92	107	5.6	6.57	16.7421
	83	tert-Butylbenzene	102	103	85	100	99	95	94	95	101	125	6.3	10.33	17.3006
	84	1,2,4-Trimethylbenzene	111	102	93	106	109	102	94	93	91	100	5.7	7.06	17.3643
	85	sec-Butylbenzene	116	113	100	104	111	102	95	92	84	84	9.2	11.41	17.6621
	86	p-Isopropyltoluene	115	107	96	107	111	101	96	92	86	88	8.4	9.96	17.8887
	87	1,3-Dichlorobenzene	114	106	90	96	105	98	94	93	92	111	7.2	8.46	18.0384
	88	1,2,3-Trimethylbenzene	104	109	97	108	111	103	96	91	87	93	7.1	8.36	18.1451
	89	1,4-Dichlorobenzene	112	105	91	101	103	98	95	92	92	111	6.3	7.64	18.1999
	90	n-Butylbenzene	12[illegible]	114	98	109	109	103	94	88	81	82	11.6	13.27	18.5006
	91	1,2-Dichlorobenzene	100	106	89	102	108	100	98	93	93	112	5.7	7.38	18.7273
	92	1,2-Dibromo-3-chloropropane	------	80	78	100	111	108	112	101	105	------	9.8	13.33	19.7229
	93	1,2,4-Trichlorobenzene	107	112	84	101	104	100	99	92	90	109	6.7	8.77	20.8162
	94	Hexachlorobutadiene	109	104	96	98	104	102	97	92	90	109	5.6	6.72	20.9895
	95	Naphthalene	94	103	81	99	106	104	104	96	97	116	6.7	9.31	21.1673
	96	1,2,3-Trichlorobenzene	99	99	89	105	106	103	100	94	92	113	5.3	7.02	21.4829

For 8260 C
See
916/25f

Compound List Report 01New

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
Total Cpnds : 96

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-DIFLUOROBENZENE	114	8.56	1.000	A	1	A	B
2	T	Chlorotrifluoroethylene	116	2.08	0.242	A	2	A	B
3	T	Dichlorodifluoromethane	85	2.24	0.262	A	1	A	B
4	T	2-Chloro-1,1,1-trifluoroethane	118	2.53	0.296	A	2	A	B
5	T	Chloromethane	50	2.54	0.297	A	1	A	B
6	T	Vinyl chloride	62	2.68	0.313	A	1	A	B
7	T	Bromomethane	94	3.21	0.375	A	1	A	B
8	T	Chloroethane	64	3.27	0.382	A	1	A	B
9	T	Dichlorofluoromethane	67	3.35	0.391	A	1	A	B
10	T	Trichlorofluoromethane	101	3.48	0.406	A	1	A	B
11	T	Acrolein	56	4.01	0.469	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	4.15	0.484	A	1	A	B
13	T	Acetone	43	4.10	0.479	L	1	A	B
14	T	1,1-Dichloroethene	61	4.25	0.496	A	2	A	B
15	T	tert-Butyl alcohol	59	4.37	0.510	A	1	A	B
16	T	Iodomethane	142	4.66	0.545	A	1	A	B
17	T	Methyl acetate	43	4.68	0.547	A	1	A	B
18	T	Methylene chloride	49	4.89	0.571	A	2	A	B
19	T	Carbon disulfide	76	4.90	0.573	A	1	A	B
20	T	Acrylonitrile	53	5.05	0.590	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	5.09	0.595	A	1	A	B
22	T	trans-1,2-Dichloroethene	61	5.27	0.616	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	5.69	0.664	A	1	A	B
24	T	Vinyl acetate	43	5.85	0.683	A	1	A	B
25	T	1,1-Dichloroethane	63	5.85	0.683	A	2	A	B
26	T	2-Butanol	45	6.17	0.721	L	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.26	0.732	A	1	A	B
28	T	2-Butanone	43	6.44	0.753	A	1	A	B
29	T	2,2-Dichloropropane	77	6.65	0.777	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	6.71	0.784	A	2	A	B
31	T	Chloroform	83	6.93	0.810	A	2	A	B
32	T	Bromochloromethane	49	7.17	0.837	A	2	A	B
33	T	Tetrahydrofuran	42	7.21	0.843	A	2	A	B
34	S	Dibromofluoromethane	111	7.24	0.846	A	2	A	B
35	T	1,1,1-Trichloroethane	97	7.51	0.877	A	2	A	B
36	T	Cyclohexane	84	7.54	0.881	A	1	A	B
37	T	2,2,4-Trimethylpentane	57	7.55	0.882	A	1	A	B
38	T	1,1-Dichloropropene	110	7.73	0.903	A	1	A	B
39	T	Carbon tetrachloride	119	7.89	0.922	A	1	A	B
40	T	tert-Amyl methyl ether (TAME)	73	7.91	0.924	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	7.98	0.933	A	1	A	B
42	T	Benzene	78	8.15	0.952	A	2	A	B
43	T	1,2-Dichloroethane	62	8.12	0.948	A	1	A	B
44	T	Trichloroethene	130	9.08	1.061	A	3	A	B
45	T	Methylcyclohexane	83	9.18	1.073	A	2	A	B
46	T	1,2-Dichloropropane	63	9.36	1.093	A	1	A	B
47	T	Bromodichloromethane	83	9.74	1.138	A	1	A	B
48	T	1,4-Dioxane	88	9.78	1.142	A	1	A	B
49	T	Dibromomethane	93	9.83	1.149	A	2	A	B
50	T	2-Chloroethyl vinyl ether	63	10.23	1.196	A	2	A	B
51	T	4-Methyl-2-pentanone	43	10.28	1.201	A	3	A	B
52	T	cis-1,3-Dichloropropene	75	10.63	1.242	A	1	A	B

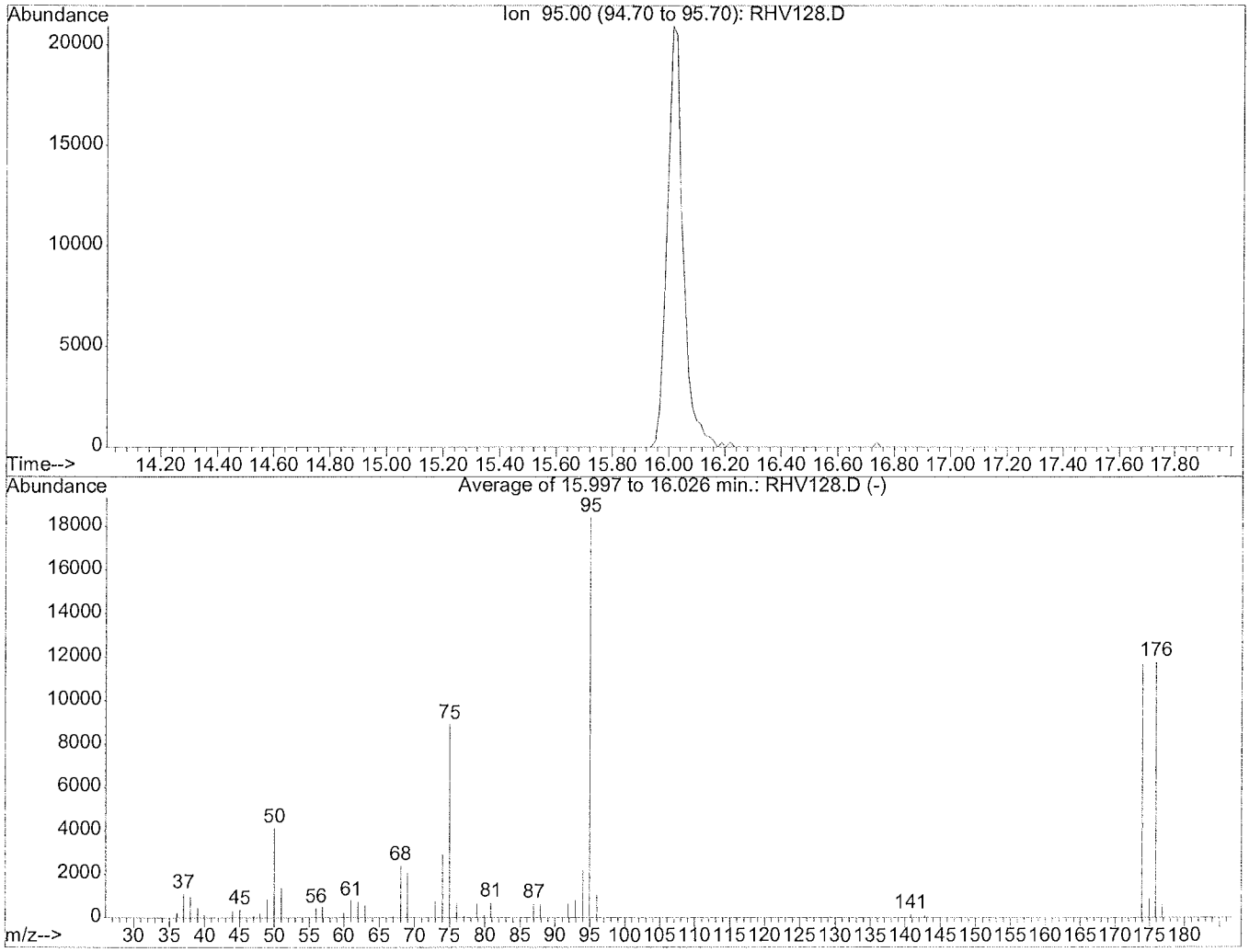
53	I	CHLOROBENZENE-D5	117	13.73	1.000	A	2	A	B
54	S	Toluene-d8	98	11.03	0.804	A	1	A	B
55	T	Toluene	91	11.17	0.813	A	1	A	B
56	T	Ethyl methacrylate	69	11.46	0.835	A	1	A	B
57	T	trans-1,3-Dichloropropene	75	11.48	0.836	A	1	A	B
58	T	1,1,2-Trichloroethane	97	11.76	0.856	A	2	A	B
59	T	2-Hexanone	43	11.76	0.856	L	1	A	B
60	T	1,3-Dichloropropane	76	12.20	0.889	A	1	A	B
61	T	Tetrachloroethene	164	12.31	0.896	A	3	A	B
62	T	Dibromochloromethane	129	12.68	0.923	A	1	A	B
63	T	1,2-Dibromoethane	107	13.03	0.949	A	1	A	B
64	T	1-Chlorohexane	91	13.32	0.970	A	1	A	B
65	P,M	Chlorobenzene	112	13.79	1.004	A	1	A	B
66	T	1,1,1,2-Tetrachloroethane	131	13.86	1.010	A	1	A	B
67	T	Ethylbenzene	91	13.89	1.012	A	1	A	B
68	T	m-Xylene & p-Xylene	91	14.03	1.022	A	1	A	B
69	T	o-Xylene	91	14.84	1.081	A	1	A	B
70	T	Styrene	104	14.92	1.086	A	2	A	B
71	T	Isopropylbenzene	105	15.52	1.131	A	3	A	B
72	I	1,2-DICHLOROBENZENE-D4	152	18.69	1.000	A	1	A	B
73	T	Bromoform	173	15.57	0.833	A	1	A	B
74	T	trans-1,4-Dichloro-2-butene	53	15.63	0.836	A	1	A	B
75	T	1,1,2,2-Tetrachloroethane	83	15.86	0.849	A	1	A	B
76	S	4-Bromofluorobenzene	95	16.01	0.857	A	2	A	B
77	T	1,2,3-Trichloropropane	110	16.16	0.864	A	1	A	B
78	T	n-Propylbenzene	91	16.31	0.872	A	2	A	B
79	T	Bromobenzene	156	16.40	0.877	A	1	A	B
80	T	1,3,5-Trimethylbenzene	105	16.60	0.888	A	2	A	B
81	T	2-Chlorotoluene	91	16.65	0.891	A	1	A	B
82	T	4-Chlorotoluene	91	16.74	0.895	A	1	A	B
83	T	tert-Butylbenzene	134	17.30	0.926	A	1	A	B
84	T	1,2,4-Trimethylbenzene	105	17.36	0.929	A	1	A	B
85	T	sec-Butylbenzene	105	17.66	0.945	A	1	A	B
86	T	p-Isopropyltoluene	119	17.88	0.956	A	2	A	B
87	T	1,3-Dichlorobenzene	146	18.04	0.965	A	2	A	B
88	T	1,2,3-Trimethylbenzene	105	18.15	0.971	A	2	A	B
89	T	1,4-Dichlorobenzene	146	18.19	0.973	A	2	A	B
90	T	n-Butylbenzene	91	18.50	0.990	A	2	A	B
91	T	1,2-Dichlorobenzene	146	18.72	1.002	A	1	A	B
92	T	1,2-Dibromo-3-chloropropane	157	19.72	1.055	A	1	A	B
93	T	1,2,4-Trichlorobenzene	180	20.81	1.113	A	2	A	B
94	T	Hexachlorobutadiene	225	20.99	1.123	A	1	A	B
95	T	Naphthalene	128	21.17	1.132	A	1	A	B
96	T	1,2,3-Trichlorobenzene	180	21.48	1.149	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO01H09.M Mon Aug 26 20:22:50 2024

SV
8/16/24

Data File : D:\HPCHEM\1\DATA\24H09\RHV128.D Vial: 1
Acq On : 9 Aug 2024 8:08 am Operator: DNguye
Sample : BFB01H09 Inst : 01New
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls



AutoFind: Scans 979, 980, 981; Background Corrected with Scan 973

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	4121	PASS
75	95	30	60	48.4	8912	PASS
95	95	100	100	100.0	18421	PASS
96	95	5	9	6.0	1107	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	63.4	11685	PASS
175	174	5	9	7.5	878	PASS
176	174	95	101	100.7	11771	PASS
177	176	5	9	5.5	648	PASS

RHV128.D VO01H09.M Tue Aug 27 13:41:53 2024 Su 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1105194	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	899301	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	307129	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	5367	0.16	ug/l	-0.01
Spiked Amount 10.000			Recovery = 1.60%			
41) 1,2-Dichloroethane-d4	7.98	65	4275	0.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 1.40%			
54) Toluene-d8	11.05	98	18909	0.17	ug/l	0.01
Spiked Amount 10.000			Recovery = 1.70%			
76) 4-Bromofluorobenzene	16.04	95	6868	0.18	ug/l	0.03
Spiked Amount 10.000			Recovery = 1.80%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.22	85	9737	0.27	ug/l	92
5) Chloromethane	2.55	50	7112	0.27	ug/l	76
6) Vinyl chloride	2.68	62	5866	0.25	ug/l	57
9) Dichlorofluoromethane	3.33	67	10549	0.26	ug/l	85
10) Trichlorofluoromethane	3.60	101	14770	0.28	ug/l	62
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	5882	0.27	ug/l	99
13) Acetone	4.09	43	20215	1.68	ug/l	93
14) 1,1-Dichloroethene	4.25	61	16192	0.30	ug/l	75
15) tert-Butyl alcohol	4.37	59	4486	3.02	ug/l	81
16) Iodomethane	4.67	142	12285	0.25	ug/l	93
18) Methylene chloride	4.87	49	12150	0.33	ug/l	91
20) Acrylonitrile	5.07	53	5456	1.24	ug/l	83
21) tert-Butyl methyl ether (M	5.10	73	16045	0.26	ug/l	99
22) trans-1,2-Dichloroethene	5.27	61	13527	0.28	ug/l	89
23) Isopropyl ether (DIPE)	5.69	45	24782	0.25	ug/l	94
25) 1,1-Dichloroethane	5.85	63	16379	0.27	ug/l	94
27) tert-Butyl ethyl ether (ET	6.27	59	22976	0.26	ug/l	97
28) 2-Butanone	6.47	43	9400	1.29	ug/l	70
29) 2,2-Dichloropropane	6.64	77	17336	0.29	ug/l	96
30) cis-1,2-Dichloroethene	6.70	96	9302	0.25	ug/l	92
31) Chloroform	6.92	83	27892	0.41	ug/l	95
32) Bromochloromethane	7.17	49	5648	0.25	ug/l	99
35) 1,1,1-Trichloroethane	7.53	97	18811	0.28	ug/l	93
36) Cyclohexane	7.54	84	8269	0.17	ug/l	89
38) 1,1-Dichloropropene	7.73	110	5427	0.30	ug/l	97
39) Carbon tetrachloride	7.88	119	15091	0.27	ug/l	89
40) tert-Amyl methyl ether (TA	7.90	73	17816	0.27	ug/l	92

(#) = qualifier out of range (m) = manual integration

SU 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42)	Benzene	8.15	78	33490	0.28 ug/l	96
43)	1,2-Dichloroethane	8.12	62	8604	0.23 ug/l	96
44)	Trichloroethene	9.09	130	11845	0.31 ug/l	92
45)	Methylcyclohexane	9.17	83	10995	0.21 ug/l	97
46)	1,2-Dichloropropane	9.36	63	7817	0.28 ug/l	93
47)	Bromodichloromethane	9.74	83	16439	0.34 ug/l	93
49)	Dibromomethane	9.83	93	3658	0.24 ug/l	87
51)	4-Methyl-2-pentanone	10.34	43	11071	0.67 ug/l	76
52)	cis-1,3-Dichloropropene	10.63	75	13250	0.27 ug/l	94
55)	Toluene	11.18	91	41950	0.31 ug/l	95
57)	trans-1,3-Dichloropropene	11.51	75	9783	0.25 ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	5233	0.27 ug/l	91
59)	2-Hexanone	11.94	43	3190	2.75 ug/l	67
60)	1,3-Dichloropropane	12.20	76	9156	0.26 ug/l	84
61)	Tetrachloroethene	12.31	164	9983	0.33 ug/l	98
62)	Dibromochloromethane	12.69	129	7234	0.28 ug/l	95
63)	1,2-Dibromoethane	13.05	107	5763	0.29 ug/l	81
64)	1-Chlorohexane	13.33	91	20274	0.32 ug/l	98
65)	Chlorobenzene	13.80	112	29198	0.32 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.88	131	7815	0.25 ug/l	90
67)	Ethylbenzene	13.89	91	54163	0.32 ug/l	99
68)	m-Xylene & p-Xylene	14.04	91	82438	0.62 ug/l	97
69)	o-Xylene	14.86	91	40424	0.31 ug/l	98
70)	Styrene	14.93	104	25970	0.28 ug/l	95
71)	Isopropylbenzene	15.54	105	53542	0.30 ug/l	97
73)	Bromoform	15.58	173	2273	0.20 ug/l	84
75)	1,1,2,2-Tetrachloroethane	15.88	83	4235	0.23 ug/l	100
78)	n-Propylbenzene	16.31	91	69725	0.36 ug/l	97
79)	Bromobenzene	16.40	156	8237	0.28 ug/l	96
80)	1,3,5-Trimethylbenzene	16.62	105	42163	0.33 ug/l	97
81)	2-Chlorotoluene	16.65	91	42056	0.33 ug/l	98
82)	4-Chlorotoluene	16.75	91	35667	0.33 ug/l	96
83)	tert-Butylbenzene	17.30	134	8739	0.31 ug/l	91
84)	1,2,4-Trimethylbenzene	17.37	105	40975	0.33 ug/l	98
85)	sec-Butylbenzene	17.67	105	60303	0.35 ug/l	97
86)	p-Isopropyltoluene	17.89	119	51002	0.34 ug/l	98
87)	1,3-Dichlorobenzene	18.04	146	20909	0.34 ug/l	95
88)	1,2,3-Trimethylbenzene	18.14	105	37294	0.31 ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	19871	0.34 ug/l	97
90)	n-Butylbenzene	18.50	91	49822	0.37 ug/l	98
91)	1,2-Dichlorobenzene	18.74	146	15061	0.30 ug/l	94

(#) = qualifier out of range (m) = manual integration
RHV129.D VO01H09.M Fri Aug 30 17:58:28 2024 Su 9/6/24 Page 2

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
93)	1,2,4-Trichlorobenzene	20.81	180	10971	0.32	ug/l	89
94)	Hexachlorobutadiene	20.99	225	7363	0.33	ug/l	97
95)	Naphthalene	21.17	128	13737	0.28	ug/l	95
96)	1,2,3-Trichlorobenzene	21.49	180	7807	0.30	ug/l	98

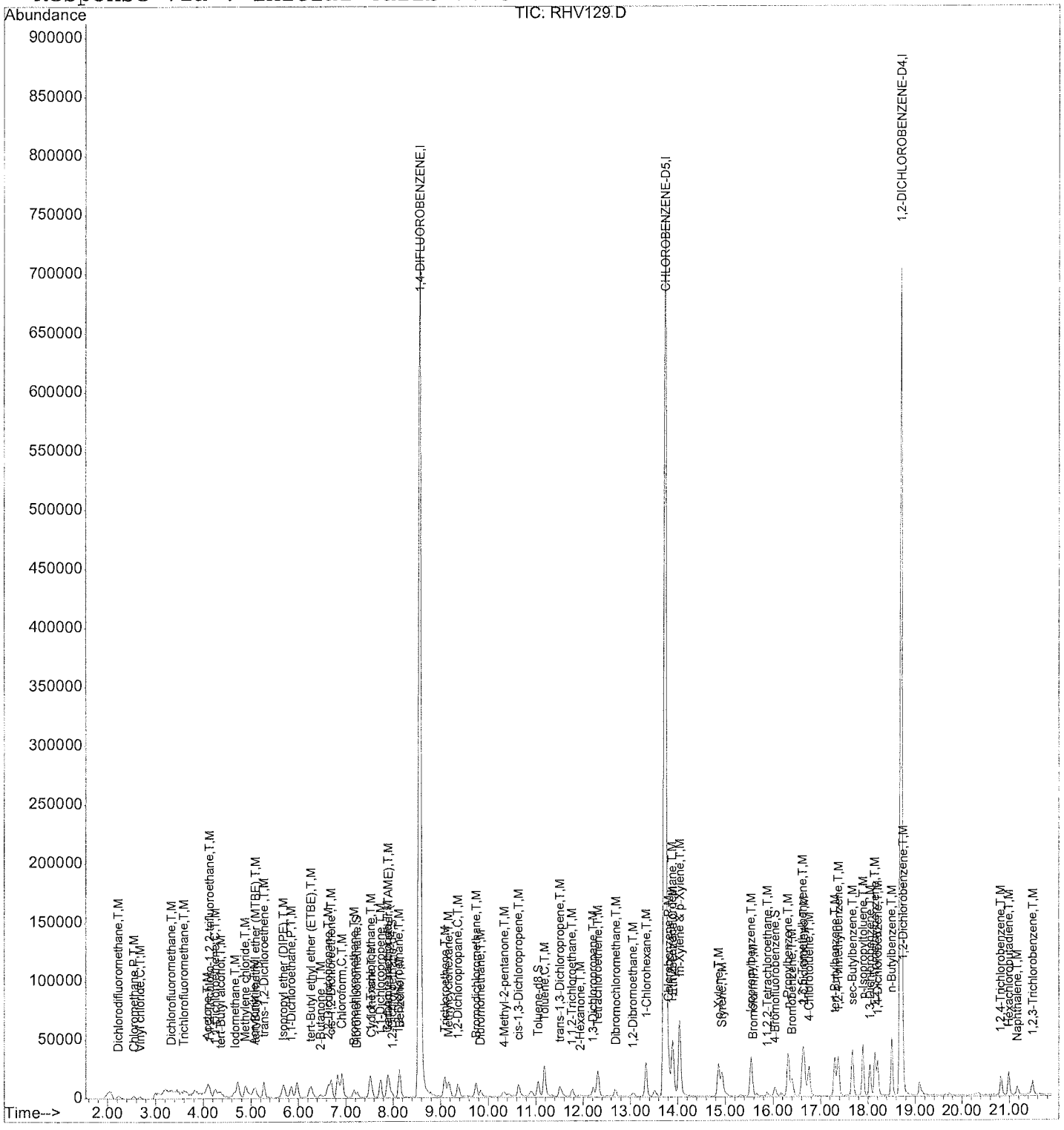
SV 9/6/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SW 9/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	926593	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	791295	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	271625	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	11707	0.42	ug/l	0.02
Spiked Amount 10.000			Recovery = 4.20%			
41) 1,2-Dichloroethane-d4	7.97	65	10946	0.44	ug/l	-0.01
Spiked Amount 10.000			Recovery = 4.40%			
54) Toluene-d8	11.05	98	43520	0.45	ug/l	0.01
Spiked Amount 10.000			Recovery = 4.50%			
76) 4-Bromofluorobenzene	16.04	95	18873	0.55	ug/l	0.03
Spiked Amount 10.000			Recovery = 5.50%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	12363	0.41	ug/l	66
5) Chloromethane	2.54	50	7558	0.34	ug/l	77
6) Vinyl chloride	2.67	62	7222	0.37	ug/l	54
7) Bromomethane	3.21	94	8517	0.49	ug/l	81
8) Chloroethane	3.29	64	4728	0.31	ug/l	70
9) Dichlorofluoromethane	3.33	67	18350	0.55	ug/l	92
10) Trichlorofluoromethane	3.60	101	19043	0.43	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	7946	0.44	ug/l	98
13) Acetone	4.09	43	26960	4.21	ug/l	88
14) 1,1-Dichloroethene	4.25	61	22648	0.51	ug/l	78
15) tert-Butyl alcohol	4.37	59	16148	12.95	ug/l	98
16) Iodomethane	4.65	142	12433	0.31	ug/l	61
18) Methylene chloride	4.89	49	16675	0.54	ug/l	95
20) Acrylonitrile	5.07	53	9172	2.49	ug/l	96
21) tert-Butyl methyl ether (M	5.10	73	27071	0.53	ug/l	95
22) trans-1,2-Dichloroethene	5.27	61	20852	0.51	ug/l	100
23) Isopropyl ether (DIPE)	5.69	45	42344	0.52	ug/l	91
25) 1,1-Dichloroethane	5.85	63	27035	0.54	ug/l	96
27) tert-Butyl ethyl ether (ET	6.27	59	41112	0.55	ug/l	99
28) 2-Butanone	6.46	43	17957	2.94	ug/l	73
29) 2,2-Dichloropropane	6.65	77	27492	0.55	ug/l	95
30) cis-1,2-Dichloroethene	6.70	96	16499	0.52	ug/l	95
31) Chloroform	6.93	83	34568	0.61	ug/l	99
32) Bromochloromethane	7.17	49	10138	0.53	ug/l	92
35) 1,1,1-Trichloroethane	7.53	97	27785	0.50	ug/l	96
36) Cyclohexane	7.53	84	17446	0.44	ug/l	97
38) 1,1-Dichloropropene	7.75	110	7189	0.47	ug/l	95

(#) = qualifier out of range (m) = manual integration

SC 9/6/24

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Carbon tetrachloride	7.90	119	24352	0.53 ug/l	97
40)	tert-Amyl methyl ether (TA	7.91	73	29675	0.54 ug/l	100
42)	Benzene	8.15	78	51640	0.51 ug/l	96
43)	1,2-Dichloroethane	8.12	62	16819	0.53 ug/l	98
44)	Trichloroethene	9.09	130	17293	0.53 ug/l	94
45)	Methylcyclohexane	9.18	83	20321	0.45 ug/l	97
46)	1,2-Dichloropropane	9.37	63	11309	0.49 ug/l	92
47)	Bromodichloromethane	9.74	83	25096	0.62 ug/l	88
49)	Dibromomethane	9.85	93	6954	0.54 ug/l	93
51)	4-Methyl-2-pentanone	10.32	43	30397	2.18 ug/l	86
52)	cis-1,3-Dichloropropene	10.63	75	20197	0.49 ug/l	100
55)	Toluene	11.18	91	61515	0.52 ug/l	97
56)	Ethyl methacrylate	11.55	69	7690	0.38 ug/l	100
57)	trans-1,3-Dichloropropene	11.51	75	16890	0.49 ug/l	93
58)	1,1,2-Trichloroethane	11.77	97	9327	0.54 ug/l	94
59)	2-Hexanone	11.86	43	12268	3.70 ug/l	93
60)	1,3-Dichloropropane	12.20	76	15985	0.52 ug/l	97
61)	Tetrachloroethene	12.31	164	14906	0.55 ug/l	95
62)	Dibromochloromethane	12.68	129	12139	0.53 ug/l	89
63)	1,2-Dibromoethane	13.06	107	8192	0.47 ug/l	86
64)	1-Chlorohexane	13.33	91	28655	0.52 ug/l	97
65)	Chlorobenzene	13.80	112	41164	0.51 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	12966	0.48 ug/l	92
67)	Ethylbenzene	13.89	91	76034	0.51 ug/l	100
68)	m-Xylene & p-Xylene	14.04	91	124345	1.06 ug/l	95
69)	o-Xylene	14.86	91	58801	0.52 ug/l	98
70)	Styrene	14.93	104	40335	0.49 ug/l	99
71)	Isopropylbenzene	15.54	105	75865	0.49 ug/l	98
73)	Bromoform	15.58	173	5106	0.51 ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.67	53	2227	0.37 ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.88	83	7625	0.47 ug/l	100
77)	1,2,3-Trichloropropane	16.19	110	3311	0.55 ug/l	80
78)	n-Propylbenzene	16.31	91	94099	0.54 ug/l	98
79)	Bromobenzene	16.40	156	12161	0.47 ug/l	95
80)	1,3,5-Trimethylbenzene	16.62	105	62021	0.54 ug/l	99
81)	2-Chlorotoluene	16.65	91	62439	0.55 ug/l	99
82)	4-Chlorotoluene	16.75	91	49002	0.51 ug/l	94
83)	tert-Butylbenzene	17.30	134	13024	0.52 ug/l	95
84)	1,2,4-Trimethylbenzene	17.37	105	55543	0.51 ug/l	100
85)	sec-Butylbenzene	17.67	105	87172	0.57 ug/l	98
86)	p-Isopropyltoluene	17.89	119	70281	0.54 ug/l	98

(#) = qualifier out of range (m) = manual integration

SC 9/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
87)	1,3-Dichlorobenzene	18.04	146	28650	0.53	ug/l	95
88)	1,2,3-Trimethylbenzene	18.14	105	57835	0.55	ug/l	96
89)	1,4-Dichlorobenzene	18.20	146	27530	0.53	ug/l	96
90)	n-Butylbenzene	18.50	91	68146	0.57	ug/l	95
91)	1,2-Dichlorobenzene	18.74	146	23552	0.53	ug/l	95
92)	1,2-Dibromo-3-chloropropan	19.73	157	1003	0.40	ug/l	93
93)	1,2,4-Trichlorobenzene	20.83	180	16918	0.56	ug/l	96
94)	Hexachlorobutadiene	20.99	225	10289	0.52	ug/l	97
95)	Naphthalene	21.18	128	22266	0.52	ug/l	100
96)	1,2,3-Trichlorobenzene	21.49	180	11480	0.50	ug/l	94

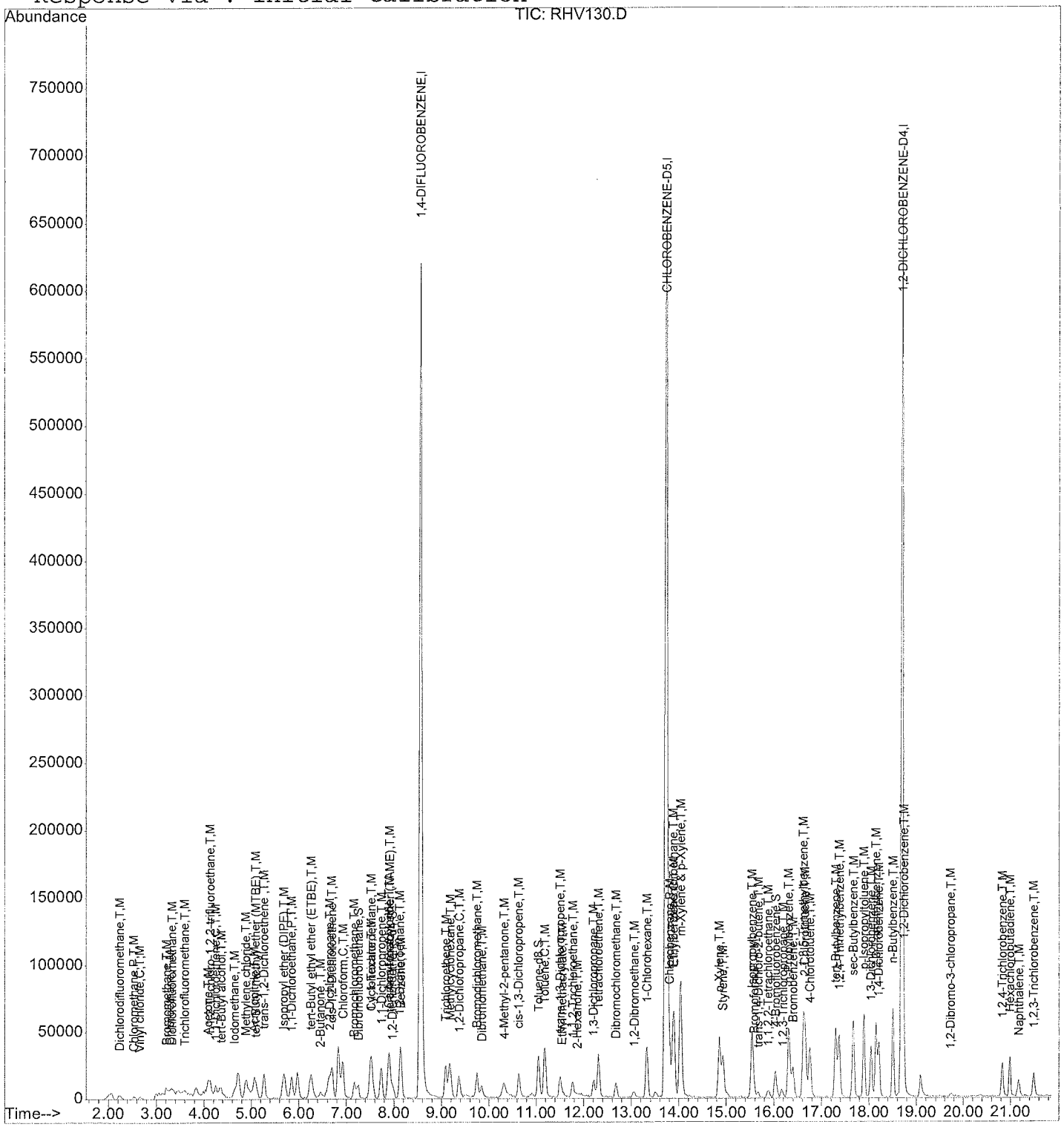
9/16/24

(#) = qualifier out of range (m) = manual integration
RHV130.D VO01H09.M Fri Aug 30 18:00:22 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Sa 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D Vial: 4
Acq On : 9 Aug 2024 6:45 pm Operator: DNguye
Sample : VO01H093 0.1/0.5 Inst : 01New
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	995321	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	821998	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	293785	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	22673	0.75	ug/l	0.00
Spiked Amount 10.000			Recovery =	7.50%		
41) 1,2-Dichloroethane-d4	7.98	65	24240	0.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.00%		
54) Toluene-d8	11.05	98	86586	0.86	ug/l	0.01
Spiked Amount 10.000			Recovery =	8.60%		
76) 4-Bromofluorobenzene	16.03	95	30002	0.80	ug/l	0.01
Spiked Amount 10.000			Recovery =	8.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	30466	0.93	ug/l	98
5) Chloromethane	2.56	50	19736	0.83	ug/l	91
6) Vinyl chloride	2.69	62	18921	0.90	ug/l	81
7) Bromomethane	3.23	94	16363	0.88	ug/l	90
8) Chloroethane	3.27	64	12940	0.80	ug/l	54
9) Dichlorofluoromethane	3.35	67	32855	0.92	ug/l	93
10) Trichlorofluoromethane	3.48	101	46525	0.98	ug/l	97
11) Acrolein	4.01	56	4025	4.01	ug/l	83
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	19202	0.98	ug/l	94
13) Acetone	4.10	43	31614	4.84	ug/l	92
14) 1,1-Dichloroethene	4.26	61	44721	0.93	ug/l	98
15) tert-Butyl alcohol	4.40	59	24804	18.52	ug/l	72
16) Iodomethane	4.66	142	37572	0.86	ug/l	96
17) Methyl acetate	4.69	43	9826	0.95	ug/l	74
18) Methylene chloride	4.89	49	31152	0.93	ug/l	96
19) Carbon disulfide	4.90	76	75491	0.91	ug/l	93
20) Acrylonitrile	5.06	53	17253	4.36	ug/l	94
21) tert-Butyl methyl ether (M	5.11	73	50189	0.92	ug/l	97
22) trans-1,2-Dichloroethene	5.29	61	40795	0.93	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	78248	0.89	ug/l	95
24) Vinyl acetate	5.86	43	25648	0.80	ug/l	92
25) 1,1-Dichloroethane	5.86	63	48765	0.91	ug/l	97
27) tert-Butyl ethyl ether (ET	6.28	59	75845	0.94	ug/l	99
28) 2-Butanone	6.46	43	31758	4.85	ug/l	83
29) 2,2-Dichloropropane	6.65	77	53766	1.00	ug/l	94
30) cis-1,2-Dichloroethene	6.71	96	30582	0.90	ug/l	97
31) Chloroform	6.93	83	61990	1.02	ug/l	99

(#) = qualifier out of range (m) = manual integration

SV 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D Vial: 4
Acq On : 9 Aug 2024 6:45 pm Operator: DNguye
Sample : VO01H093 0.1/0.5 Inst : 01New
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	18968	0.92 ug/l	91
35)	1,1,1-Trichloroethane	7.52	97	58634	0.98 ug/l	99
36)	Cyclohexane	7.54	84	40214	0.93 ug/l	95
38)	1,1-Dichloropropene	7.75	110	14068	0.86 ug/l	93
39)	Carbon tetrachloride	7.89	119	47111	0.95 ug/l	94
40)	tert-Amyl methyl ether (TA	7.91	73	54707	0.92 ug/l	97
42)	Benzene	8.15	78	102789	0.94 ug/l	98
43)	1,2-Dichloroethane	8.13	62	32983	0.96 ug/l	97
44)	Trichloroethene	9.09	130	30949	0.89 ug/l	97
45)	Methylcyclohexane	9.17	83	46423	0.97 ug/l	97
46)	1,2-Dichloropropane	9.37	63	21104	0.84 ug/l	98
47)	Bromodichloromethane	9.74	83	42128	0.96 ug/l	91
49)	Dibromomethane	9.85	93	12851	0.92 ug/l	96
50)	2-Chloroethyl vinyl ether	10.26	63	6191	0.79 ug/l	90
51)	4-Methyl-2-pentanone	10.31	43	58311	3.90 ug/l	96
52)	cis-1,3-Dichloropropene	10.63	75	38746	0.88 ug/l	95
55)	Toluene	11.18	91	118137	0.96 ug/l	99
56)	Ethyl methacrylate	11.52	69	14561	0.70 ug/l	90
57)	trans-1,3-Dichloropropene	11.51	75	30877	0.86 ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	15565	0.86 ug/l	96
59)	2-Hexanone	11.83	43	27746	5.15 ug/l	98
60)	1,3-Dichloropropane	12.22	76	27325	0.85 ug/l	99
61)	Tetrachloroethene	12.31	164	25662	0.92 ug/l	95
62)	Dibromochloromethane	12.68	129	22491	0.94 ug/l	99
63)	1,2-Dibromoethane	13.05	107	15774	0.87 ug/l	91
64)	1-Chlorohexane	13.33	91	53523	0.94 ug/l	97
65)	Chlorobenzene	13.80	112	76255	0.90 ug/l	97
66)	1,1,1,2-Tetrachloroethane	13.88	131	25787	0.91 ug/l	94
67)	Ethylbenzene	13.89	91	147217	0.95 ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	231851	1.90 ug/l	99
69)	o-Xylene	14.86	91	111932	0.95 ug/l	99
70)	Styrene	14.93	104	76846	0.89 ug/l	99
71)	Isopropylbenzene	15.54	105	150424	0.94 ug/l	99
73)	Bromoform	15.57	173	7909	0.73 ug/l	94
74)	trans-1,4-Dichloro-2-buten	15.66	53	3855	0.59 ug/l	75
75)	1,1,2,2-Tetrachloroethane	15.86	83	15709	0.90 ug/l	95
77)	1,2,3-Trichloropropane	16.17	110	5246	0.81 ug/l	100
78)	n-Propylbenzene	16.31	91	179592	0.96 ug/l	99
79)	Bromobenzene	16.41	156	25486	0.90 ug/l	96
80)	1,3,5-Trimethylbenzene	16.62	105	117474	0.95 ug/l	98
81)	2-Chlorotoluene	16.65	91	116646	0.95 ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D
Acq On : 9 Aug 2024 6:45 pm
Sample : VO01H093 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024

Vial: 4
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	4-Chlorotoluene	16.75	91	97550	0.93	ug/l	97
83)	tert-Butylbenzene	17.30	134	23224	0.85	ug/l	97
84)	1,2,4-Trimethylbenzene	17.37	105	109893	0.93	ug/l	97
85)	sec-Butylbenzene	17.67	105	165895	1.00	ug/l	98
86)	p-Isopropyltoluene	17.89	119	136562	0.96	ug/l	100
87)	1,3-Dichlorobenzene	18.04	146	52499	0.90	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	110813	0.97	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	51315	0.91	ug/l	95
90)	n-Butylbenzene	18.50	91	126614	0.98	ug/l	98
91)	1,2-Dichlorobenzene	18.74	146	43042	0.89	ug/l	96
92)	1,2-Dibromo-3-chloropropan	19.72	157	2154	0.79	ug/l	89
93)	1,2,4-Trichlorobenzene	20.83	180	27564	0.84	ug/l	94
94)	Hexachlorobutadiene	20.99	225	20598	0.96	ug/l	95
95)	Naphthalene	21.17	128	37775	0.81	ug/l	97
96)	1,2,3-Trichlorobenzene	21.49	180	22299	0.89	ug/l	98

(#) = qualifier out of range (m) = manual integration

SM 9/6/24

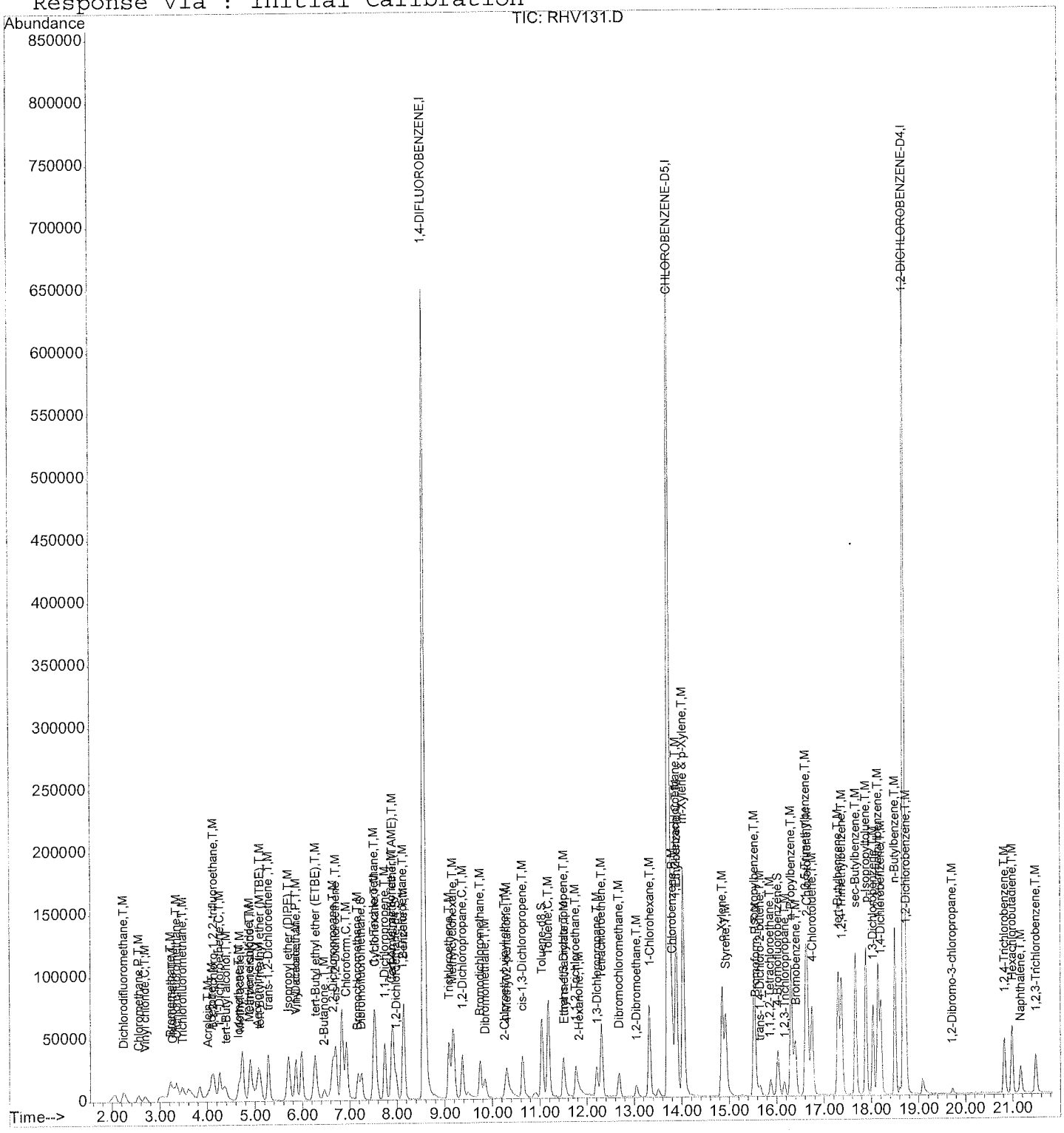
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D
Acq On : 9 Aug 2024 6:45 pm
Sample : VO01H093 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024

Vial: 4
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SM 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D Vial: 5
Acq On : 9 Aug 2024 7:15 pm Operator: DNguye
Sample : VO01H094 0.2/1.0 Inst : 01New
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	929341	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	773979	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	292349	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	55807	1.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	19.70%		
41) 1,2-Dichloroethane-d4	7.98	65	52153	2.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.80%		
54) Toluene-d8	11.03	98	193146	2.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.40%		
76) 4-Bromofluorobenzene	16.03	95	73870	1.99	ug/l	0.02
Spiked Amount 10.000			Recovery =	19.90%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	65972	2.16	ug/l	100
5) Chloromethane	2.54	50	45109	2.03	ug/l	88
6) Vinyl chloride	2.68	62	38629	1.98	ug/l	97
7) Bromomethane	3.23	94	34323	1.98	ug/l	92
8) Chloroethane	3.29	64	28277	1.86	ug/l	95
9) Dichlorofluoromethane	3.35	67	72578	2.17	ug/l	93
10) Trichlorofluoromethane	3.61	101	99914	2.25	ug/l	95
11) Acrolein	4.03	56	8713	9.30	ug/l	80
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	39758	2.18	ug/l	99
13) Acetone	4.10	43	56023	11.53	ug/l	94
14) 1,1-Dichloroethene	4.27	61	90464	2.01	ug/l	97
15) tert-Butyl alcohol	4.38	59	61420	49.12	ug/l	89
16) Iodomethane	4.67	142	85074	2.09	ug/l	100
17) Methyl acetate	4.71	43	21017	2.19	ug/l	88
18) Methylene chloride	4.89	49	64331	2.06	ug/l	98
19) Carbon disulfide	4.90	76	147578	1.90	ug/l	99
20) Acrylonitrile	5.08	53	31410	8.50	ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	105459	2.06	ug/l	93
22) trans-1,2-Dichloroethene	5.27	61	83911	2.05	ug/l	96
23) Isopropyl ether (DIPE)	5.69	45	172878	2.11	ug/l	95
24) Vinyl acetate	5.87	43	55134	1.85	ug/l	93
25) 1,1-Dichloroethane	5.85	63	101890	2.03	ug/l	98
27) tert-Butyl ethyl ether (ET	6.27	59	165369	2.19	ug/l	96
28) 2-Butanone	6.44	43	54809	8.96	ug/l	97
29) 2,2-Dichloropropane	6.65	77	106854	2.14	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	64694	2.05	ug/l	97
31) Chloroform	6.93	83	122203	2.16	ug/l	99

(#) = qualifier out of range (m) = manual integration

SC 9/4/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D Vial: 5
Acq On : 9 Aug 2024 7:15 pm Operator: DNguye
Sample : VO01H094 0.2/1.0 Inst : 01New
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	39762	2.07 ug/l	95
33)	Tetrahydrofuran	7.23	42	7343	2.15 ug/l	76
35)	1,1,1-Trichloroethane	7.52	97	125916	2.26 ug/l	97
36)	Cyclohexane	7.55	84	75239	1.87 ug/l	97
38)	1,1-Dichloropropene	7.75	110	32014	2.10 ug/l	97
39)	Carbon tetrachloride	7.89	119	103890	2.24 ug/l	98
40)	tert-Amyl methyl ether (TA	7.91	73	115634	2.08 ug/l	99
42)	Benzene	8.15	78	217291	2.12 ug/l	98
43)	1,2-Dichloroethane	8.13	62	74934	2.34 ug/l	94
44)	Trichloroethene	9.08	130	67124	2.06 ug/l	98
45)	Methylcyclohexane	9.18	83	89414	2.00 ug/l	99
46)	1,2-Dichloropropane	9.38	63	46427	1.99 ug/l	89
47)	Bromodichloromethane	9.75	83	85439	2.10 ug/l	97
48)	1,4-Dioxane	9.82	88	3945	34.11 ug/l	99
49)	Dibromomethane	9.82	93	27628	2.13 ug/l	97
50)	2-Chloroethyl vinyl ether	10.25	63	12684	1.73 ug/l	94
51)	4-Methyl-2-pentanone	10.29	43	132706	9.50 ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	85667	2.08 ug/l	100
55)	Toluene	11.18	91	248416	2.14 ug/l	100
56)	Ethyl methacrylate	11.49	69	37895	1.94 ug/l	94
57)	trans-1,3-Dichloropropene	11.49	75	71080	2.11 ug/l	99
58)	1,1,2-Trichloroethane	11.78	97	31742	1.87 ug/l	90
59)	2-Hexanone	11.81	43	70967	9.74 ug/l	95
60)	1,3-Dichloropropane	12.21	76	62124	2.05 ug/l	97
61)	Tetrachloroethene	12.31	164	52731	2.00 ug/l	98
62)	Dibromochloromethane	12.68	129	46698	2.08 ug/l	94
63)	1,2-Dibromoethane	13.05	107	36203	2.12 ug/l	98
64)	1-Chlorohexane	13.32	91	111167	2.07 ug/l	97
65)	Chlorobenzene	13.81	112	168518	2.11 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	57260	2.15 ug/l	96
67)	Ethylbenzene	13.89	91	318134	2.19 ug/l	100
68)	m-Xylene & p-Xylene	14.03	91	492634	4.30 ug/l	98
69)	o-Xylene	14.86	91	243021	2.20 ug/l	100
70)	Styrene	14.93	104	171716	2.12 ug/l	97
71)	Isopropylbenzene	15.54	105	321702	2.12 ug/l	100
73)	Bromoform	15.57	173	20333	1.89 ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.64	53	11156	1.71 ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.88	83	35677	2.04 ug/l	95
77)	1,2,3-Trichloropropane	16.16	110	13275	2.07 ug/l	93
78)	n-Propylbenzene	16.31	91	384796	2.07 ug/l	100
79)	Bromobenzene	16.40	156	54854	1.95 ug/l	98

(#) = qualifier out of range (m) = manual integration

SC 8/30/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D
Acq On : 9 Aug 2024 7:15 pm
Sample : VO01H094 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 5
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	253323	2.06	ug/l	98
81)	2-Chlorotoluene	16.65	91	243448	2.00	ug/l	99
82)	4-Chlorotoluene	16.74	91	215125	2.06	ug/l	100
83)	tert-Butylbenzene	17.30	134	54261	2.00	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	248740	2.12	ug/l	98
85)	sec-Butylbenzene	17.67	105	344731	2.08	ug/l	99
86)	p-Isopropyltoluene	17.89	119	302431	2.15	ug/l	99
87)	1,3-Dichlorobenzene	18.04	146	112458	1.93	ug/l	95
88)	1,2,3-Trimethylbenzene	18.15	105	244867	2.15	ug/l	98
89)	1,4-Dichlorobenzene	18.21	146	113654	2.02	ug/l	98
90)	n-Butylbenzene	18.50	91	282361	2.19	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	98168	2.05	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.73	157	5426	2.01	ug/l	80
93)	1,2,4-Trichlorobenzene	20.83	180	66203	2.03	ug/l	97
94)	Hexachlorobutadiene	20.99	225	41854	1.95	ug/l	94
95)	Naphthalene	21.17	128	92074	1.98	ug/l	94
96)	1,2,3-Trichlorobenzene	21.48	180	52448	2.10	ug/l	92

(#) = qualifier out of range (m) = manual integration

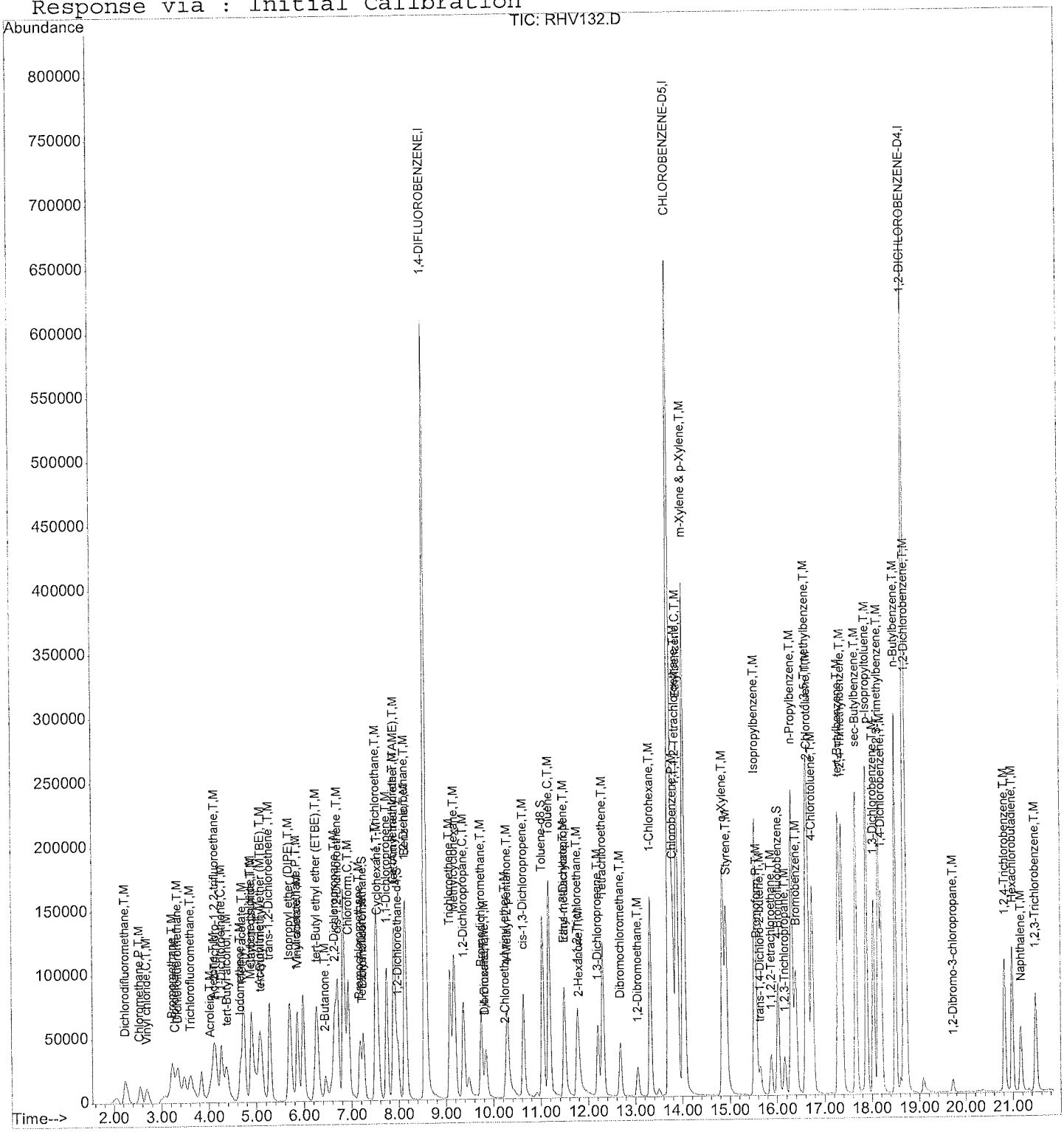
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D
Acq On : 9 Aug 2024 7:15 pm
Sample : VO01H094 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 5
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D
Acq On : 9 Aug 2024 7:46 pm
Sample : VO01H095 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 6
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	944867	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	782335	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	297857	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	156156	5.43	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.30%		
41) 1,2-Dichloroethane-d4	7.98	65	139228	5.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.50%		
54) Toluene-d8	11.03	98	520164	5.44	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.40%		
76) 4-Bromofluorobenzene	16.01	95	198471	5.25	ug/l	0.00
Spiked Amount 10.000			Recovery =	52.50%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	176344	5.67	ug/l	97
5) Chloromethane	2.55	50	113480	5.03	ug/l	96
6) Vinyl chloride	2.68	62	106845	5.37	ug/l	95
7) Bromomethane	3.23	94	89457	5.08	ug/l	93
8) Chloroethane	3.29	64	73010	4.73	ug/l	99
9) Dichlorofluoromethane	3.35	67	173930	5.11	ug/l	97
10) Trichlorofluoromethane	3.48	101	229883	5.09	ug/l	99
11) Acrolein	4.01	56	23263	24.43	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	96485	5.21	ug/l	100
13) Acetone	4.10	43	111900	25.17	ug/l	97
14) 1,1-Dichloroethene	4.26	61	240030	5.25	ug/l	99
15) tert-Butyl alcohol	4.37	59	179705	141.35	ug/l	99
16) Iodomethane	4.66	142	210193	5.09	ug/l	96
17) Methyl acetate	4.68	43	47344	4.85	ug/l	94
18) Methylene chloride	4.89	49	164275	5.17	ug/l	96
19) Carbon disulfide	4.92	76	391595	4.95	ug/l	98
20) Acrylonitrile	5.06	53	90738	24.16	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	282100	5.43	ug/l	100
22) trans-1,2-Dichloroethene	5.29	61	220434	5.29	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	438709	5.28	ug/l	99
24) Vinyl acetate	5.85	43	153880	5.07	ug/l	99
25) 1,1-Dichloroethane	5.86	63	262745	5.15	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	411440	5.35	ug/l	100
28) 2-Butanone	6.44	43	150643	24.22	ug/l	99
29) 2,2-Dichloropropane	6.66	77	268946	5.29	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	164584	5.12	ug/l	98
31) Chloroform	6.93	83	303402	5.28	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D
Acq On : 9 Aug 2024 7:46 pm
Sample : VO01H095 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 6
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	99406	5.10	ug/l	100
33)	Tetrahydrofuran	7.21	42	20729	5.97	ug/l	82
35)	1,1,1-Trichloroethane	7.52	97	315591	5.57	ug/l	99
36)	Cyclohexane	7.54	84	203812	4.99	ug/l	97
38)	1,1-Dichloropropene	7.75	110	77861	5.01	ug/l	98
39)	Carbon tetrachloride	7.89	119	258209	5.48	ug/l	98
40)	tert-Amyl methyl ether (TA	7.91	73	301526	5.34	ug/l	99
42)	Benzene	8.15	78	550624	5.29	ug/l	99
43)	1,2-Dichloroethane	8.12	62	184098	5.66	ug/l	100
44)	Trichloroethene	9.08	130	166925	5.04	ug/l	97
45)	Methylcyclohexane	9.18	83	242377	5.32	ug/l	99
46)	1,2-Dichloropropane	9.36	63	122908	5.17	ug/l	97
47)	Bromodichloromethane	9.74	83	208845	5.04	ug/l	99
48)	1,4-Dioxane	9.79	88	10959	93.21	ug/l	95
49)	Dibromomethane	9.83	93	67341	5.09	ug/l	92
50)	2-Chloroethyl vinyl ether	10.25	63	37832	5.09	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	392237	27.62	ug/l	99
52)	cis-1,3-Dichloropropene	10.63	75	225216	5.37	ug/l	100
55)	Toluene	11.17	91	640556	5.46	ug/l	99
56)	Ethyl methacrylate	11.48	69	108013	5.46	ug/l	99
57)	trans-1,3-Dichloropropene	11.49	75	191369	5.63	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	95428	5.56	ug/l	97
59)	2-Hexanone	11.77	43	234467	26.22	ug/l	97
60)	1,3-Dichloropropane	12.20	76	165246	5.40	ug/l	99
61)	Tetrachloroethene	12.31	164	139666	5.25	ug/l	98
62)	Dibromochloromethane	12.68	129	119480	5.26	ug/l	99
63)	1,2-Dibromoethane	13.05	107	92674	5.36	ug/l	100
64)	1-Chlorohexane	13.32	91	281821	5.18	ug/l	99
65)	Chlorobenzene	13.79	112	436346	5.42	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.88	131	146983	5.46	ug/l	99
67)	Ethylbenzene	13.89	91	808736	5.51	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	1271852	10.98	ug/l	100
69)	o-Xylene	14.86	91	635102	5.69	ug/l	97
70)	Styrene	14.92	104	457496	5.60	ug/l	100
71)	Isopropylbenzene	15.52	105	853174	5.58	ug/l	100
73)	Bromoform	15.57	173	59824	5.47	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	34382	5.17	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	98436	5.53	ug/l	98
77)	1,2,3-Trichloropropane	16.16	110	35532	5.43	ug/l	92
78)	n-Propylbenzene	16.31	91	1020830	5.39	ug/l	100
79)	Bromobenzene	16.40	156	147713	5.15	ug/l	99

(#) = qualifier out of range (m) = manual integration

SC 09/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D Vial: 6
Acq On : 9 Aug 2024 7:46 pm Operator: DNguye
Sample : VO01H095 0.5/2.5 Inst : 01New
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

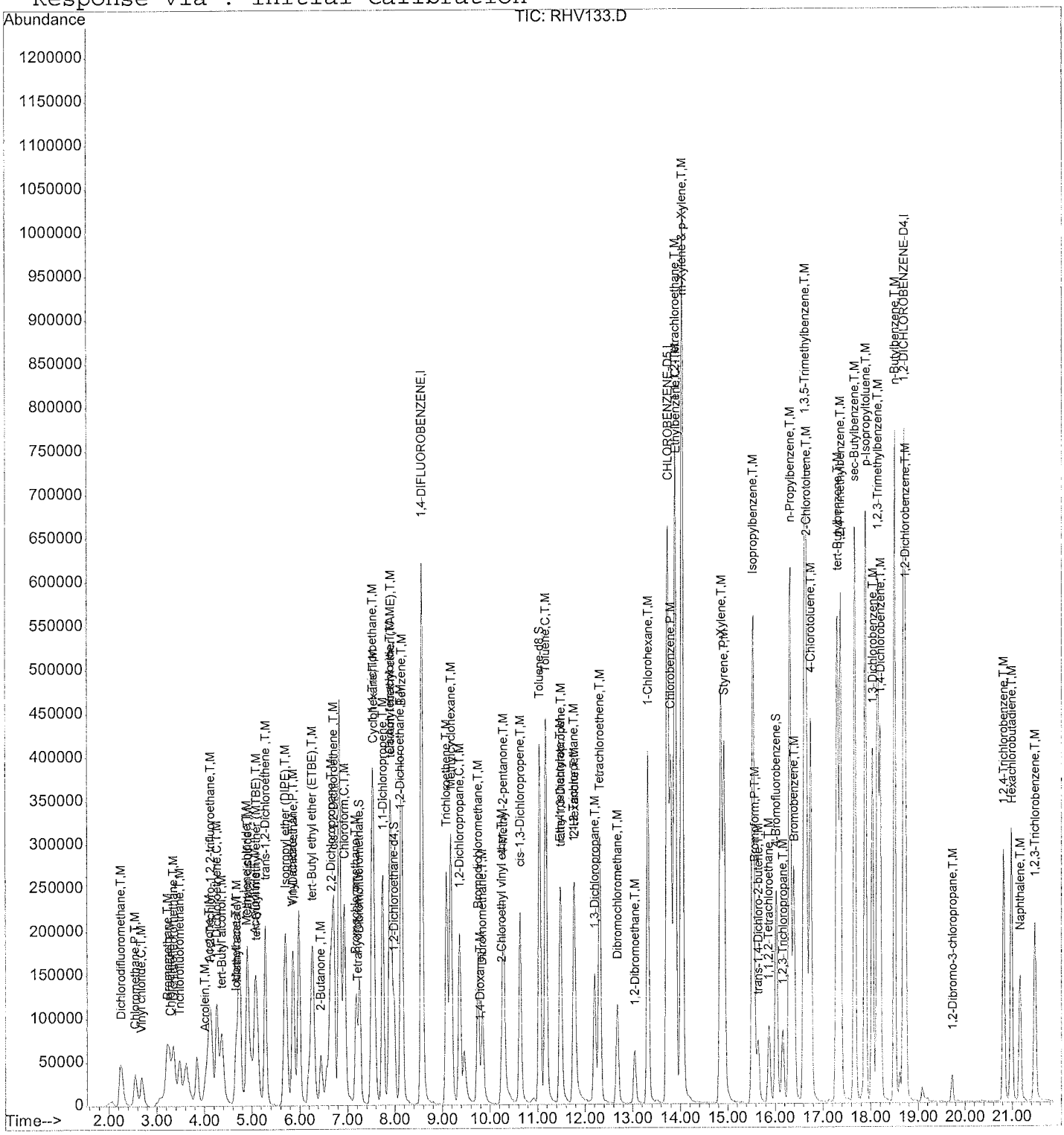
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	679737	5.44	ug/l	98
81)	2-Chlorotoluene	16.65	91	652654	5.25	ug/l	100
82)	4-Chlorotoluene	16.74	91	572332	5.39	ug/l	98
83)	tert-Butylbenzene	17.30	134	136532	4.94	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	650237	5.44	ug/l	100
85)	sec-Butylbenzene	17.66	105	936507	5.55	ug/l	100
86)	p-Isopropyltoluene	17.89	119	796468	5.55	ug/l	99
87)	1,3-Dichlorobenzene	18.04	146	312015	5.25	ug/l	99
88)	1,2,3-Trimethylbenzene	18.15	105	645332	5.57	ug/l	100
89)	1,4-Dichlorobenzene	18.20	146	294724	5.13	ug/l	97
90)	n-Butylbenzene	18.50	91	714305	5.43	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	264324	5.40	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.73	157	15407	5.59	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	173273	5.21	ug/l	99
94)	Hexachlorobutadiene	20.99	225	113734	5.21	ug/l	99
95)	Naphthalene	21.17	128	250291	5.28	ug/l	97
96)	1,2,3-Trichlorobenzene	21.48	180	134434	5.29	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D Vial: 6
Acq On : 9 Aug 2024 7:46 pm Operator: DNguye
Sample : VO01H095 0.5/2.5 Inst : 01New
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SM 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D
Acq On : 9 Aug 2024 8:17 pm
Sample : VO01H096 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 7
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	962079	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	831588	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	320498	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	317917	10.87	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.70%		
41) 1,2-Dichloroethane-d4	7.98	65	287348	11.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.50%		
54) Toluene-d8	11.03	98	1083309	10.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.60%		
76) 4-Bromofluorobenzene	16.01	95	405953	9.98	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.80%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	367558	11.61	ug/l	100
5) Chloromethane	2.54	50	246286	10.73	ug/l	100
6) Vinyl chloride	2.68	62	230246	11.37	ug/l	100
7) Bromomethane	3.21	94	183985	10.26	ug/l	100
8) Chloroethane	3.27	64	161113	10.25	ug/l	100
9) Dichlorofluoromethane	3.35	67	350297	10.11	ug/l	100
10) Trichlorofluoromethane	3.48	101	526820	11.45	ug/l	100
11) Acrolein	4.01	56	46359	47.82	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	195663	10.38	ug/l	100
13) Acetone	4.10	43	215012	49.81	ug/l	100
14) 1,1-Dichloroethene	4.25	61	476924	10.24	ug/l	100
15) tert-Butyl alcohol	4.37	59	335001	258.79	ug/l	100
16) Iodomethane	4.66	142	440198	10.46	ug/l	100
17) Methyl acetate	4.68	43	98398	9.89	ug/l	100
18) Methylene chloride	4.89	49	318119	9.83	ug/l	100
19) Carbon disulfide	4.90	76	851870	10.57	ug/l	100
20) Acrylonitrile	5.05	53	187795	49.11	ug/l	100
21) tert-Butyl methyl ether (M	5.09	73	547466	10.34	ug/l	100
22) trans-1,2-Dichloroethene	5.27	61	435508	10.27	ug/l	100
23) Isopropyl ether (DIPE)	5.69	45	857937	10.14	ug/l	100
24) Vinyl acetate	5.85	43	325682	10.54	ug/l	100
25) 1,1-Dichloroethane	5.85	63	519607	10.00	ug/l	100
27) tert-Butyl ethyl ether (ET	6.26	59	808757	10.33	ug/l	100
28) 2-Butanone	6.44	43	305798	48.28	ug/l	100
29) 2,2-Dichloropropane	6.65	77	538863	10.40	ug/l	100
30) cis-1,2-Dichloroethene	6.71	96	335591	10.26	ug/l	100
31) Chloroform	6.93	83	598324	10.23	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D Vial: 7
Acq On : 9 Aug 2024 8:17 pm Operator: DNguye
Sample : VO01H096 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.17	49	200895	10.11 ug/l	100
33) Tetrahydrofuran	7.21	42	32034	9.06 ug/l	100
35) 1,1,1-Trichloroethane	7.51	97	618367	10.71 ug/l	100
36) Cyclohexane	7.54	84	433940	10.44 ug/l	100
38) 1,1-Dichloropropene	7.73	110	158741	10.04 ug/l	100
39) Carbon tetrachloride	7.89	119	516332	10.76 ug/l	100
40) tert-Amyl methyl ether (TA	7.91	73	592996	10.31 ug/l	100
42) Benzene	8.15	78	1106697	10.45 ug/l	100
43) 1,2-Dichloroethane	8.12	62	365537	11.03 ug/l	100
44) Trichloroethene	9.08	130	344897	10.23 ug/l	100
45) Methylcyclohexane	9.18	83	488415	10.53 ug/l	100
46) 1,2-Dichloropropane	9.36	63	249523	10.32 ug/l	100
47) Bromodichloromethane	9.75	83	423474	10.03 ug/l	100
48) 1,4-Dioxane	9.78	88	24332	203.24 ug/l	100
49) Dibromomethane	9.83	93	138344	10.28 ug/l	100
50) 2-Chloroethyl vinyl ether	10.23	63	73857	9.76 ug/l	100
51) 4-Methyl-2-pentanone	10.28	43	788348	54.51 ug/l	100
52) cis-1,3-Dichloropropene	10.63	75	451018	10.56 ug/l	100
55) Toluene	11.17	91	1307968	10.50 ug/l	100
56) Ethyl methacrylate	11.46	69	223328	10.63 ug/l	100
57) trans-1,3-Dichloropropene	11.48	75	388371	10.75 ug/l	100
58) 1,1,2-Trichloroethane	11.76	97	184365	10.10 ug/l	100
59) 2-Hexanone	11.76	43	509587	51.03 ug/l	100
60) 1,3-Dichloropropane	12.20	76	333447	10.26 ug/l	100
61) Tetrachloroethene	12.31	164	277290	9.80 ug/l	100
62) Dibromochloromethane	12.68	129	250854	10.39 ug/l	100
63) 1,2-Dibromoethane	13.03	107	184590	10.04 ug/l	100
64) 1-Chlorohexane	13.32	91	572517	9.91 ug/l	100
65) Chlorobenzene	13.79	112	886613	10.35 ug/l	100
66) 1,1,1,2-Tetrachloroethane	13.86	131	304261	10.64 ug/l	100
67) Ethylbenzene	13.89	91	1648829	10.57 ug/l	100
68) m-Xylene & p-Xylene	14.03	91	2525052	20.50 ug/l	100
69) o-Xylene	14.84	91	1277808	10.76 ug/l	100
70) Styrene	14.92	104	912792	10.50 ug/l	100
71) Isopropylbenzene	15.52	105	1710871	10.52 ug/l	100
73) Bromoform	15.57	173	120818	10.26 ug/l	100
74) trans-1,4-Dichloro-2-buten	15.63	53	71724	10.02 ug/l	100
75) 1,1,2,2-Tetrachloroethane	15.86	83	194330	10.15 ug/l	100
77) 1,2,3-Trichloropropane	16.16	110	67329	9.56 ug/l	100
78) n-Propylbenzene	16.31	91	2038997	10.01 ug/l	100
79) Bromobenzene	16.40	156	299740	9.71 ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D Vial: 7
Acq On : 9 Aug 2024 8:17 pm Operator: DNguye
Sample : VO01H096 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1314569	9.77 ug/l	100
81)	2-Chlorotoluene	16.65	91	1310655	9.80 ug/l	100
82)	4-Chlorotoluene	16.74	91	1130456	9.89 ug/l	100
83)	tert-Butylbenzene	17.30	134	282803	9.51 ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	1295259	10.08 ug/l	100
85)	sec-Butylbenzene	17.66	105	1844631	10.16 ug/l	100
86)	p-Isopropyltoluene	17.88	119	1565765	10.14 ug/l	100
87)	1,3-Dichlorobenzene	18.04	146	627224	9.81 ug/l	100
88)	1,2,3-Trimethylbenzene	18.15	105	1285939	10.31 ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	607095	9.82 ug/l	100
90)	n-Butylbenzene	18.50	91	1461921	10.34 ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	527594	10.03 ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	32206	10.86 ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	358763	10.03 ug/l	100
94)	Hexachlorobutadiene	20.99	225	239251	10.19 ug/l	100
95)	Naphthalene	21.17	128	529576	10.39 ug/l	100
96)	1,2,3-Trichlorobenzene	21.48	180	280464	10.26 ug/l	100

SC 09/6/24

(#) = qualifier out of range (m) = manual integration

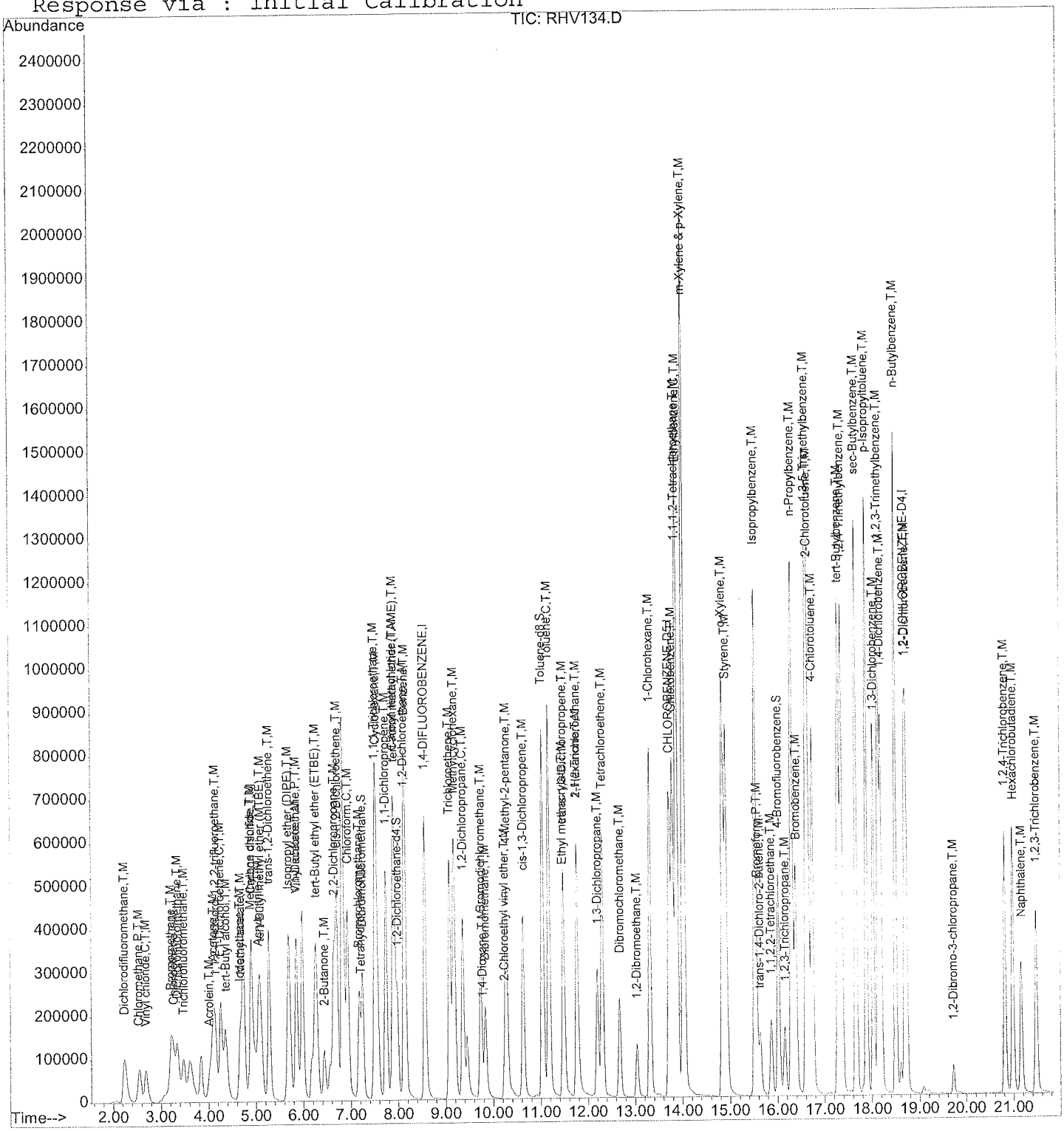
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D
Acq On : 9 Aug 2024 8:17 pm
Sample : VO01H096 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 7
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SW 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1150883	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1018537	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	384694	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	765356	21.87	ug/l	0.00
Spiked Amount 10.000			Recovery = 218.70%			
41) 1,2-Dichloroethane-d4	7.97	65	677959	21.79	ug/l	-0.01
Spiked Amount 10.000			Recovery = 217.90%			
54) Toluene-d8	11.03	98	2602667	20.91	ug/l	0.00
Spiked Amount 10.000			Recovery = 209.10%			
76) 4-Bromofluorobenzene	16.01	95	1002851	20.55	ug/l	0.00
Spiked Amount 10.000			Recovery = 205.50%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	785678	20.75	ug/l	97
5) Chloromethane	2.54	50	541646	19.73	ug/l	98
6) Vinyl chloride	2.67	62	513628	21.21	ug/l	94
7) Bromomethane	3.23	94	422952	19.72	ug/l	97
8) Chloroethane	3.27	64	377247	20.07	ug/l	97
9) Dichlorofluoromethane	3.35	67	827118	19.95	ug/l	99
10) Trichlorofluoromethane	3.60	101	1055028	19.17	ug/l	94
11) Acrolein	4.01	56	111080	95.77	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	450807	20.00	ug/l	98
13) Acetone	4.09	43	506208	100.56	ug/l	96
14) 1,1-Dichloroethene	4.25	61	1089229	19.56	ug/l	97
15) tert-Butyl alcohol	4.37	59	830279	536.18	ug/l	97
16) Iodomethane	4.67	142	1029215	20.44	ug/l	96
17) Methyl acetate	4.68	43	228998	19.24	ug/l	99
18) Methylene chloride	4.89	49	759786	19.63	ug/l	98
19) Carbon disulfide	4.90	76	2032344	21.08	ug/l	100
20) Acrylonitrile	5.05	53	476585	104.20	ug/l	99
21) tert-Butyl methyl ether (M	5.08	73	1291834	20.40	ug/l	98
22) trans-1,2-Dichloroethene	5.27	61	997435	19.67	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	2069096	20.44	ug/l	98
24) Vinyl acetate	5.85	43	777719	21.03	ug/l	97
25) 1,1-Dichloroethane	5.85	63	1245038	20.03	ug/l	99
27) tert-Butyl ethyl ether (ET	6.27	59	1896011	20.25	ug/l	99
28) 2-Butanone	6.43	43	776970	102.54	ug/l	100
29) 2,2-Dichloropropane	6.65	77	1227491	19.81	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	776590	19.85	ug/l	97
31) Chloroform	6.93	83	1319238	18.85	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	491878	20.70	ug/l	98
33)	Tetrahydrofuran	7.21	42	81729	19.32	ug/l	94
35)	1,1,1-Trichloroethane	7.51	97	1375586	19.92	ug/l	99
36)	Cyclohexane	7.54	84	970280	19.51	ug/l	99
38)	1,1-Dichloropropene	7.73	110	379669	20.07	ug/l	100
39)	Carbon tetrachloride	7.90	119	1155219	20.12	ug/l	100
40)	tert-Amyl methyl ether (TA	7.91	73	1437980	20.90	ug/l	100
42)	Benzene	8.15	78	2636933	20.81	ug/l	100
43)	1,2-Dichloroethane	8.12	62	823275	20.77	ug/l	97
44)	Trichloroethene	9.08	130	802073	19.89	ug/l	99
45)	Methylcyclohexane	9.17	83	1109057	19.99	ug/l	98
46)	1,2-Dichloropropane	9.36	63	601312	20.78	ug/l	97
47)	Bromodichloromethane	9.73	83	966732	19.15	ug/l	99
48)	1,4-Dioxane	9.77	88	59642	416.46	ug/l	88
49)	Dibromomethane	9.83	93	326433	20.27	ug/l	98
50)	2-Chloroethyl vinyl ether	10.23	63	196401	21.69	ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	1965955	113.64	ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	1075089	21.05	ug/l	99
55)	Toluene	11.17	91	2960512	19.40	ug/l	99
56)	Ethyl methacrylate	11.46	69	556104	21.61	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	903478	20.41	ug/l	99
58)	1,1,2-Trichloroethane	11.76	97	448543	20.06	ug/l	99
59)	2-Hexanone	11.76	43	1275894	101.74	ug/l	97
60)	1,3-Dichloropropane	12.19	76	812582	20.41	ug/l	99
61)	Tetrachloroethene	12.31	164	635772	18.34	ug/l	99
62)	Dibromochloromethane	12.66	129	586615	19.85	ug/l	100
63)	1,2-Dibromoethane	13.03	107	453234	20.14	ug/l	99
64)	1-Chlorohexane	13.32	91	1346564	19.02	ug/l	99
65)	Chlorobenzene	13.79	112	2065952	19.69	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	703194	20.07	ug/l	99
67)	Ethylbenzene	13.88	91	3709861	19.42	ug/l	97
68)	m-Xylene & p-Xylene	14.03	91	5569365	36.92	ug/l	97
69)	o-Xylene	14.84	91	2875405	19.77	ug/l	100
70)	Styrene	14.92	104	2174056	20.43	ug/l	97
71)	Isopropylbenzene	15.52	105	3813167	19.14	ug/l	99
73)	Bromoform	15.57	173	289936	20.52	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	178121	20.73	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	491863	21.41	ug/l	96
77)	1,2,3-Trichloropropane	16.14	110	168364	19.91	ug/l	96
78)	n-Propylbenzene	16.29	91	4613231	18.86	ug/l	99
79)	Bromobenzene	16.38	156	709263	19.15	ug/l	99

(#) = qualifier out of range (m) = manual integration

08/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	3005426	18.61	ug/l	97
81)	2-Chlorotoluene	16.65	91	2992664	18.64	ug/l	98
82)	4-Chlorotoluene	16.74	91	2549486	18.59	ug/l	98
83)	tert-Butylbenzene	17.30	134	673296	18.85	ug/l	99
84)	1,2,4-Trimethylbenzene	17.36	105	2904957	18.83	ug/l	97
85)	sec-Butylbenzene	17.66	105	4132246	18.97	ug/l	99
86)	p-Isopropyltoluene	17.88	119	3562034	19.21	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	1447912	18.88	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	2885446	19.28	ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	1416710	19.10	ug/l	99
90)	n-Butylbenzene	18.50	91	3192652	18.81	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	1237082	19.58	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	79839	22.44	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	853446	19.88	ug/l	100
94)	Hexachlorobutadiene	20.99	225	547118	19.42	ug/l	100
95)	Naphthalene	21.17	128	1278083	20.89	ug/l	98
96)	1,2,3-Trichlorobenzene	21.48	180	653907	19.94	ug/l	99

(#) = qualifier out of range (m) = manual integration

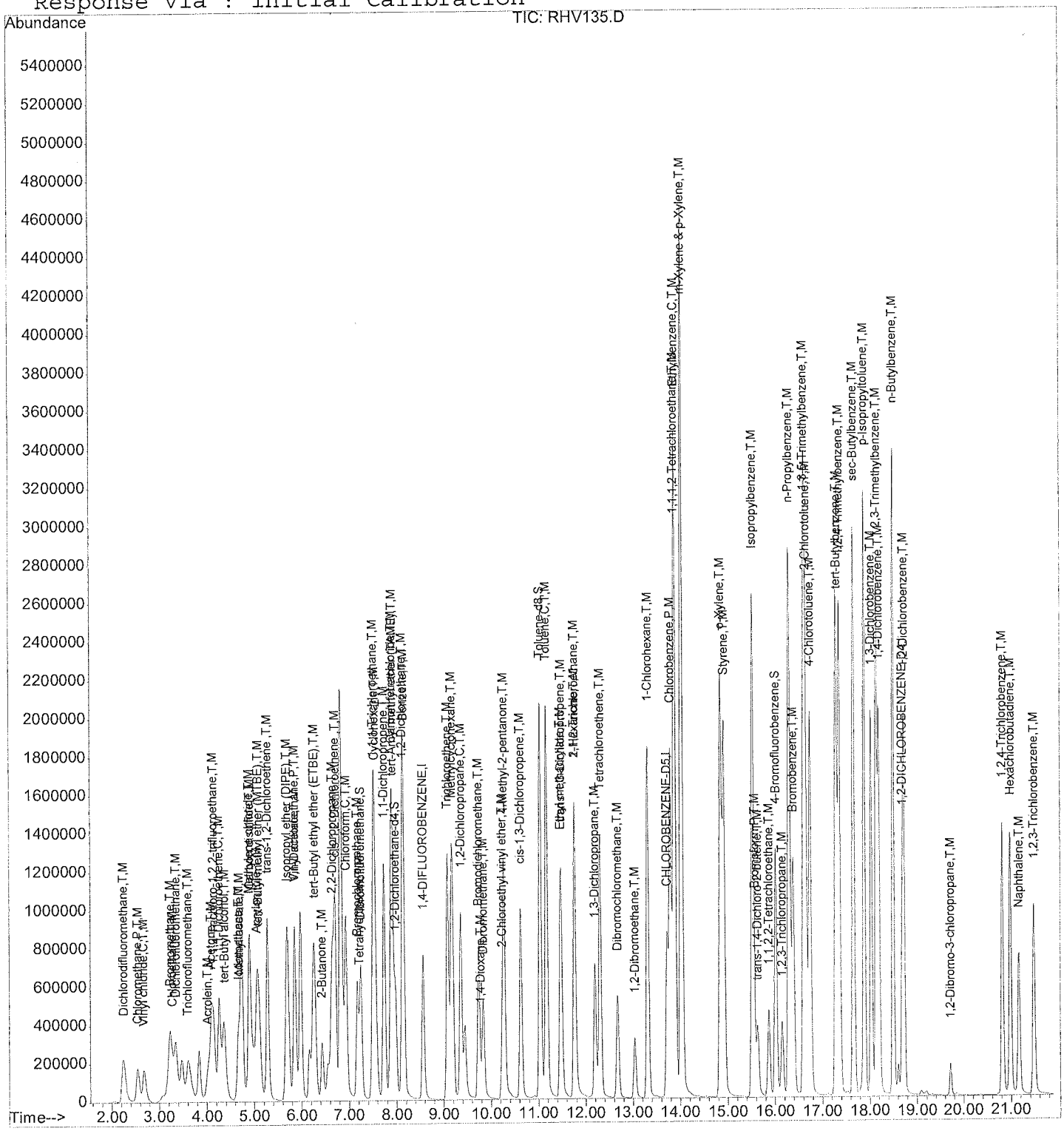
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D
Acq On : 9 Aug 2024 8:47 pm
Sample : VO01H097 2.0/10
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 8
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1461385	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	1212032	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	417210	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	1328233	29.89	ug/l	0.00
Spiked Amount 10.000			Recovery =	298.90%		
41) 1,2-Dichloroethane-d4	7.98	65	1070237	27.09	ug/l	0.00
Spiked Amount 10.000			Recovery =	270.90%		
54) Toluene-d8	11.03	98	4525292	30.55	ug/l	0.00
Spiked Amount 10.000			Recovery =	305.50%		
76) 4-Bromofluorobenzene	16.01	95	1632018	30.83	ug/l	0.00
Spiked Amount 10.000			Recovery =	308.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	1325069	27.55	ug/l	99
5) Chloromethane	2.54	50	944572	27.10	ug/l	98
6) Vinyl chloride	2.69	62	942460	30.65	ug/l	99
7) Bromomethane	3.23	94	770930	28.31	ug/l	94
8) Chloroethane	3.29	64	700835	29.36	ug/l	92
9) Dichlorofluoromethane	3.35	67	1425385	27.07	ug/l	99
10) Trichlorofluoromethane	3.48	101	1922790	27.51	ug/l	99
11) Acrolein	4.03	56	217539	147.71	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	822034	28.72	ug/l	98
13) Acetone	4.10	43	866792	136.51	ug/l	94
14) 1,1-Dichloroethene	4.25	61	1973543	27.91	ug/l	95
15) tert-Butyl alcohol	4.37	59	1338284	680.61	ug/l	99
16) Iodomethane	4.66	142	1915115	29.96	ug/l	91
17) Methyl acetate	4.68	43	425400	28.15	ug/l	98
18) Methylene chloride	4.89	49	1394981	28.38	ug/l	97
19) Carbon disulfide	4.90	76	3839603	31.37	ug/l	100
20) Acrylonitrile	5.05	53	901212	155.17	ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	2295214	28.54	ug/l	94
22) trans-1,2-Dichloroethene	5.27	61	1846052	28.66	ug/l	96
23) Isopropyl ether (DIPE)	5.70	45	3839771	29.87	ug/l	99
24) Vinyl acetate	5.85	43	1354892	28.85	ug/l	96
25) 1,1-Dichloroethane	5.85	63	2294729	29.08	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	3377877	28.42	ug/l	99
28) 2-Butanone	6.43	43	1385103	143.96	ug/l	99
29) 2,2-Dichloropropane	6.65	77	2083192	26.48	ug/l	98
30) cis-1,2-Dichloroethene	6.71	96	1462643	29.45	ug/l	94
31) Chloroform	6.93	83	2272439	25.57	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	881140	29.20	ug/l	99
33)	Tetrahydrofuran	7.21	42	141560	26.35	ug/l	93
35)	1,1,1-Trichloroethane	7.52	97	2341349	26.70	ug/l	99
36)	Cyclohexane	7.54	84	1962879	31.08	ug/l	100
38)	1,1-Dichloropropene	7.75	110	712914	29.67	ug/l	99
39)	Carbon tetrachloride	7.89	119	1951070	26.76	ug/l	99
40)	tert-Amyl methyl ether (TA	7.91	73	2495207	28.56	ug/l	100
42)	Benzene	8.15	78	4773208	29.66	ug/l	99
43)	1,2-Dichloroethane	8.12	62	1359635	27.02	ug/l	99
44)	Trichloroethene	9.08	130	1450073	28.32	ug/l	98
45)	Methylcyclohexane	9.18	83	2278446	32.34	ug/l	97
46)	1,2-Dichloropropane	9.36	63	1087666	29.61	ug/l	92
47)	Bromodichloromethane	9.75	83	1641626	25.61	ug/l	100
48)	1,4-Dioxane	9.77	88	101171	556.34	ug/l	88
49)	Dibromomethane	9.83	93	563077	27.54	ug/l	97
50)	2-Chloroethyl vinyl ether	10.23	63	353243	30.72	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	3374776	153.63	ug/l	97
52)	cis-1,3-Dichloropropene	10.63	75	1903847	29.35	ug/l	97
55)	Toluene	11.17	91	5289587	29.13	ug/l	97
56)	Ethyl methacrylate	11.45	69	969178	31.64	ug/l	93
57)	trans-1,3-Dichloropropene	11.48	75	1528669	29.02	ug/l	97
58)	1,1,2-Trichloroethane	11.76	97	782516	29.41	ug/l	98
59)	2-Hexanone	11.76	43	2150018	143.04	ug/l	96
60)	1,3-Dichloropropane	12.20	76	1372065	28.96	ug/l	99
61)	Tetrachloroethene	12.31	164	1145792	27.78	ug/l	97
62)	Dibromochloromethane	12.68	129	974891	27.72	ug/l	99
63)	1,2-Dibromoethane	13.03	107	784356	29.28	ug/l	98
64)	1-Chlorohexane	13.32	91	2398148	28.47	ug/l	99
65)	Chlorobenzene	13.79	112	3536039	28.33	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	1207456	28.97	ug/l	99
67)	Ethylbenzene	13.89	91	6169157	27.14	ug/l	95
68)	m-Xylene & p-Xylene	14.03	91	8994205	50.10	ug/l	91
69)	o-Xylene	14.84	91	4849057	28.02	ug/l	97
70)	Styrene	14.92	104	3756223	29.66	ug/l	96
71)	Isopropylbenzene	15.52	105	6282009	26.50	ug/l	98
73)	Bromoform	15.57	173	474486	30.97	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	281511	30.21	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	799846	32.10	ug/l	97
77)	1,2,3-Trichloropropane	16.16	110	263192	28.70	ug/l	97
78)	n-Propylbenzene	16.31	91	7448579	28.08	ug/l	97
79)	Bromobenzene	16.40	156	1170949	29.15	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	4831297	27.59	ug/l	95
81)	2-Chlorotoluene	16.65	91	4742897	27.24	ug/l	97
82)	4-Chlorotoluene	16.74	91	4208682	28.30	ug/l	96
83)	tert-Butylbenzene	17.30	134	1108973	28.63	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	4692017	28.04	ug/l	95
85)	sec-Butylbenzene	17.66	105	6494824	27.49	ug/l	98
86)	p-Isopropyltoluene	17.89	119	5547663	27.59	ug/l	98
87)	1,3-Dichlorobenzene	18.04	146	2316340	27.84	ug/l	99
88)	1,2,3-Trimethylbenzene	18.15	105	4423835	27.26	ug/l	95
89)	1,4-Dichlorobenzene	18.20	146	2218767	27.58	ug/l	99
90)	n-Butylbenzene	18.50	91	4839886	26.29	ug/l	96
91)	1,2-Dichlorobenzene	18.72	146	1893356	27.64	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.73	157	117545	30.46	ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	1289347	27.70	ug/l	99
94)	Hexachlorobutadiene	20.99	225	840674	27.51	ug/l	99
95)	Naphthalene	21.17	128	1911419	28.80	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	1000796	28.14	ug/l	98

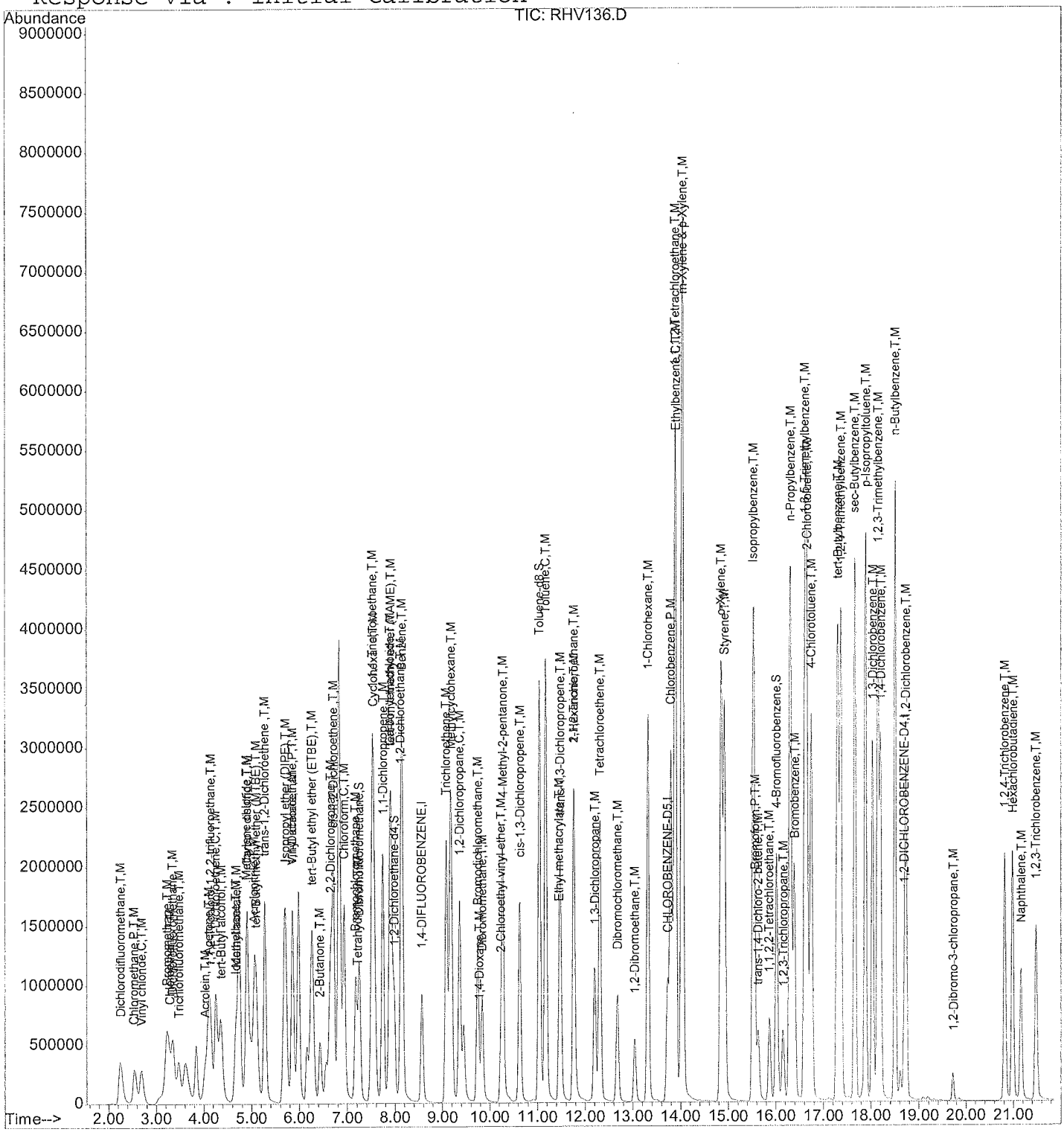
SC

(#) = qualifier out of range (m) = manual integration
RHV136.D VO01H09.M Fri Aug 30 18:37:29 2024 9/6/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SC 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1550082	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1272626	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	398203	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	551	0.01	ug/l	-0.01
Spiked Amount 10.000			Recovery =	0.10%		
41) 1,2-Dichloroethane-d4	0.00	65	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
54) Toluene-d8	11.03	98	13898	0.09	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.90%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.23	85	2346897	46.01	ug/l	95
5) Chloromethane	2.53	50	1762845	47.68	ug/l	98
6) Vinyl chloride	2.67	62	1751063	53.69	ug/l	97
7) Bromomethane	3.21	94	1398868	48.43	ug/l	95
8) Chloroethane	3.27	64	1331488	52.58	ug/l	90
9) Dichlorofluoromethane	3.33	67	2577952	46.16	ug/l	99
10) Trichlorofluoromethane	3.60	101	3493896	47.13	ug/l	98
11) Acrolein	4.01	56	420047	268.90	ug/l	90
12) 1,1,2-Trichloro-1,2,2-trif	4.12	151	1433660	47.22	ug/l	100
13) Acetone	4.09	43	1465054	219.08	ug/l	93
14) 1,1-Dichloroethene	4.25	61	3480047	46.40	ug/l	94
15) tert-Butyl alcohol	4.35	59	2530967	1213.52	ug/l	97
16) Iodomethane	4.65	142	3415106	50.36	ug/l	89
17) Methyl acetate	4.67	43	765906	47.78	ug/l	96
18) Methylene chloride	4.87	49	2452149	47.04	ug/l	96
20) Acrylonitrile	5.05	53	1559155	253.09	ug/l	98
21) tert-Butyl methyl ether (M	5.10	73	3901741	45.74	ug/l	93
22) trans-1,2-Dichloroethene	5.27	61	3241205	47.45	ug/l	93
23) Isopropyl ether (DIPE)	5.69	45	6590087	48.33	ug/l	100
24) Vinyl acetate	5.84	43	2483809	49.87	ug/l	96
25) 1,1-Dichloroethane	5.85	63	4004425	47.83	ug/l	99
27) tert-Butyl ethyl ether (ET	6.25	59	5674608	45.01	ug/l	98
28) 2-Butanone	6.43	43	2357347	230.99	ug/l	99
29) 2,2-Dichloropropane	6.65	77	3567287	42.75	ug/l	98
30) cis-1,2-Dichloroethene	6.70	96	2584295	49.05	ug/l	92
31) Chloroform	6.92	83	3884727	41.21	ug/l	97
32) Bromochloromethane	7.17	49	1538605	48.08	ug/l	99

(#) = qualifier out of range (m) = manual integration

RHV137.D VO01H09.M Fri Aug 30 18:39:11 2024 Page 1

SL 09/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D
Acq On : 9 Aug 2024 9:47 pm
Sample : VO01H099 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024

Vial: 10
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33) Tetrahydrofuran	7.21	42	258978	45.45	ug/l	93
35) 1,1,1-Trichloroethane	7.51	97	3980715	42.79	ug/l	98
36) Cyclohexane	7.52	84	3368126	50.28	ug/l	99
38) 1,1-Dichloropropene	7.73	110	1234976	48.46	ug/l	99
39) Carbon tetrachloride	7.90	119	3320517	42.94	ug/l	98
40) tert-Amyl methyl ether (TA	7.91	73	4201292	45.33	ug/l	99
42) Benzene	8.13	78	8069673	47.28	ug/l	98
43) 1,2-Dichloroethane	8.12	62	2294253	42.98	ug/l	98
44) Trichloroethene	9.08	130	2486450	45.79	ug/l	97
45) Methylcyclohexane	9.17	83	3912492	52.36	ug/l	97
46) 1,2-Dichloropropane	9.36	63	1922116	49.33	ug/l	89
47) Bromodichloromethane	9.73	83	2782210	40.92	ug/l	99
48) 1,4-Dioxane	9.76	88	198113	1027.09	ug/l	93
49) Dibromomethane	9.82	93	963297	44.42	ug/l	95
50) 2-Chloroethyl vinyl ether	10.22	63	623578	51.12	ug/l	98
51) 4-Methyl-2-pentanone	10.26	43	5634001	241.80	ug/l	96
52) cis-1,3-Dichloropropene	10.62	75	3238872	47.08	ug/l	97
55) Toluene	11.17	91	8563343	44.91	ug/l	93
56) Ethyl methacrylate	11.45	69	1671329	51.97	ug/l	94
57) trans-1,3-Dichloropropene	11.48	75	2629177	47.54	ug/l	96
58) 1,1,2-Trichloroethane	11.74	97	1347520	48.24	ug/l	99
59) 2-Hexanone	11.76	43	3580157	225.40	ug/l	94
60) 1,3-Dichloropropane	12.19	76	2409049	48.43	ug/l	100
61) Tetrachloroethene	12.31	164	1975797	45.62	ug/l	97
62) Dibromochloromethane	12.66	129	1687823	45.70	ug/l	99
63) 1,2-Dibromoethane	13.03	107	1330569	47.31	ug/l	96
64) 1-Chlorohexane	13.32	91	4073611	46.06	ug/l	98
65) Chlorobenzene	13.79	112	5965334	45.51	ug/l	97
66) 1,1,1,2-Tetrachloroethane	13.86	131	2052970	46.90	ug/l	100
67) Ethylbenzene	13.88	91	9788973	41.01	ug/l	90
69) o-Xylene	14.84	91	7695449	42.35	ug/l	94
70) Styrene	14.92	104	6256463	47.05	ug/l	97
73) Bromoform	15.57	173	817115	55.88	ug/l	98
74) trans-1,4-Dichloro-2-buten	15.63	53	474241	53.32	ug/l	98
75) 1,1,2,2-Tetrachloroethane	15.86	83	1321811	55.58	ug/l	98
77) 1,2,3-Trichloropropane	16.14	110	460433	52.61	ug/l	94
78) n-Propylbenzene	16.29	91	11115890	43.91	ug/l	93
79) Bromobenzene	16.38	156	1942250	50.66	ug/l	100
80) 1,3,5-Trimethylbenzene	16.60	105	7640705	45.71	ug/l	92
81) 2-Chlorotoluene	16.65	91	7752421	46.65	ug/l	94
82) 4-Chlorotoluene	16.74	91	6559965	46.21	ug/l	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

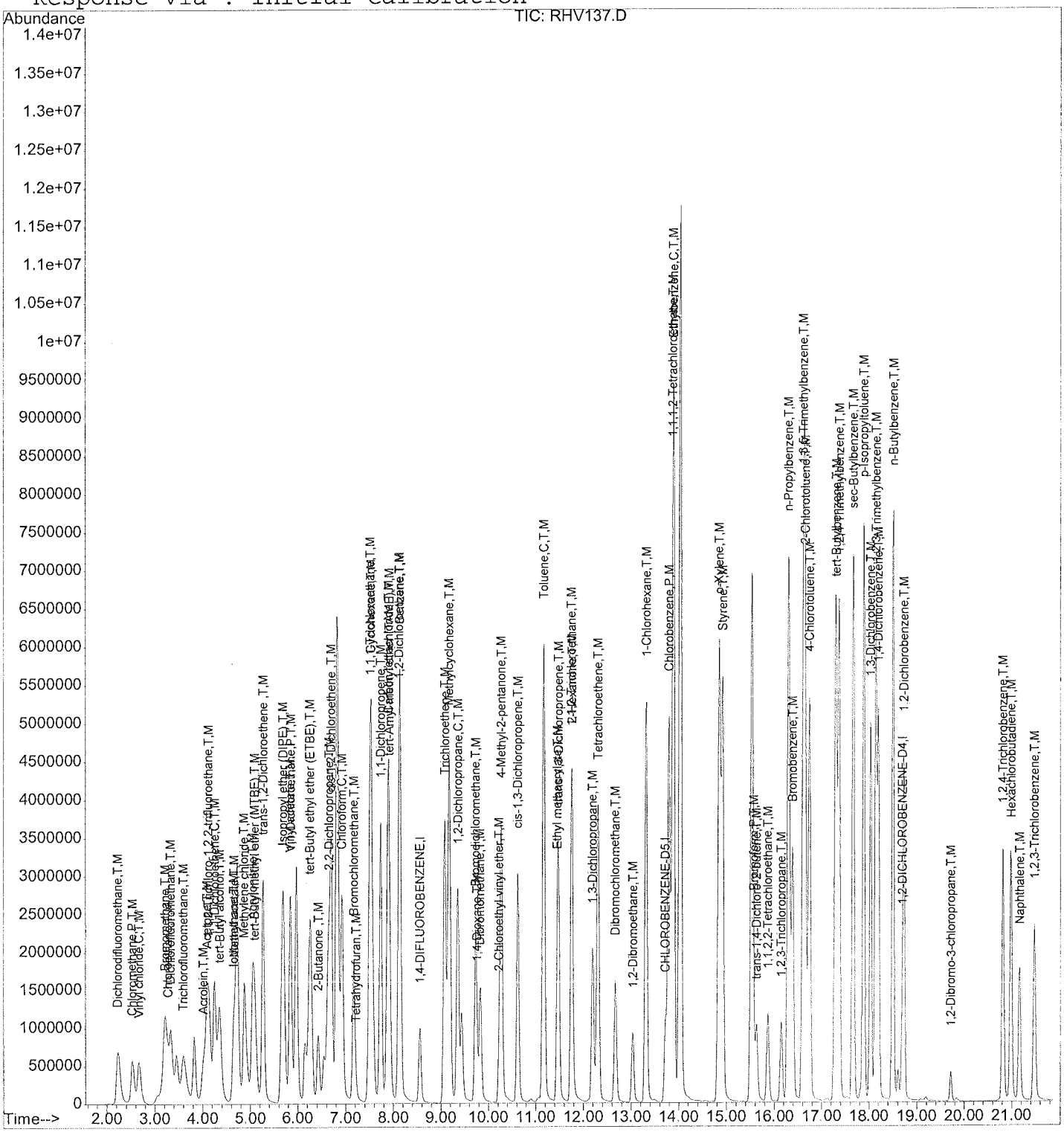
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83)	tert-Butylbenzene	17.30	134	1857054	50.24	ug/l	97
84)	1,2,4-Trimethylbenzene	17.36	105	7235456	45.31	ug/l	90
85)	sec-Butylbenzene	17.66	105	9517579	42.21	ug/l	93
86)	p-Isopropyltoluene	17.88	119	8220752	42.84	ug/l	95
87)	1,3-Dichlorobenzene	18.03	146	3672185	46.25	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	6721285	43.39	ug/l	93
89)	1,4-Dichlorobenzene	18.19	146	3550594	46.24	ug/l	99
90)	n-Butylbenzene	18.50	91	7113798	40.49	ug/l	91
91)	1,2-Dichlorobenzene	18.72	146	3029323	46.33	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	196035	53.22	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	2009206	45.22	ug/l	100
94)	Hexachlorobutadiene	20.99	225	1310067	44.92	ug/l	99
95)	Naphthalene	21.17	128	3067753	48.44	ug/l	98
96)	1,2,3-Trichlorobenzene	21.48	180	1571867	46.30	ug/l	97

(#) = qualifier out of range (m) = manual integration
RHV137.D VO01H09.M Fri Aug 30 18:39:12 2024 Page 3

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1270873	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	1026209	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	289170	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	0.00	111	0	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
41) 1,2-Dichloroethane-d4	0.00	65	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
54) Toluene-d8	11.05	98	4989	0.04	ug/l	0.01
Spiked Amount 10.000			Recovery =	0.40%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	4670381	111.67	ug/l	96
5) Chloromethane	2.53	50	3722515	122.79	ug/l	98
7) Bromomethane	3.21	94	2840980	119.96	ug/l	97
8) Chloroethane	3.27	64	2633367	126.84	ug/l	91
9) Dichlorofluoromethane	3.35	67	5323040	116.25	ug/l	100
10) Trichlorofluoromethane	3.61	101	6852447	112.74	ug/l	98
11) Acrolein	4.01	56	842414	657.76	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	2886728	115.96	ug/l	99
13) Acetone	4.09	43	2953626	542.52	ug/l	92
14) 1,1-Dichloroethene	4.25	61	6983489	113.56	ug/l	94
15) tert-Butyl alcohol	4.37	59	4804777	2809.87	ug/l	99
17) Methyl acetate	4.68	43	1495299	113.78	ug/l	95
18) Methylene chloride	4.89	49	4936369	115.49	ug/l	95
20) Acrylonitrile	5.05	53	3140183	621.71	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	7734124	110.59	ug/l	94
22) trans-1,2-Dichloroethene	5.27	61	6301340	112.51	ug/l	91
23) Isopropyl ether (DIPE)	5.69	45	12384481	110.77	ug/l	95
24) Vinyl acetate	5.85	43	4887040	119.68	ug/l	95
25) 1,1-Dichloroethane	5.85	63	7723208	112.53	ug/l	98
27) tert-Butyl ethyl ether (ET	6.27	59	10982001	106.24	ug/l	96
28) 2-Butanone	6.43	43	4661661	557.14	ug/l	99
29) 2,2-Dichloropropane	6.65	77	7038809	102.88	ug/l	97
30) cis-1,2-Dichloroethene	6.71	96	5150285	119.23	ug/l	90
31) Chloroform	6.93	83	7500896	97.05	ug/l	94
32) Bromochloromethane	7.17	49	3031909	115.55	ug/l	99
33) Tetrahydrofuran	7.21	42	500929	107.23	ug/l	95
35) 1,1,1-Trichloroethane	7.51	97	7775386	101.94	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
36)	Cyclohexane	7.54	84	6580294	119.81	ug/l		99
38)	1,1-Dichloropropene	7.73	110	2477702	118.58	ug/l		98
39)	Carbon tetrachloride	7.89	119	6568334	103.61	ug/l		99
40)	tert-Amyl methyl ether (TA	7.91	73	8112654	106.77	ug/l		98
42)	Benzene	8.15	78	13888654	99.25	ug/l		93
43)	1,2-Dichloroethane	8.12	62	4483500	102.46	ug/l		97
44)	Trichloroethene	9.08	130	4941326	110.99	ug/l		97
45)	Methylcyclohexane	9.18	83	7314408	119.40	ug/l		96
46)	1,2-Dichloropropane	9.36	63	3752082	117.45	ug/l		92
47)	Bromodichloromethane	9.73	83	5473913	98.19	ug/l		99
48)	1,4-Dioxane	9.76	88	380626	2406.83	ug/l		90
49)	Dibromomethane	9.83	93	1910399	107.45	ug/l		96
50)	2-Chloroethyl vinyl ether	10.22	63	1218626	121.85	ug/l		99
51)	4-Methyl-2-pentanone	10.26	43	10267105	537.45	ug/l		92
52)	cis-1,3-Dichloropropene	10.62	75	6202577	109.96	ug/l		94
55)	Toluene	11.17	91	14043908	91.33	ug/l		84
57)	trans-1,3-Dichloropropene	11.48	75	5011355	112.36	ug/l		94
58)	1,1,2-Trichloroethane	11.74	97	2647712	117.55	ug/l		99
59)	2-Hexanone	11.76	43	6801833	527.70	ug/l		92
60)	1,3-Dichloropropane	12.19	76	4651210	115.96	ug/l		98
61)	Tetrachloroethene	12.31	164	3854409	110.36	ug/l		97
62)	Dibromochloromethane	12.66	129	3318617	111.43	ug/l		97
63)	1,2-Dibromoethane	13.03	107	2639320	116.39	ug/l		97
64)	1-Chlorohexane	13.31	91	7538336	105.71	ug/l		95
65)	Chlorobenzene	13.79	112	10817556	102.35	ug/l		91
66)	1,1,1,2-Tetrachloroethane	13.88	131	4072316	115.38	ug/l		100
69)	o-Xylene	14.84	91	12785500	87.27	ug/l		83
70)	Styrene	14.91	104	10999980	102.59	ug/l		97
78)	n-Propylbenzene	16.31	91	16291269	88.62	ug/l		80
79)	Bromobenzene	16.38	156	3679164	132.16	ug/l		98
80)	1,3,5-Trimethylbenzene	16.62	105	12237227	100.82	ug/l		84
81)	2-Chlorotoluene	16.65	91	12699107	105.23	ug/l		87
82)	4-Chlorotoluene	16.74	91	11067133	107.36	ug/l		85
83)	tert-Butylbenzene	17.30	134	3365411	125.37	ug/l		94
84)	1,2,4-Trimethylbenzene	17.36	105	11581107	99.87	ug/l		79
85)	sec-Butylbenzene	17.66	105	13681920	83.56	ug/l		80
86)	p-Isopropyltoluene	17.89	119	12260360	87.97	ug/l		85
87)	1,3-Dichlorobenzene	18.04	146	6425754	111.44	ug/l		96
88)	1,2,3-Trimethylbenzene	18.14	105	10502610	93.36	ug/l	#	84
89)	1,4-Dichlorobenzene	18.20	146	6178768	110.82	ug/l		95
90)	n-Butylbenzene	18.50	91	10448826	81.89	ug/l		82

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
91)	1,2-Dichlorobenzene	18.72	146	5331830	112.29	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	3527937	109.34	ug/l	99
94)	Hexachlorobutadiene	20.99	225	2314021	109.25	ug/l	99
95)	Naphthalene	21.15	128	5355694	116.45	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	2776515	112.62	ug/l	98

(#) = qualifier out of range (m) = manual integration

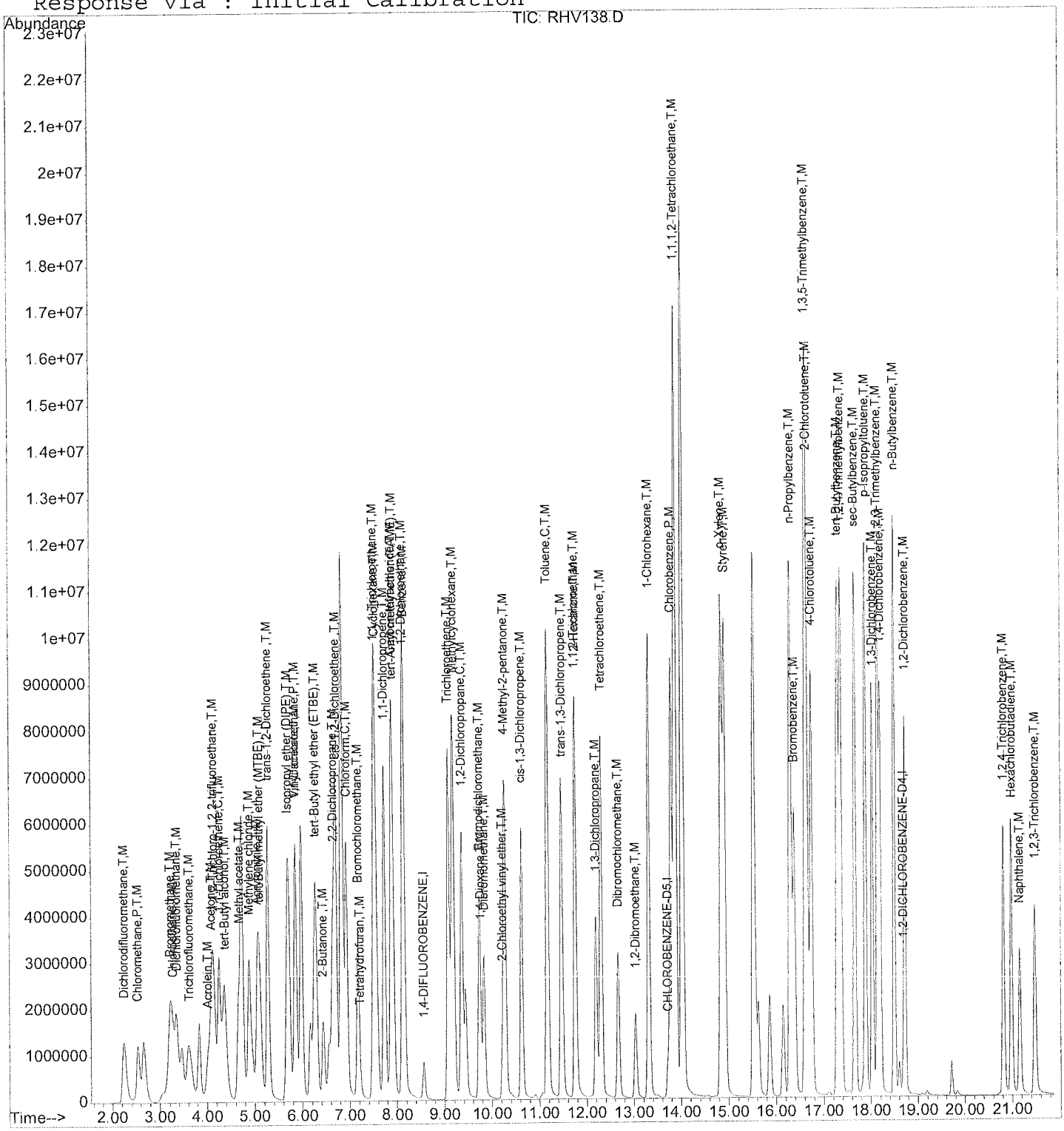
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D
Acq On : 9 Aug 2024 10:17 pm
Sample : VO01H0910 10/50
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024

Vial: 11
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01New
IC_Beginning DateTime :08/09/24 17:28
Spike Amount :10 PPB
CC/CV File :RHV141
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09
Date_Time :08/09/24 23:47

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1458016	1	1	8.561	8.560	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane	8.562	-14.4	410825	0.282	0.329	2.239	2.241	12.04				
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane	11.811	18.1	410805	0.282	0.239	2.553	2.541	11.82				
	6	Vinyl chloride	11.830	18.3	362949	0.249	0.210	2.695	2.679	12.57				
	7	Bromomethane	11.618	16.2	315660	0.216	0.186	3.227	3.221	8.61				
	8	Chloroethane	12.384	23.8	294990	0.202	0.163	3.272	3.278	13.37				
	9	Dichlorofluoromethane	9.814	-1.9	515590	0.354	0.360	3.346	3.342	9.43				
	10	Trichlorofluoromethane	9.253	-7.5	645259	0.443	0.478	3.613	3.554	9.99				
5	11	Acrolein	56.857	13.7	83543	0.011	0.010	4.027	4.017	14.81				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	8.849	-11.5	252752	0.173	0.196	4.131	4.133	8.61				
5	13	Acetone	45.730	-8.5	300505	0.041	0.048	4.102	4.096	19.26	0.0111	0.0426		0.9952
	14	1,1-Dichloroethene	9.776	-2.2	689726	0.473	0.484	4.264	4.255	6.44				
25	15	tert-Butyl alcohol	222.068	-11.2	435647	0.012	0.013	4.368	4.372	12.10				
	16	Iodomethane	11.013	10.1	702444	0.482	0.437	4.664	4.663	6.31				
	17	Methyl acetate	10.258	2.6	154672	0.106	0.103	4.679	4.683	7.37				
	18	Methylene chloride	10.356	3.6	507851	0.348	0.336	4.887	4.885	7.35				
	19	Carbon disulfide	10.975	9.8	1340359	0.919	0.838	4.902	4.904	6.33				
5	20	Acrylonitrile	53.508	7.0	310061	0.043	0.040	5.050	5.059	11.32				
	21	tert-Butyl methyl ether (MTBE)	9.805	-1.9	786741	0.540	0.550	5.094	5.095	7.89				
	22	trans-1,2-Dichloroethene	10.226	2.3	657080	0.451	0.441	5.272	5.276	6.34				
	23	Isopropyl ether (DIPE)	10.918	9.2	1400453	0.961	0.880	5.687	5.692	7.83				
	24	Vinyl acetate	10.710	7.1	501747	0.344	0.321	5.850	5.852	11.40				
	25	1,1-Dichloroethane	10.517	5.2	828152	0.568	0.540	5.850	5.853	6.83				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	9.977	-0.2	1183255	0.812	0.813	6.265	6.265	8.56				
5	28	2-Butanone	45.670	-8.7	438405	0.060	0.066	6.442	6.440	9.12				
	29	2,2-Dichloropropane	8.837	-11.6	693615	0.476	0.538	6.650	6.650	7.93				
	30	cis-1,2-Dichloroethene	10.682	6.8	529401	0.363	0.340	6.709	6.705	9.52				
	31	Chloroform	9.141	-8.6	810614	0.556	0.608	6.931	6.930	12.21				
	32	Bromochloromethane	10.320	3.2	310687	0.213	0.206	7.168	7.169	8.79				
	33	Tetrahydrofuran	8.018	-19.8	42975	0.029	0.037	7.213	7.215	11.65				
	34	Dibromofluoromethane	10.058	0.6	445940	0.306	0.304	7.242	7.243	13.19				
	35	1,1,1-Trichloroethane	8.951	-10.5	783252	0.537	0.600	7.509	7.519	8.89				
	36	Cyclohexane	9.904	-1.0	624073	0.428	0.432	7.538	7.538	9.21				
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene	9.832	-1.7	235706	0.162	0.164	7.731	7.739	8.22				
	39	Carbon tetrachloride	8.793	-12.1	639597	0.439	0.499	7.894	7.893	9.16				
	40	tert-Amyl methyl ether (TAME)	10.160	1.6	885635	0.607	0.598	7.894	7.908	7.20				
	41	1,2-Dichloroethane-d4	8.954	-10.5	352943	0.242	0.270	7.968	7.979	10.30				
	42	Benzene	11.047	10.5	1773569	1.216	1.101	8.146	8.145	5.25				
	43	1,2-Dichloroethane	9.025	-9.8	453115	0.311	0.344	8.116	8.120	13.08				
	44	Trichloroethene	10.012	0.1	511419	0.351	0.350	9.079	9.083	6.77				
	45	Methylcyclohexane	9.800	-2.0	688803	0.472	0.482	9.168	9.176	13.31				
	46	1,2-Dichloropropane	10.763	7.6	394503	0.271	0.251	9.361	9.364	8.42				
	47	Bromodichloromethane	8.826	-11.7	564519	0.387	0.439	9.731	9.741	12.12				
20	48	1,4-Dioxane	188.765	-5.6	34248	0.001	0.001	9.790	9.779	11.23				
	49	Dibromomethane	9.554	-4.5	194884	0.134	0.140	9.820	9.834	7.18				
	50	2-Chloroethyl vinyl ether	10.125	1.3	116170	0.080	0.079	10.235	10.238	13.01				
5	51	4-Methyl-2-pentanone	50.701	1.4	1111189	0.152	0.150	10.264	10.283	11.85				
	52	cis-1,3-Dichloropropene	9.896	-1.0	640446	0.439	0.444	10.620	10.629	7.60				
	53	CHLOROBENZENE-D5	10.000	0	1207297	1	1	13.716	13.726	0				
	54	Toluene-d8	10.351	3.5	1527415	1.265	1.222	11.035	11.038	8.56				
	55	Toluene	10.603	6.0	1918259	1.589	1.498	11.168	11.173	6.69				
	56	Ethyl methacrylate	10.127	1.3	308968	0.256	0.253	11.464	11.474	13.78				
	57	trans-1,3-Dichloropropene	9.640	-3.6	505830	0.419	0.435	11.479	11.490	10.00				
	58	1,1,2-Trichloroethane	9.957	-0.4	263881	0.219	0.219	11.746	11.760	9.84				
5	59	2-Hexanone	45.591	-8.8	656965	0.109	0.111	11.761	11.776	19.21	-0.0312	0.1262		0.9976
	60	1,3-Dichloropropane	9.946	-0.5	469386	0.389	0.391	12.190	12.201	9.24				
	61	Tetrachloroethene	9.317	-6.8	382862	0.317	0.340	12.294	12.308	8.13				
	62	Dibromochloromethane	9.227	-7.7	323283	0.268	0.290	12.664	12.675	7.03				
	63	1,2-Dibromoethane	9.750	-2.5	260128	0.215	0.221	13.035	13.043	8.26				
	64	1-Chlorohexane	9.480	-5.2	795389	0.659	0.695	13.316	13.320	5.71				
	65	Chlorobenzene	10.174	1.7	1265090	1.048	1.030	13.790	13.795	6.31				
	66	1,1,1,2-Tetrachloroethane	9.822	-1.8	407851	0.338	0.344	13.864	13.872	9.54				
	67	Ethylbenzene	9.808	-1.9	2221146	1.840	1.876	13.879	13.890	9.54				
2	68	m-Xylene & p-Xylene	18.778	-6.1	3357661	1.391	1.481	14.027	14.030	8.93				
	69	o-Xylene	9.874	-1.3	1702007	1.410	1.428	14.842	14.849	9.71				
	70	Styrene	10.081	0.8	1271745	1.053	1.045	14.916	14.921	6.93				
	71	Isopropylbenzene	9.475	-5.2	2237530	1.853	1.956	15.524	15.530	7.56				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	390071	1	1	18.679	18.693	0				
	73	Bromoform	10.403	4.0	149023	0.382	0.367	15.568	15.569	11.93				
	74	trans-1,4-Dichloro-2-butene	9.266	-7.3	80729	0.207	0.223	15.627	15.632	7.51				
	75	1,1,2,2-Tetrachloroethane	11.077	10.8	258076	0.662	0.597	15.864	15.869	11.29				
	76	4-Bromofluorobenzene	10.193	1.9	504433	1.293	1.269	16.013	16.020	9.24				
	77	1,2,3-Trichloropropane	10.112	1.1	86704	0.222	0.220	16.146	16.162	9.42				
	78	n-Propylbenzene	10.643	6.4	2639309	6.766	6.357	16.294	16.305	9.90				
	79	Bromobenzene	10.386	3.9	390060	1.000	0.963	16.383	16.394	11.94				
	80	1,3,5-Trimethylbenzene	10.378	3.8	1699332	4.356	4.198	16.605	16.613	7.15				
	81	2-Chlorotoluene	10.446	4.5	1700484	4.359	4.173	16.635	16.649	7.05				
	82	4-Chlorotoluene	9.973	-0.3	1386824	3.555	3.565	16.738	16.742	6.57				
	83	tert-Butylbenzene	10.467	4.7	379037	0.972	0.928	17.287	17.301	10.33				
	84	1,2,4-Trimethylbenzene	10.417	4.2	1629540	4.178	4.010	17.361	17.364	7.06				
	85	sec-Butylbenzene	10.482	4.8	2315214	5.935	5.662	17.657	17.662	11.41				
	86	p-Isopropyltoluene	10.350	3.5	1945839	4.988	4.820	17.879	17.889	9.96				
	87	1,3-Dichlorobenzene	10.149	1.5	789417	2.024	1.994	18.027	18.038	8.46				
	88	1,2,3-Trimethylbenzene	10.267	2.7	1558138	3.994	3.890	18.131	18.145	8.36				
	89	1,4-Dichlorobenzene	10.222	2.2	768840	1.971	1.928	18.190	18.200	7.64				
	90	n-Butylbenzene	10.013	0.1	1723405	4.418	4.412	18.487	18.501	13.97				
	91	1,2-Dichlorobenzene	10.110	1.1	647540	1.660	1.642	18.724	18.727	7.38				
	92	1,2-Dibromo-3-chloropropane	10.513	5.1	37937	0.097	0.093	19.716	19.723	13.33				
	93	1,2,4-Trichlorobenzene	9.794	-2.1	426286	1.093	1.116	20.813	20.816	8.77				
	94	Hexachlorobutadiene	9.724	-2.8	277847	0.712	0.732	20.976	20.990	6.72				
	95	Naphthalene	9.749	-2.5	604845	1.551	1.591	21.153	21.167	9.31				
	96	1,2,3-Trichlorobenzene	9.676	-3.2	321802	0.825	0.853	21.479	21.483	7.02				

Spike Amount = Nominal Amount * M

SC 24/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	152	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	8.562	14.4	112	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	11.812	-18.1	167	0.01
6	C,T,M	Vinyl chloride	10.000	11.830	-18.3	158	0.01
7	T,M	Bromomethane	10.000	11.618	-16.2	172	0.02
8	T,M	Chloroethane	10.000	12.385	-23.8#	183	0.00
9	T,M	Dichlorofluoromethane	10.000	9.815	1.9	147	0.00
10	T,M	Trichlorofluoromethane	10.000	9.254	7.5	122	0.13
11	T,M	Acrolein	50.000	56.858	-13.7	180	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	8.850	11.5	129	-0.02
13	T,M	Acetone	50.000	45.731	8.5	140	0.00
14	C,T,M	1,1-Dichloroethene	10.000	9.776	2.2	145	0.01
15	T,M	tert-Butyl alcohol	250.000	222.069	11.2	130	0.00
16	T,M	Iodomethane	10.000	11.013	-10.1	160	0.00
17	T,M	Methyl acetate	10.000	10.258	-2.6	157	0.00
18	T,M	Methylene chloride	10.000	10.357	-3.6	160	0.00
19	T,M	Carbon disulfide	10.000	10.976	-9.8	157	0.00
20	T,M	Acrylonitrile	50.000	53.509	-7.0	165	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	9.806	1.9	144	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.226	-2.3	151	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.918	-9.2	163	0.00
24	T,M	Vinyl acetate	10.000	10.710	-7.1	154	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.517	-5.2	159	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.01
27	T,M	tert-Butyl ethyl ether (ETB	10.000	9.977	0.2	146	0.00
28	T,M	2-Butanone	50.000	45.670	8.7	143	0.00
29	T,M	2,2-Dichloropropane	10.000	8.837	11.6	129	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.683	-6.8	158	0.00
31	C,T,M	Chloroform	10.000	9.142	8.6	135	0.00
32	T,M	Bromochloromethane	10.000	10.321	-3.2	155	0.00
33	T,M	Tetrahydrofuran	10.000	8.019	19.8	134	0.00
34	S	Dibromofluoromethane	10.000	10.058	-0.6	140	0.00
35	T,M	1,1,1-Trichloroethane	10.000	8.951	10.5	127	0.00
36	T,M	Cyclohexane	10.000	9.904	1.0	144	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.01
38	T,M	1,1-Dichloropropene	10.000	9.833	1.7	148	0.00
39	T,M	Carbon tetrachloride	10.000	8.794	12.1	124	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.160	-1.6	149	-0.02
41	S	1,2-Dichloroethane-d4	10.000	8.954	10.5	123	-0.01

(#) = Out of Range

SA 9/6/24

Tune evaluated From ICV (IVO01H0902) File ID: RHV167

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M Benzene	10.000	11.048	-10.5	160	0.00
43	T,M 1,2-Dichloroethane	10.000	9.026	9.7	124	0.00
44	T,M Trichloroethene	10.000	10.012	-0.1	148	0.00
45	T,M Methylcyclohexane	10.000	9.801	2.0	141	-0.01
46	C,T,M 1,2-Dichloropropane	10.000	10.764	-7.6	158	0.00
47	T,M Bromodichloromethane	10.000	8.826	11.7	133	-0.01
48	T,M 1,4-Dioxane	200.000	188.765	5.6	141	0.02
49	T,M Dibromomethane	10.000	9.555	4.5	141	-0.01
50	T,M 2-Chloroethyl vinyl ether	10.000	10.125	-1.3	157	0.00
51	T,M 4-Methyl-2-pentanone	50.000	50.701	-1.4	141	-0.01
52	T,M cis-1,3-Dichloropropene	10.000	9.896	1.0	142	-0.01
53	I CHLOROBENZENE-D5	10.000	10.000	0.0	145	-0.01
54	S Toluene-d8	10.000	10.351	-3.5	141	0.00
55	C,T,M Toluene	10.000	10.604	-6.0	147	0.00
56	T,M Ethyl methacrylate	10.000	10.128	-1.3	138	0.00
57	T,M trans-1,3-Dichloropropene	10.000	9.640	3.6	130	0.00
58	T,M 1,1,2-Trichloroethane	10.000	9.958	0.4	143	-0.01
59	T,M 2-Hexanone	50.000	45.591	8.8	129	0.00
60	T,M 1,3-Dichloropropane	10.000	9.947	0.5	141	-0.01
61	T,M Tetrachloroethene	10.000	9.318	6.8	138	-0.01
62	T,M Dibromochloromethane	10.000	9.227	7.7	129	-0.01
63	T,M 1,2-Dibromoethane	10.000	9.750	2.5	141	0.00
64	T,M 1-Chlorohexane	10.000	9.480	5.2	139	0.00
65	P,M Chlorobenzene	10.000	10.175	-1.8	143	0.00
66	T,M 1,1,1,2-Tetrachloroethane	10.000	9.822	1.8	134	0.00
67	C,T,M Ethylbenzene	10.000	9.808	1.9	135	-0.01
68	T,M m-Xylene & p-Xylene	20.000	18.778	6.1	133	0.00
69	T,M o-Xylene	10.000	9.875	1.3	133	0.00
70	T,M Styrene	10.000	10.081	-0.8	139	0.00
71	T,M Isopropylbenzene	10.000	9.475	5.3	131	0.00
72	I 1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	122	-0.01
73	P,T,M Bromoform	10.000	10.403	-4.0	123	0.00
74	T,M trans-1,4-Dichloro-2-butene	10.000	9.266	7.3	113	0.00
75	T,M 1,1,2,2-Tetrachloroethane	10.000	11.077	-10.8	133	0.00
76	S 4-Bromofluorobenzene	10.000	10.193	-1.9	124	0.00
77	T,M 1,2,3-Trichloropropane	10.000	10.113	-1.1	129	-0.01
78	T,M n-Propylbenzene	10.000	10.644	-6.4	129	-0.01
79	T,M Bromobenzene	10.000	10.387	-3.9	130	-0.01
80	T,M 1,3,5-Trimethylbenzene	10.000	10.379	-3.8	129	0.00

(#) = Out of Range

SC 9/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	10.446	-4.5	130	-0.01
82	T,M	4-Chlorotoluene	10.000	9.974	0.3	123	0.00
83	T,M	tert-Butylbenzene	10.000	10.468	-4.7	134	-0.01
84	T,M	1,2,4-Trimethylbenzene	10.000	10.417	-4.2	126	0.00
85	T,M	sec-Butylbenzene	10.000	10.483	-4.8	126	0.00
86	T,M	p-Isopropyltoluene	10.000	10.350	-3.5	124	0.00
87	T,M	1,3-Dichlorobenzene	10.000	10.149	-1.5	126	-0.01
88	T,M	1,2,3-Trimethylbenzene	10.000	10.268	-2.7	121	-0.01
89	T,M	1,4-Dichlorobenzene	10.000	10.222	-2.2	127	0.00
90	T,M	n-Butylbenzene	10.000	10.013	-0.1	118	-0.01
91	T,M	1,2-Dichlorobenzene	10.000	10.110	-1.1	123	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.513	-5.1	118	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	9.794	2.1	119	0.00
94	T,M	Hexachlorobutadiene	10.000	9.724	2.8	116	-0.01
95	T,M	Naphthalene	10.000	9.749	2.5	114	-0.01
96	T,M	1,2,3-Trichlorobenzene	10.000	9.677	3.2	115	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	152	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.282	14.3	112	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.282	-18.0	167	0.01
6	C,T,M	Vinyl chloride	0.210	0.249	-18.6	158	0.01
7	T,M	Bromomethane	0.186	0.216	-16.1	172	0.02
8	T,M	Chloroethane	0.163	0.202	-23.9#	183	0.00
9	T,M	Dichlorofluoromethane	0.360	0.354	1.7	147	0.00
10	T,M	Trichlorofluoromethane	0.478	0.443	7.3	122	0.13
11	T,M	Acrolein	0.010	0.011	-10.0	180	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.173	11.7	129	-0.02
13	T,M	Acetone	0.048	0.041	14.6	140	0.00
14	C,T,M	1,1-Dichloroethene	0.484	0.473	2.3	145	0.01
15	T,M	tert-Butyl alcohol	0.013	0.012	7.7	130	0.00
16	T,M	Iodomethane	0.437	0.482	-10.3	160	0.00
17	T,M	Methyl acetate	0.103	0.106	-2.9	157	0.00
18	T,M	Methylene chloride	0.336	0.348	-3.6	160	0.00
19	T,M	Carbon disulfide	0.838	0.919	-9.7	157	0.00
20	T,M	Acrylonitrile	0.040	0.043	-7.5	165	0.00
21	T,M	tert-Butyl methyl ether (MT	0.550	0.540	1.8	144	0.00
22	T,M	trans-1,2-Dichloroethene	0.441	0.451	-2.3	151	0.00
23	T,M	Isopropyl ether (DIPE)	0.880	0.961	-9.2	163	0.00
24	T,M	Vinyl acetate	0.321	0.344	-7.2	154	0.00
25	P,T,M	1,1-Dichloroethane	0.540	0.568	-5.2	159	0.00
26	T,M	2-Butanol	0.000	0.010	0.0	0#	-0.01
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.812	0.1	146	0.00
28	T,M	2-Butanone	0.066	0.060	9.1	143	0.00
29	T,M	2,2-Dichloropropane	0.538	0.476	11.5	129	0.00
30	T,M	cis-1,2-Dichloroethene	0.340	0.363	-6.8	158	0.00
31	C,T,M	Chloroform	0.608	0.556	8.6	135	0.00
32	T,M	Bromochloromethane	0.206	0.213	-3.4	155	0.00
33	T,M	Tetrahydrofuran	0.037	0.029	21.6#	134	0.00
34	S	Dibromofluoromethane	0.304	0.306	-0.7	140	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.537	10.5	127	0.00
36	T,M	Cyclohexane	0.432	0.428	0.9	144	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.021	0.0	0#	-0.01
38	T,M	1,1-Dichloropropene	0.164	0.162	1.2	148	0.00
39	T,M	Carbon tetrachloride	0.499	0.439	12.0	124	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.607	-1.5	149	-0.02
41	S	1,2-Dichloroethane-d4	0.270	0.242	10.4	123	-0.01

(#) = Out of Range

sc 8/26/24

*Re-evaluated From ICV (IV001H0902) File ID: RHV137

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M Benzene	1.101	1.216	-10.4	160	0.00
43	T,M 1,2-Dichloroethane	0.344	0.311	9.6	124	0.00
44	T,M Trichloroethene	0.350	0.351	-0.3	148	0.00
45	T,M Methylcyclohexane	0.482	0.472	2.1	141	-0.01
46	C,T,M 1,2-Dichloropropane	0.251	0.271	-8.0	158	0.00
47	T,M Bromodichloromethane	0.439	0.387	11.8	133	-0.01
48	T,M 1,4-Dioxane	0.001	0.001	0.0	141	0.02
49	T,M Dibromomethane	0.140	0.134	4.3	141	-0.01
50	T,M 2-Chloroethyl vinyl ether	0.079	0.080	-1.3	157	0.00
51	T,M 4-Methyl-2-pentanone	0.150	0.152	-1.3	141	-0.01
52	T,M cis-1,3-Dichloropropene	0.444	0.439	1.1	142	-0.01
53	I CHLOROBENZENE-D5	1.000	1.000	0.0	145	-0.01
54	S Toluene-d8	1.222	1.265	-3.5	141	0.00
55	C,T,M Toluene	1.498	1.589	-6.1	147	0.00
56	T,M Ethyl methacrylate	0.253	0.256	-1.2	138	0.00
57	T,M trans-1,3-Dichloropropene	0.435	0.419	3.7	130	0.00
58	T,M 1,1,2-Trichloroethane	0.219	0.219	0.0	143	-0.01
59	T,M 2-Hexanone	0.111	0.109	1.8	129	0.00
60	T,M 1,3-Dichloropropane	0.391	0.389	0.5	141	-0.01
61	T,M Tetrachloroethene	0.340	0.317	6.8	138	-0.01
62	T,M Dibromochloromethane	0.290	0.268	7.6	129	-0.01
63	T,M 1,2-Dibromoethane	0.221	0.215	2.7	141	0.00
64	T,M 1-Chlorohexane	0.695	0.659	5.2	139	0.00
65	P,M Chlorobenzene	1.030	1.048	-1.7	143	0.00
66	T,M 1,1,1,2-Tetrachloroethane	0.344	0.338	1.7	134	0.00
67	C,T,M Ethylbenzene	1.876	1.840	1.9	135	-0.01
68	T,M m-Xylene & p-Xylene	1.481	1.391	6.1	133	0.00
69	T,M o-Xylene	1.428	1.410	1.3	133	0.00
70	T,M Styrene	1.045	1.053	-0.8	139	0.00
71	T,M Isopropylbenzene	1.956	1.853	5.3	131	0.00
72	I 1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	122	-0.01
73	P,T,M Bromoform	0.367	0.382	-4.1	123	0.00
74	T,M trans-1,4-Dichloro-2-butene	0.223	0.207	7.2	113	0.00
75	T,M 1,1,2,2-Tetrachloroethane	0.597	0.662	-10.9	133	0.00
76	S 4-Bromofluorobenzene	1.269	1.293	-1.9	124	0.00
77	T,M 1,2,3-Trichloropropane	0.220	0.222	-0.9	129	-0.01
78	T,M n-Propylbenzene	6.357	6.766	-6.4	129	-0.01
79	T,M Bromobenzene	0.963	1.000	-3.8	130	-0.01
80	T,M 1,3,5-Trimethylbenzene	4.198	4.356	-3.8	129	0.00

(#) = Out of Range

9/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	4.359	-4.5	130	-0.01
82	T,M	4-Chlorotoluene	3.565	3.555	0.3	123	0.00
83	T,M	tert-Butylbenzene	0.928	0.972	-4.7	134	-0.01
84	T,M	1,2,4-Trimethylbenzene	4.010	4.178	-4.2	126	0.00
85	T,M	sec-Butylbenzene	5.662	5.935	-4.8	126	0.00
86	T,M	p-Isopropyltoluene	4.820	4.988	-3.5	124	0.00
87	T,M	1,3-Dichlorobenzene	1.994	2.024	-1.5	126	-0.01
88	T,M	1,2,3-Trimethylbenzene	3.890	3.994	-2.7	121	-0.01
89	T,M	1,4-Dichlorobenzene	1.928	1.971	-2.2	127	0.00
90	T,M	n-Butylbenzene	4.412	4.418	-0.1	118	-0.01
91	T,M	1,2-Dichlorobenzene	1.642	1.660	-1.1	123	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.097	-4.3	118	0.00
93	T,M	1,2,4-Trichlorobenzene	1.116	1.093	2.1	119	0.00
94	T,M	Hexachlorobutadiene	0.732	0.712	2.7	116	-0.01
95	T,M	Naphthalene	1.591	1.551	2.5	114	-0.01
96	T,M	1,2,3-Trichlorobenzene	0.853	0.825	3.3	115	0.00

Sm 9/6/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1458016	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1207297	10.00	ug/l	-0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	390071	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	445940	10.06	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.60%			
41) 1,2-Dichloroethane-d4	7.97	65	352943	8.95	ug/l	-0.01
Spiked Amount 10.000			Recovery = 89.50%			
54) Toluene-d8	11.03	98	1527415	10.35	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.50%			
76) 4-Bromofluorobenzene	16.01	95	504433	10.19	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.90%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	410825	8.56	ug/l	96
5) Chloromethane	2.55	50	410805	11.81	ug/l	98
6) Vinyl chloride	2.69	62	362949	11.83	ug/l	97
7) Bromomethane	3.23	94	315660	11.62	ug/l	96
8) Chloroethane	3.27	64	294990	12.38	ug/l	87
9) Dichlorofluoromethane	3.35	67	515590	9.81	ug/l	99
10) Trichlorofluoromethane	3.61	101	645259	9.25	ug/l	99
11) Acrolein	4.03	56	83543	56.86	ug/l	88
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	252752	8.85	ug/l	100
13) Acetone	4.10	43	300505	45.73	ug/l	87
14) 1,1-Dichloroethene	4.26	61	689726	9.78	ug/l	93
15) tert-Butyl alcohol	4.37	59	435647	222.07	ug/l	100
16) Iodomethane	4.66	142	702444	11.01	ug/l	88
17) Methyl acetate	4.68	43	154672	10.26	ug/l	94
18) Methylene chloride	4.89	49	507851	10.36	ug/l	96
19) Carbon disulfide	4.90	76	1340359	10.98	ug/l	100
20) Acrylonitrile	5.05	53	310061	53.51	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	786741	9.81	ug/l	92
22) trans-1,2-Dichloroethene	5.27	61	657080	10.23	ug/l	94
23) Isopropyl ether (DIPE)	5.69	45	1400453	10.92	ug/l	99
24) Vinyl acetate	5.85	43	501747	10.71	ug/l	96
25) 1,1-Dichloroethane	5.85	63	828152	10.52	ug/l	98
27) tert-Butyl ethyl ether (ET	6.26	59	1183255	9.98	ug/l	99
28) 2-Butanone	6.44	43	438405	45.67	ug/l	98
29) 2,2-Dichloropropane	6.65	77	693615	8.84	ug/l	96
30) cis-1,2-Dichloroethene	6.71	96	529401	10.68	ug/l	93
31) Chloroform	6.93	83	810614	9.14	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	310687	10.32	ug/l	99
33)	Tetrahydrofuran	7.21	42	42975	8.02	ug/l	90
35)	1,1,1-Trichloroethane	7.51	97	783252	8.95	ug/l	99
36)	Cyclohexane	7.54	84	624073	9.90	ug/l	99
38)	1,1-Dichloropropene	7.73	110	235706	9.83	ug/l	99
39)	Carbon tetrachloride	7.89	119	639597	8.79	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	885635	10.16	ug/l	99
42)	Benzene	8.15	78	1773569	11.05	ug/l	98
43)	1,2-Dichloroethane	8.12	62	453115	9.03	ug/l	98
44)	Trichloroethene	9.08	130	511419	10.01	ug/l	97
45)	Methylcyclohexane	9.17	83	688803	9.80	ug/l	97
46)	1,2-Dichloropropane	9.36	63	394503	10.76	ug/l	86
47)	Bromodichloromethane	9.73	83	564519	8.83	ug/l	100
48)	1,4-Dioxane	9.79	88	34248	188.77	ug/l	94
49)	Dibromomethane	9.82	93	194884	9.55	ug/l	98
50)	2-Chloroethyl vinyl ether	10.23	63	116170	10.13	ug/l	97
51)	4-Methyl-2-pentanone	10.26	43	1111189	50.70	ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	640446	9.90	ug/l	99
55)	Toluene	11.17	91	1918259	10.60	ug/l	99
56)	Ethyl methacrylate	11.46	69	308968	10.13	ug/l	93
57)	trans-1,3-Dichloropropene	11.48	75	505830	9.64	ug/l	98
58)	1,1,2-Trichloroethane	11.75	97	263881	9.96	ug/l	98
59)	2-Hexanone	11.76	43	656965	45.59	ug/l	94
60)	1,3-Dichloropropane	12.19	76	469386	9.95	ug/l	99
61)	Tetrachloroethene	12.29	164	382862	9.32	ug/l	97
62)	Dibromochloromethane	12.66	129	323283	9.23	ug/l	100
63)	1,2-Dibromoethane	13.03	107	260128	9.75	ug/l	99
64)	1-Chlorohexane	13.32	91	795389	9.48	ug/l	99
65)	Chlorobenzene	13.79	112	1265090	10.17	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	407851	9.82	ug/l	98
67)	Ethylbenzene	13.88	91	2221146	9.81	ug/l	97
68)	m-Xylene & p-Xylene	14.03	91	3357661	18.78	ug/l	96
69)	o-Xylene	14.84	91	1702007	9.87	ug/l	98
70)	Styrene	14.92	104	1271745	10.08	ug/l	96
71)	Isopropylbenzene	15.52	105	2237530	9.47	ug/l	98
73)	Bromoform	15.57	173	149023	10.40	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	80729	9.27	ug/l	97
75)	1,1,2,2-Tetrachloroethane	15.86	83	258076	11.08	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	86704	10.11	ug/l	99
78)	n-Propylbenzene	16.29	91	2639309	10.64	ug/l	98
79)	Bromobenzene	16.38	156	390060	10.39	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

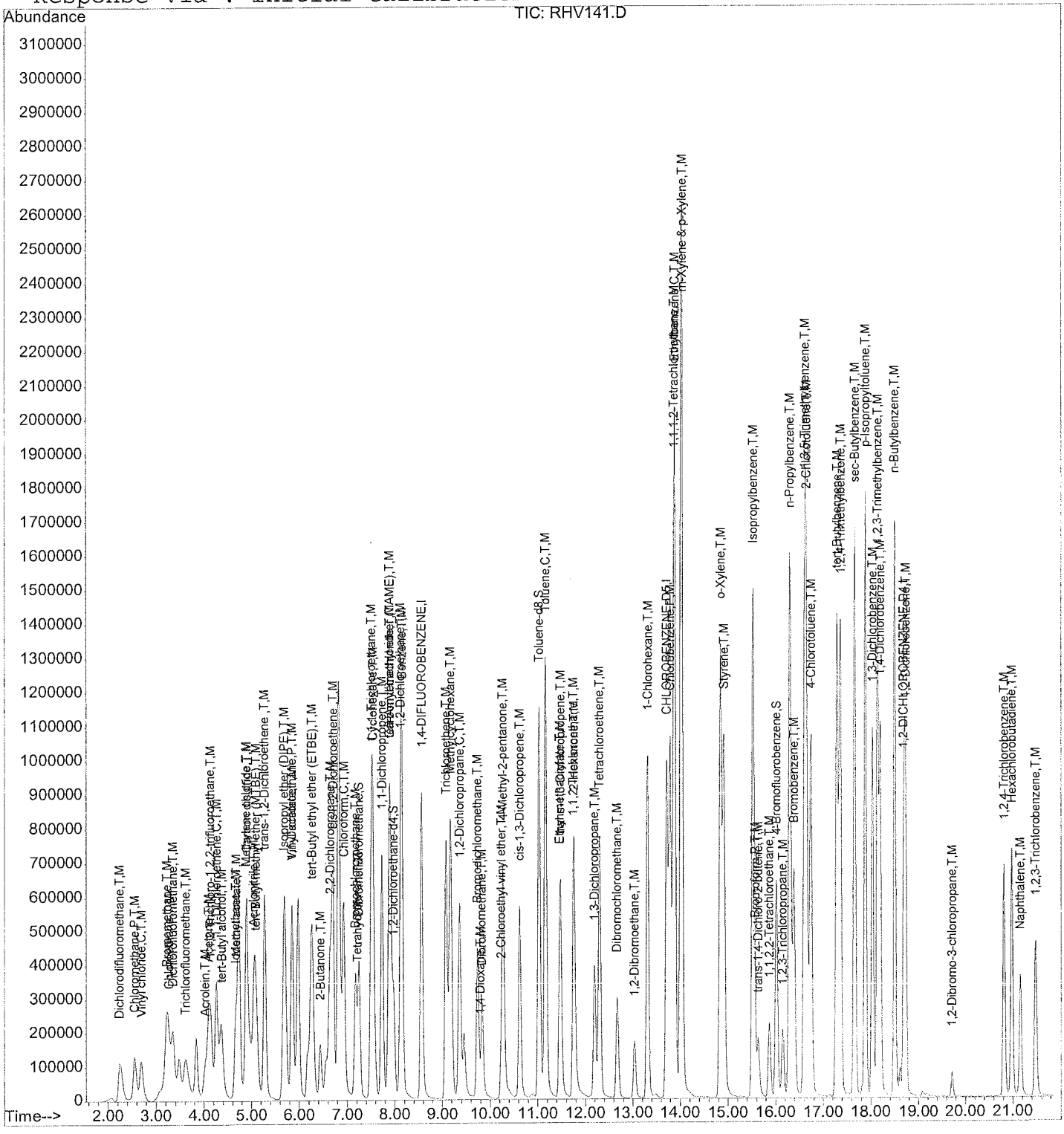
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.61	105	1699332	10.38	ug/l	96
81)	2-Chlorotoluene	16.63	91	1700484	10.45	ug/l	96
82)	4-Chlorotoluene	16.74	91	1386824	9.97	ug/l	97
83)	tert-Butylbenzene	17.29	134	379037	10.47	ug/l	89
84)	1,2,4-Trimethylbenzene	17.36	105	1629540	10.42	ug/l	95
85)	sec-Butylbenzene	17.66	105	2315214	10.48	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1945839	10.35	ug/l	98
87)	1,3-Dichlorobenzene	18.03	146	789417	10.15	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	1558138	10.27	ug/l	98
89)	1,4-Dichlorobenzene	18.19	146	768840	10.22	ug/l	99
90)	n-Butylbenzene	18.49	91	1723405	10.01	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	647540	10.11	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.72	157	37937	10.51	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	426286	9.79	ug/l	97
94)	Hexachlorobutadiene	20.98	225	277847	9.72	ug/l	97
95)	Naphthalene	21.15	128	604845	9.75	ug/l	100
96)	1,2,3-Trichlorobenzene	21.48	180	321802	9.68	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RHV145 BFB Injection Date: 08/13/24

Instrument ID: 01New BFB Injection Time: 15:24

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.567
75	30 - 60% of mass 95	48.649
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.418
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	72.564
175	5 - 9% of mass 174	4.820(6.64)1
176	95 - 101% % of mass 174	71.637(98.72)1
177	5 - 9% % of mass 176	4.061(5.67)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD50	IVO01H0902	RHV147	08/13/24	16:44

SC
8/16/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01New
IC_Beginning DateTime :08/09/24 17:28
Spike Amount :10 PPB
CC/CV File :RHV147
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09
Date_Time :08/13/24 16:44

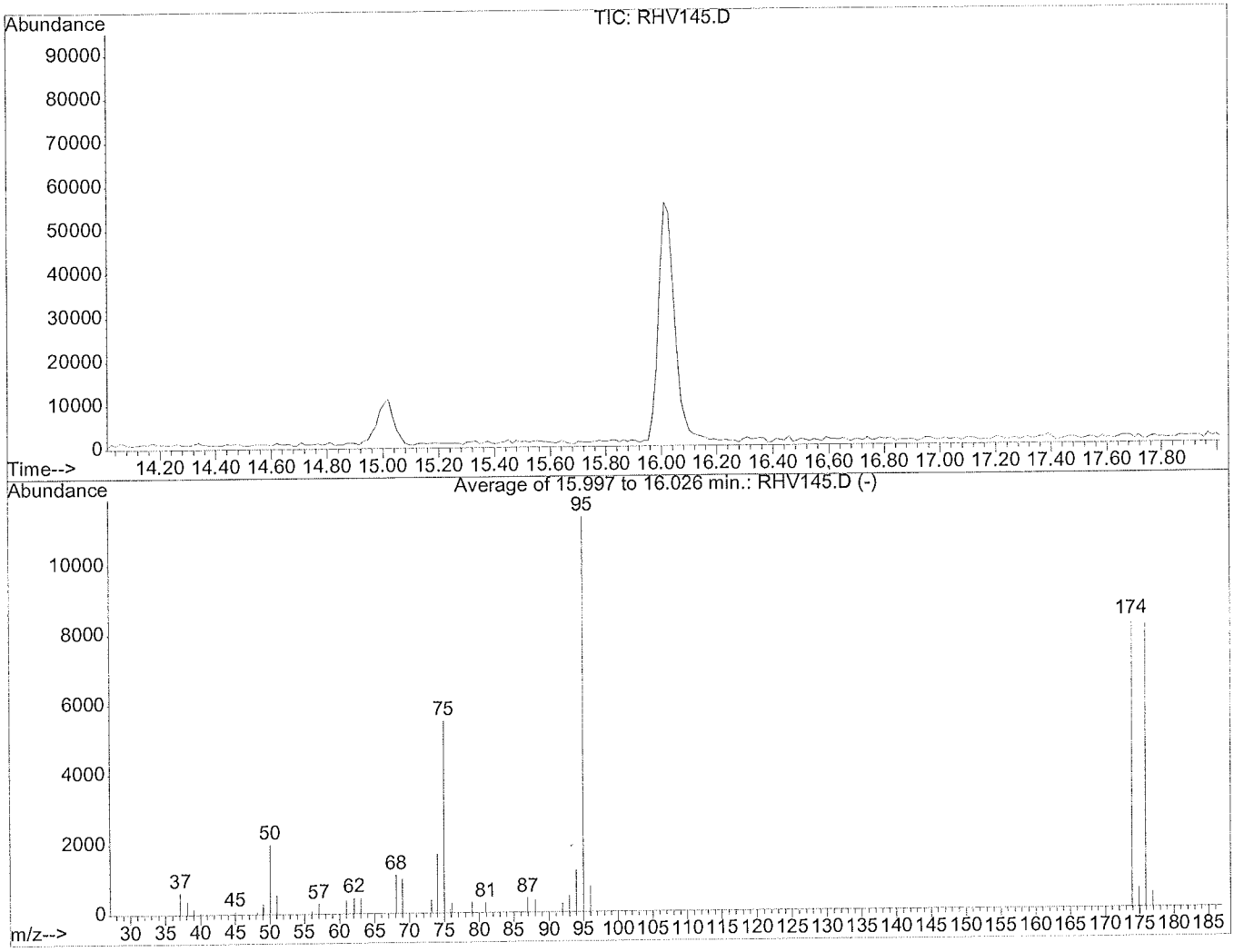
M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1270191	1	1	8.561	8.560	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane												
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane												
	6	Vinyl chloride												
	7	Bromomethane												
	8	Chloroethane	9.018	-9.8	187127	0.147	0.163	3.273	3.278	13.37				
	9	Dichlorofluoromethane												
	10	Trichlorofluoromethane												
5	11	Acrolein												
	12	1,1,2-Trichloro-1,2,2-trifluoroethane												
5	13	Acetone												
	14	1,1-Dichloroethene												
25	15	tert-Butyl alcohol												
	16	Iodomethane												
	17	Methyl acetate												
	18	Methylene chloride												
	19	Carbon disulfide												
5	20	Acrylonitrile												
	21	tert-Butyl methyl ether (MTBE)												
	22	trans-1,2-Dichloroethene												
	23	Isopropyl ether (DIPE)												
	24	Vinyl acetate												
	25	1,1-Dichloroethane												
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)												
5	28	2-Butanone												
	29	2,2-Dichloropropane												
	30	cis-1,2-Dichloroethene												
	31	Chloroform												
	32	Bromochloromethane												
	33	Tetrahydrofuran												
	34	Dibromofluoromethane	10.429	4.3	402823	0.317	0.304	7.243	7.243	13.19				
	35	1,1,1-Trichloroethane												
	36	Cyclohexane												
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene												
	39	Carbon tetrachloride												
	40	tert-Amyl methyl ether (TAME)												
	41	1,2-Dichloroethane-d4	9.454	-5.5	324659	0.256	0.270	7.969	7.979	10.30				
	42	Benzene												
	43	1,2-Dichloroethane												
	44	Trichloroethene												
	45	Methylcyclohexane												
	46	1,2-Dichloropropane												
	47	Bromodichloromethane												
20	48	1,4-Dioxane												
	49	Dibromomethane												
	50	2-Chloroethyl vinyl ether												
5	51	4-Methyl-2-pentanone												
	52	cis-1,3-Dichloropropene												
	53	CHLOROBENZENE-D5	10.000	0	1068412	1	1	13.716	13.726	0				
	54	Toluene-d8	10.902	9.0	1423776	1.333	1.222	11.035	11.038	8.56				
	55	Toluene												
	56	Ethyl methacrylate												
	57	trans-1,3-Dichloropropene												
	58	1,1,2-Trichloroethane												
5	59	2-Hexanone												
	60	1,3-Dichloropropane												
	61	Tetrachloroethene												
	62	Dibromochloromethane												
	63	1,2-Dibromoethane												
	64	1-Chlorohexane												
	65	Chlorobenzene												
	66	1,1,1,2-Tetrachloroethane												
	67	Ethylbenzene												
2	68	m-Xylene & p-Xylene												
	69	o-Xylene												
	70	Styrene												
	71	Isopropylbenzene												
	72	1,2-DICHLOROBENZENE-D4	10.000	0	439346	1	1	18.679	18.693	0				
	73	Bromoform												
	74	trans-1,4-Dichloro-2-butene												
	75	1,1,2,2-Tetrachloroethane												
	76	4-Bromofluorobenzene	9.531	-4.7	531274	1.209	1.269	16.013	16.020	9.24				
	77	1,2,3-Trichloropropane												
	78	n-Propylbenzene												
	79	Bromobenzene												
	80	1,3,5-Trimethylbenzene												
	81	2-Chlorotoluene												
	82	4-Chlorotoluene												
	83	tert-Butylbenzene												
	84	1,2,4-Trimethylbenzene												
	85	sec-Butylbenzene												
	86	p-Isopropyltoluene												
	87	1,3-Dichlorobenzene												
	88	1,2,3-Trimethylbenzene												
	89	1,4-Dichlorobenzene												
	90	n-Butylbenzene												
	91	1,2-Dichlorobenzene												
	92	1,2-Dibromo-3-chloropropane												
	93	1,2,4-Trichlorobenzene												
	94	Hexachlorobutadiene												
	95	Naphthalene												
	96	1,2,3-Trichlorobenzene												

Spike Amount = Nominal Amount * M

SW
9/16/24

Data File : D:\HPCHEM\1\DATA\24H13\RHV145.D
Acq On : 13 Aug 2024 3:24 pm
Sample : BFB01H10
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye
Inst : 01New
Multiplr: 1.00



AutoFind: Scans 979, 980, 981; Background Corrected with Scan 973

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	1990	PASS
75	95	30	60	48.6	5511	PASS
95	95	100	100	100.0	11328	PASS
96	95	5	9	6.4	727	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	72.6	8220	PASS
175	174	5	9	6.6	546	PASS
176	174	95	101	98.7	8115	PASS
177	176	5	9	5.7	460	PASS

RHV145.D VO01H09.M Fri Sep 06 16:25:53 2024 SV 9/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	132	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	0.000	100.0#	0	-2.24#
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	0.000	100.0#	0	-2.54#
6	C,T,M	Vinyl chloride	10.000	0.000	100.0#	0	-2.68#
7	T,M	Bromomethane	10.000	0.000	100.0#	0	-3.21#
8	T,M	Chloroethane	10.000	9.018	9.8	116	0.00
9	T,M	Dichlorofluoromethane	10.000	0.000	100.0#	0	-3.35#
10	T,M	Trichlorofluoromethane	10.000	0.000	100.0#	0	-3.48#
11	T,M	Acrolein	50.000	0.000	100.0#	0	-4.01#
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	0.000	100.0#	0	-4.15#
13	T,M	Acetone	50.000	-2.613	105.2#	0	-4.10#
14	C,T,M	1,1-Dichloroethene	10.000	0.000	100.0#	0	-4.25#
15	T,M	tert-Butyl alcohol	250.000	0.000	100.0#	0	-4.37#
16	T,M	Iodomethane	10.000	0.000	100.0#	0	-4.66#
17	T,M	Methyl acetate	10.000	0.000	100.0#	0	-4.68#
18	T,M	Methylene chloride	10.000	0.000	100.0#	0	-4.89#
19	T,M	Carbon disulfide	10.000	0.000	100.0#	0	-4.90#
20	T,M	Acrylonitrile	50.000	0.000	100.0#	0	-5.05#
21	T,M	tert-Butyl methyl ether (MT	10.000	0.000	100.0#	0	-5.09#
22	T,M	trans-1,2-Dichloroethene	10.000	0.000	100.0#	0	-5.27#
23	T,M	Isopropyl ether (DIPE)	10.000	0.000	100.0#	0	-5.69#
24	T,M	Vinyl acetate	10.000	0.000	100.0#	0	-5.85#
25	P,T,M	1,1-Dichloroethane	10.000	0.000	100.0#	0	-5.85#
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-6.17#
27	T,M	tert-Butyl ethyl ether (ETB	10.000	0.000	100.0#	0	-6.26#
28	T,M	2-Butanone	50.000	0.000	100.0#	0	-6.44#
29	T,M	2,2-Dichloropropane	10.000	0.000	100.0#	0	-6.65#
30	T,M	cis-1,2-Dichloroethene	10.000	0.000	100.0#	0	-6.71#
31	C,T,M	Chloroform	10.000	0.000	100.0#	0	-6.93#
32	T,M	Bromochloromethane	10.000	0.000	100.0#	0	-7.17#
33	T,M	Tetrahydrofuran	10.000	0.000	100.0#	0	-7.21#
34	S	Dibromofluoromethane	10.000	10.429	-4.3	127	0.00
35	T,M	1,1,1-Trichloroethane	10.000	0.000	100.0#	0	-7.51#
36	T,M	Cyclohexane	10.000	0.000	100.0#	0	-7.54#
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-7.55#
38	T,M	1,1-Dichloropropene	10.000	0.000	100.0#	0	-7.73#
39	T,M	Carbon tetrachloride	10.000	0.000	100.0#	0	-7.89#
40	T,M	tert-Amyl methyl ether (TAM	10.000	0.000	100.0#	0	-7.91#
41	S	1,2-Dichloroethane-d4	10.000	9.454	5.5	113	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	0.000	100.0#	0	-8.15#
43	T,M	1,2-Dichloroethane	10.000	0.000	100.0#	0	-8.12#
44	T,M	Trichloroethene	10.000	0.000	100.0#	0	-9.08#
45	T,M	Methylcyclohexane	10.000	0.000	100.0#	0	-9.18#
46	C,T,M	1,2-Dichloropropane	10.000	0.000	100.0#	0	-9.36#
47	T,M	Bromodichloromethane	10.000	0.000	100.0#	0	-9.74#
48	T,M	1,4-Dioxane	200.000	0.000	100.0#	0	-9.78#
49	T,M	Dibromomethane	10.000	0.000	100.0#	0	-9.83#
50	T,M	2-Chloroethyl vinyl ether	10.000	0.000	100.0#	0	-10.23#
51	T,M	4-Methyl-2-pentanone	50.000	0.000	100.0#	0	-10.28#
52	T,M	cis-1,3-Dichloropropene	10.000	0.000	100.0#	0	-10.63#
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	128	-0.01
54	S	Toluene-d8	10.000	10.903	-9.0	131	0.00
55	C,T,M	Toluene	10.000	0.000	100.0#	0	-11.17#
56	T,M	Ethyl methacrylate	10.000	0.000	100.0#	0	-11.46#
57	T,M	trans-1,3-Dichloropropene	10.000	0.000	100.0#	0	-11.48#
58	T,M	1,1,2-Trichloroethane	10.000	0.000	100.0#	0	-11.76#
59	T,M	2-Hexanone	50.000	2.471	95.1#	0	-11.76#
60	T,M	1,3-Dichloropropane	10.000	0.000	100.0#	0	-12.20#
61	T,M	Tetrachloroethene	10.000	0.000	100.0#	0	-12.31#
62	T,M	Dibromochloromethane	10.000	0.000	100.0#	0	-12.68#
63	T,M	1,2-Dibromoethane	10.000	0.000	100.0#	0	-13.03#
64	T,M	1-Chlorohexane	10.000	0.000	100.0#	0	-13.32#
65	P,M	Chlorobenzene	10.000	0.000	100.0#	0	-13.79#
66	T,M	1,1,1,2-Tetrachloroethane	10.000	0.000	100.0#	0	-13.86#
67	C,T,M	Ethylbenzene	10.000	0.000	100.0#	0	-13.89#
68	T,M	m-Xylene & p-Xylene	20.000	0.000	100.0#	0	-14.03#
69	T,M	o-Xylene	10.000	0.000	100.0#	0	-14.84#
70	T,M	Styrene	10.000	0.000	100.0#	0	-14.92#
71	T,M	Isopropylbenzene	10.000	0.000	100.0#	0	-15.52#
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	137	-0.01
73	P,T,M	Bromoform	10.000	0.000	100.0#	0	-15.57#
74	T,M	trans-1,4-Dichloro-2-butene	10.000	0.000	100.0#	0	-15.63#
75	T,M	1,1,2,2-Tetrachloroethane	10.000	0.000	100.0#	0	-15.86#
76	S	4-Bromofluorobenzene	10.000	9.531	4.7	131	0.00
77	T,M	1,2,3-Trichloropropane	10.000	0.000	100.0#	0	-16.16#
78	T,M	n-Propylbenzene	10.000	0.000	100.0#	0	-16.31#
79	T,M	Bromobenzene	10.000	0.000	100.0#	0	-16.40#
80	T,M	1,3,5-Trimethylbenzene	10.000	0.000	100.0#	0	-16.60#

(#) = Out of Range

9/16/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D
Acq On : 13 Aug 2024 4:44 pm
Sample : IVO01H0902 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 3
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	0.000	100.0#	0	-16.65#
82	T,M	4-Chlorotoluene	10.000	0.000	100.0#	0	-16.74#
83	T,M	tert-Butylbenzene	10.000	0.000	100.0#	0	-17.30#
84	T,M	1,2,4-Trimethylbenzene	10.000	0.000	100.0#	0	-17.36#
85	T,M	sec-Butylbenzene	10.000	0.000	100.0#	0	-17.66#
86	T,M	p-Isopropyltoluene	10.000	0.000	100.0#	0	-17.88#
87	T,M	1,3-Dichlorobenzene	10.000	0.000	100.0#	0	-18.04#
88	T,M	1,2,3-Trimethylbenzene	10.000	0.000	100.0#	0	-18.15#
89	T,M	1,4-Dichlorobenzene	10.000	0.000	100.0#	0	-18.19#
90	T,M	n-Butylbenzene	10.000	0.000	100.0#	0	-18.50#
91	T,M	1,2-Dichlorobenzene	10.000	0.000	100.0#	0	-18.72#
92	T,M	1,2-Dibromo-3-chloropropane	10.000	0.000	100.0#	0	-19.72#
93	T,M	1,2,4-Trichlorobenzene	10.000	0.000	100.0#	0	-20.81#
94	T,M	Hexachlorobutadiene	10.000	0.000	100.0#	0	-20.99#
95	T,M	Naphthalene	10.000	0.000	100.0#	0	-21.17#
96	T,M	1,2,3-Trichlorobenzene	10.000	0.000	100.0#	0	-21.48#

S 9/6/24

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	132	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.000	100.0#	0#	-2.24#
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.000#	100.0#	0#	-2.54#
6	C,T,M	Vinyl chloride	0.210	0.000	100.0#	0#	-2.68#
7	T,M	Bromomethane	0.186	0.000	100.0#	0#	-3.21#
8	T,M	Chloroethane	0.163	0.147	9.8	116	0.00
9	T,M	Dichlorofluoromethane	0.360	0.000	100.0#	0#	-3.35#
10	T,M	Trichlorofluoromethane	0.478	0.000	100.0#	0#	-3.48#
11	T,M	Acrolein	0.010	0.000	100.0#	0#	-4.01#
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.000	100.0#	0#	-4.15#
13	T,M	Acetone	0.048	0.000	100.0#	0#	-4.10#
14	C,T,M	1,1-Dichloroethene	0.484	0.000	100.0#	0#	-4.25#
15	T,M	tert-Butyl alcohol	0.013	0.000	100.0#	0#	-4.37#
16	T,M	Iodomethane	0.437	0.000	100.0#	0#	-4.66#
17	T,M	Methyl acetate	0.103	0.000	100.0#	0#	-4.68#
18	T,M	Methylene chloride	0.336	0.000	100.0#	0#	-4.89#
19	T,M	Carbon disulfide	0.838	0.000	100.0#	0#	-4.90#
20	T,M	Acrylonitrile	0.040	0.000	100.0#	0#	-5.05#
21	T,M	tert-Butyl methyl ether (MT	0.550	0.000	100.0#	0#	-5.09#
22	T,M	trans-1,2-Dichloroethene	0.441	0.000	100.0#	0#	-5.27#
23	T,M	Isopropyl ether (DIPE)	0.880	0.000	100.0#	0#	-5.69#
24	T,M	Vinyl acetate	0.321	0.000	100.0#	0#	-5.85#
25	P,T,M	1,1-Dichloroethane	0.540	0.000#	100.0#	0#	-5.85#
26	T,M	2-Butanol	0.000	0.000	0.0	0#	-6.17#
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.000	100.0#	0#	-6.26#
28	T,M	2-Butanone	0.066	0.000	100.0#	0#	-6.44#
29	T,M	2,2-Dichloropropane	0.538	0.000	100.0#	0#	-6.65#
30	T,M	cis-1,2-Dichloroethene	0.340	0.000	100.0#	0#	-6.71#
31	C,T,M	Chloroform	0.608	0.000	100.0#	0#	-6.93#
32	T,M	Bromochloromethane	0.206	0.000	100.0#	0#	-7.17#
33	T,M	Tetrahydrofuran	0.037	0.000	100.0#	0#	-7.21#
34	S	Dibromofluoromethane	0.304	0.317	-4.3	127	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.000	100.0#	0#	-7.51#
36	T,M	Cyclohexane	0.432	0.000	100.0#	0#	-7.54#
37	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	-7.55#
38	T,M	1,1-Dichloropropene	0.164	0.000	100.0#	0#	-7.73#
39	T,M	Carbon tetrachloride	0.499	0.000	100.0#	0#	-7.89#
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.000	100.0#	0#	-7.91#
41	S	1,2-Dichloroethane-d4	0.270	0.256	5.2	113	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	0.000	100.0#	0#	-8.15#
43	T,M	1,2-Dichloroethane	0.344	0.000	100.0#	0#	-8.12#
44	T,M	Trichloroethene	0.350	0.000	100.0#	0#	-9.08#
45	T,M	Methylcyclohexane	0.482	0.000	100.0#	0#	-9.18#
46	C,T,M	1,2-Dichloropropane	0.251	0.000	100.0#	0#	-9.36#
47	T,M	Bromodichloromethane	0.439	0.000	100.0#	0#	-9.74#
48	T,M	1,4-Dioxane	0.001	0.000	100.0#	0#	-9.78#
49	T,M	Dibromomethane	0.140	0.000	100.0#	0#	-9.83#
50	T,M	2-Chloroethyl vinyl ether	0.079	0.000	100.0#	0#	-10.23#
51	T,M	4-Methyl-2-pentanone	0.150	0.000	100.0#	0#	-10.28#
52	T,M	cis-1,3-Dichloropropene	0.444	0.000	100.0#	0#	-10.63#
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	128	-0.01
54	S	Toluene-d8	1.222	1.333	-9.1	131	0.00
55	C,T,M	Toluene	1.498	0.000	100.0#	0#	-11.17#
56	T,M	Ethyl methacrylate	0.253	0.000	100.0#	0#	-11.46#
57	T,M	trans-1,3-Dichloropropene	0.435	0.000	100.0#	0#	-11.48#
58	T,M	1,1,2-Trichloroethane	0.219	0.000	100.0#	0#	-11.76#
59	T,M	2-Hexanone	0.111	0.000	100.0#	0#	-11.76#
60	T,M	1,3-Dichloropropane	0.391	0.000	100.0#	0#	-12.20#
61	T,M	Tetrachloroethene	0.340	0.000	100.0#	0#	-12.31#
62	T,M	Dibromochloromethane	0.290	0.000	100.0#	0#	-12.68#
63	T,M	1,2-Dibromoethane	0.221	0.000	100.0#	0#	-13.03#
64	T,M	1-Chlorohexane	0.695	0.000	100.0#	0#	-13.32#
65	P,M	Chlorobenzene	1.030	0.000#	100.0#	0#	-13.79#
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.000	100.0#	0#	-13.86#
67	C,T,M	Ethylbenzene	1.876	0.000	100.0#	0#	-13.89#
68	T,M	m-Xylene & p-Xylene	1.481	0.000	100.0#	0#	-14.03#
69	T,M	o-Xylene	1.428	0.000	100.0#	0#	-14.84#
70	T,M	Styrene	1.045	0.000	100.0#	0#	-14.92#
71	T,M	Isopropylbenzene	1.956	0.000	100.0#	0#	-15.52#
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	137	-0.01
73	P,T,M	Bromoform	0.367	0.000#	100.0#	0#	-15.57#
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.000	100.0#	0#	-15.63#
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.000	100.0#	0#	-15.86#
76	S	4-Bromofluorobenzene	1.269	1.209	4.7	131	0.00
77	T,M	1,2,3-Trichloropropane	0.220	0.000	100.0#	0#	-16.16#
78	T,M	n-Propylbenzene	6.357	0.000	100.0#	0#	-16.31#
79	T,M	Bromobenzene	0.963	0.000	100.0#	0#	-16.40#
80	T,M	1,3,5-Trimethylbenzene	4.198	0.000	100.0#	0#	-16.60#

(#) = Out of Range

09/6/24

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	0.000	100.0#	0#	-16.65#
82	T,M	4-Chlorotoluene	3.565	0.000	100.0#	0#	-16.74#
83	T,M	tert-Butylbenzene	0.928	0.000	100.0#	0#	-17.30#
84	T,M	1,2,4-Trimethylbenzene	4.010	0.000	100.0#	0#	-17.36#
85	T,M	sec-Butylbenzene	5.662	0.000	100.0#	0#	-17.66#
86	T,M	p-Isopropyltoluene	4.820	0.000	100.0#	0#	-17.88#
87	T,M	1,3-Dichlorobenzene	1.994	0.000	100.0#	0#	-18.04#
88	T,M	1,2,3-Trimethylbenzene	3.890	0.000	100.0#	0#	-18.15#
89	T,M	1,4-Dichlorobenzene	1.928	0.000	100.0#	0#	-18.19#
90	T,M	n-Butylbenzene	4.412	0.000	100.0#	0#	-18.50#
91	T,M	1,2-Dichlorobenzene	1.642	0.000	100.0#	0#	-18.72#
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.000	100.0#	0#	-19.72#
93	T,M	1,2,4-Trichlorobenzene	1.116	0.000	100.0#	0#	-20.81#
94	T,M	Hexachlorobutadiene	0.732	0.000	100.0#	0#	-20.99#
95	T,M	Naphthalene	1.591	0.000	100.0#	0#	-21.17#
96	T,M	1,2,3-Trichlorobenzene	0.853	0.000	100.0#	0#	-21.48#

SC 09/6/24

(#) = Out of Range SPCC's out = 4 CCC's out = 6

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 6 16:06 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

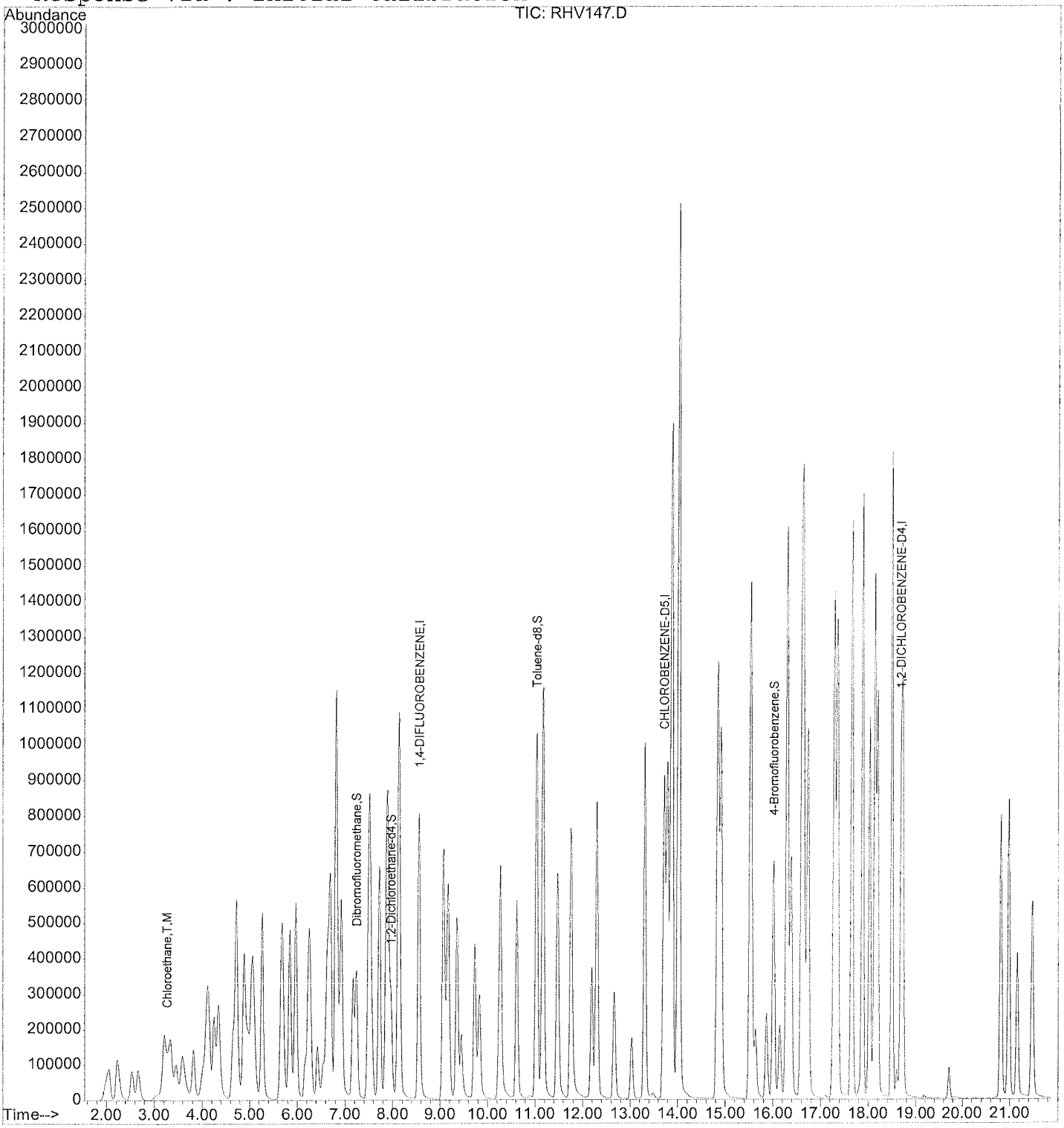
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1270191	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1068412	10.00	ug/l	-0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	439346	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	402823	10.43	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.30%			
41) 1,2-Dichloroethane-d4	7.97	65	324659	9.45	ug/l	-0.01
Spiked Amount 10.000			Recovery = 94.50%			
54) Toluene-d8	11.03	98	1423776	10.90	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.00%			
76) 4-Bromofluorobenzene	16.01	95	531274	9.53	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.30%			
Target Compounds						Qvalue
8) Chloroethane	3.27	64	187127	9.02	ug/l	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 6 16:06 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



DAILY CALIBRATIONS

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc.
Project : VA SALT LAKE CITY
Lab Code : EMAX
SDG No : 24I077
Lab File ID: RIV657
BFB Injection Date: 09/26/24
Instrument ID: 01
BFB Injection Time: 06:39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	16.889
75	30 - 60% of mass 95	48.473
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.951
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	86.627
175	5 - 9% of mass 174	5.901(6.81)1
176	95 - 101% % of mass 174	83.801(96.74)1
177	5 - 9% % of mass 176	5.263(6.28)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CV001H0940	RIV658	09/26/24	07:08
2	LCS1W	V001I25L	RIV659	09/26/24	07:37
3	LCD1W	V001I25C	RIV660	09/26/24	08:06
4	MBLK1W	V001I25B	RIV662	09/26/24	09:04
5	TB05-GW091324	24I077-05	RIV665	09/26/24	10:32
6	MW23C-GW091224	24I077-03	RIV673	09/26/24	14:32

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RHV134
Instrument ID: 01

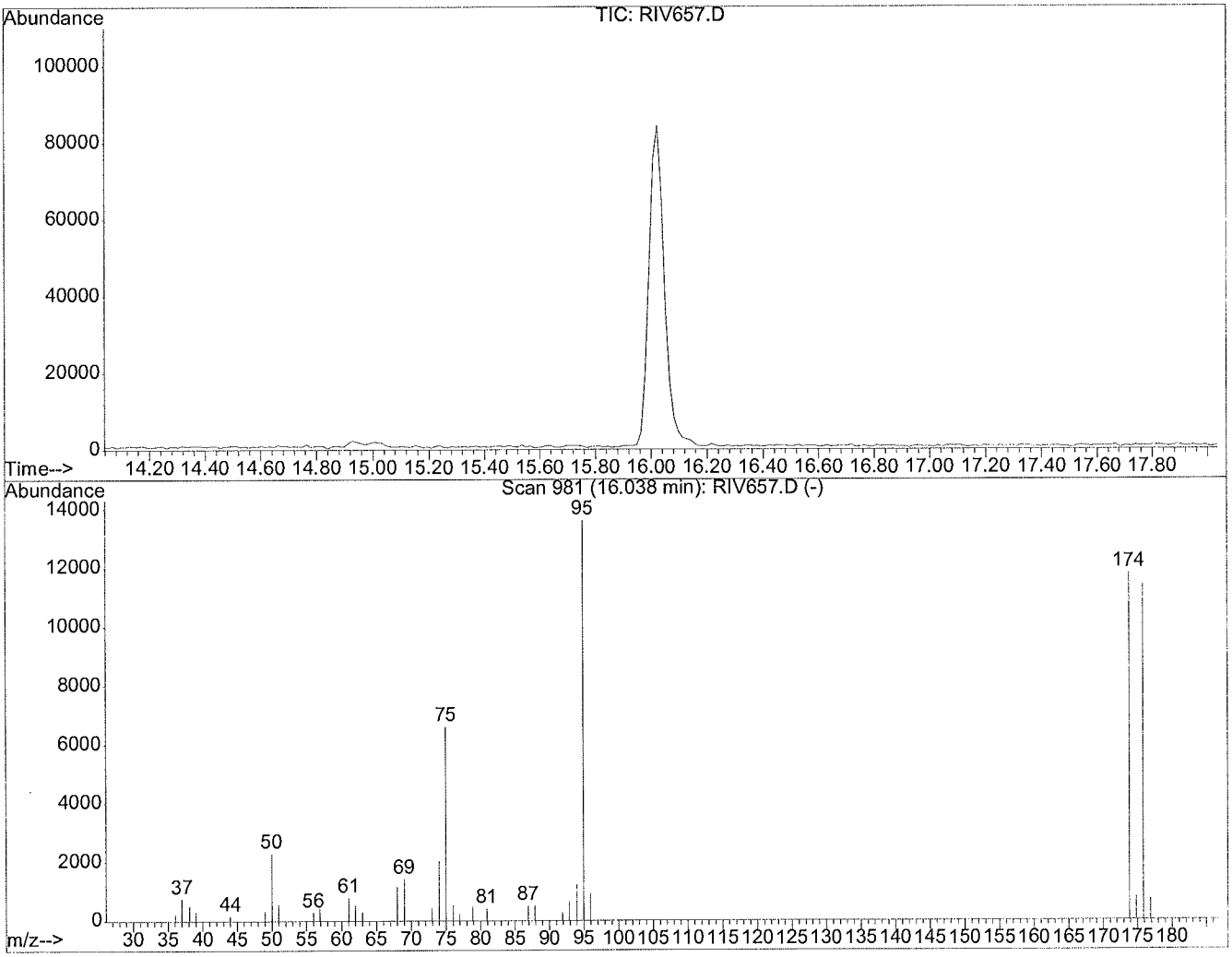
Project: VA SALT LAKE CITY
SDG No: 24I077
Date Analyzed: 08/09/24
Time Analyzed: 20:17

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	962079	8.56	831588	13.73	320498	18.69
	UPPER LIMIT	1924158	8.73	1663176	13.90	640996	18.86
	LOWER LIMIT	481040	8.39	415794	13.56	160249	18.52
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	804365	8.56	688576	13.71	374513	18.69
2	LCS1W	909812	8.56	754115	13.71	396770	18.69
3	LCD1W	911963	8.56	755903	13.71	413304	18.69
4	M8LK1W	943303	8.56	775446	13.71	378369	18.69
5	T805-GW091324	829479	8.56	710727	13.71	355939	18.67
6	MW23C-GW091224	722810	8.56	616812	13.71	309986	18.69

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data File : D:\HPCHEM\1\DATA\24I25\RIV657.D
Acq On : 26 Sep 2024 6:39 am
Sample : BFB01I25
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 2
Operator: DNguye/CLi
Inst : 01
Multiplr: 1.00



Spectrum Information: Scan 981 -scan 972 & 10/3/24

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.9	2301	PASS
75	95	30	60	48.5	6604	PASS
95	95	100	100	100.0	13624	PASS
96	95	5	9	7.0	947	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	86.6	11802	PASS
175	174	5	9	6.8	804	PASS
176	174	95	101	96.7	11417	PASS
177	176	5	9	6.3	717	PASS

RIV657.D VO01H09.M Thu Oct 03 12:30:54 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV658.D Vial: 3
Acq On : 26 Sep 2024 7:08 am Operator: DNguye/CLingl
Sample : CVO01H0940 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	84	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	9.713	2.9	70	0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	10.393	-3.9	81	0.03
6	C,T,M	Vinyl chloride	10.000	11.035	-10.4	81	0.03
7	T,M	Bromomethane	10.000	10.261	-2.6	84	0.03
8	T,M	Chloroethane	10.000	12.406	-24.1#	101	-0.01
9	T,M	Dichlorofluoromethane	10.000	12.710	-27.1#	105	0.02
10	T,M	Trichlorofluoromethane	10.000	8.644	13.6	63	0.15
11	T,M	Acrolein	50.000	26.521	47.0#	46	0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.551	-15.5	93	0.00
13	T,M	Acetone	50.000	54.364	-8.7	91	0.00
14	C,T,M	1,1-Dichloroethene	10.000	9.606	3.9	78	0.02
15	T,M	tert-Butyl alcohol	250.000	289.360	-15.7	93	0.02
16	T,M	Iodomethane	10.000	11.422	-14.2	91	0.00
17	T,M	Methyl acetate	10.000	11.367	-13.7	96	0.02
18	T,M	Methylene chloride	10.000	12.028	-20.3#	102	0.00
19	T,M	Carbon disulfide	10.000	12.814	-28.1#	101	0.02
20	T,M	Acrylonitrile	50.000	62.140	-24.3#	106	0.02
21	T,M	tert-Butyl methyl ether (MT	10.000	13.459	-34.6#	109	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.696	-7.0	87	0.02
23	T,M	Isopropyl ether (DIPE)	10.000	13.941	-39.4#	115	0.00
24	T,M	Vinyl acetate	10.000	7.145	28.6#	57	0.02
25	P,T,M	1,1-Dichloroethane	10.000	12.609	-26.1#	105	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	0.02
27	T,M	tert-Butyl ethyl ether (ETB	10.000	12.884	-28.8#	104	0.00
28	T,M	2-Butanone	50.000	58.684	-17.4	102	0.00
29	T,M	2,2-Dichloropropane	10.000	9.624	3.8	77	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	12.335	-23.4#	100	0.00
31	C,T,M	Chloroform	10.000	12.546	-25.5#	103	0.00
32	T,M	Bromochloromethane	10.000	12.494	-24.9#	103	0.00
33	T,M	Tetrahydrofuran	10.000	10.642	-6.4	98	0.01
34	S	Dibromofluoromethane	10.000	10.526	-5.3	81	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.443	-4.4	82	0.00
36	T,M	Cyclohexane	10.000	11.250	-12.5	90	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.01
38	T,M	1,1-Dichloropropene	10.000	9.267	7.3	77	0.01
39	T,M	Carbon tetrachloride	10.000	9.113	8.9	71	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	14.011	-40.1#	114	0.00
41	S	1,2-Dichloroethane-d4	10.000	10.799	-8.0	82	0.00

(#) = Out of Range
RIV658.D VO01H09.M Thu Oct 03 12:31:02 2024 Page 1

Data File : D:\HPCHEM\1\DATA\24I25\RIV658.D Vial: 3
Acq On : 26 Sep 2024 7:08 am Operator: DNguye/CLingl
Sample : CVO01H0940 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	13.020	-30.2#	104	0.00
43	T,M	1,2-Dichloroethane	10.000	11.542	-15.4	87	0.00
44	T,M	Trichloroethene	10.000	11.175	-11.8	91	0.00
45	T,M	Methylcyclohexane	10.000	11.198	-12.0	89	-0.02
46	C,T,M	1,2-Dichloropropane	10.000	13.871	-38.7#	112	0.00
47	T,M	Bromodichloromethane	10.000	12.776	-27.8#	106	-0.02
48	T,M	1,4-Dioxane	200.000	220.775	-10.4	91	0.01
49	T,M	Dibromomethane	10.000	12.061	-20.6#	98	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	5.363	46.4#	46	0.00
51	T,M	4-Methyl-2-pentanone	50.000	63.837	-27.7#	98	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	12.899	-29.0#	102	-0.02
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	83	-0.02
54	S	Toluene-d8	10.000	10.676	-6.8	83	0.00
55	C,T,M	Toluene	10.000	12.514	-25.1#	99	0.00
56	T,M	Ethyl methacrylate	10.000	14.690	-46.9#	114	-0.02
57	T,M	trans-1,3-Dichloropropene	10.000	12.465	-24.6#	96	0.00
58	T,M	1,1,2-Trichloroethane	10.000	13.457	-34.6#	110	-0.02
59	T,M	2-Hexanone	50.000	59.133	-18.3	97	0.00
60	T,M	1,3-Dichloropropane	10.000	14.029	-40.3#	113	-0.02
61	T,M	Tetrachloroethene	10.000	10.703	-7.0	90	0.00
62	T,M	Dibromochloromethane	10.000	13.000	-30.0#	104	-0.02
63	T,M	1,2-Dibromoethane	10.000	12.106	-21.1#	100	0.00
64	T,M	1-Chlorohexane	10.000	10.311	-3.1	86	0.00
65	P,M	Chlorobenzene	10.000	11.551	-15.5	92	0.00
66	T,M	1,1,1,2-Tetrachloroethane	10.000	13.127	-31.3#	102	0.00
67	C,T,M	Ethylbenzene	10.000	11.825	-18.2	93	-0.02
68	T,M	m-Xylene & p-Xylene	20.000	22.531	-12.7	91	0.00
69	T,M	o-Xylene	10.000	12.665	-26.6#	97	0.00
70	T,M	Styrene	10.000	12.405	-24.0#	98	0.00
71	T,M	Isopropylbenzene	10.000	11.375	-13.8	90	0.00
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	117	0.00
73	P,T,M	Bromoform	10.000	9.200	8.0	105	-0.02
74	T,M	trans-1,4-Dichloro-2-butene	10.000	6.596	34.0#	77	0.00
75	T,M	1,1,2,2-Tetrachloroethane	10.000	10.248	-2.5	118	0.00
76	S	4-Bromofluorobenzene	10.000	8.830	11.7	103	0.00
77	T,M	1,2,3-Trichloropropane	10.000	8.126	18.7	99	-0.02
78	T,M	n-Propylbenzene	10.000	7.976	20.2#	93	-0.02
79	T,M	Bromobenzene	10.000	9.385	6.2	113	-0.02
80	T,M	1,3,5-Trimethylbenzene	10.000	7.485	25.1#	90	0.00

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24I25\RIV658.D Vial: 3
Acq On : 26 Sep 2024 7:08 am Operator: DNguye/CLingl
Sample : CVO01H0940 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	8.238	17.6	98	0.00
82	T,M	4-Chlorotoluene	10.000	8.036	19.6	95	0.00
83	T,M	tert-Butylbenzene	10.000	8.306	16.9	102	-0.02
84	T,M	1,2,4-Trimethylbenzene	10.000	7.593	24.1#	88	0.00
85	T,M	sec-Butylbenzene	10.000	7.890	21.1#	91	0.00
86	T,M	p-Isopropyltoluene	10.000	7.580	24.2#	87	0.00
87	T,M	1,3-Dichlorobenzene	10.000	9.566	4.3	114	-0.02
88	T,M	1,2,3-Trimethylbenzene	10.000	8.471	15.3	96	-0.02
89	T,M	1,4-Dichlorobenzene	10.000	9.477	5.2	113	0.00
90	T,M	n-Butylbenzene	10.000	7.664	23.4#	87	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.719	2.8	113	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.376	-3.8	112	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	8.261	17.4	96	0.00
94	T,M	Hexachlorobutadiene	10.000	7.164	28.4#	82	0.00
95	T,M	Naphthalene	10.000	8.028	19.7	90	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	8.274	17.3	94	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV658.D Vial: 3
Acq On : 26 Sep 2024 7:08 am Operator: DNguye/CLingl
Sample : CVO01H0940 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	84	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.320	2.7	70	0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.248	-3.8	81	0.03
6	C,T,M	Vinyl chloride	0.210	0.232	-10.5	81	0.03
7	T,M	Bromomethane	0.186	0.191	-2.7	84	0.03
8	T,M	Chloroethane	0.163	0.203	-24.5#	101	-0.01
9	T,M	Dichlorofluoromethane	0.360	0.458	-27.2#	105	0.02
10	T,M	Trichlorofluoromethane	0.478	0.413	13.6	63	0.15
11	T,M	Acrolein	0.010	0.005	50.0#	46#	0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.226	-15.3	93	0.00
13	T,M	Acetone	0.048	0.049	-2.1	91	0.00
14	C,T,M	1,1-Dichloroethene	0.484	0.465	3.9	78	0.02
15	T,M	tert-Butyl alcohol	0.013	0.016	-23.1#	93	0.02
16	T,M	Iodomethane	0.437	0.500	-14.4	91	0.00
17	T,M	Methyl acetate	0.103	0.118	-14.6	96	0.02
18	T,M	Methylene chloride	0.336	0.405	-20.5#	102	0.00
19	T,M	Carbon disulfide	0.838	1.073	-28.0#	101	0.02
20	T,M	Acrylonitrile	0.040	0.049	-22.5#	106	0.02
21	T,M	tert-Butyl methyl ether (MT	0.550	0.741	-34.7#	109	0.00
22	T,M	trans-1,2-Dichloroethene	0.441	0.471	-6.8	87	0.02
23	T,M	Isopropyl ether (DIPE)	0.880	1.227	-39.4#	115	0.00
24	T,M	Vinyl acetate	0.321	0.230	28.3#	57	0.02
25	P,T,M	1,1-Dichloroethane	0.540	0.681	-26.1#	105	0.00
26	T,M	2-Butanol	0.000	0.009	0.0	0#	0.02
27	T,M	tert-Butyl ethyl ether (ETB	0.813	1.048	-28.9#	104	0.00
28	T,M	2-Butanone	0.066	0.077	-16.7	102	0.00
29	T,M	2,2-Dichloropropane	0.538	0.518	3.7	77	0.00
30	T,M	cis-1,2-Dichloroethene	0.340	0.419	-23.2#	100	0.00
31	C,T,M	Chloroform	0.608	0.763	-25.5#	103	0.00
32	T,M	Bromochloromethane	0.206	0.258	-25.2#	103	0.00
33	T,M	Tetrahydrofuran	0.037	0.039	-5.4	98	0.01
34	S	Dibromofluoromethane	0.304	0.320	-5.3	81	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.627	-4.5	82	0.00
36	T,M	Cyclohexane	0.432	0.486	-12.5	90	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.020	0.0	0#	-0.01
38	T,M	1,1-Dichloropropene	0.164	0.152	7.3	77	0.01
39	T,M	Carbon tetrachloride	0.499	0.455	8.8	71	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.838	-40.1#	114	0.00
41	S	1,2-Dichloroethane-d4	0.270	0.292	-8.1	82	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I25\RIV658.D Vial: 3
Acq On : 26 Sep 2024 7:08 am Operator: DNguye/CLingl
Sample : CVO01H0940 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	1.434	-30.2#	104	0.00
43	T,M	1,2-Dichloroethane	0.344	0.397	-15.4	87	0.00
44	T,M	Trichloroethene	0.350	0.392	-12.0	91	0.00
45	T,M	Methylcyclohexane	0.482	0.540	-12.0	89	-0.02
46	C,T,M	1,2-Dichloropropane	0.251	0.349	-39.0#	112	0.00
47	T,M	Bromodichloromethane	0.439	0.560	-27.6#	106	-0.02
48	T,M	1,4-Dioxane	0.001	0.001	0.0	91	0.01
49	T,M	Dibromomethane	0.140	0.169	-20.7#	98	0.00
50	T,M	2-Chloroethyl vinyl ether	0.079	0.042	46.8#	46#	0.00
51	T,M	4-Methyl-2-pentanone	0.150	0.192	-28.0#	98	0.00
52	T,M	cis-1,3-Dichloropropene	0.444	0.573	-29.1#	102	-0.02
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	83	-0.02
54	S	Toluene-d8	1.222	1.305	-6.8	83	0.00
55	C,T,M	Toluene	1.498	1.875	-25.2#	99	0.00
56	T,M	Ethyl methacrylate	0.253	0.371	-46.6#	114	-0.02
57	T,M	trans-1,3-Dichloropropene	0.435	0.542	-24.6#	96	0.00
58	T,M	1,1,2-Trichloroethane	0.219	0.295	-34.7#	110	-0.02
59	T,M	2-Hexanone	0.111	0.143	-28.8#	97	0.00
60	T,M	1,3-Dichloropropane	0.391	0.548	-40.2#	113	-0.02
61	T,M	Tetrachloroethene	0.340	0.364	-7.1	90	0.00
62	T,M	Dibromochloromethane	0.290	0.377	-30.0#	104	-0.02
63	T,M	1,2-Dibromoethane	0.221	0.268	-21.3#	100	0.00
64	T,M	1-Chlorohexane	0.695	0.717	-3.2	86	0.00
65	P,M	Chlorobenzene	1.030	1.190	-15.5	92	0.00
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.451	-31.1#	102	0.00
67	C,T,M	Ethylbenzene	1.876	2.218	-18.2	93	-0.02
68	T,M	m-Xylene & p-Xylene	1.481	1.668	-12.6	91	0.00
69	T,M	o-Xylene	1.428	1.808	-26.6#	97	0.00
70	T,M	Styrene	1.045	1.296	-24.0#	98	0.00
71	T,M	Isopropylbenzene	1.956	2.225	-13.8	90	0.00
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	117	0.00
73	P,T,M	Bromoform	0.367	0.338	7.9	105	-0.02
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.147	34.1#	77	0.00
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.612	-2.5	118	0.00
76	S	4-Bromofluorobenzene	1.269	1.120	11.7	103	0.00
77	T,M	1,2,3-Trichloropropane	0.220	0.179	18.6	99	-0.02
78	T,M	n-Propylbenzene	6.357	5.070	20.2#	93	-0.02
79	T,M	Bromobenzene	0.963	0.904	6.1	113	-0.02
80	T,M	1,3,5-Trimethylbenzene	4.198	3.142	25.2#	90	0.00

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24I25\RIV658.D Vial: 3
Acq On : 26 Sep 2024 7:08 am Operator: DNguye/CLingl
Sample : CVO01H0940 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	3.438	17.6	98	0.00
82	T,M	4-Chlorotoluene	3.565	2.865	19.6	95	0.00
83	T,M	tert-Butylbenzene	0.928	0.771	16.9	102	-0.02
84	T,M	1,2,4-Trimethylbenzene	4.010	3.045	24.1#	88	0.00
85	T,M	sec-Butylbenzene	5.662	4.467	21.1#	91	0.00
86	T,M	p-Isopropyltoluene	4.820	3.653	24.2#	87	0.00
87	T,M	1,3-Dichlorobenzene	1.994	1.907	4.4	114	-0.02
88	T,M	1,2,3-Trimethylbenzene	3.890	3.296	15.3	96	-0.02
89	T,M	1,4-Dichlorobenzene	1.928	1.827	5.2	113	0.00
90	T,M	n-Butylbenzene	4.412	3.382	23.3#	87	0.00
91	T,M	1,2-Dichlorobenzene	1.642	1.596	2.8	113	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.096	-3.2	112	0.00
93	T,M	1,2,4-Trichlorobenzene	1.116	0.922	17.4	96	0.00
94	T,M	Hexachlorobutadiene	0.732	0.525	28.3#	82	0.00
95	T,M	Naphthalene	1.591	1.277	19.7	90	0.00
96	T,M	1,2,3-Trichlorobenzene	0.853	0.705	17.4	94	0.00

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV658.D Vial: 3
Acq On : 26 Sep 2024 7:08 am Operator: DNguye/CLingl
Sample : CVO01H0940 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 7:30 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	804365	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	688576	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	374513	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	257454	10.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.30%		
41) 1,2-Dichloroethane-d4	7.98	65	234841	10.80	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.00%		
54) Toluene-d8	11.03	98	898484	10.68	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.80%		
76) 4-Bromofluorobenzene	16.01	95	419547	8.83	ug/l	0.00
Spiked Amount 10.000			Recovery =	88.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	257112	9.71	ug/l	97
5) Chloromethane	2.57	50	199419	10.39	ug/l	100
6) Vinyl chloride	2.71	62	186776	11.04	ug/l	100
7) Bromomethane	3.24	94	153800	10.26	ug/l	92
8) Chloroethane	3.26	64	163014	12.41	ug/l	75
9) Dichlorofluoromethane	3.36	67	368362	12.71	ug/l	91
10) Trichlorofluoromethane	3.63	101	332517	8.64	ug/l	99
11) Acrolein	4.03	56	21498	26.52	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	181999	11.55	ug/l	97
13) Acetone	4.10	43	195391	54.36	ug/l	89
14) 1,1-Dichloroethene	4.27	61	373877	9.61	ug/l	97
15) tert-Butyl alcohol	4.38	59	313168	289.36	ug/l	100
16) Iodomethane	4.67	142	401928	11.42	ug/l	84
17) Methyl acetate	4.70	43	94551	11.37	ug/l	95
18) Methylene chloride	4.89	49	325379	12.03	ug/l	91
19) Carbon disulfide	4.92	76	863338	12.81	ug/l	99
20) Acrylonitrile	5.07	53	198650	62.14	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	595709	13.46	ug/l	92
22) trans-1,2-Dichloroethene	5.29	61	379160	10.70	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	986563	13.94	ug/l	98
24) Vinyl acetate	5.87	43	184654	7.14	ug/l	96
25) 1,1-Dichloroethane	5.85	63	547750	12.61	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	842975	12.88	ug/l	94
28) 2-Butanone	6.44	43	310779	58.68	ug/l	96
29) 2,2-Dichloropropane	6.65	77	416727	9.62	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	337235	12.34	ug/l	96
31) Chloroform	6.93	83	613722	12.55	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I25\RIV658.D Vial: 3
Acq On : 26 Sep 2024 7:08 am Operator: DNguye/CLingl
Sample : CVO01H0940 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 7:30 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	207488	12.49 ug/l	100
33)	Tetrahydrofuran	7.23	42	31464	10.64 ug/l	94
35)	1,1,1-Trichloroethane	7.51	97	504128	10.44 ug/l	97
36)	Cyclohexane	7.54	84	391084	11.25 ug/l	100
38)	1,1-Dichloropropene	7.75	110	122554	9.27 ug/l	97
39)	Carbon tetrachloride	7.89	119	365669	9.11 ug/l	99
40)	tert-Amyl methyl ether (TA	7.91	73	673798	14.01 ug/l	99
42)	Benzene	8.15	78	1153094	13.02 ug/l	97
43)	1,2-Dichloroethane	8.12	62	319669	11.54 ug/l	98
44)	Trichloroethene	9.08	130	314911	11.18 ug/l	97
45)	Methylcyclohexane	9.17	83	434180	11.20 ug/l	90
46)	1,2-Dichloropropane	9.36	63	280464	13.87 ug/l	89
47)	Bromodichloromethane	9.73	83	450828	12.78 ug/l	95
48)	1,4-Dioxane	9.79	88	22098	220.77 ug/l	89
49)	Dibromomethane	9.83	93	135717	12.06 ug/l	91
50)	2-Chloroethyl vinyl ether	10.23	63	33947	5.36 ug/l	96
51)	4-Methyl-2-pentanone	10.28	43	771857	63.84 ug/l	97
52)	cis-1,3-Dichloropropene	10.62	75	460517	12.90 ug/l	97
55)	Toluene	11.17	91	1291185	12.51 ug/l	100
56)	Ethyl methacrylate	11.45	69	255603	14.69 ug/l	91
57)	trans-1,3-Dichloropropene	11.48	75	373020	12.46 ug/l	98
58)	1,1,2-Trichloroethane	11.74	97	203393	13.46 ug/l	94
59)	2-Hexanone	11.76	43	492369	59.13 ug/l	98
60)	1,3-Dichloropropane	12.19	76	377576	14.03 ug/l	98
61)	Tetrachloroethene	12.31	164	250831	10.70 ug/l	94
62)	Dibromochloromethane	12.66	129	259786	13.00 ug/l	100
63)	1,2-Dibromoethane	13.03	107	184203	12.11 ug/l	98
64)	1-Chlorohexane	13.31	91	493387	10.31 ug/l	100
65)	Chlorobenzene	13.79	112	819172	11.55 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	310877	13.13 ug/l	97
67)	Ethylbenzene	13.88	91	1527343	11.83 ug/l	97
68)	m-Xylene & p-Xylene	14.02	91	2297760	22.53 ug/l	97
69)	o-Xylene	14.84	91	1245077	12.67 ug/l	95
70)	Styrene	14.91	104	892513	12.40 ug/l	98
71)	Isopropylbenzene	15.52	105	1532015	11.37 ug/l	98
73)	Bromoform	15.55	173	126539	9.20 ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.62	53	55171	6.60 ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	229236	10.25 ug/l	96
77)	1,2,3-Trichloropropane	16.14	110	66889	8.13 ug/l	89
78)	n-Propylbenzene	16.29	91	1898892	7.98 ug/l	98
79)	Bromobenzene	16.38	156	338388	9.39 ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I25\RIV658.D Vial: 3
Acq On : 26 Sep 2024 7:08 am Operator: DNguye/CLingl
Sample : CVO01H0940 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 7:30 2024 Quant Results File: VO01H09.RES

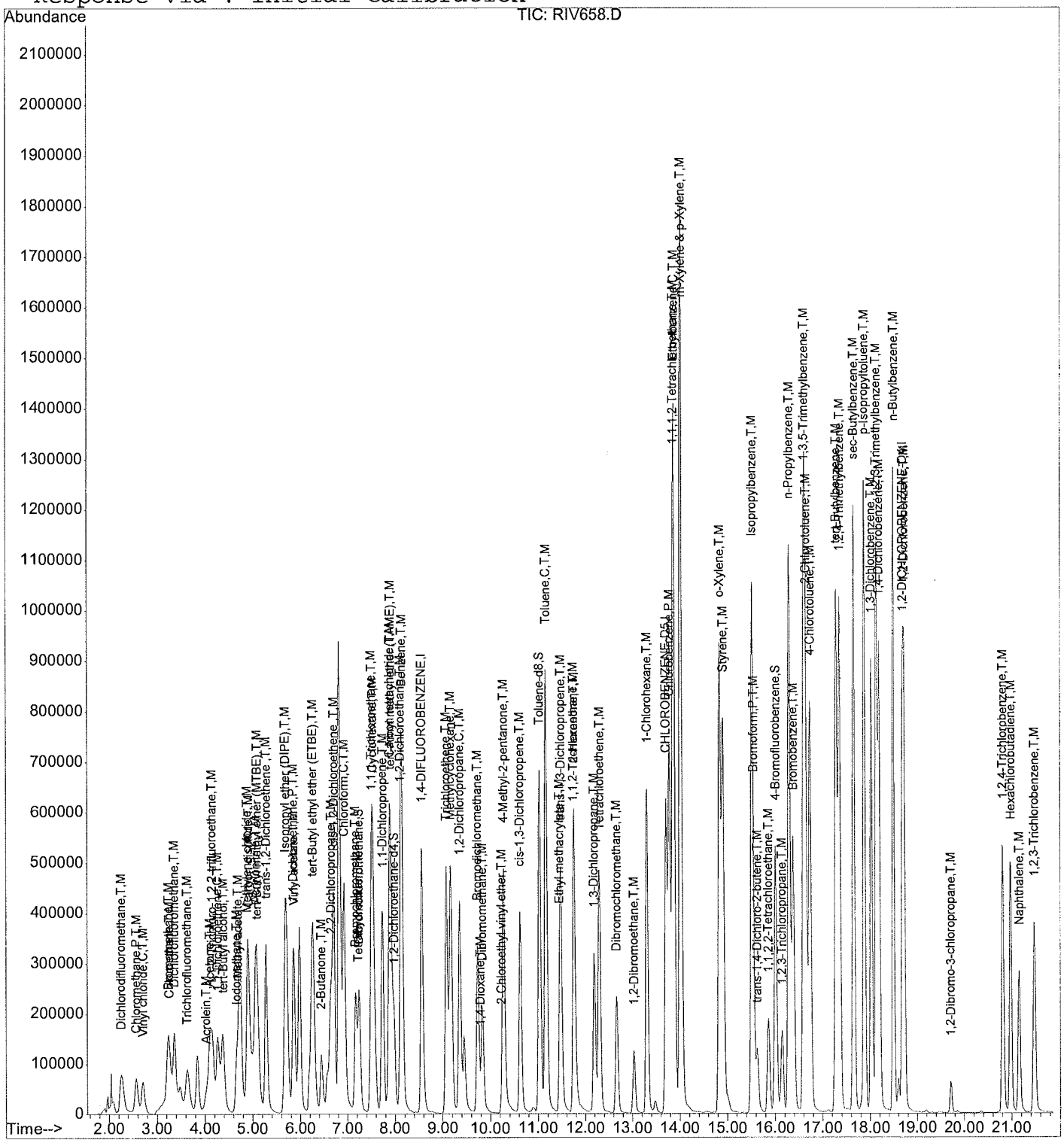
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1176683	7.49 ug/l	97
81)	2-Chlorotoluene	16.64	91	1287574	8.24 ug/l	97
82)	4-Chlorotoluene	16.73	91	1072835	8.04 ug/l	97
83)	tert-Butylbenzene	17.28	134	288746	8.31 ug/l	91
84)	1,2,4-Trimethylbenzene	17.36	105	1140416	7.59 ug/l	97
85)	sec-Butylbenzene	17.65	105	1673042	7.89 ug/l	96
86)	p-Isopropyltoluene	17.87	119	1368146	7.58 ug/l	97
87)	1,3-Dichlorobenzene	18.02	146	714363	9.57 ug/l	92
88)	1,2,3-Trimethylbenzene	18.13	105	1234275	8.47 ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	684367	9.48 ug/l	92
90)	n-Butylbenzene	18.50	91	1266499	7.66 ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	597658	9.72 ug/l	96
92)	1,2-Dibromo-3-chloropropan	19.71	157	35948	10.38 ug/l	95
93)	1,2,4-Trichlorobenzene	20.81	180	345218	8.26 ug/l	96
94)	Hexachlorobutadiene	20.98	225	196527	7.16 ug/l	97
95)	Naphthalene	21.16	128	478187	8.03 ug/l	97
96)	1,2,3-Trichlorobenzene	21.47	180	264189	8.27 ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I25\RIV658.D Vial: 3
Acq On : 26 Sep 2024 7:08 am Operator: DNguye/CLing
Sample : CVO01H0940 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 7:30 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
8ROMOFLUOROBENZENE (8F8)

Lab Name : EMAX Laboratories, Inc.
Project : VA SALT LAKE CITY
Lab Code : EMAX
SDG No : 24I077
Lab File ID: RIV677
8F8 Injection Date: 09/26/24
Instrument ID: 01
8F8 Injection Time: 19:06

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	19.129
75	30 - 60% of mass 95	44.635
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.308
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	75.676
175	5 - 9% of mass 174	5.238(6.92)1
176	95 - 101% % of mass 174	73.113(96.61)1
177	5 - 9% % of mass 176	4.489(6.14)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CV001H0941	RIV678	09/26/24	19:44
2	LCS2W	V001I26L	RIV679	09/26/24	20:13
3	LCD2W	V001I26C	RIV680	09/26/24	20:43
4	M8LK2W	V001I268	RIV682	09/26/24	21:43
5	MW23A-GW091224	24I077-01N	RIV685	09/26/24	23:12
6	MW238-GW091224	24I077-02N	RIV686	09/26/24	23:42
7	MW328-GW091224	24I077-04N	RIV687	09/27/24	00:12
8	MW42S-GW091224	24I077-07N	RIV688	09/27/24	00:42
9	E803-GW091324	24I077-06	RIV689	09/27/24	01:11
10	MW08C-GW091324	24I077-08	RIV692	09/27/24	02:39
11	MW268-GW091324	24I077-09	RIV693	09/27/24	03:09

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RHV134
Instrument ID: 01

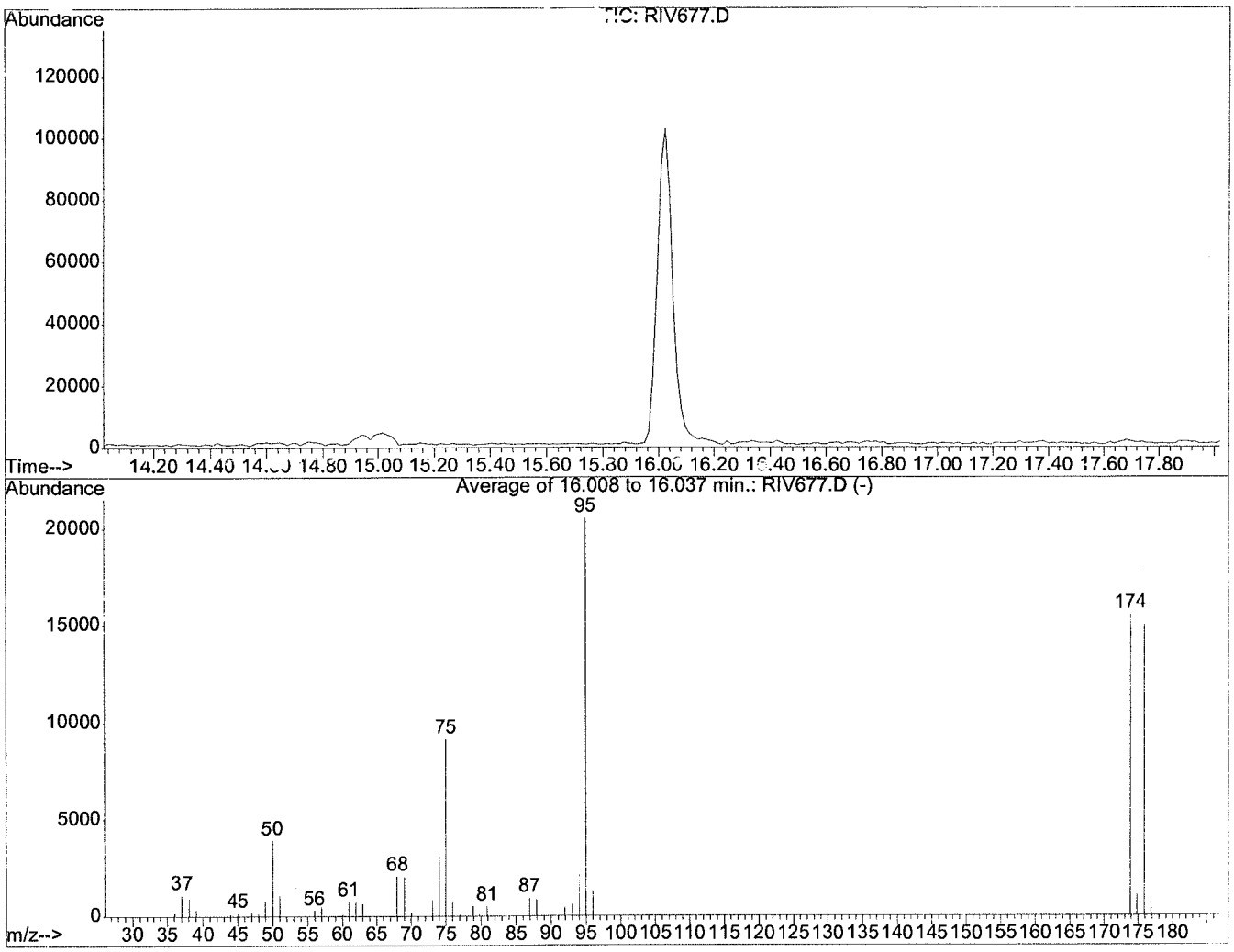
Project: VA SALT LAKE CITY
SDG No: 24I077
Date Analyzed: 08/09/24
Time Analyzed: 20:17

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	962079	8.56	831588	13.73	320498	18.69
	UPPER LIMIT	1924158	8.73	1663176	13.90	640996	18.86
	LOWER LIMIT	481040	8.39	415794	13.56	160249	18.52
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	839842	8.56	701641	13.71	405790	18.69
2	LCS2W	985289	8.56	824828	13.71	473876	18.69
3	LCD2W	1040113	8.57	835899	13.73	482024	18.69
4	MBLK2W	1221359	8.56	957052	13.71	431621	18.69
5	MW23A-GW091224	1060647	8.56	839668	13.71	433214	18.69
6	MW23B-GW091224	949585	8.56	790870	13.71	395039	18.69
7	MW32B-GW091224	943355	8.56	776289	13.71	400009	18.69
8	MW42S-GW091224	919239	8.56	757833	13.71	384601	18.69
9	EB03-GW091324	951655	8.56	789488	13.71	391375	18.69
10	MW08C-GW091324	902644	8.56	738878	13.71	378561	18.69
11	MW26B-GW091324	862593	8.56	740716	13.71	369869	18.69

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data File : D:\HPCHEM\1\DATA\24I26\RIV677.D
Acq On : 26 Sep 2024 7:06 pm
Sample : BFB01I26
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye/CLi
Inst : 01
Multiplr: 1.00



AutoFind: Scans 979, 980, 981; Background Corrected with Scan 972

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	3933	PASS
75	95	30	60	44.6	9177	PASS
95	95	100	100	100.0	20560	PASS
96	95	5	9	6.3	1297	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.7	15559	PASS
175	174	5	9	6.9	1077	PASS
176	174	95	101	96.6	15032	PASS
177	176	5	9	6.1	923	PASS

RIV677.D VO01H09.M Thu Oct 03 12:44:59 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I26\RIV678.D Vial: 2
Acq On : 26 Sep 2024 7:44 pm Operator: DNguye/CLingl
Sample : CVO01H0941 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHCD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	87	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	8.982	10.2	68	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	8.057	19.4	66	0.01
6	C,T,M	Vinyl chloride	10.000	9.479	5.2	73	0.00
7	T,M	Bromomethane	10.000	7.794	22.1#	66	0.02
8	T,M	Chloroethane	10.000	8.928	10.7	76	0.02
9	T,M	Dichlorofluoromethane	10.000	13.764	-37.6#	119	0.00
10	T,M	Trichlorofluoromethane	10.000	7.661	23.4#	58	0.13
11	T,M	Acrolein	50.000	32.362	35.3#	59	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	13.295	-33.0#	112	0.00
13	T,M	Acetone	50.000	49.769	0.5	87	-0.01
14	C,T,M	1,1-Dichloroethene	10.000	9.893	1.1	84	0.00
15	T,M	tert-Butyl alcohol	250.000	241.576	3.4	81	0.00
16	T,M	Iodomethane	10.000	10.475	-4.7	87	-0.01
17	T,M	Methyl acetate	10.000	10.547	-5.5	93	0.00
18	T,M	Methylene chloride	10.000	10.613	-6.1	94	-0.01
19	T,M	Carbon disulfide	10.000	10.903	-9.0	90	0.00
20	T,M	Acrylonitrile	50.000	55.991	-12.0	100	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	11.618	-16.2	98	-0.01
22	T,M	trans-1,2-Dichloroethene	10.000	10.120	-1.2	86	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	12.250	-22.5#	105	0.00
24	T,M	Vinyl acetate	10.000	6.025	39.8#	50	0.00
25	P,T,M	1,1-Dichloroethane	10.000	11.656	-16.6	102	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	11.363	-13.6	96	-0.02
28	T,M	2-Butanone	50.000	50.536	-1.1	91	-0.01
29	T,M	2,2-Dichloropropane	10.000	12.079	-20.8#	101	-0.02
30	T,M	cis-1,2-Dichloroethene	10.000	11.152	-11.5	95	-0.02
31	C,T,M	Chloroform	10.000	11.541	-15.4	99	-0.01
32	T,M	Bromochloromethane	10.000	10.827	-8.3	93	0.00
33	T,M	Tetrahydrofuran	10.000	8.976	10.2	87	0.01
34	S	Dibromofluoromethane	10.000	9.918	0.8	80	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.349	-3.5	84	0.00
36	T,M	Cyclohexane	10.000	13.957	-39.6#	117	-0.01
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	[illegible]	-0.03
38	T,M	1,1-Dichloropropene	10.000	9.517	4.8	83	0.00
39	T,M	Carbon tetrachloride	10.000	9.651	3.5	78	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	11.824	-18.2	100	-0.02
41	S	1,2-Dichloroethane-d4	10.000	9.705	2.9	77	-0.02

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24I26\RIV678.D Vial: 2
Acq On : 26 Sep 2024 7:44 pm Operator: DNguye/CLingl
Sample : CVO01H0941 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	12.092	-20.9#	101	-0.02
43	T,M	1,2-Dichloroethane	10.000	10.196	-2.0	81	0.00
44	T,M	Trichloroethene	10.000	10.862	-8.6	93	0.00
45	T,M	Methylcyclohexane	10.000	14.229	-42.3#	118	-0.02
46	C,T,M	1,2-Dichloropropane	10.000	12.156	-21.6#	103	0.00
47	T,M	Bromodichloromethane	10.000	11.413	-14.1	99	-0.01
48	T,M	1,4-Dioxane	200.000	197.737	1.1	85	0.01
49	T,M	Dibromomethane	10.000	10.203	-2.0	87	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	5.746	42.5#	51	0.00
51	T,M	4-Methyl-2-pentanone	50.000	56.480	-13.0	90	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	11.885	-18.8	98	-0.02
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	84	-0.02
54	S	Toluene-d8	10.000	10.714	-7.1	85	0.00
55	C,T,M	Toluene	10.000	11.886	-18.9	96	0.00
56	T,M	Ethyl methacrylate	10.000	12.299	-23.0#	98	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	11.328	-13.3	89	0.00
58	T,M	1,1,2-Trichloroethane	10.000	11.939	-19.4	100	-0.02
59	T,M	2-Hexanone	50.000	52.492	-5.0	87	0.00
60	T,M	1,3-Dichloropropane	10.000	12.486	-24.9#	103	-0.02
61	T,M	Tetrachloroethene	10.000	11.337	-13.4	98	0.00
62	T,M	Dibromochloromethane	10.000	11.504	-15.0	93	-0.02
63	T,M	1,2-Dibromoethane	10.000	10.587	-5.9	89	0.00
64	T,M	1-Chlorohexane	10.000	11.560	-15.6	98	0.00
65	P,M	Chlorobenzene	10.000	11.016	-10.2	90	0.00
66	T,M	1,1,1,2-Tetrachloroethane	10.000	12.417	-24.2#	98	0.00
67	C,T,M	Ethylbenzene	10.000	11.821	-18.2	94	-0.02
68	T,M	m-Xylene & p-Xylene	20.000	22.142	-10.7	91	0.00
69	T,M	o-Xylene	10.000	12.150	-21.5#	95	0.00
70	T,M	Styrene	10.000	12.243	-22.4#	98	0.00
71	T,M	Isopropylbenzene	10.000	11.606	-16.1	93	0.00
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	127	0.00
73	P,T,M	Bromoform	10.000	7.664	23.4#	95	0.00
74	T,M	trans-1,4-Dichloro-2-butene	10.000	6.289	37.1#	79	0.01
75	T,M	1,1,2,2-Tetrachloroethane	10.000	8.611	13.9	107	0.00
76	S	4-Bromofluorobenzene	10.000	8.199	18.0	104	0.00
77	T,M	1,2,3-Trichloropropane	10.000	6.582	34.2#	87	0.00
78	T,M	n-Propylbenzene	10.000	7.809	21.9#	99	-0.02
79	T,M	Bromobenzene	10.000	8.397	16.0	109	-0.02
80	T,M	1,3,5-Trimethylbenzene	10.000	7.184	28.2#	93	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I26\RIV678.D Vial: 2
Acq On : 26 Sep 2024 7:44 pm Operator: DNguye/CLingl
Sample : CVO01H0941 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	7.558	24.4#	98	0.00
82	T,M	4-Chlorotoluene	10.000	7.672	23.3#	98	0.00
83	T,M	tert-Butylbenzene	10.000	8.323	16.8	111	-0.02
84	T,M	1,2,4-Trimethylbenzene	10.000	7.348	26.5#	92	0.00
85	T,M	sec-Butylbenzene	10.000	7.703	23.0#	96	0.00
86	T,M	p-Isopropyltoluene	10.000	7.360	26.4#	92	0.00
87	T,M	1,3-Dichlorobenzene	10.000	8.890	11.1	115	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	7.806	21.9#	96	0.00
89	T,M	1,4-Dichlorobenzene	10.000	8.868	11.3	114	0.01
90	T,M	n-Butylbenzene	10.000	8.550	14.5	105	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.203	8.0	116	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.172	8.3	107	0.01
93	T,M	1,2,4-Trichlorobenzene	10.000	8.713	12.9	110	0.00
94	T,M	Hexachlorobutadiene	10.000	8.762	12.4	109	0.00
95	T,M	Naphthalene	10.000	7.773	22.3#	95	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	8.580	14.2	106	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I26\RIV678.D Vial: 2
Acq On : 26 Sep 2024 7:44 pm Operator: DNguye/CLingl
Sample : CVO01H0941 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	87	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.296	10.0	68	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.192	19.7	66	0.01
6	C,T,M	Vinyl chloride	0.210	0.199	5.2	73	0.00
7	T,M	Bromomethane	0.186	0.145	22.0#	66	0.02
8	T,M	Chloroethane	0.163	0.146	10.4	76	0.02
9	T,M	Dichlorofluoromethane	0.360	0.496	-37.8#	119	0.00
10	T,M	Trichlorofluoromethane	0.478	0.366	23.4#	58	0.13
11	T,M	Acrolein	0.010	0.007	30.0#	59	0.00
12	T,M	1,1,2 Trichloro-1,2,2-trifl	0.196	0.260	-32.7#	112	0.00
13	T,M	Acetone	0.048	0.045	6.3	87	-0.01
14	C,T,M	1,1-Dichloroethene	0.484	0.479	1.0	84	0.00
15	T,M	tert-Butyl alcohol	0.013	0.013	0.0	81	0.00
16	T,M	Iodomethane	0.437	0.458	-4.8	87	-0.01
17	T,M	Methyl acetate	0.103	0.109	-5.8	93	0.00
18	T,M	Methylene chloride	0.336	0.357	-6.2	94	-0.01
19	T,M	Carbon disulfide	0.838	0.913	-8.9	90	0.00
20	T,M	Acrylonitrile	0.040	0.045	-12.5	100	0.00
21	T,M	tert-Butyl methyl ether (MT	0.550	0.639	-16.2	98	-0.01
22	T,M	trans-1,2-Dichloroethene	0.441	0.446	-1.1	86	0.00
23	T,M	Isopropyl ether (DIPE)	0.880	1.078	-22.5#	105	0.00
24	T,M	Vinyl acetate	0.321	0.194	39.6#	50#	0.00
25	P,T,M	1,1-Dichloroethane	0.540	0.629	-16.5	102	0.00
26	T,M	2-Butanol	0.000	0.009	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.924	-13.7	96	-0.02
28	T,M	2-Butanone	0.066	0.067	-1.5	91	-0.01
29	T,M	2,2-Dichloropropane	0.538	0.650	-20.8#	101	-0.02
30	T,M	cis-1,2-Dichloroethene	0.340	0.379	-11.5	95	-0.02
31	C,T,M	Chloroform	0.608	0.702	-15.5	99	-0.01
32	T,M	Bromochloromethane	0.206	0.224	-8.7	93	0.00
33	T,M	Tetrahydrofuran	0.037	0.033	10.8	87	0.01
34	S	Dibromofluoromethane	0.304	0.302	0.7	80	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.621	-3.5	84	0.00
36	T,M	Cyclohexane	0.432	0.603	-39.6#	117	-0.01
37	T,M	2,2,4-Trimethylpentane	0.000	0.026	0.0	0#	-0.03
38	T,M	1,1-Dichloropropene	0.164	0.156	4.9	83	0.00
39	T,M	Carbon tetrachloride	0.499	0.481	3.6	78	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.707	-18.2	100	-0.02
41	S	1,2-Dichloroethane-d4	0.270	0.262	3.0	77	-0.02

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24I26\RIV678.D Vial: 2
Acq On : 26 Sep 2024 7:44 pm Operator: DNguye/CLingl
Sample : CVO01H0941 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	1.331	-20.9#	101	-0.02
43	T,M	1,2-Dichloroethane	0.344	0.351	-2.0	81	0.00
44	T,M	Trichloroethene	0.350	0.381	-8.9	93	0.00
45	T,M	Methylcyclohexane	0.482	0.686	-42.3#	118	-0.02
46	C,T,M	1,2-Dichloropropane	0.251	0.306	-21.9#	103	0.00
47	T,M	Bromodichloromethane	0.439	0.501	-14.1	99	-0.01
48	T,M	1,4-Dioxane	0.001	0.001	0.0	85	0.01
49	T,M	Dibromomethane	0.140	0.143	-2.1	87	0.00
50	T,M	2-Chloroethyl vinyl ether	0.079	0.045	43.0#	51	0.00
51	T,M	4-Methyl-2-pentanone	0.150	0.170	-13.3	90	0.00
52	T,M	cis-1,3-Dichloropropene	0.444	0.528	-18.9	98	-0.02
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	84	-0.02
54	S	Toluene-d8	1.222	1.309	-7.1	85	0.00
55	C,T,M	Toluene	1.498	1.781	-18.9	96	0.00
56	T,M	Ethyl methacrylate	0.253	0.311	-22.9#	98	0.00
57	T,M	trans-1,3-Dichloropropene	0.435	0.492	-13.1	89	0.00
58	T,M	1,1,2-Trichloroethane	0.219	0.262	-19.6	100	-0.02
59	T,M	2-Hexanone	0.111	0.126	-13.5	87	0.00
60	T,M	1,3-Dichloropropane	0.391	0.488	-24.8#	103	-0.02
61	T,M	Tetrachloroethene	0.340	0.386	-13.5	98	0.00
62	T,M	Dibromochloromethane	0.290	0.334	-15.2	93	-0.02
63	T,M	1,2-Dibromoethane	0.221	0.234	-5.9	89	0.00
64	T,M	1-Chlorohexane	0.695	0.803	-15.5	98	0.00
65	P,M	Chlorobenzene	1.030	1.135	-10.2	90	0.00
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.427	-24.1#	98	0.00
67	C,T,M	Ethylbenzene	1.876	2.217	-18.2	94	-0.02
68	T,M	m-Xylene & p-Xylene	1.481	1.640	-10.7	91	0.00
69	T,M	o-Xylene	1.428	1.735	-21.5#	95	0.00
70	T,M	Styrene	1.045	1.279	-22.4#	98	0.00
71	T,M	Isopropylbenzene	1.956	2.270	-16.1	93	0.00
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	127	0.00
73	P,T,M	Bromoform	0.367	0.281	23.4#	95	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.140	37.2#	79	0.01
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.514	13.9	107	0.00
76	S	4-Bromofluorobenzene	1.269	1.040	18.0	104	0.00
77	T,M	1,2,3-Trichloropropane	0.220	0.145	34.1#	87	0.00
78	T,M	n-Propylbenzene	6.357	4.964	21.9#	99	-0.02
79	T,M	Bromobenzene	0.963	0.808	16.1	109	-0.02
80	T,M	1,3,5-Trimethylbenzene	4.198	3.015	28.2#	93	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I26\RIV678.D Vial: 2
Acq On : 26 Sep 2024 7:44 pm Operator: DNguye/CLingl
Sample : CVO01H0941 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	3.154	24.4#	98	0.00
82	T,M	4-Chlorotoluene	3.565	2.735	23.3#	98	0.00
83	T,M	tert-Butylbenzene	0.928	0.773	16.7	111	-0.02
84	T,M	1,2,4-Trimethylbenzene	4.010	2.947	26.5#	92	0.00
85	T,M	sec-Butylbenzene	5.662	4.362	23.0#	96	0.00
86	T,M	p-Isopropyltoluene	4.820	3.547	26.4#	92	0.00
87	T,M	1,3-Dichlorobenzene	1.994	1.773	11.1	115	0.00
88	T,M	1,2,3-Trimethylbenzene	3.890	3.037	21.9#	96	0.00
89	T,M	1,4-Dichlorobenzene	1.928	1.710	11.3	114	0.01
90	T,M	n-Butylbenzene	4.412	3.773	14.5	105	0.00
91	T,M	1,2-Dichlorobenzene	1.642	1.511	8.0	116	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.085	8.6	107	0.01
93	T,M	1,2,4-Trichlorobenzene	1.116	0.972	12.9	110	0.00
94	T,M	Hexachlorobutadiene	0.732	0.642	12.3	109	0.00
95	T,M	Naphthalene	1.591	1.236	22.3#	95	0.00
96	T,M	1,2,3-Trichlorobenzene	0.853	0.731	14.3	106	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I26\RIV678.D Vial: 2
Acq On : 26 Sep 2024 7:44 pm Operator: DNguye/CLingl
Sample : CVO01H0941 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 20:06 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	839842	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	701641	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	405790	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	253279	9.92	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.20%			
41) 1,2-Dichloroethane-d4	7.97	65	220358	9.71	ug/l	-0.02
Spiked Amount 10.000			Recovery = 97.10%			
54) Toluene-d8	11.03	98	918774	10.71	ug/l	0.00
Spiked Amount 10.000			Recovery = 107.10%			
76) 4-Bromofluorobenzene	16.01	95	422114	8.20	ug/l	0.00
Spiked Amount 10.000			Recovery = 82.00%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	248230	8.98	ug/l	97
5) Chloromethane	2.55	50	161412	8.06	ug/l	99
6) Vinyl chloride	2.68	62	167511	9.48	ug/l	99
7) Bromomethane	3.23	94	121977	7.79	ug/l	97
8) Chloroethane	3.29	64	122495	8.93	ug/l	97
9) Dichlorofluoromethane	3.35	67	416488	13.76	ug/l	98
10) Trichlorofluoromethane	3.61	101	307733	7.66	ug/l	98
11) Acrolein	4.01	56	27390	32.36	ug/l	91
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	218715	13.29	ug/l	97
13) Acetone	4.09	43	187554	49.77	ug/l	90
14) 1,1-Dichloroethene	4.25	61	402027	9.89	ug/l	75
15) tert-Butyl alcohol	4.37	59	272983	241.58	ug/l	98
16) Iodomethane	4.65	142	384848	10.47	ug/l	84
17) Methyl acetate	4.68	43	91599	10.55	ug/l	97
18) Methylene chloride	4.87	49	299784	10.61	ug/l	91
19) Carbon disulfide	4.90	76	766982	10.90	ug/l	100
20) Acrylonitrile	5.05	53	186886	55.99	ug/l	98
21) tert-Butyl methyl ether (M	5.08	73	536917	11.62	ug/l	94
22) trans-1,2-Dichloroethene	5.27	61	374584	10.12	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	905084	12.25	ug/l	99
24) Vinyl acetate	5.85	43	162588	6.03	ug/l	97
25) 1,1-Dichloroethane	5.85	63	528674	11.66	ug/l	99
27) tert-Butyl ethyl ether (ET	6.25	59	776244	11.36	ug/l	94
28) 2-Butanone	6.43	43	279432	50.54	ug/l	97
29) 2,2-Dichloropropane	6.63	77	546103	12.08	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	318337	11.15	ug/l	99
31) Chloroform	6.92	83	589462	11.54	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I26\RIV678.D Vial: 2
Acq On : 26 Sep 2024 7:44 pm Operator: DNguye/CLingl
Sample : CVO01H0941 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 20:06 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	187738	10.83 ug/l	99
33)	Tetrahydrofuran	7.23	42	27711	8.98 ug/l	98
35)	1,1,1-Trichloroethane	7.51	97	521602	10.35 ug/l	96
36)	Cyclohexane	7.52	84	506567	13.96 ug/l	98
38)	1,1-Dichloropropene	7.73	110	131408	9.52 ug/l	97
39)	Carbon tetrachloride	7.89	119	404326	9.65 ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	593699	11.82 ug/l	99
42)	Benzene	8.13	78	1118162	12.09 ug/l	98
43)	1,2-Dichloroethane	8.12	62	294854	10.20 ug/l	98
44)	Trichloroethene	9.08	130	319586	10.86 ug/l	96
45)	Methylcyclohexane	9.17	83	576033	14.23 ug/l	90
46)	1,2-Dichloropropane	9.36	63	256623	12.16 ug/l	93
47)	Bromodichloromethane	9.73	83	420487	11.41 ug/l	96
48)	1,4-Dioxane	9.79	88	20665	197.74 ug/l	97
49)	Dibromomethane	9.83	93	119876	10.20 ug/l	90
50)	2-Chloroethyl vinyl ether	10.23	63	37974	5.75 ug/l	93
51)	4-Methyl-2-pentanone	10.28	43	713022	56.48 ug/l	97
52)	cis-1,3-Dichloropropene	10.62	75	443027	11.88 ug/l	96
55)	Toluene	11.17	91	1249621	11.89 ug/l	99
56)	Ethyl methacrylate	11.46	69	218051	12.30 ug/l	92
57)	trans-1,3-Dichloropropene	11.48	75	345431	11.33 ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	183865	11.94 ug/l	95
59)	2-Hexanone	11.76	43	442905	52.49 ug/l	98
60)	1,3-Dichloropropane	12.19	76	342426	12.49 ug/l	99
61)	Tetrachloroethene	12.31	164	270737	11.34 ug/l	94
62)	Dibromochloromethane	12.66	129	234254	11.50 ug/l	98
63)	1,2-Dibromoethane	13.03	107	164160	10.59 ug/l	97
64)	1-Chlorohexane	13.31	91	563656	11.56 ug/l	100
65)	Chlorobenzene	13.79	112	796053	11.02 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	299645	12.42 ug/l	98
67)	Ethylbenzene	13.88	91	1555791	11.82 ug/l	97
68)	m-Xylene & p-Xylene	14.02	91	2300948	22.14 ug/l	96
69)	o-Xylene	14.84	91	1217097	12.15 ug/l	96
70)	Styrene	14.91	104	897563	12.24 ug/l	99
71)	Isopropylbenzene	15.52	105	1592791	11.61 ug/l	98
73)	Bromoform	15.56	173	114213	7.66 ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.64	53	57000	6.29 ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	208715	8.61 ug/l	96
77)	1,2,3-Trichloropropane	16.16	110	58705	6.58 ug/l	90
78)	n-Propylbenzene	16.29	91	2014320	7.81 ug/l	98
79)	Bromobenzene	16.38	156	328030	8.40 ug/l	96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I26\RIV678.D Vial: 2
Acq On : 26 Sep 2024 7:44 pm Operator: DNguye/CLingl
Sample : CVO01H0941 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 20:06 2024 Quant Results File: VO01H09.RES

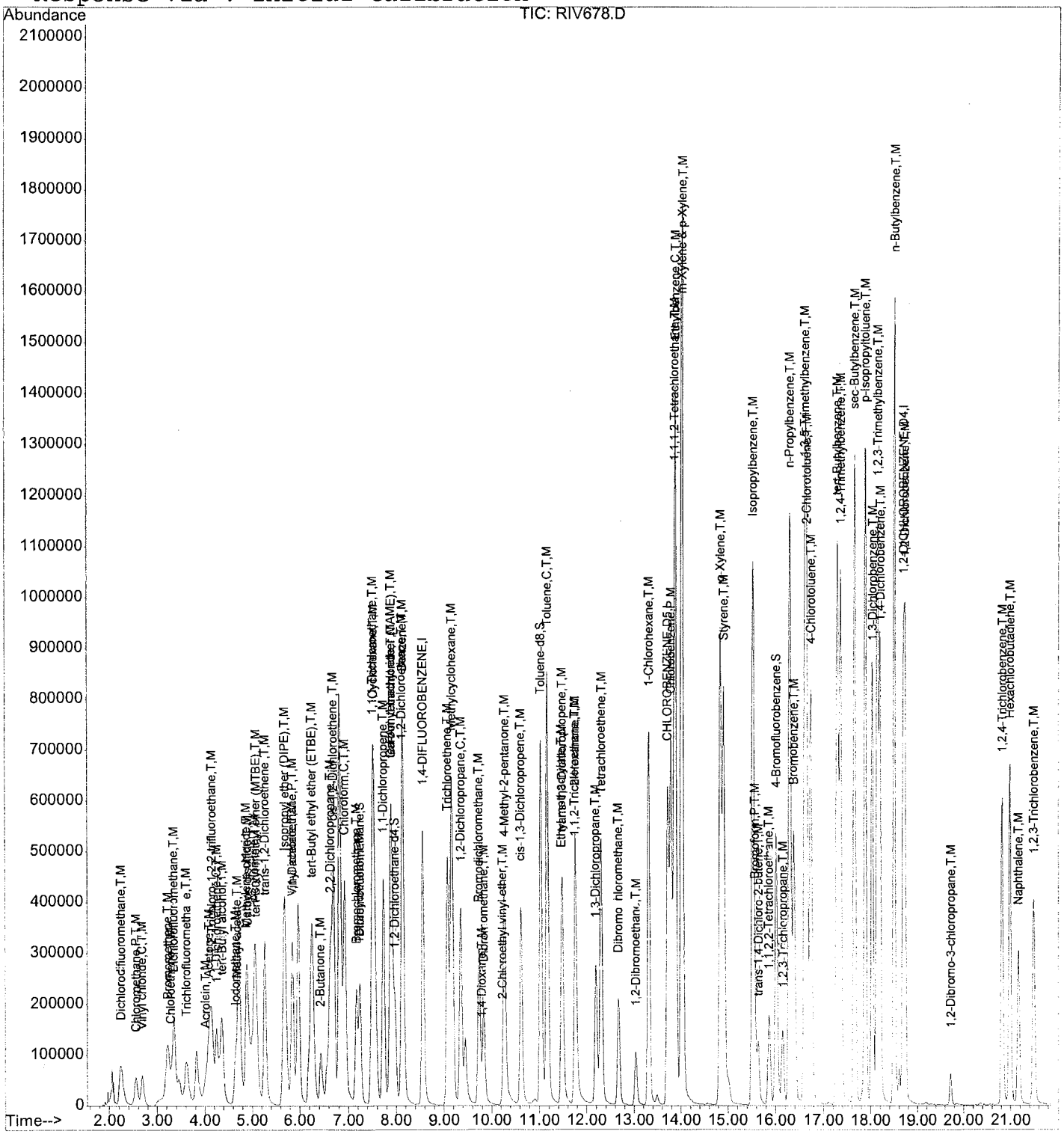
Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1223594	7.18 ug/l	98
81)	2-Chlorotoluene	16.65	91	1279935	7.56 ug/l	98
82)	4-Chlorotoluene	16.73	91	1109794	7.67 ug/l	98
83)	tert-Butylbenzene	17.28	134	313501	8.32 ug/l	97
84)	1,2,4-Trimethylbenzene	17.36	105	1195799	7.35 ug/l	98
85)	sec-Butylbenzene	17.65	105	1769974	7.70 ug/l	95
86)	p-Isopropyltoluene	17.88	119	1439484	7.36 ug/l	96
87)	1,3-Dichlorobenzene	18.04	146	719328	8.89 ug/l	92
88)	1,2,3-Trimethylbenzene	18.14	105	1232332	7.81 ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	693881	8.87 ug/l	92
90)	n-Butylbenzene	18.50	91	1530930	8.55 ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	613164	9.20 ug/l	96
92)	1,2-Dibromo-3-chloropropan	19.73	157	34431	9.17 ug/l	99
93)	1,2,4-Trichlorobenzene	20.82	180	394508	8.71 ug/l	96
94)	Hexachlorobutadiene	20.98	225	260441	8.76 ug/l	99
95)	Naphthalene	21.16	128	501668	7.77 ug/l	97
96)	1,2,3-Trichlorobenzene	21.49	180	296834	8.58 ug/l	95

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24I26\RIV678.D Vial: 2
Acq On : 26 Sep 2024 7:44 pm Operator: DNguye/CLing
Sample : CVO01H0941 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 26 20:06 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



ANALYTICAL LOGS

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments: * Varied Amounts

* ICV (IV001H0901) not evaluated for chloroethane only - compound to be evaluated from ICV (IV001H0902)

Book #: A01-076
Instrument No.: 01
Analytical Sequence: 24H09
Method File: V001H09
Analytical Batch: V001H096

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-82605IM Rev. No. 1
☐ EMAX-M82605IM Rev. No. 0
☐ EMAX-TCP5IM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☐ Water
☐ pH <2. Outliers indicated on analytical sequence.
☐ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☑ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE

DATE	8/9/24
ICAL ID	V001H09

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2	SVI-45-19-01	*	250
DCC GAS	-15-03		250
DCC 4ADD	-06-02		250
DCC 8260	-21-01		50
DCC KET	-19-02		250
BFB	-01-01	1	50
IS/SURR. IS	SVI-43-95-01	1	250
IS/SURR. SS	-45-07-02	*	250
ICV/LCS CS2	-43-79-02	1	250
ICV/LCS GAS	-45-06-01	1	250
ICV/LCS 3ADD	-43-81-03	5	50
ICV/LCS KET	-45-21-03	5	250
ICV/LCS 8260	-43-78-03	5	50
Data File Folder	24H09		

	LOT #	Syringe Lot #
pH strip	N/A	MSV-03-09-12-4
Chlorine strip		-01-12-6
Methanol		-03-23
$NaHSO_4$		-02-24
Reagent Water	RW4-23-001	
Sand		

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: [signature]
Date: 8/9/24
Disposed By: [signature]
Date Disposed: 8/10/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24H09

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RHV128.D	1.	BFB01H09	T/CHK	9 Aug 2024 08:08
2	2	RHV129.D	1.	VO01H091 0.03/0.15	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	9 Aug 2024 17:28
3	3	RHV130.D	1.	VO01H092 0.05/0.25	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	9 Aug 2024 18:14
4	4	RHV131.D	1.	VO01H093 0.1/0.5	1ppb 8260/5ppb KET-AA/25ppb TBA	9 Aug 2024 18:45
5	5	RHV132.D	1.	VO01H094 0.2/1.0	2ppb 8260/10ppb KET-AA/50ppb TBA	9 Aug 2024 19:15
6	6	RHV133.D	1.	VO01H095 0.5/2.5	5ppb 8260/25ppb KET-AA/125ppb TBA	9 Aug 2024 19:46
7	7	RHV134.D	1.	VO01H096 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	9 Aug 2024 20:17
8	8	RHV135.D	1.	VO01H097 2.0/10	20ppb 8260/100ppb KET-AA/500ppb TBA	9 Aug 2024 20:47
9	9	RHV136.D	1.	VO01H098 3.0/15	30ppb 8260/150ppb KET-AA/750ppb TBA	9 Aug 2024 21:17
10	10	RHV137.D	1.	VO01H099 5.0/25	50ppb 8260/250ppb KET-AA/1250ppb TBA	9 Aug 2024 21:47
11	11	RHV138.D	1.	VO01H0910 10/50	100ppb 8260/500ppb KET-AA/2500ppb TBA	9 Aug 2024 22:17
12	12	RHV139.D	1.	RINSE		9 Aug 2024 22:47
13	13	RHV140.D	1.	RINSE		9 Aug 2024 23:17
14	14	RHV141.D	1.	IVO01H0901 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	9 Aug 2024 23:47
15	15	RHV142.D	1.	RINSE		10 Aug 2024 00:17
16	16	RHV143.D	1.	LOD1	0.2ppb 8260/4.0ppb KET-AA/5.0ppb TBA	10 Aug 2024 00:48
17	17	RHV144.D	1.	LOD2	0.3ppb 8260/4.0ppb KET-AA/5.0ppb TBA	10 Aug 2024 01:18

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24H13
Method File:	V001H09
Analytical Batch:	CV001H0901

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	V001H09		
STANDARDS			
NAME	ID	Amount (L)	Conc. (mg/L)
DCC	SV1-45-14-01	1	
	-15-03	1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-14-02	5	50
BFB	-01-01	1	250
IS/SURR.	SV1-43-78-01	5	
ICV/LCS	-43-79-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03	5	
	-45-21-03	5	
ICV/LCS	-43-78-03	5	
Data File Folder	24H13		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-04-12-4	
Chlorine strip	301902	↓ -6	
Methanol			
$NaHSO_4$			
Reagent Water	LW4-23-001		
Sand			

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5 mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: DM

Date: 8/13/24

Disposed By: DM

Date Disposed: 8/14/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24H13

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RHV145.D	1.	BFB01H10	T/CHK	13 Aug 2024 15:24
2	1	RHV146.D	1.	CVO01H0901	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 16:12
3	3	RHV147.D	1.	IVO01H0902 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 16:44
4	4	RHV148.D	1.	VO01H10L	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 17:17
5	5	RHV149.D	1.	RINSE	25mL	13 Aug 2024 17:49
6	6	RHV150.D	1.	VO01H10B	25mL	13 Aug 2024 18:21
7	7	RHV151.D	1.	24H006-12	25mL	13 Aug 2024 18:53
8	8	RHV152.D	1.	24H006-11	25mL	13 Aug 2024 19:25
9	9	RHV153.D	1.	24H006-10	25mL	13 Aug 2024 19:57
10	10	RHV154.D	1.	24H006-01	25mL	13 Aug 2024 20:29
11	11	RHV155.D	1.	24H006-02	25mL	13 Aug 2024 21:00
12	12	RHV156.D	1.	24H006-03	25mL	13 Aug 2024 21:31
13	13	RHV157.D	1.	24H006-04	25mL	13 Aug 2024 22:02
14	14	RHV158.D	1.	24H006-05	25mL	13 Aug 2024 22:33
15	15	RHV159.D	1.	24H006-06	25mL	13 Aug 2024 23:04
16	16	RHV160.D	1.	24H006-07	25mL	13 Aug 2024 23:35
17	17	RHV161.D	1.	24H006-08	25mL	14 Aug 2024 00:05
18	18	RHV162.D	1.	24H006-09	25mL	14 Aug 2024 00:35
19	19	RHV163.D	1.	24H006-01M	25mL	14 Aug 2024 01:06
20	20	RHV164.D	1.	24H006-01S	25mL	14 Aug 2024 01:36
21	21	RHV165.D	1.	EVO01H0901	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 02:06
22	22	RHV166.D	1.	EVO01H09011	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 02:36
23	23	RHV167.D	1.	EVO01H09012	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 03:06

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-077
Instrument No.:	01
Analytical Sequence:	24I25
Method File:	V001H09
Analytical Batch:	CV001H0940

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	V001H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-45-19-01 -15-03	1 1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-19-02	5	
BFB	-01-02	1	50/150
IS/SURR.	SVI-45-29-03	5	
ICV/LCS	-43-74-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03 -45-21-03	5 5	
ICV/LCS	-43-78-03	5	
Data File Folder	24I25		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-09-12-4	
Chlorine strip	301902	↓ -6	
Methanol			
$NaHSO_4$			
Reagent Water	RW3-23-001		
Sand			

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: CL/M
Date: 9/25/24
Disposed By: CL
Date Disposed: 9/26/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24I25

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RIV628.D	1.	BFB01I24	T/CHK	25 Sep 2024 16:09
2	2	RIV629.D	1.	CVO01H0939	10ppb 8260/50ppb KET-AA/250ppb TBA	25 Sep 2024 16:48
3	3	RIV630.D	1.	VO01I24L	10ppb 8260/50ppb KET-AA/250ppb TBA	25 Sep 2024 17:26
4	4	RIV631.D	1.	VO01I24C	10ppb 8260/50ppb KET-AA/250ppb TBA	25 Sep 2024 17:56
5	5	RIV632.D	1.	RINSE	25mL	25 Sep 2024 18:26
6	6	RIV633.D	1.	VO01I24B	25mL	25 Sep 2024 18:56
7	7	RIV634.D	1.	24I047-05I 50X	0.5mL	25 Sep 2024 19:26
8	8	RIV635.D	1.	24I061-12I 10X	2.5mL	25 Sep 2024 19:55
9	9	RIV636.D	1.	24I048-01I 10X	2.5mL	25 Sep 2024 20:25
10	10	RIV637.D	1.	24I048-22	25mL	25 Sep 2024 20:55
11	11	RIV638.D	1.	24I058-09	25mL	25 Sep 2024 21:24
12	12	RIV639.D	1.	24I066-27	25mL	25 Sep 2024 21:54
13	13	RIV640.D	1.	24I066-28	25mL	25 Sep 2024 22:23
14	14	RIV641.D	1.	24I066-22	25mL	25 Sep 2024 22:53
15	15	RIV642.D	1.	24I058-10	25mL	25 Sep 2024 23:22
16	16	RIV643.D	1.	24I058-02	25mL	25 Sep 2024 23:51
17	17	RIV644.D	1.	24I058-06	25mL	26 Sep 2024 00:21
18	18	RIV645.D	1.	24I058-07	25mL	26 Sep 2024 00:50
19	19	RIV646.D	1.	24I058-09M	25mL	26 Sep 2024 01:19
20	20	RIV647.D	1.	24I058-09S	25mL	26 Sep 2024 01:48
21	21	RIV648.D	1.	24I066-20	25mL	26 Sep 2024 02:17
22	22	RIV649.D	1.	24I066-21	25mL	26 Sep 2024 02:47
23	23	RIV650.D	1.	24I066-19	25mL	26 Sep 2024 03:16
24	24	RIV651.D	1.	24I066-18	25mL	26 Sep 2024 03:45
25	25	RIV652.D	1.	EVO01H0939	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 04:14
26	26	RIV653.D	1.	EVO01H09391	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 04:43
27	27	RIV654.D	1.	EVO01H09392	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 05:12
28	28	RIV655.D	1.	RINSE	25mL	26 Sep 2024 05:41
29	1	RIV656.D	1.	RINSE	25mL	26 Sep 2024 06:10
30	2	RIV657.D	1.	BFB01I25	T/CHK	26 Sep 2024 06:39
31	3	RIV658.D	1.	CVO01H0940	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 07:08
32	4	RIV659.D	1.	VO01I25L	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 07:37
33	5	RIV660.D	1.	VO01I25C	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 08:06
34	6	RIV661.D	1.	RINSE	25mL	26 Sep 2024 08:35
35	7	RIV662.D	1.	VO01I25B	25mL	26 Sep 2024 09:04
36	8	RIV663.D	1.	24I058-01	25mL	26 Sep 2024 09:33
37	9	RIV664.D	1.	24I073-01	25mL	26 Sep 2024 10:02
38	10	RIV665.D	1.	24I077-05	25mL	26 Sep 2024 10:32
39	11	RIV666.D	1.	24I058-11	25mL	26 Sep 2024 11:01
40	12	RIV667.D	1.	TB	25mL	26 Sep 2024 11:31
41	13	RIV668.D	1.	24I058-12	25mL	26 Sep 2024 12:01
42	14	RIV669.D	1.	24I058-03I 5X	5.0mL	26 Sep 2024 12:31
43	15	RIV670.D	1.	24I058-08I 5X	5.0mL	26 Sep 2024 13:02
44	16	RIV671.D	1.	24I077-01	25mL	26 Sep 2024 13:32
45	17	RIV672.D	1.	24I077-02	25mL	26 Sep 2024 14:02
46	18	RIV673.D	1.	24I077-03	25mL	26 Sep 2024 14:32
47	19	RIV674.D	1.	24I077-04	25mL	26 Sep 2024 15:02
48	20	RIV675.D	1.	24I077-07	25mL	26 Sep 2024 15:32
49	21	RIV676.D	1.	RINSE	25mL	26 Sep 2024 16:03

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-077
Instrument No.:	01
Analytical Sequence:	24I26
Method File:	V001H09
Analytical Batch:	cV001H0941

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	VO01H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-45-19-01	1	
DCC	-15-03	1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-19-02	5	50/250
BFB	-01-02	1	
IS/SURR.	SVI-45-29-03	5	
ICV/LCS	-43-74-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03 -45-21-03	5 5	
ICV/LCS	-43-78-03	5	
Data File Folder	24I26		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-09-12-4	
Chlorine strip	301902	↓	-6
Methanol			
$NaHSO_4$			
Reagent Water	RW3-23-001		
Sand			

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: CL/M
Date: 9/26/24
Disposed By: CL
Date Disposed: 9/27/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24I26

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RIV677.D	1.	BFB01I26	T/CHK	26 Sep 2024 19:06
2	2	RIV678.D	1.	CVO01H0941	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 19:44
3	3	RIV679.D	1.	VO01I26L	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 20:13
4	4	RIV680.D	1.	VO01I26C	10ppb 8260/50ppb KET-AA/250ppb TBA	26 Sep 2024 20:43
5	5	RIV681.D	1.	RINSE	25mL	26 Sep 2024 21:13
6	6	RIV682.D	1.	VO01I26B	25mL	26 Sep 2024 21:43
7	7	RIV683.D	1.	24I058-03	25mL	26 Sep 2024 22:13
8	8	RIV684.D	1.	24I058-08	25mL	26 Sep 2024 22:43
9	9	RIV685.D	1.	24I077-01N	25mL	26 Sep 2024 23:12
10	10	RIV686.D	1.	24I077-02N	25mL	26 Sep 2024 23:42
11	11	RIV687.D	1.	24I077-04N	25mL	27 Sep 2024 00:12
12	12	RIV688.D	1.	24I077-07N	25mL	27 Sep 2024 00:42
13	13	RIV689.D	1.	24I077-06	25mL	27 Sep 2024 01:11
14	14	RIV690.D	1.	24I073-13	25mL	27 Sep 2024 01:41
15	15	RIV691.D	1.	24I073-14	25mL	27 Sep 2024 02:10
16	16	RIV692.D	1.	24I077-08	25mL	27 Sep 2024 02:39
17	17	RIV693.D	1.	24I077-09	25mL	27 Sep 2024 03:09
18	18	RIV694.D	1.	24I073-02I 25X	1.0mL	27 Sep 2024 03:38
19	19	RIV695.D	1.	24I073-03I 50X	0.5mL	27 Sep 2024 04:07
20	20	RIV696.D	1.	24I073-03J 10X	2.5mL	27 Sep 2024 04:36
21	21	RIV697.D	1.	24I073-06	25mL	27 Sep 2024 05:06
22	22	RIV698.D	1.	24I073-04	25mL	27 Sep 2024 05:35
23	23	RIV699.D	1.	24I073-02	25mL	27 Sep 2024 06:04
24	24	RIV700.D	1.	24I073-03	25mL	27 Sep 2024 06:34
25	25	RIV701.D	1.	RINSE	25mL	27 Sep 2024 07:03
26	26	RIV702.D	1.	RINSE	25mL	27 Sep 2024 07:32

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

METHOD RSK-175
DISSOLVED GASES

SDG#: 24I077

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I077

METHOD RSK-175
DISSOLVED GASES

One(1) water sample was received on 09/14/24 to be analyzed for Dissolved Gases in accordance with Method RSK-175 and project specific requirements.

Holding Time
The sample was analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DGI005WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. DGI005WL/DGI005WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Sample Analysis
The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE
DISSOLVED GASES

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24I077
Instrument ID : GCT072

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DGI005WB	1	NA	09/19/2413:26	09/19/2412:30	BI19003A	BI19002A	DGI005W	Method Blank
LCS1W	DGI005WL	1	NA	09/19/2413:39	09/19/2412:30	BI19004A	BI19002A	DGI005W	Lab Control Sample (LCS)
LCD1W	DGI005WC	1	NA	09/19/2413:50	09/19/2412:30	BI19005A	BI19002A	DGI005W	LCS Duplicate
MW42S-GW091224	I077-07	1	NA	09/19/2419:23	09/19/2412:30	BI19026A	BI19024A	DGI005W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD RSK-175
DISSOLVED GASES

Client : CDM SMITH	Date Collected: 09/12/24
Project : VA SALT LAKE CITY	Date Received: 09/14/24
Batch No. : 24I077	Date Extracted: 09/19/24 12:30
Sample ID: MW42S-GW091224	Date Analyzed: 09/19/24 19:23
Lab Samp ID: I077-07	Dilution Factor: 1
Lab File ID: BI19026A	Matrix : WATER
Ext Btch ID: DGI005W	% Moisture : NA
Calib. Ref.: BI19024A	Instrument ID : GCT072

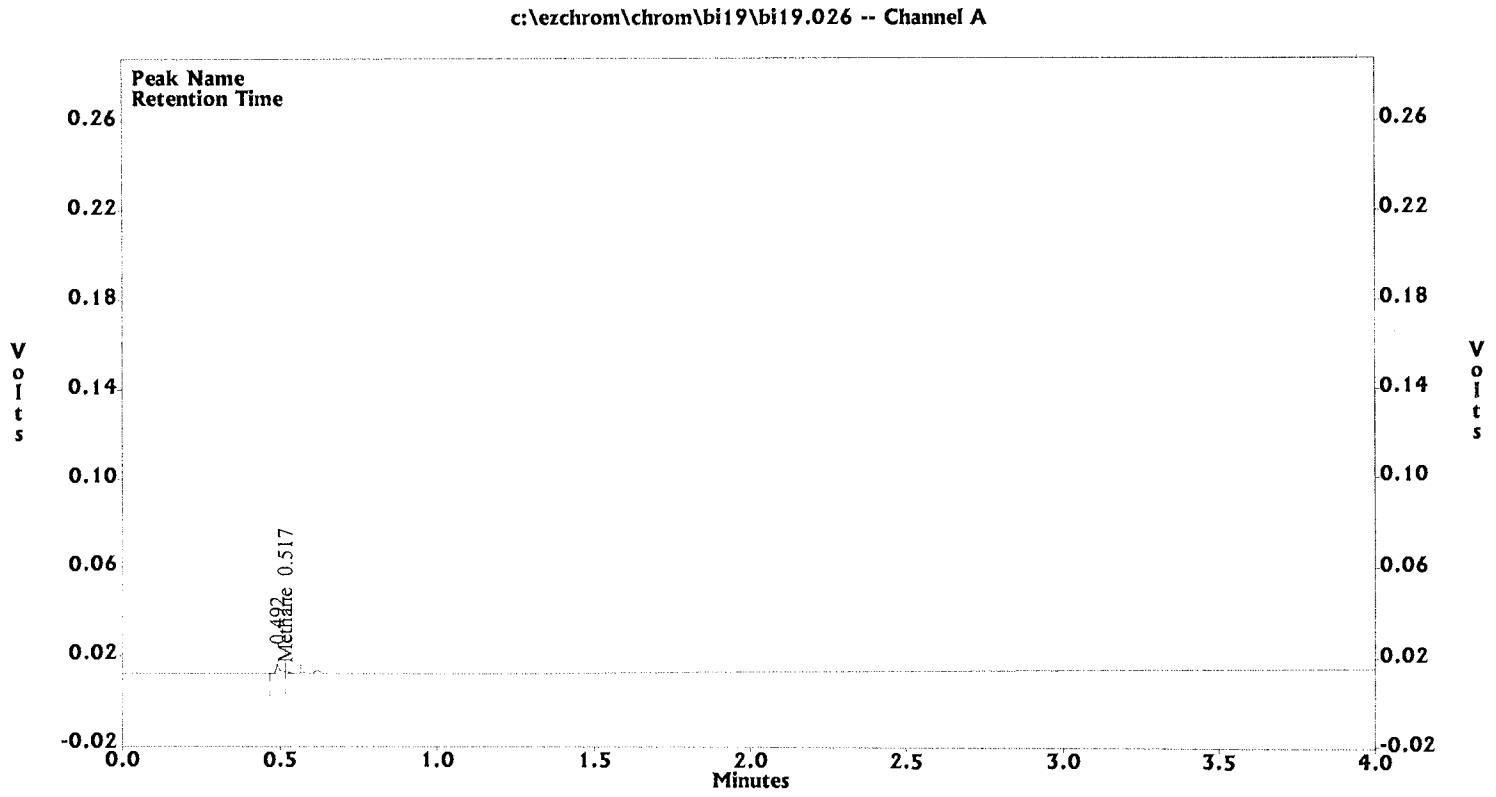
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	2.0	0.32
ETHENE	ND	2.0	0.30
METHANE	0.24J	2.0	0.17

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.026
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : I077-07
Acquired : Sep 19, 2024 19:23:20
Printed : Sep 19, 2024 19:36:43
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	763	3195.35	0.239
--	Ethylene	0.775	0	0.00	0.000
--	Acetylene	0.858	0	0.00	0.000
--	Ethane	0.908	0	0.00	0.000
--	Propane	2.450	0	0.00	0.000



QC SUMMARIES

METHOD RSK-175
DISSOLVED GASES

Client : CDM SMITH	Date Collected: NA
Project : VA SALT LAKE CITY	Date Received: 09/19/24
Batch No. : 24I077	Date Extracted: 09/19/24 12:30
Sample ID: MBLK1W	Date Analyzed: 09/19/24 13:26
Lab Samp ID: DGI005WB	Dilution Factor: 1
Lab File ID: BI19003A	Matrix : WATER
Ext Btch ID: DGI005W	% Moisture : NA
Calib. Ref.: BI19002A	Instrument ID : GCT072

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	2.0	0.32
ETHENE	ND	2.0	0.30
METHANE	ND	2.0	0.17

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: CDM SMITH
PROJECT: VA SALT LAKE CITY
BATCH NO.: 24I077
METHOD: RSK-175

MATRIX: WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	DGI005WB	DGI005WL	DGI005WC		
LAB FILE ID:	BI19003A	BI19004A	BI19005A		
DATE EXTRACTED:	09/19/2412:30	09/19/2412:30	09/19/2412:30	DATE COLLECTED:	NA
DATE ANALYZED:	09/19/2413:26	09/19/2413:39	09/19/2413:50	DATE RECEIVED:	09/19/24
PREP. BATCH:	DGI005W	DGI005W	DGI005W		
CALIB. REF:	BI19002A	BI19002A	BI19002A		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Ethane	ND	25.5	24.0	94	25.5	25.0	98	4	70-140	30
Ethene	ND	23.8	22.5	94	23.8	23.4	98	4	70-140	30
Methane	ND	13.6	13.0	96	13.6	13.7	100	5	70-130	30

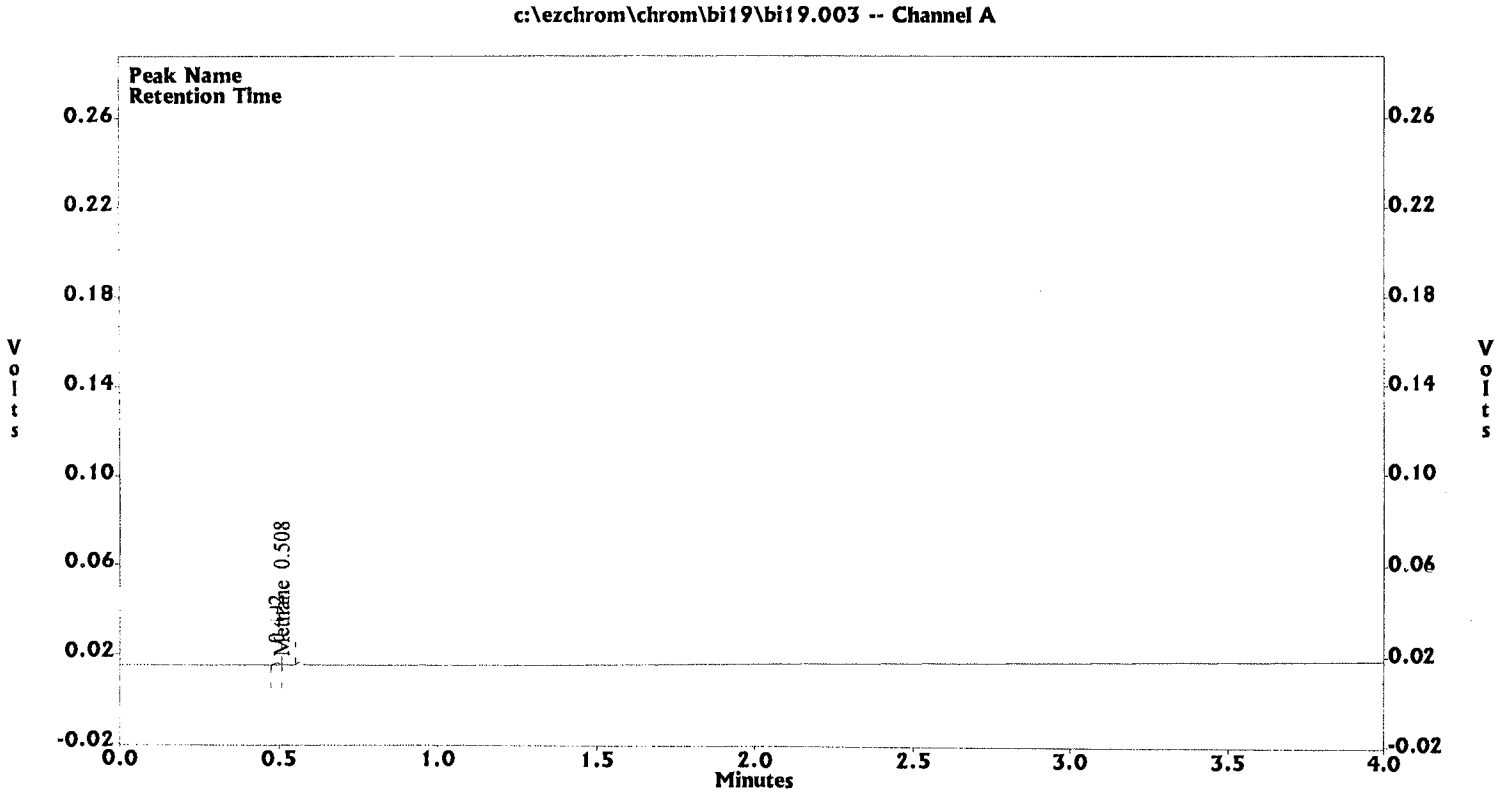
QC DATA

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.003
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DGI005WB
Acquired : Sep 19, 2024 13:26:30
Printed : Sep 19, 2024 17:49:26
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.508	188	3195.35	0.059
--	Ethylene	0.775	0	0.00	0.000
--	Acetylene	0.858	0	0.00	0.000
--	Ethane	0.908	0	0.00	0.000
--	Propane	2.450	0	0.00	0.000

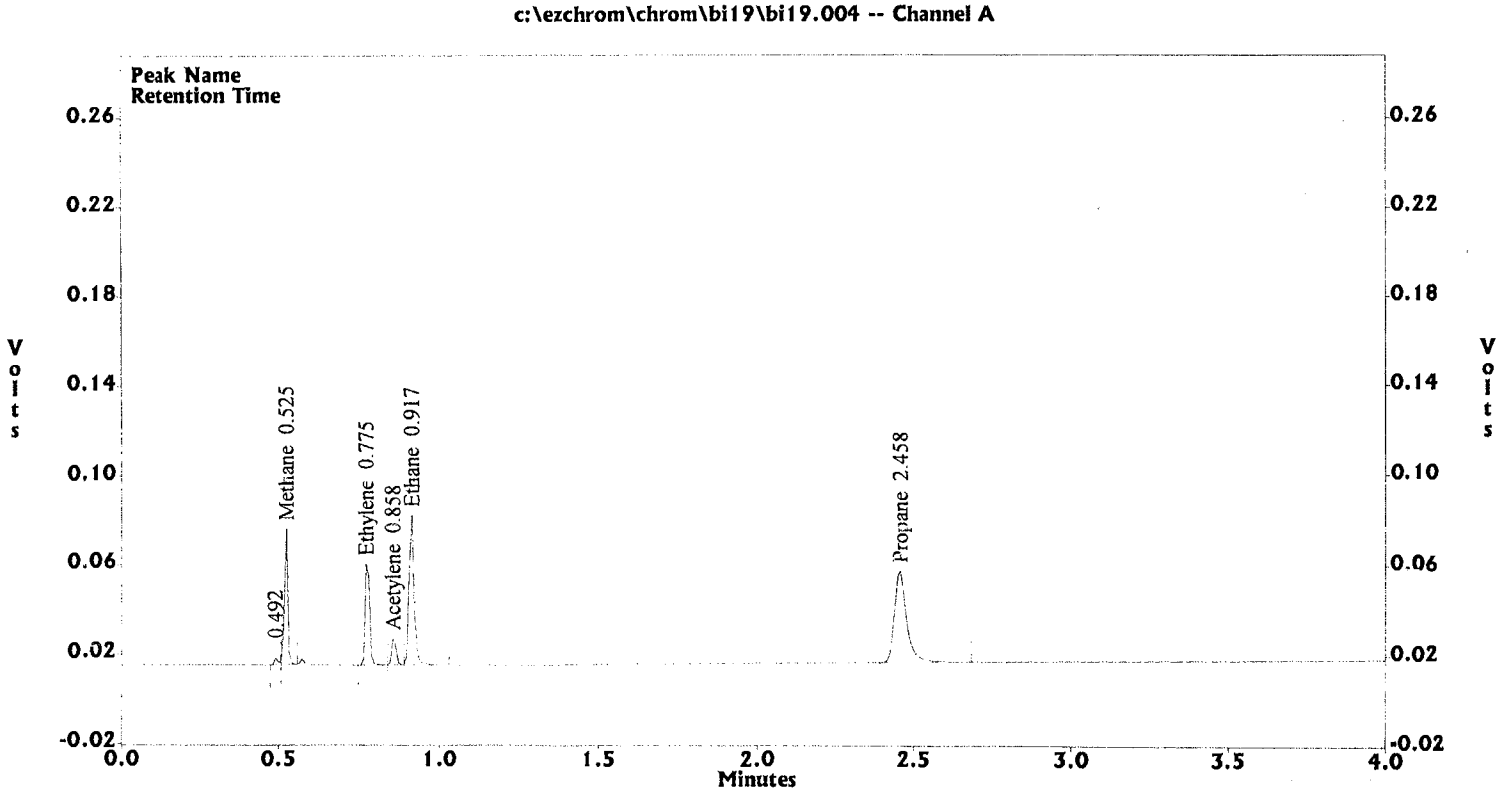


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.004
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DGI005WL
Acquired : Sep 19, 2024 13:39:15
Printed : Sep 19, 2024 17:49:32
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	41694	3195.35	13.048
3	Ethylene	0.775	46336	2060.05	22.493
4	Acetylene	0.858	11456	574.97	19.924
5	Ethane	0.917	71727	2984.48	24.033
6	Propane	2.458	111895	2994.95	37.361

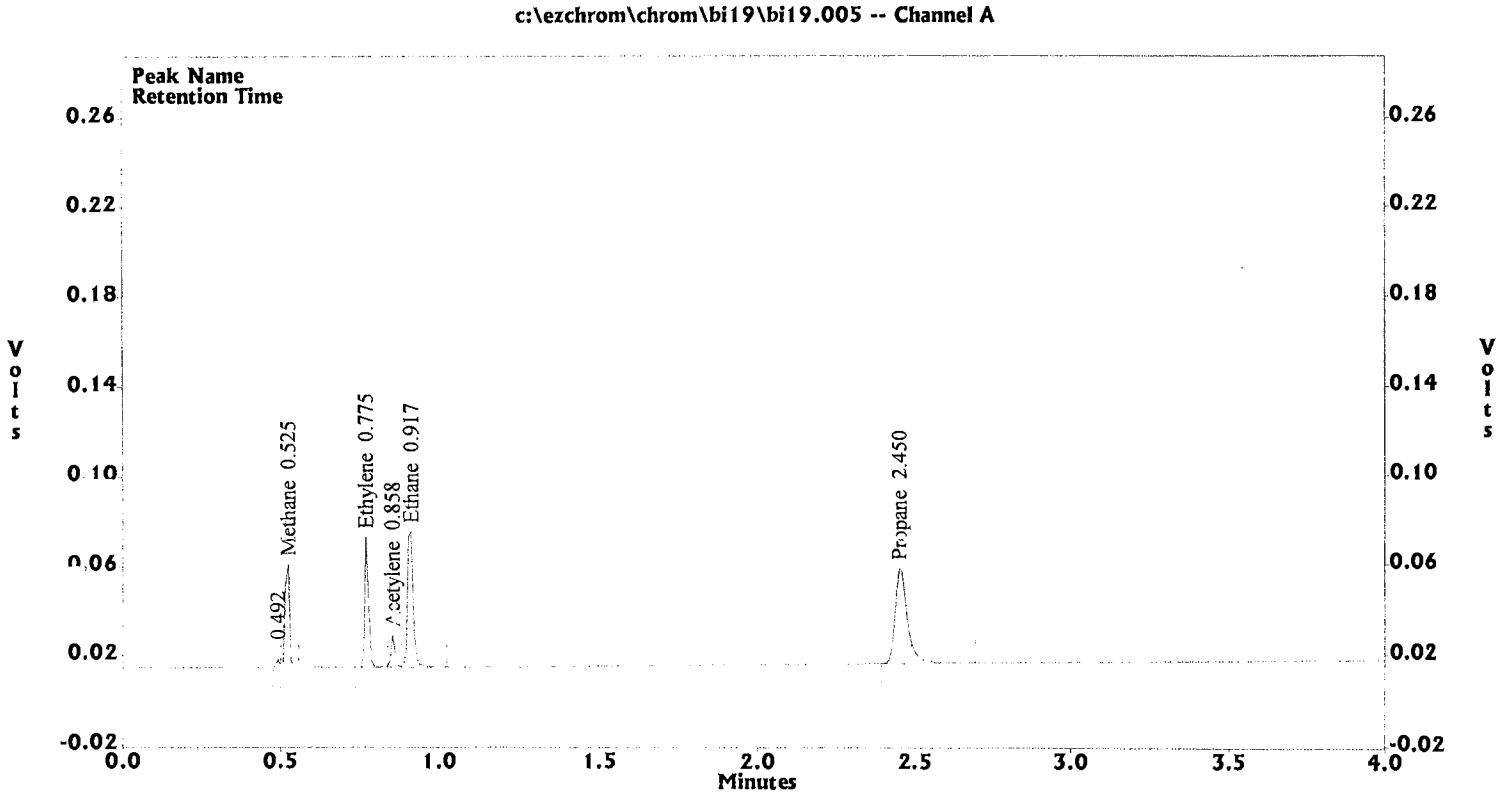


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.005
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DGI005WC
Acquired : Sep 19, 2024 13:50:52
Printed : Sep 19, 2024 17:49:37
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	43663	3195.35	13.665
3	Ethylene	0.775	48212	2060.05	23.403
4	Acetylene	0.858	11570	574.97	20.123
5	Ethane	0.917	74629	2984.48	25.006
6	Propane	2.450	116516	2994.95	38.904



INITIAL CALIBRATION(S)

INITIAL CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
LFID & Datetime: BH10002A 08/10/23 11:25
LFID & Datetime: BH10003A 08/10/23 11:38
LFID & Datetime: BH10004A 08/10/23 11:50
LFID & Datetime: BH10005A 08/10/23 12:03
LFID & Datetime: BH10006A 08/10/23 12:17
LFID & Datetime: BH10007A 08/10/23 12:29
CONC UNIT: ppb

	CONC	CALIBRATION FACTORS (AREA)/UNIT							
COMPOUND	X	2.00X	10.00X	25.00X	40.00X	75.00X	100.00X	MEAN	%RSD
Methane	0.34	3675	3492	3190	3042	2924	2849	3195.3	10.2
Ethylene	0.60	2234	2136	2105	1958	1969	1957	2060.0	5.6
Acetylene	.55	529	605	618	550	573	575	575.0	5.7
Ethane	0.64	3365	3080	3053	2834	2815	2760	2984.5	7.7
Propane	0.94	3398	3041	2994	2896	2856	2794	2995.0	7.3

DG72H10.MET

8/11/23

INITIAL CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
LFID & Datetime: BH10002A 08/10/23 11:25
LFID & Datetime: BH10003A 08/10/23 11:38
LFID & Datetime: BH10004A 08/10/23 11:50
LFID & Datetime: BH10005A 08/10/23 12:03
LFID & Datetime: BH10006A 08/10/23 12:17
LFID & Datetime: BH10007A 08/10/23 12:29

COMPOUND	RT OF STANDARDS (MIN) 2.0X	10.0X	25.0X	40.0X	75.0X	100.0X	MEAN RT	RT WINDOW FROM	TO	RTWINDOW WIDTH
Methane	0.508	0.517	0.525	0.517	0.517	0.517	0.517	0.474	0.560	0.043
Ethylene	0.767	0.767	0.775	0.767	0.767	0.775	0.770	0.655	0.885	0.115
Acetylene	0.850	0.850	0.858	0.850	0.850	0.850	0.851	0.736	0.966	0.115
Ethane	0.900	0.900	0.908	0.900	0.900	0.908	0.903	0.799	1.007	0.104
Propane	2.442	2.442	2.450	2.442	2.442	2.442	2.443	2.273	2.613	0.170

DG72H10.MET

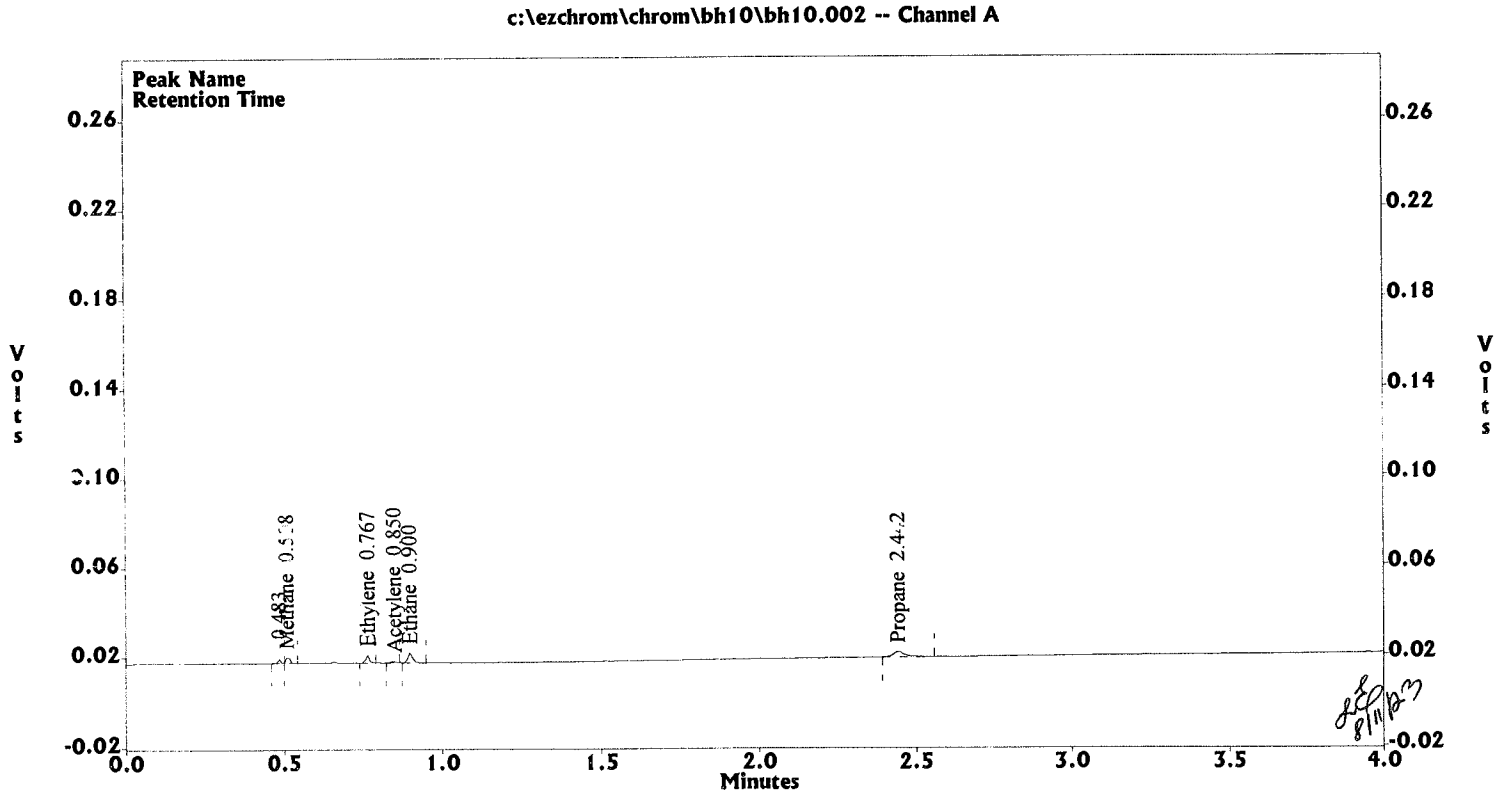
8/11/23

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.002
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1001
Acquired : Aug 10, 2023 11:25:46
Printed : Aug 10, 2023 12:59:27
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.508	2499	3195.35	0.680
3	Ethylene	0.767	2659	2060.05	1.190
4	Acetylene	0.850	585	574.97	1.105
5	Ethane	0.900	4291	2984.48	1.275
6	Propane	2.442	6355	2994.95	1.870

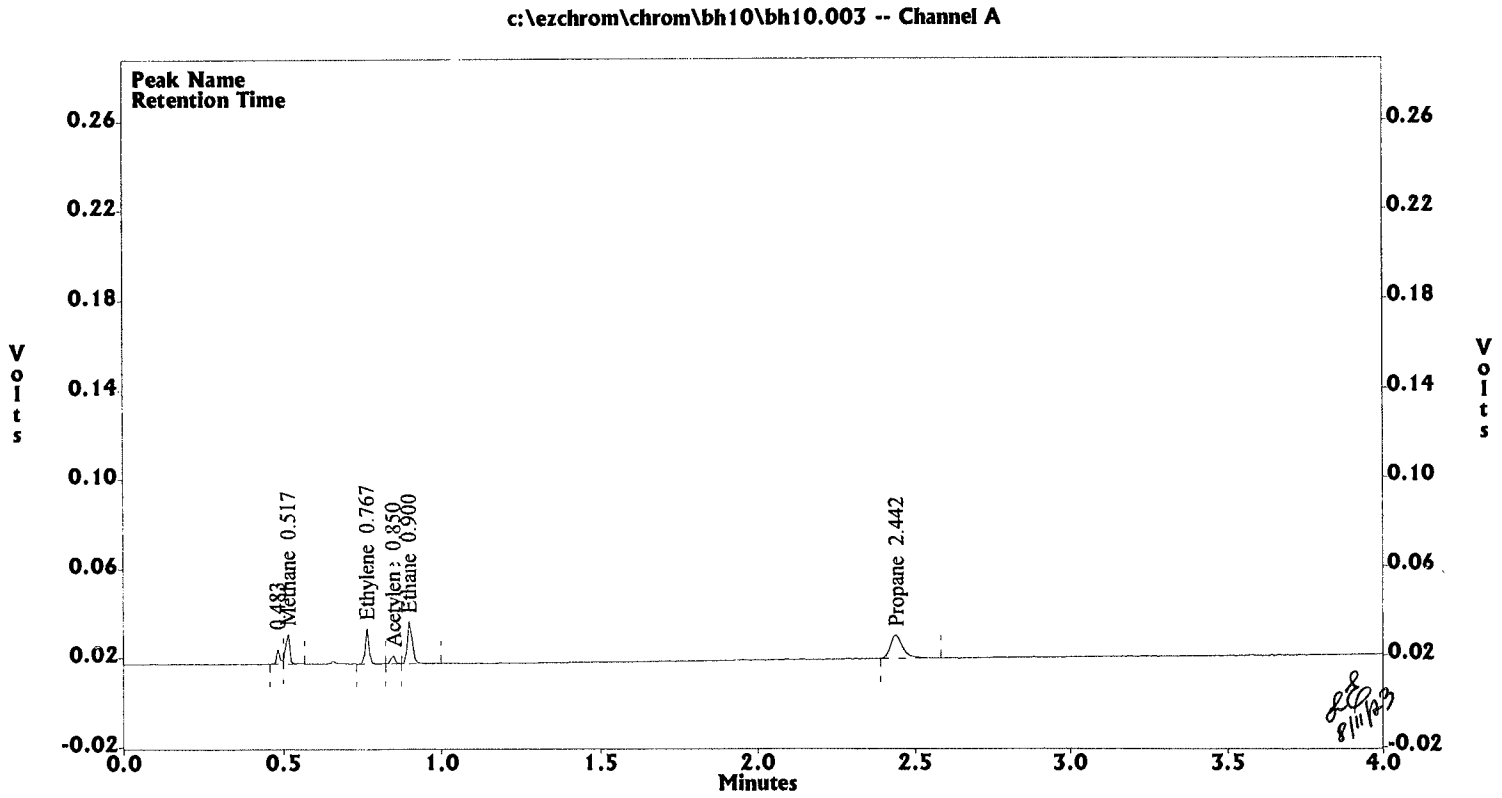


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.003
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1002
Acquired : Aug 10, 2023 11:38:22
Printed : Aug 10, 2023 13:00:53
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	11880	3195.35	3.402
3	Ethylene	0.767	12718	2060.05	5.953
4	Acetylene	0.850	3346	574.97	5.528
5	Ethane	0.900	19644	2984.48	6.378
6	Propane	2.442	28430	2994.95	9.350

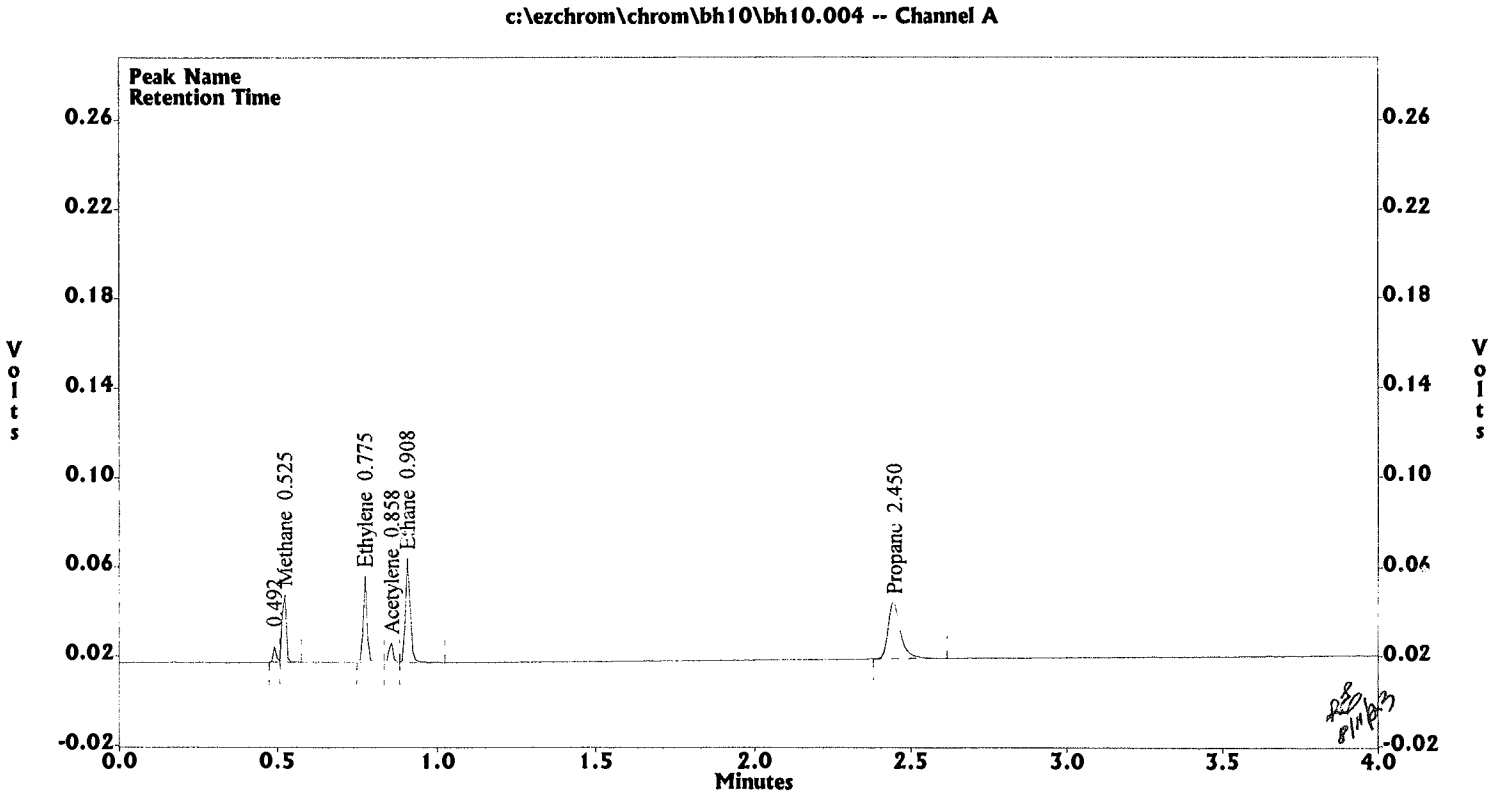


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.004
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1003
Acquired : Aug 10, 2023 11:50:35
Printed : Aug 10, 2023 13:01:17
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	27130	3195.35	8.504
3	Ethylene	0.775	31321	2060.05	14.880
4	Acetylene	0.858	8535	574.97	13.820
5	Ethane	0.908	48689	2984.48	15.950
6	Propane	2.450	70036	2994.95	23.390

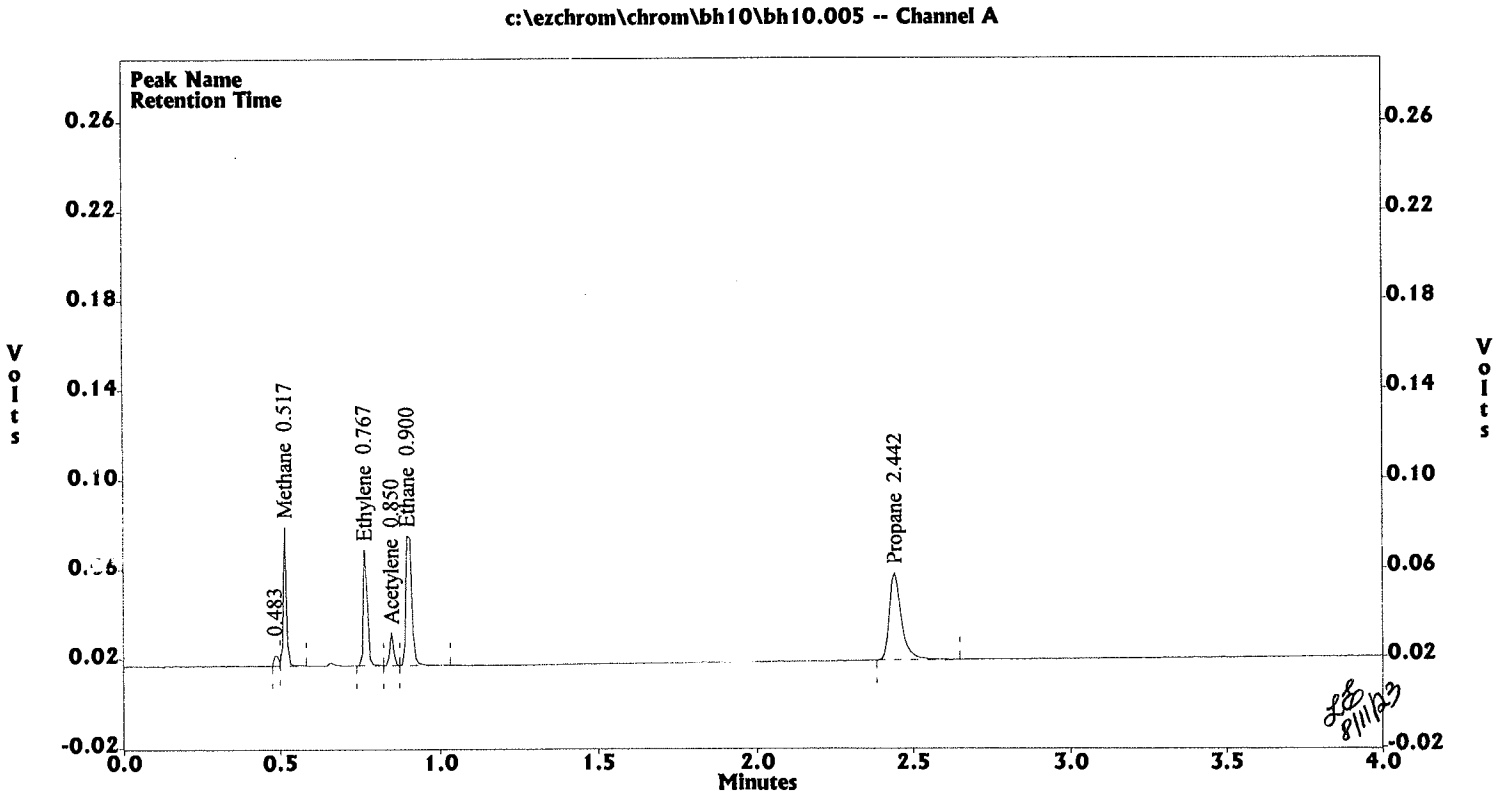


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.005
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1004
Acquired : Aug 10, 2023 12:03:54
Printed : Aug 10, 2023 13:01:25
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	41377	3195.35	13.600
3	Ethylene	0.767	46631	2060.05	23.810
4	Acetylene	0.850	12154	574.97	22.110
5	Ethane	0.900	72285	2984.48	25.510
6	Propane	2.442	107962	2994.95	37.410

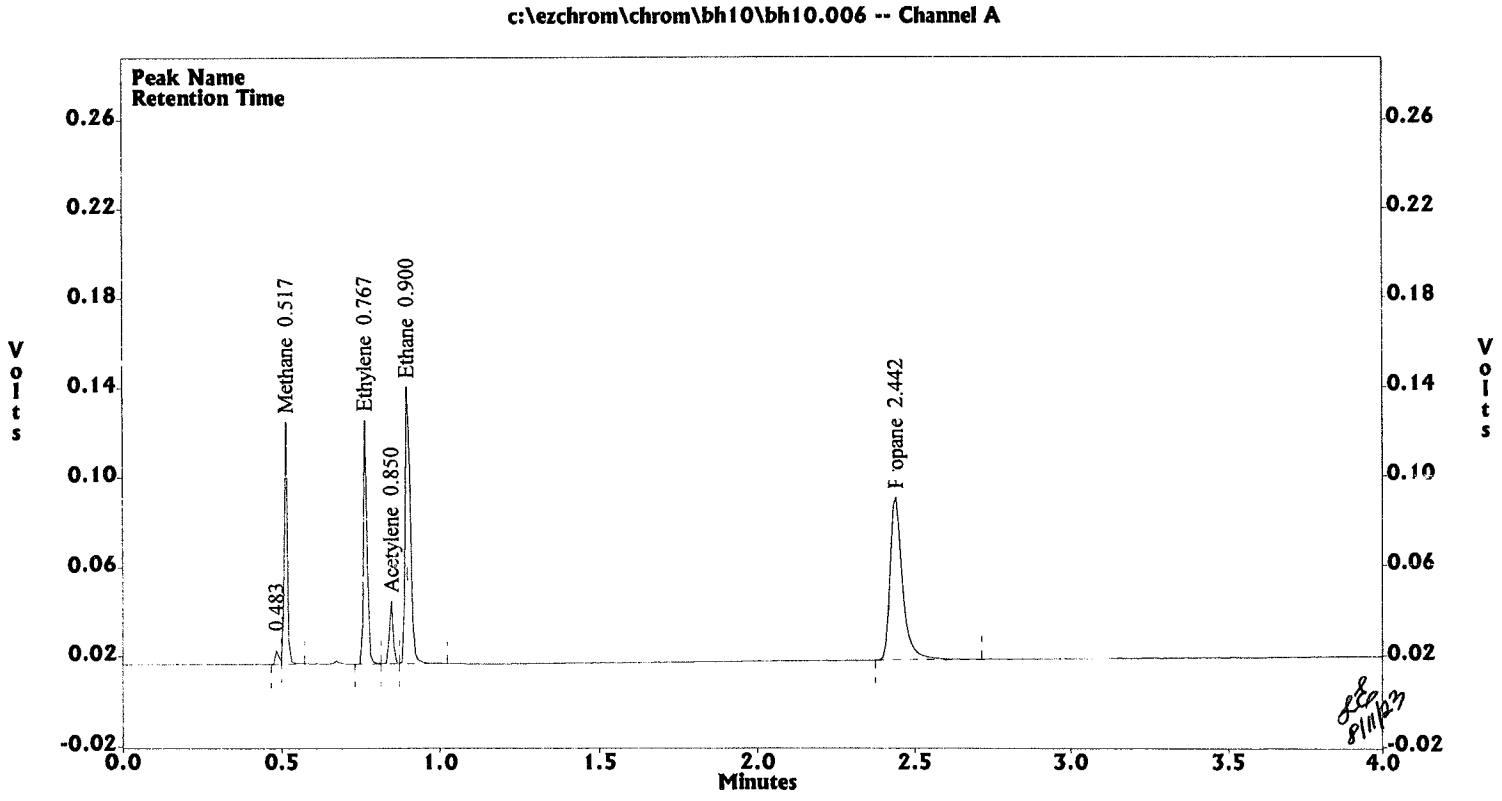


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.006
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1005
Acquired : Aug 10, 2023 12:17:22
Printed : Aug 10, 2023 13:01:34
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	74581	3195.35	25.510
3	Ethylene	0.767	87901	2060.05	44.640
4	Acetylene	0.850	23740	574.97	41.450
5	Ethane	0.900	134633	2984.48	47.830
6	Propane	2.442	200349	2994.95	70.150

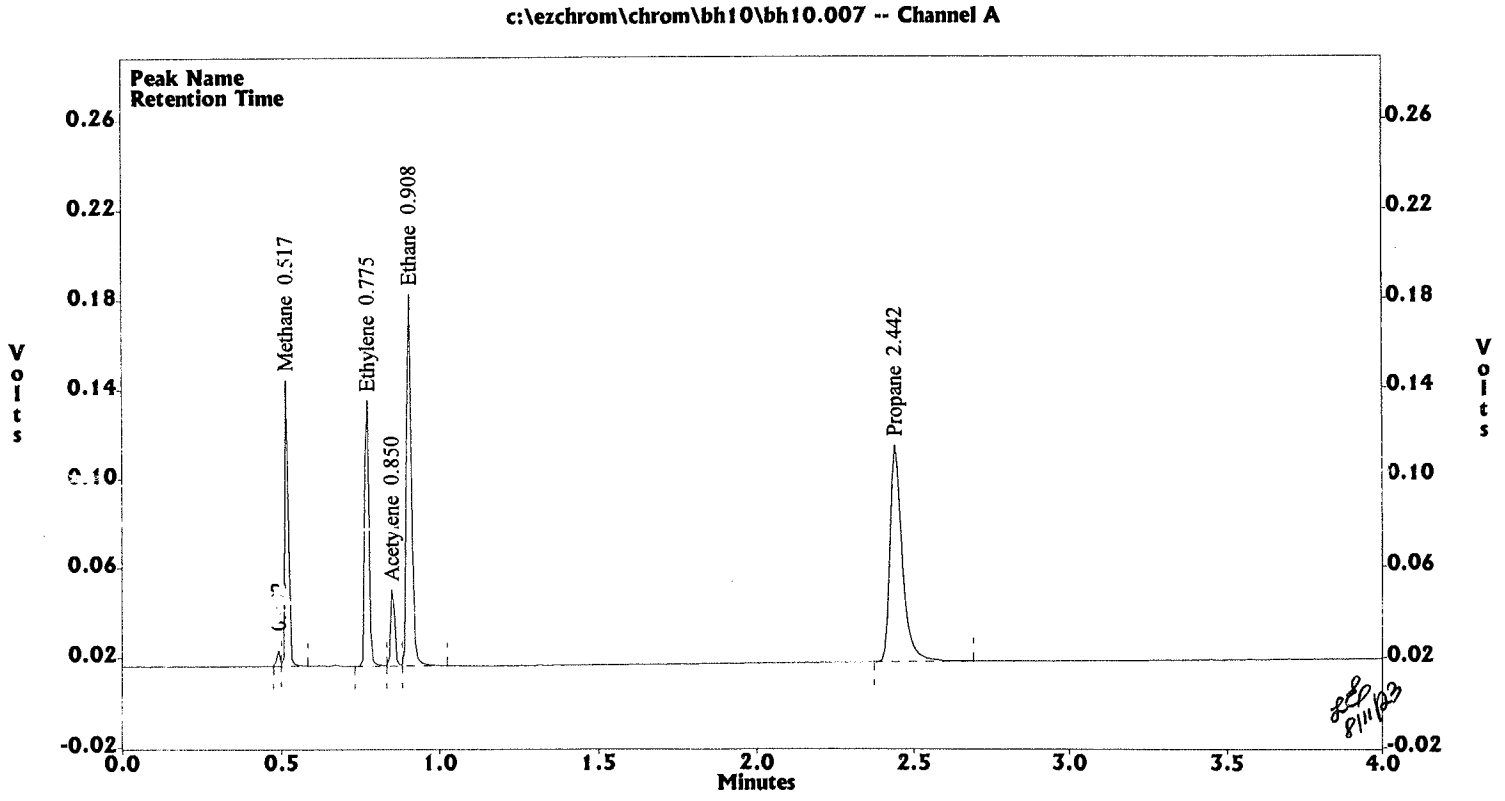


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.007
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1006
Acquired : Aug 10, 2023 12:29:40
Printed : Aug 10, 2023 13:01:43
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	96885	3195.35	34.010
3	Ethylene	0.775	116477	2060.05	59.520
4	Acetylene	0.850	31787	574.97	55.270
5	Ethane	0.908	176033	2984.48	63.770
6	Propane	2.442	261368	2994.95	93.530



SECOND SOURCE VERIFICATION

INITIAL CALIBRATION VERIFICATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BH10008A 08/10/2023 12:54
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.517	0.474	0.560	13.6	3195.3	43313	13.56	-0		15
Ethylene	0.767	0.652	0.882	23.8	2060.0	49406	23.98	1		15
Acetylene	0.850	0.735	0.965	22.1	575.000	12812	22.28	1		15
Ethane	0.900	0.796	1.004	25.5	2984.5	73566	24.65	-3		15
Propane	2.442	2.272	2.612	37.4	2995.0	109634	36.61	-2		15

DG72H10.MET

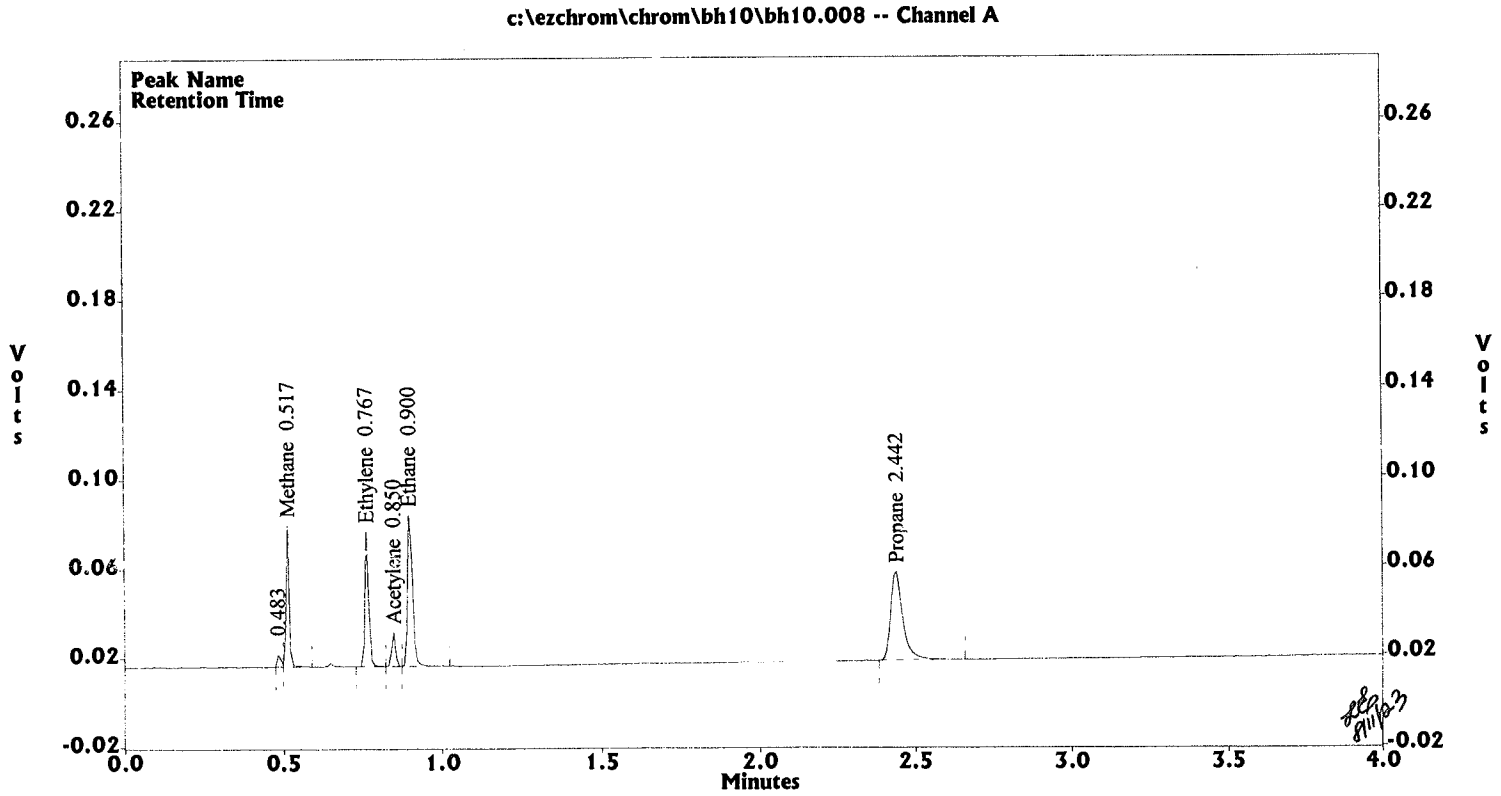
8/11/23

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.008
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : IDG72H10001
Acquired : Aug 10, 2023 12:54:30
Printed : Aug 10, 2023 13:07:59
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	43313	3195.35	13.555
3	Ethylene	0.767	49406	2060.05	23.983
4	Acetylene	0.850	12812	574.97	22.283
5	Ethane	0.900	73566	2984.48	24.649
6	Propane	2.442	109634	2994.95	36.606



DAILY CALIBRATIONS

CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BI19002A 09/19/2024 13:13
CONC UNIT : ppb

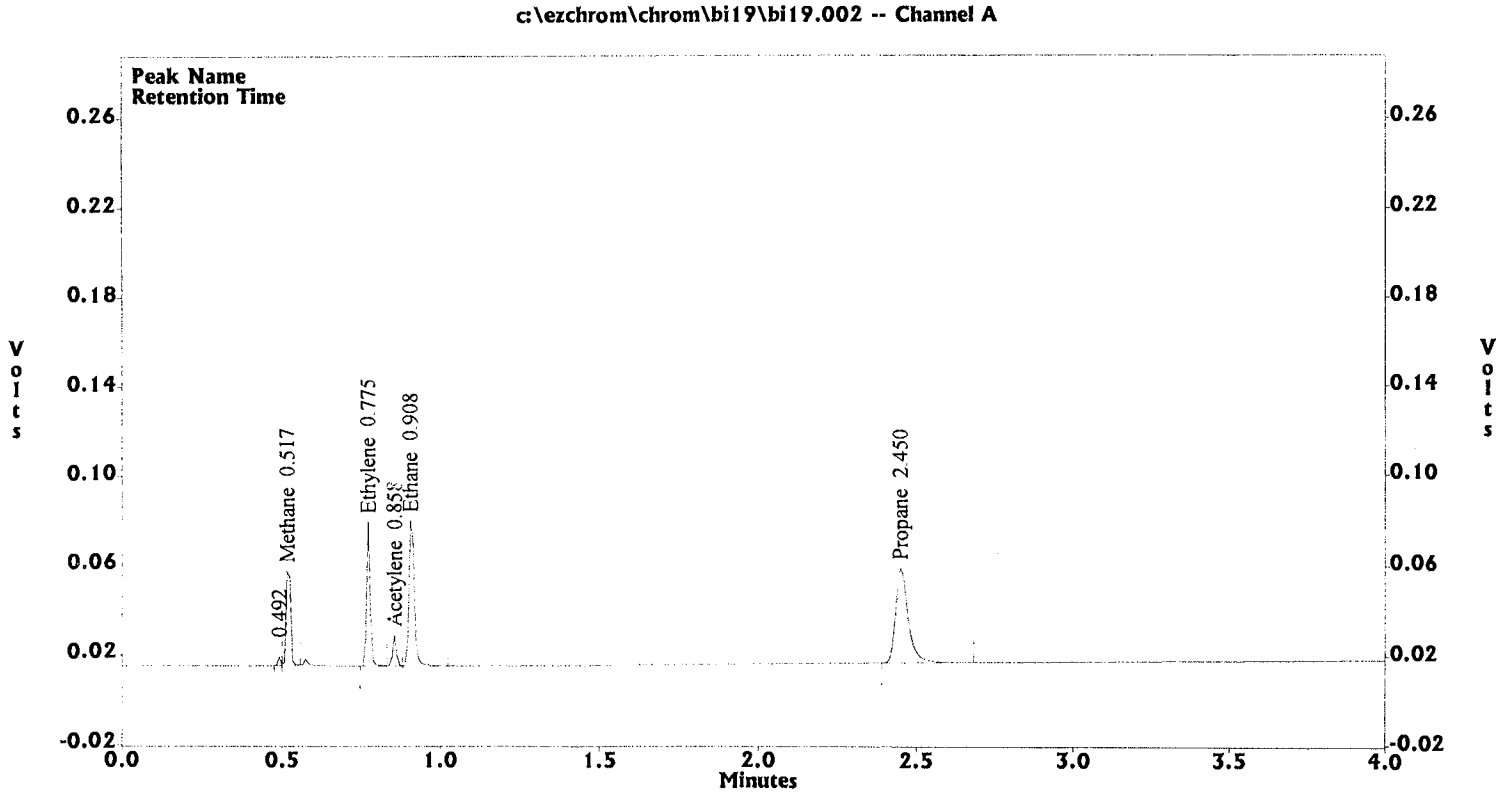
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.517	0.474	0.560	13.6	3195.3	42710	13.37	-2		15
Ethylene	0.775	0.660	0.890	23.8	2060.0	51018	24.76	4		15
Acetylene	0.858	0.743	0.973	22.1	575.000	11184	19.45	-12		15
Ethane	0.908	0.804	1.012	25.5	2984.5	74850	25.08	-2		15
Propane	2.450	2.280	2.620	37.4	2995.0	115791	38.66	3		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.002
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10527
Acquired : Sep 19, 2024 13:13:23
Printed : Sep 19, 2024 17:49:09
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	42710	3195.35	13.366
3	Ethylene	0.775	51018	2060.05	24.765
4	Acetylene	0.858	11184	574.97	19.451
5	Ethane	0.908	74850	2984.48	25.080
6	Propane	2.450	115791	2994.95	38.662



CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BI19013A 09/19/2024 16:17
CONC UNIT : ppb

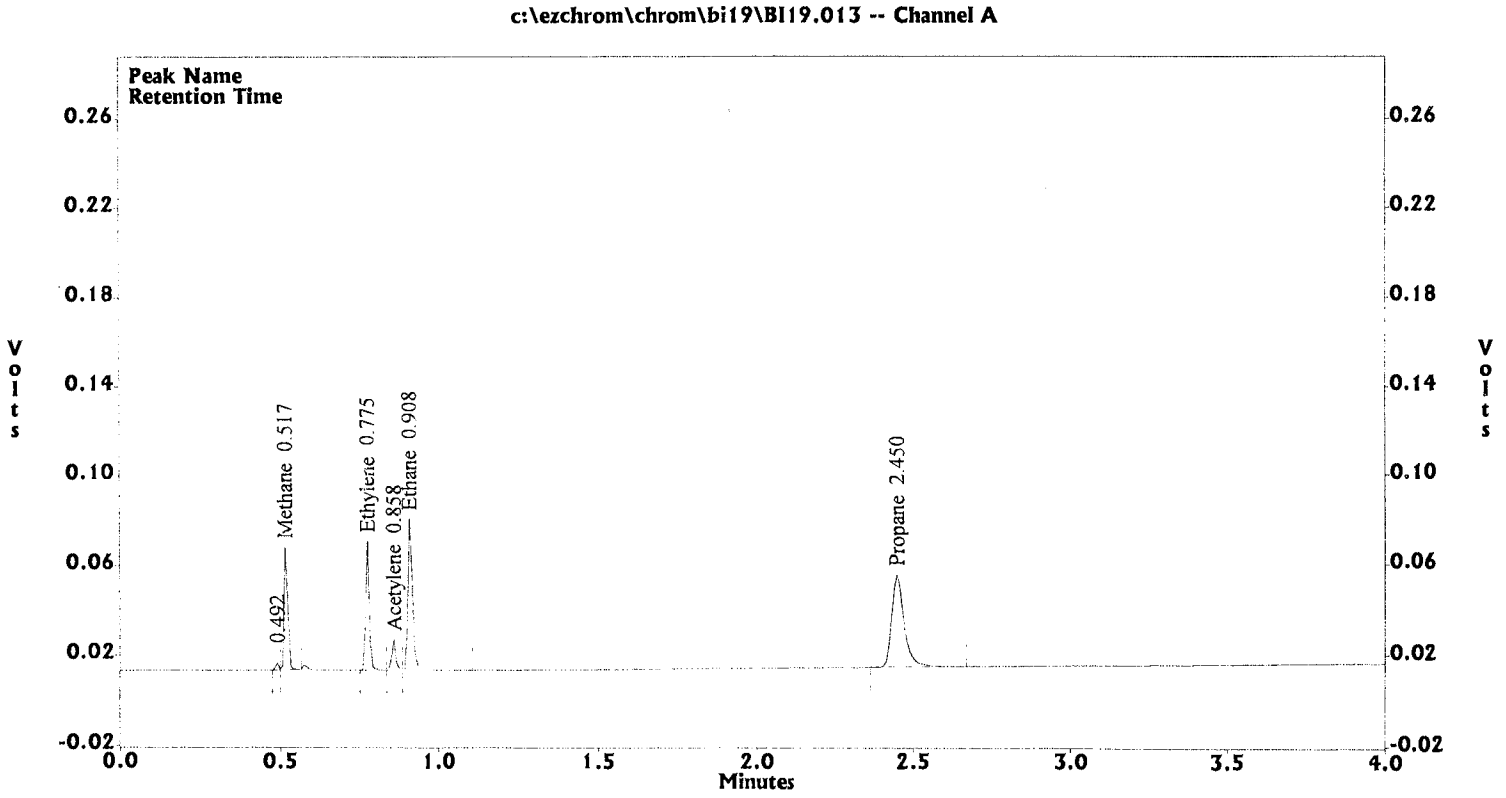
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.517	0.474	0.560	13.6	3195.3	42313	13.24	-3		15
Ethylene	0.775	0.660	0.890	23.8	2060.0	46163	22.41	-6		15
Acetylene	0.858	0.743	0.973	22.1	575.000	11780	20.49	-7		15
Ethane	0.908	0.804	1.012	25.5	2984.5	71252	23.87	-6		15
Propane	2.450	2.280	2.620	37.4	2995.0	110086	36.76	-2		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\BI19.013
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10528
Acquired : Sep 19, 2024 16:17:13
Printed : Sep 19, 2024 18:45:32
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	42313	3195.35	13.242
3	Ethylene	0.775	46163	2060.05	22.409
4	Acetylene	0.858	11780	574.97	20.488
5	Ethane	0.908	71252	2984.48	23.874
6	Propane	2.450	110086	2994.95	36.757



CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BI19024A 09/19/2024 19:01
CONC UNIT : ppb

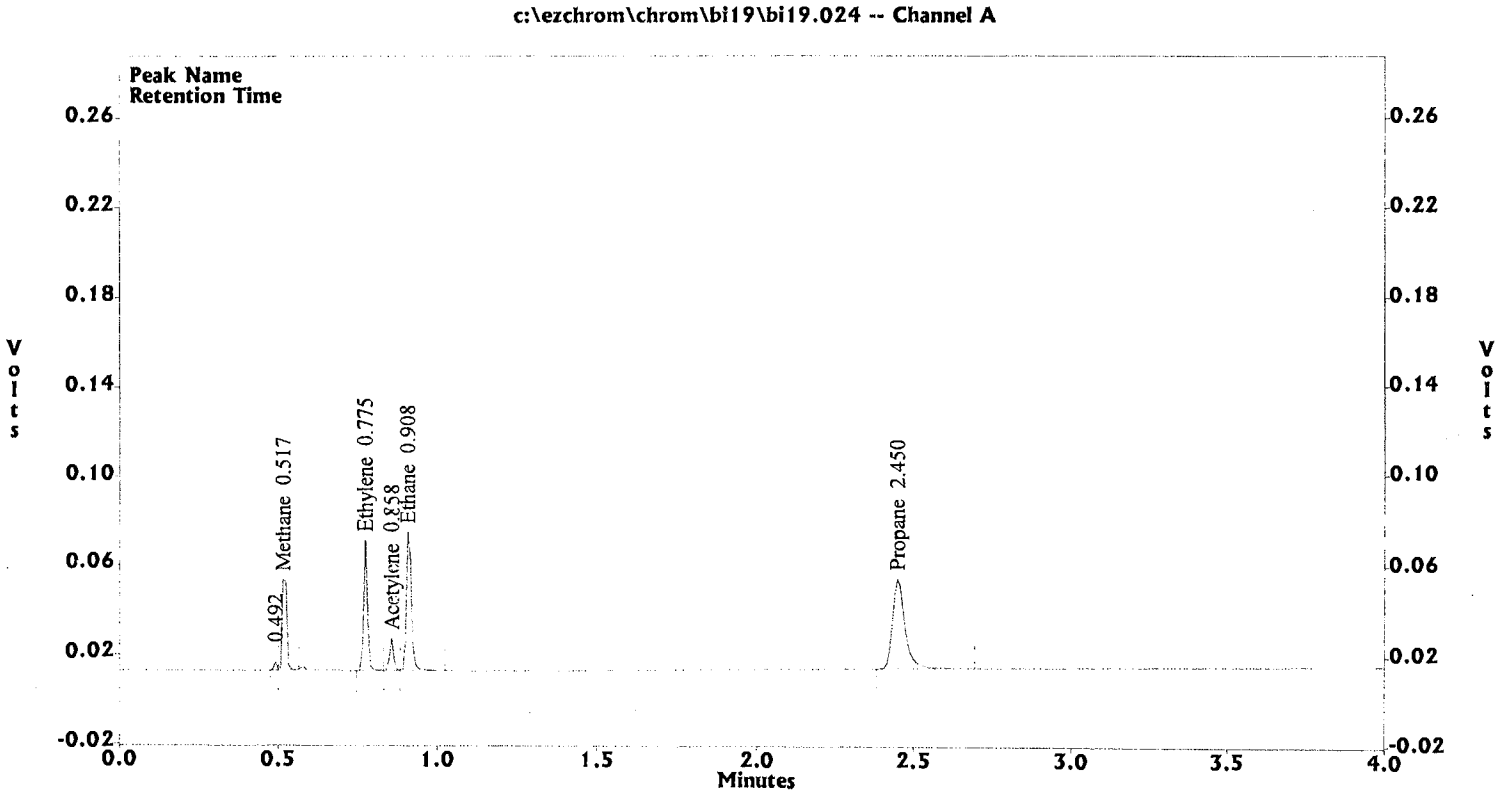
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.517	0.474	0.560	13.6	3195.3	42002	13.15	-3		15
Ethylene	0.775	0.660	0.890	23.8	2060.0	46296	22.47	-6		15
Acetylene	0.858	0.743	0.973	22.1	575.000	11777	20.48	-7		15
Ethane	0.908	0.804	1.012	25.5	2984.5	70271	23.55	-8		15
Propane	2.450	2.280	2.620	37.4	2995.0	109643	36.61	-2		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.024
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10529
Acquired : Sep 19, 2024 19:01:09
Printed : Sep 19, 2024 19:18:15
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	42002	3195.35	13.145
3	Ethylene	0.775	46296	2060.05	22.473
4	Acetylene	0.858	11777	574.97	20.483
5	Ethane	0.908	70271	2984.48	23.545
6	Propane	2.450	109643	2994.95	36.609



CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BI19027A 09/19/2024 19:34
CONC UNIT : ppb

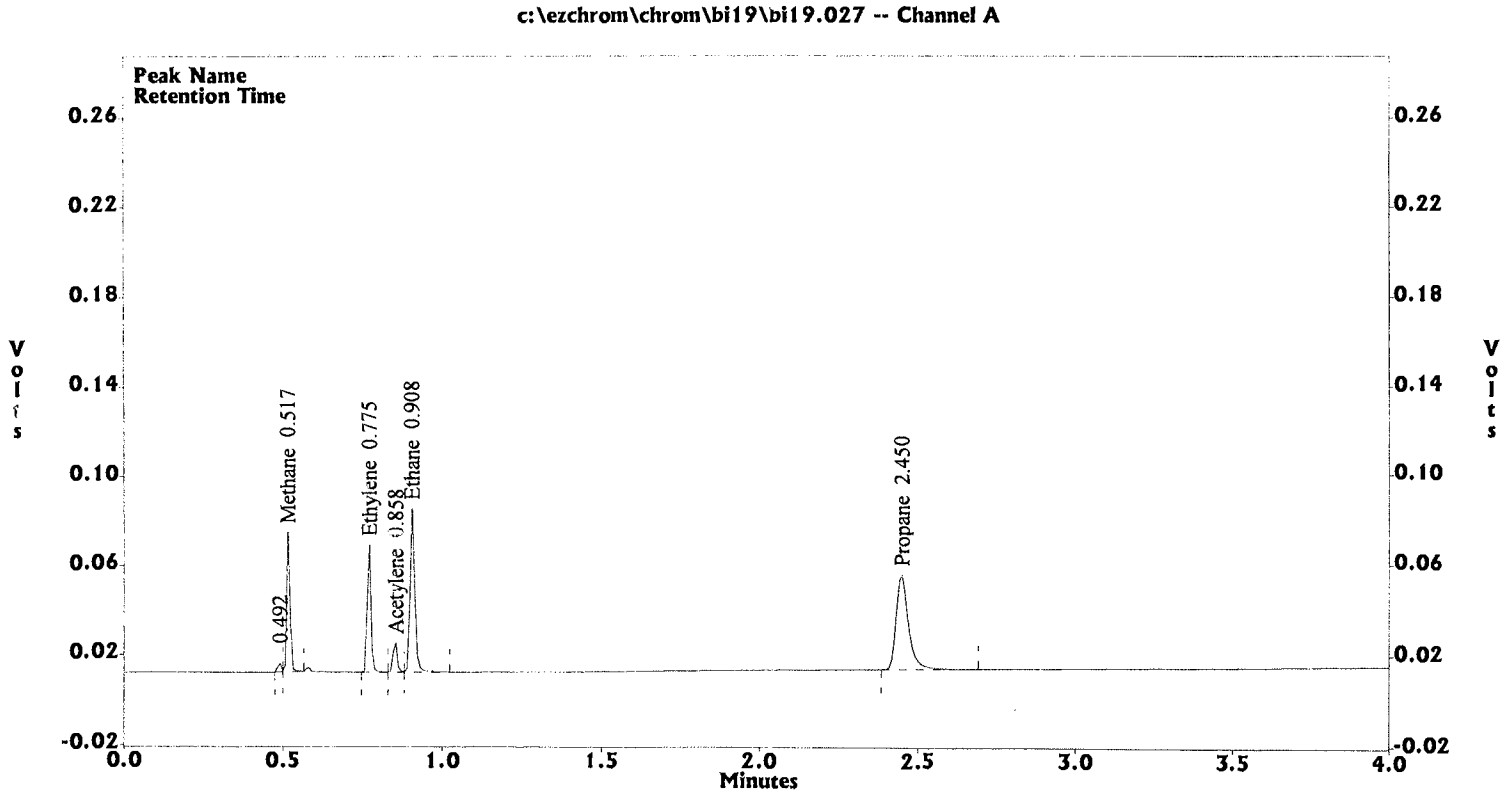
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.517	0.474	0.560	13.6	3195.3	43434	13.59	-0		15
Ethylene	0.775	0.660	0.890	23.8	2060.0	48738	23.66	-1		15
Acetylene	0.858	0.743	0.973	22.1	575.000	12279	21.36	-3		15
Ethane	0.908	0.804	1.012	25.5	2984.5	73980	24.79	-3		15
Propane	2.450	2.280	2.620	37.4	2995.0	115097	38.43	3		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bi19\bi19.027
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10530
Acquired : Sep 19, 2024 19:34:32
Printed : Sep 19, 2024 19:49:30
User : ASitu

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	43434	3195.35	13.593
3	Ethylene	0.775	48738	2060.05	23.659
4	Acetylene	0.858	12279	574.97	21.356
5	Ethane	0.908	73980	2984.48	24.788
6	Propane	2.450	115097	2994.95	38.430



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

- ☐ 10x : 400 µL of sample to 4000 µL final vol. (He)
- ☐ 20x : 200 µL of sample to 4000 µL final vol. (He)
- ☐ 40x : 100 µL of sample to 4000 µL final vol. (He)

DGAS ICAL
DGH008W : 4LCS (Training File Long Term)

Book #:	A72-031
Instrument No.:	72
Analytical Sequence:	BH10
Method File:	DG72H10
Analytical Batch:	CDG72H10001

SOP #	Rev. #
☑ EMAX-RSK175	5
☐ EMAX-D1945	0
☐ EMAX-	
☐ EMAX-	

STANDARDS ID		Conc (µL/L)
DCC	SS5B-25-22-02	200
ICAL	SS5B-25-21-03	10→500
ICV	SS5B-25-22-01	200
Temperature (°C)	21	
Data File		

SYRINGES
☐ 100 µL - MSF-02-01-12
☑ 100 µL - MSF-03-01-09
☐ 50 µL - MSF-03-01-08
☐ 100 µL - MSF-03-01-03
☐ 10 µL - MSF-03-01-06
☐

ELECTRONIC DATA ARCHIVAL	
Location	Date
Labbkup/Ezchrom/EZC_9_DGAS	

Analyzed By: LT

Date: 08/10/23

Disposed By:

Date Disposed:

Batch: bh10.seq

Run	Run Type	Sample ID	Method	Filename	Level	Mult.	Description
1	Unknown	IB72H1001	dg72h10.met	BH10.001	0	1	100uL
2	Begin Calibration	DG72H1001	dg72h10.met	BH10.002	1	1	100uL
3	Calibration	DG72H1002	dg72h10.met	BH10.003	2	1	100uL
4	Calibration	DG72H1003	dg72h10.met	BH10.004	3	1	100uL
5	Calibration	DG72H1004	dg72h10.met	BH10.005	4	1	100uL
6	Calibration	DG72H1005	dg72h10.met	BH10.006	5	1	100uL
7	End Calibration	DG72H1006	dg72h10.met	BH10.007	6	1	100uL
8	Unknown	IDG72H10001	dg72h10.met	BH10.008	0	1	100uL

FINAL

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

- ☐ 10x : 400 µL of sample to 4000 µL final vol. (He)
- ☐ 20x : 200 µL of sample to 4000 µL final vol. (He)
- ☑ 40x : 100 µL of sample to 4000 µL final vol. (He)

DGI005W; I087, I088, I062, I077

Book #:	A72-034
Instrument No.:	72
Analytical Sequence:	BI19
Method File:	DG72H10
Analytical Batch:	CDG72H10527

SOP #	Rev. #
☑ EMAX-RSK175	5
☐ EMAX-D1945	0
☐ EMAX-	
☐ EMAX-	

STANDARDS ID		Conc (µL/L)
DCC	555B-26-27-01	200
Temperature (°C)	21	
Data File		

SYRINGES
☐ 100 µL - MSF-02-01-12
☐ 100 µL - MSF-03-01-09
☑ 50 µL - MSF-03-01-08
☐ 100 µL - MSF-03-01-03
☐ 10 µL - MSF-03-01-12
☑ 100µL- MSF-04-01-04

ELECTRONIC DATA ARCHIVAL	
Location	Date
Labbkup/Ezchrom/EZC_9_DGAS	

Analyzed By: AS

Date: 9/19/24

Disposed By:

Date Disposed:

Batch: bi19.seq

Run	Sample ID	Method	Filename	Mult.	Description
1	IB72I1901	dg72h10.met	BI19.001	1	100uL
2	CDG72H10527	dg72h10.met	BI19.002	1	100uL
3	DGI005WB	dg72h10.met	BI19.003	1	100uL
4	DGI005WL	dg72h10.met	BI19.004	1	100uL
5	DGI005WC	dg72h10.met	BI19.005	1	100uL
6	I082-01	dg72h10.met	BI19.006	1	100uL
7	I082-01M	dg72h10.met	BI19.007	1	100uL
8	I082-01S	dg72h10.met	BI19.008	1	100uL
9	I082-01I DF=500	dg72h10.met	BI19.009	500	8uL of 40X
10	I082-02	dg72h10.met	BI19.010	1	100uL
11	I082-02I DF=500	dg72h10.met	BI19.011	500	8uL of 40X
12	I082-03	dg72h10.met	BI19.012	1	100uL
13	CDG72H10528	dg72h10.met	BI19.013	1	100uL
14	I082-03I DF=500	dg72h10.met	BI19.014	500	8uL of 40X
15	I088-01	dg72h10.met	BI19.015	1	100uL
16	I088-02	dg72h10.met	BI19.016	1	100uL
17	I088-03	dg72h10.met	BI19.017	1	100uL
18	I088-04	dg72h10.met	BI19.018	1	100uL
19	I062-01	dg72h10.met	BI19.019	1	100uL
20	I062-01M	dg72h10.met	BI19.020	1	100uL
21	I062-01S	dg72h10.met	BI19.021	1	100uL
22	I062-02	dg72h10.met	BI19.022	1	100uL
23	I062-03	dg72h10.met	BI19.023	1	100uL
24	CDG72H10529	dg72h10.met	BI19.024	1	100uL
25	I062-04	dg72h10.met	BI19.025	1	100uL
26	I077-07	dg72h10.met	BI19.026	1	100uL
27	CDG72H10530	dg72h10.met	BI19.027	1	100uL

FINAL

EXTRACTION LOG(S)

EMAX LABORATORIES, INC.

EXTRACTION LOG FOR DISSOLVED GAS

SOP ☑ EMAX-RSK175 Rev. 5 ☐ Propylene ☐ Room Temp. (°C): 21 Book #: EDG-062

Start Date: 9/19/24 Time: 12:30 End Date: 9/19/24 Time: 13:50

PREPARATION BATCH* DGI005W

Sample Prep ID	Lab Sample ID	Sample Amount (ml)	Extract Volume (ml)	pH (< 2)	Notes
01	DGI005WB	39	4	N/A	
02	WL			↓	
03	WC			↓	
04	I082-01			pH~7	rec'd unpreserved; sediment in vial
05	-01M			pH~7	
06	-01S			pH~7	
07	-02			pH~7	
08	-03			pH~7	
09	I088-01			pH~7	rec'd unpreserved
10	-02			pH~7	
11	-03			pH~7	
12	-04			pH~7	
13	I062-01			✓	
14	-01M			✓	
15	-01S			✓	
16	-02			✓	
17	-03			✓	
18	-04			✓	
19	I077-07			✓	
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

AS 9/19/24

Standards	ID	Amount Added (ul)
LCS/MS	SSSA-13-01-05	1600

Reagent	Source
H_2O	RW3-23-001
He	SSSA-13-02-09
Thermometer ID #:	RSK175-01
Tedlar Bag Lot#:	28221012
pH Strips:	HC 439475
Vial Manufacturer:	ESS #0R 309621

Syringes

- ☐ 5 mL - MSF-01-03-06
- ☑ 5 mL - MSF-01-01-12
- ☐ 5 mL - MSF-03-01-1S
- ☐ 1 mL - MSF-01-03-14
- ☐ 1 mL - MSF-01-02-24
- ☑ 5mL - MSF-02-01-19

Comments:

Prepared By: AS

Standard Added By: AS

EMAX LABORATORIES, INC.

EXTRACTION LOG FOR DISSOLVED GAS

SOP ☑ EMAX-RSK175 Rev. 5 ☐ Propylene ☐ Room Temp. (°C): 21 Book #: EDG-059

Start Date: 08/10/23 Time: 11:03 End Date: 08/10/23 Time: 11:38

PREPARATION BATCH* NA

Sample Prep ID	Lab Sample ID	Sample Amount (ml)	Extract Volume (ml)	pH (< 2)	Notes
01	DG72H10-01	39	4	NA	
02	-02	↓	↓	↓	
03	-03				
04	-04				
05	-05				
06	-06				
07	IDG72H10-001				
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					LT 8/10/23

Standards	ID	Amount Added (ul)
LCS/MS /ICV	SSSA-11-01-03	1606
ICAL	↓ -05	* See Comments

Reagent	Source
H_2O	RW 3-22-004
He	SSSA-12-02-05
Thermometer ID #:	RSK 175-01
Tedlar Bag Lot#:	28220128
pH Strips:	~~HC 203864~~ LT 8/10/23 N/A
Vial Manufacturer:	ESS #OR 292419

Syringes LT 8/10/23

- ☑ 5 mL - MSF-~~01-03-06~~ 03-01-05
- ☑ 5 mL - MSF-01-01-12
- ☑ 1 mL - MSF-01-03-14
- ☐ 1 mL - MSF-01-02-24
- ☐
- ☐

Comments: *

	DGAS Std (mL)		Helium (mL)
1)	0.08	+	3.92
2)	0.40	+	3.60
3)	1.00	+	3.00
4)	1.60	+	2.40
5)	3.00	+	1.00
6)	4.00	+	—

Prepared By: LT

Standard Added By: LT

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

WET CHEMICAL ANALYSES

SDG#: 24I077

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I077

METHOD E300.0
CHLORIDE

One(1) water sample was received on 09/14/24 to be analyzed for Chloride in accordance with Method E300.0 and project specific requirements.

Holding Time
The sample was analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Chloride was not detected in ICJ002WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. ICJ002WL/ICJ002WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Sample Analysis
The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I077

METHOD E300.0
SULFATE

One(1) water sample was received on 09/14/24 to be analyzed for Sulfate in accordance with Method E300.0 and project specific requirements.

Holding Time
The sample was analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Sulfate was not detected in ICJ002WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. ICJ002WL/ICJ002WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Sample Analysis
The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

SAMPLE RESULTS

METHOD E300.0
CHLORIDE

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24I077

Matrix : WATER
InstrumentID : D7

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DFxPREP FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	ICJ002WB	ND	1	NA	0.2	0.05	10/01/2412:28	NA	AJ02-03	AJ02-01	ICJ002W	NA	NA
LCS1W	ICJ002WL	2.07	1	NA	0.2	0.05	10/01/2412:48	NA	AJ02-04	AJ02-01	ICJ002W	NA	NA
LCD1W	ICJ002WC	2.01	1	NA	0.2	0.05	10/01/2413:08	NA	AJ02-05	AJ02-01	ICJ002W	NA	NA
MW42S-GW091224	I077-07J	269	100	NA	20	5	10/02/2402:01	NA	AJ02-41	AJ02-37	ICJ002W	09/12/2411:01	09/14/24

METHOD E300.0
SULFATE

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24I077

Matrix : WATER
InstrumentID : D7

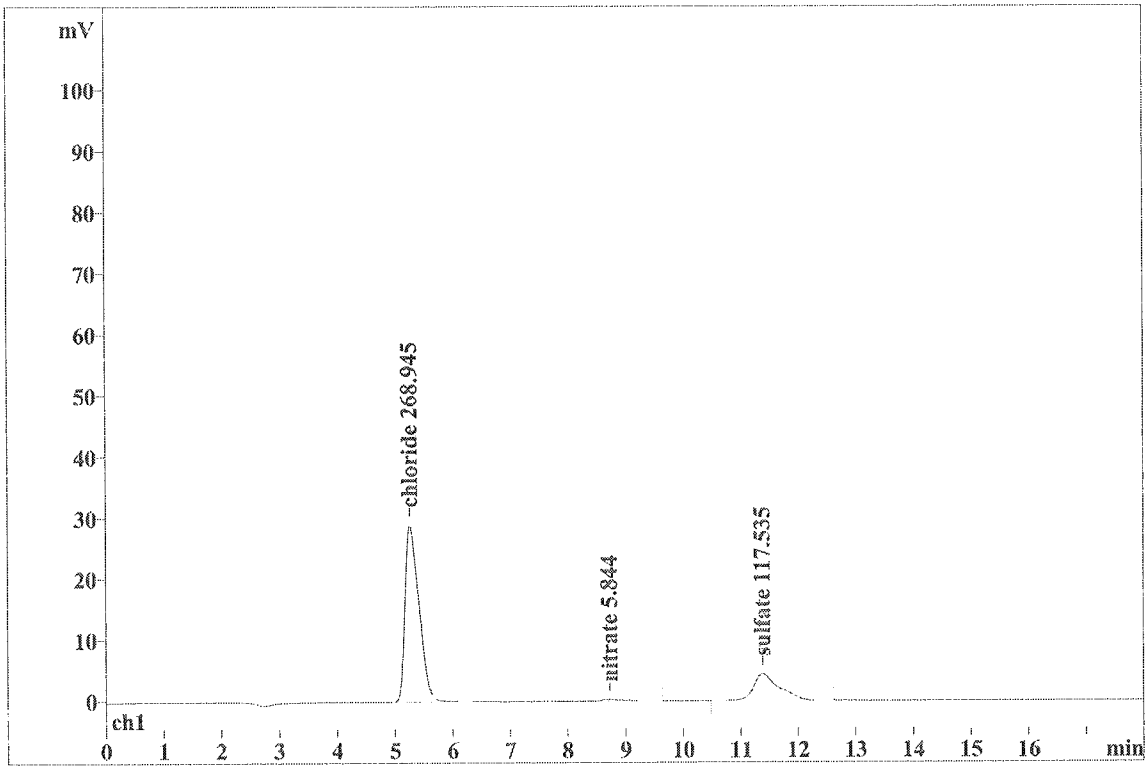
CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DFxPREP FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	ICJ002WB	ND	1	NA	0.5	0.13	10/01/2412:28	NA	AJ02-03	AJ02-01	ICJ002W	NA	NA
LCS1W	ICJ002WL	5.06	1	NA	0.5	0.13	10/01/2412:48	NA	AJ02-04	AJ02-01	ICJ002W	NA	NA
LCD1W	ICJ002WC	4.91	1	NA	0.5	0.13	10/01/2413:08	NA	AJ02-05	AJ02-01	ICJ002W	NA	NA
MW42S-GW091224	I077-07J	118	100	NA	50	13	10/02/2402:01	NA	AJ02-41	AJ02-37	ICJ002W	09/12/2411:01	09/14/24

Report date: 10/7/2024 2:05:23 PM
Printed by: ERodel

Ident: AJ02-41 I077-07J DF=100
Analysis from: 10/2/2024 2:01:38 AM
File: _2024-10-02_02-01.chw Last save: 10/4/2024 2:23:37 PM

Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 134009

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/20ml
Vial number: 41
Volume: 1.0 µL
Dilution: 100.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	5.27	29.07	488.589	268.945	chloride
2	8.71	0.28	7.895	5.844	nitrate
3	11.38	4.42	136.415	117.535	sulfate
3	18.00	33.77	632.899	392.323	

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QC SUMMARIES

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I077
METHOD : E300.0

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID :	MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID :	ICJ002WB	ICJ002WL	ICJ002WC
LAB FILE ID :	AJ02-03	AJ02-04	AJ02-05
DATE PREPARED :	NA	NA	NA
DATE ANALYZED :	10/01/2412:28	10/01/2412:48	10/01/2413:08
PREP BATCH :	ICJ002W	ICJ002W	ICJ002W
CALIBRATION REF:	AJ02-01	AJ02-01	AJ02-01

ACCESSION:

PARAMETER	MB RESULT (mg/L)	SPIKE AMT (mg/L)	BS RESULT (mg/L)	BS REC (%)	SPIKE AMT (mg/L)	BSD RESULT (mg/L)	BSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Chloride	ND	2	2.07	103	2	2.01	100	3	87-111	20

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I077
METHOD : E300.0

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID :	MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID :	ICJ002WB	ICJ002WL	ICJ002WC
LAB FILE ID :	AJ02-03	AJ02-04	AJ02-05
DATE PREPARED :	NA	NA	NA
DATE ANALYZED :	10/01/2412:28	10/01/2412:48	10/01/2413:08
PREP BATCH :	ICJ002W	ICJ002W	ICJ002W
CALIBRATION REF:	AJ02-01	AJ02-01	AJ02-01

ACCESSION:

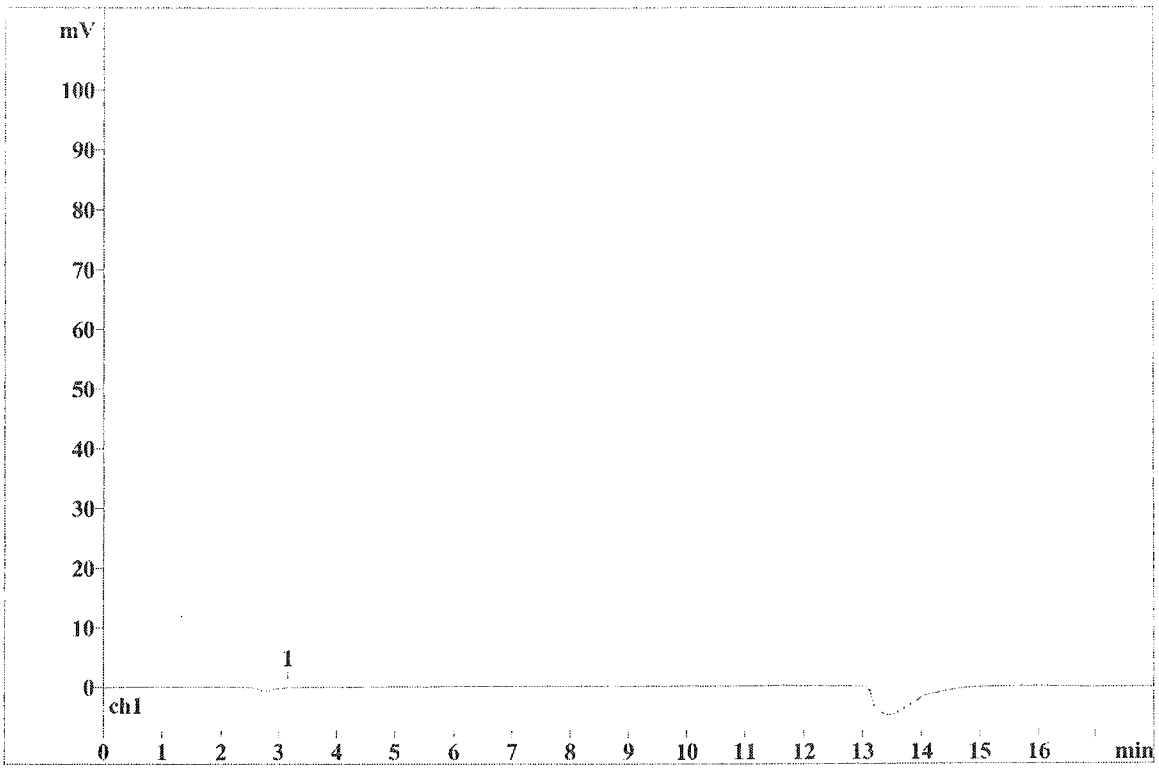
PARAMETER	MB RESULT (mg/L)	SPIKE AMT (mg/L)	BS RESULT (mg/L)	BS REC (%)	SPIKE AMT (mg/L)	BSD RESULT (mg/L)	BSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Sulfate	ND	5	5.06	101	5	4.91	98	3	87-112	20

QC DATA

Report date: 10/7/2024 1:24:00 PM
Printed by: ERodel

Ident: AJ02-03 ICJ002WB
Analysis from: 10/1/2024 12:28:06 PM
File: _2024-10-01_12-28.chw Last save: 10/1/2024 12:46:06 PM
Modified!
Method: ICD7-I23.mtw Last save: 9/28/2024 2:38:19 PM
Run operator: ERodel
An.lysis number: 133970

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 3
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.17	0.39	26.044	0.000	

This report has been created by IC Net
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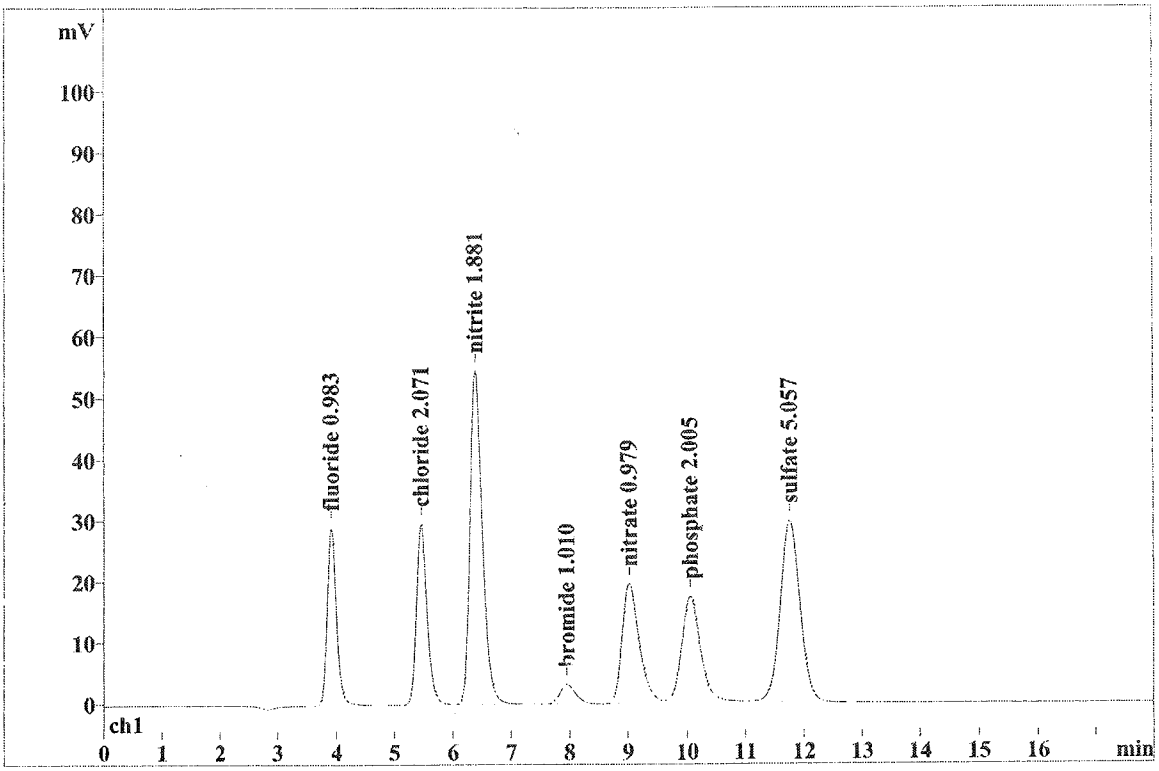
Report date: 10/7/2024 1:24:13 PM
Printed by: ERodel

Ident: AJ02-04 ICJ002WL
Analysis from: 10/1/2024 12:48:21 PM
File: _2024-10-01_12-48.chw Last save: 10/1/2024 3:42:18 PM

Method: ICD7-I23.mtw Last save: 9/28/2024 2:38:19 PM
Run operator: ERodel
Analysis number: 133971

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 4
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.91	29.07	325.060	0.983	fluoride
2	5.47	29.57	373.208	2.071	chloride
3	6.40	54.53	815.957	1.881	nitrite
4	7.96	3.23	60.896	1.010	bromide
5	9.03	19.46	386.522	0.979	nitrate
6	10.06	17.13	375.283	2.005	phosphate
7	11.77	29.65	686.396	5.057	sulfate
7	18.00	182.65	3023.323	13.986	

This report has been created by IC Net
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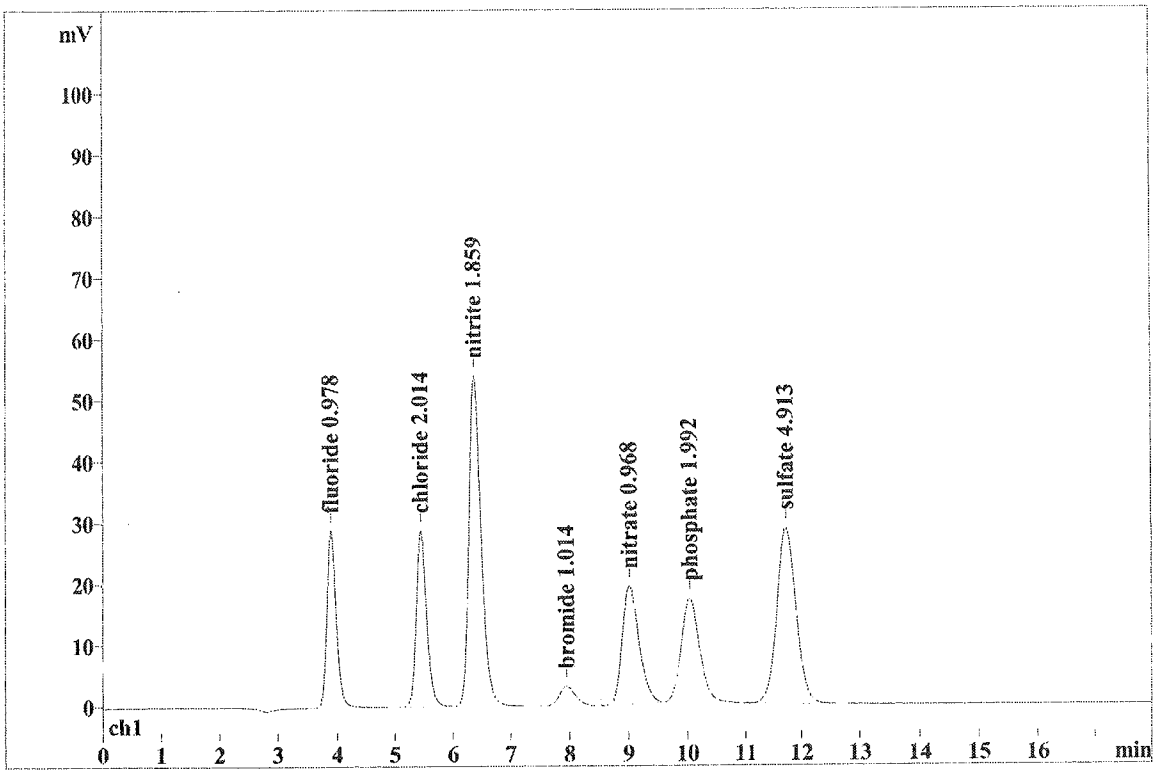
Report date: 10/7/2024 1:24:20 PM
Printed by: ERodel

Ident: AJ02-05 ICJ002WC
Analysis from: 10/1/2024 1:08:36 PM
File: _2024-10-01_13-08.chw Last save: 10/1/2024 3:42:42 PM

Method: ICD7-I23.mtw Last save: 9/20/2024 2:38:19 PM
Run operator: ERodel
Analysis number: 133972

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 5
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0.00



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.90	29.02	323.300	0.978	fluoride
2	5.45	28.86	362.651	2.014	chloride
3	6.39	54.04	806.528	1.859	nitrite
4	7.95	3.27	61.232	1.014	bromide
5	9.02	19.38	382.004	0.968	nitrate
6	10.04	17.07	372.615	1.992	phosphate
7	11.75	28.83	666.069	4.913	sulfate
7	18.00	180.46	2974.399	13.740	

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INITIAL CALIBRATION(S)

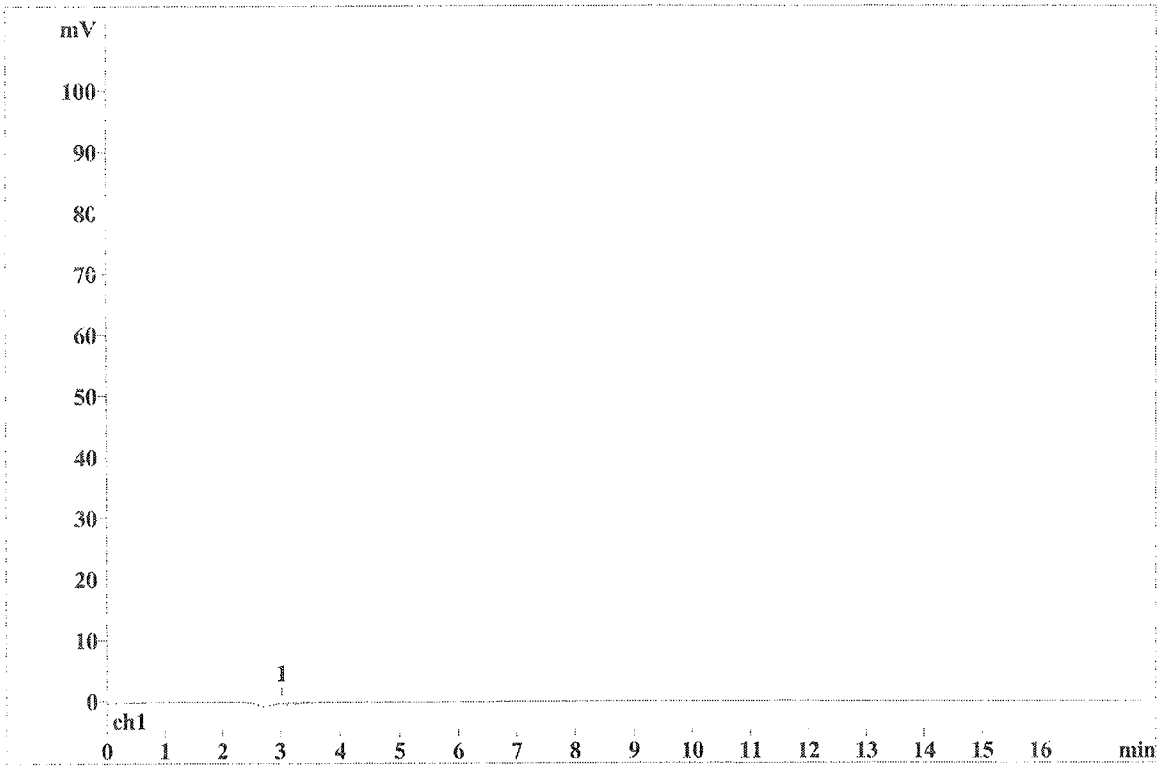
IC Result Check FormVersion : I23/AI32(2024)

LFID	LSID	Selection	iodide	chloride	fluoride	nitrite	bromide	nitrate	phosphate	sulfate	RawNetID	DF
AI32-01	IB	OCFIBNPS	0	0	0	0	0	0	0	0	_2024-09-23_18-12	1
AI32-02	S0	OCFIBNPS	0	0	0	0	0	0	0	0	_2024-09-23_18-32	1
AI32-03	S1	OCFIBNPS	0	0.108614	0.0843073	0.0817125	0.266844	0.0785244	0.195794	0.267441	_2024-09-23_18-53	1
AI32-04	S2	OCFIBNPS	0	0.149686	0.122848	0.121889	0.30554	0.11875	0.231533	0.303408	_2024-09-23_19-13	1
AI32-05	S3	OCFIBNPS	0	0.229721	0.200745	0.201335	0.38047	0.201269	0.304373	0.375788	_2024-09-23_19-33	1
AI32-06	S4	OCFIBNPS	0	0.48214	0.461048	0.459535	0.614251	0.468386	0.531232	0.608612	_2024-09-23_19-53	1
AI32-07	S5	OCFIBNPS	0	0.933934	0.952991	0.936214	1.01538	0.958395	0.962253	1.01492	_2024-09-23_20-14	1
AI32-08	S6	OCFIBNPS	0	1.89756	2.02806	1.94848	1.85007	2.02467	1.8839	1.84365	_2024-09-23_20-34	1
AI32-09	S7	OCFIBNPS	0	5.04835	5.28921	5.03216	4.55936	5.44893	4.78194	4.5886	_2024-09-23_20-54	1
AI32-10	S8	OCFIBNPS	0	10.579	10.3745	10.1386	9.54547	11.4217	9.80506	9.53559	_2024-09-23_21-15	1
AI32-11	S9	OCFIBNPS	0	22.1324	19.6464	19.9301	20.3126	23.8264	20.1539	20.312	_2024-09-23_21-35	1
AI32-12	ICV	OCFIBNPS	0%*	95.2%	95%	98%	99.7%	96.4%	95.9%	94.6%	_2024-09-23_21-55	1
AI32-13	ICV1	OCFIBNPS	0%*	92.4%	94.4%	94.2%	101%	98.1%	96.4%	105.8%	_2024-09-23_22-15	1
AI32-14	ICB	OCFIBNPS	0	0	0	0	0	0	0	0	_2024-09-23_22-36	1

Report date: 9/26/2024 12:43:36 PM
Printed by: ERodel

Ident: AI32-02 S0
Analysis from: 9/23/2024 6:32:44 PM
File: _2024-09-23_18-32.chw Last save: 9/24/2024 10:00:15 AM
Modified!
Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133697

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 2
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.02	0.30	9.717	0.000	

This report has been created by IC Net
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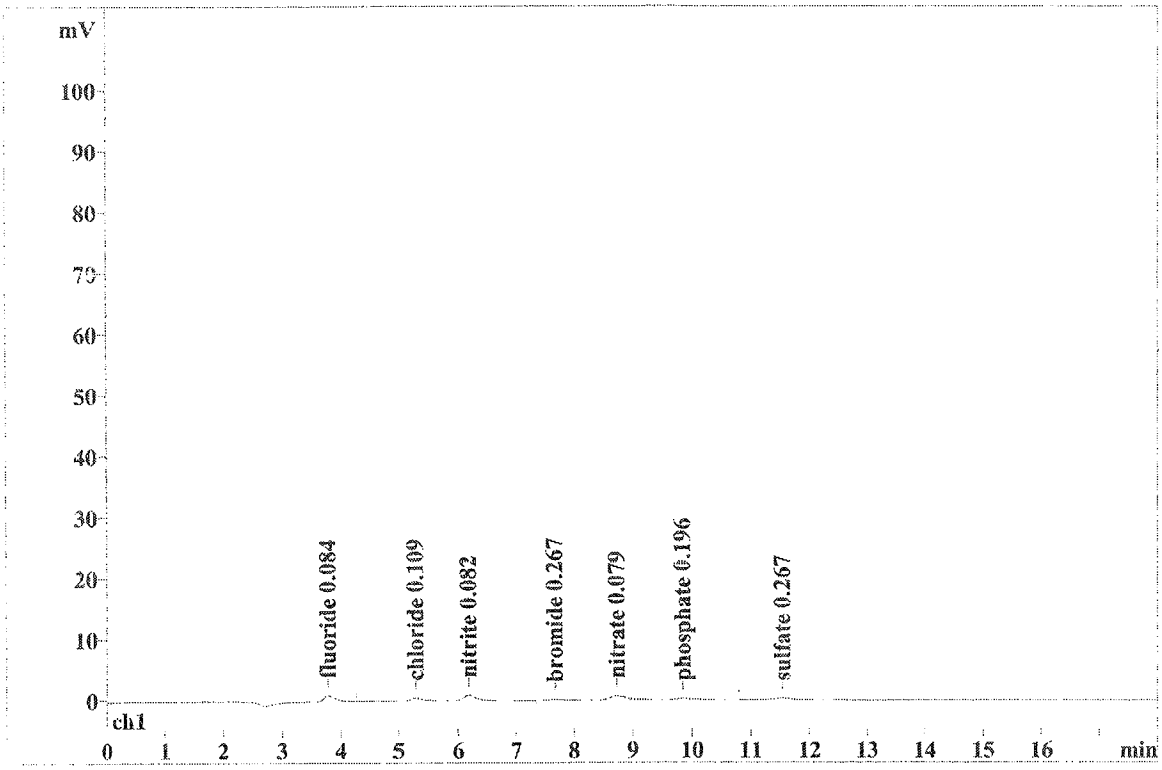
Report date: 9/26/2024 12:43:50 PM
Printed by: ERodel

Ident: AI32-03 S1
Analysis from: 9/23/2024 6:53:02 PM
File: _2024-09-23_18-53.chw Last save: 9/24/2024 10:00:15 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133698

SAMPLE: METHOD 300/9056/4110B
: 0.05 PPM
Vial number: 3
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.78	0.99	13.128	0.084	fluoride
2	5.28	0.52	7.402	0.109	chloride
3	6.18	0.96	15.324	0.082	nitrite
4	7.67	0.16	3.045	0.267	bromide
5	8.74	0.75	16.153	0.079	nitrate
6	9.85	0.27	7.020	0.196	phosphate
7	11.53	0.28	7.774	0.267	sulfate
7	18.00	3.91	69.846	1.083	

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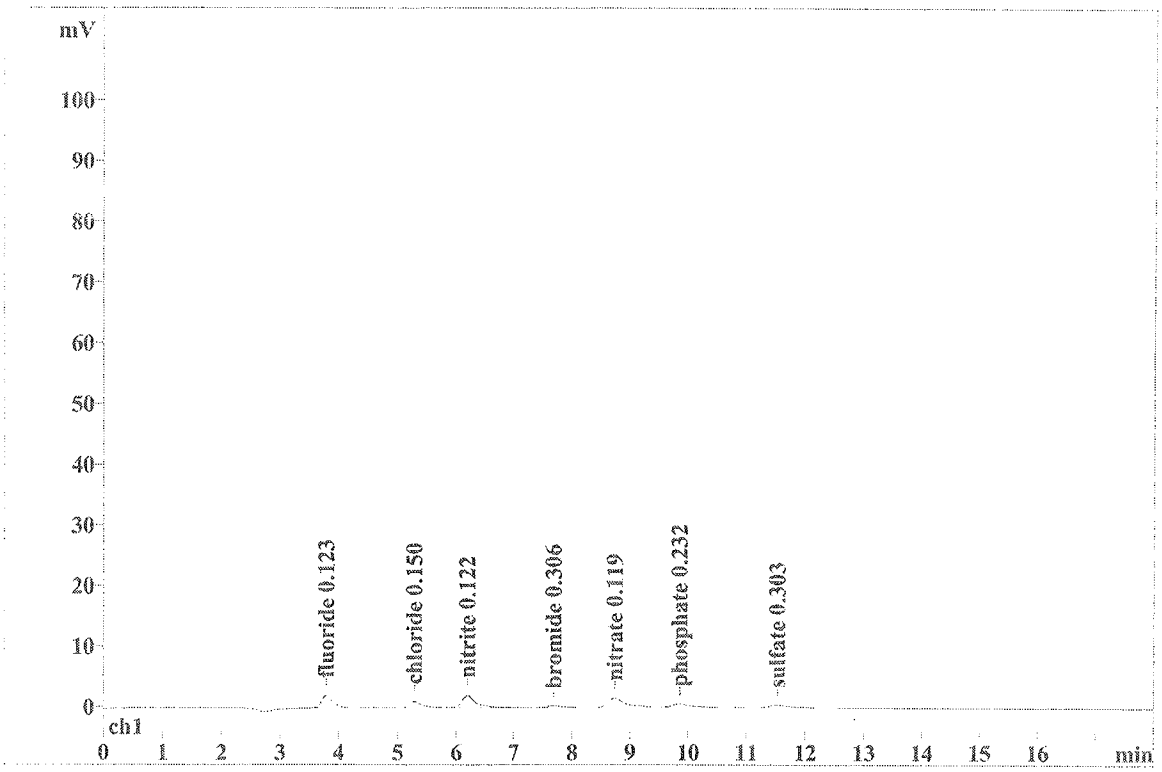
Report date: 9/26/2024 12:43:58 PM
Printed by: ERodel

Ident: AI32-04 S2
Analysis from: 9/23/2024 7:13:19 PM
File: _2024-09-23_19-13.chw Last save: 9/24/2024 10:00:15 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133699

SAMPLE: METHOD 300/9056/4110B
: 0.1 PPM
Vial number: 4
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	2.04	26.501	0.123	fluoride
2	5.29	1.05	15.060	0.150	chloride
3	6.19	2.06	33.205	0.122	nitrite
4	7.68	0.31	6.057	0.306	bromide
5	8.74	1.55	32.690	0.119	nitrate
6	9.85	0.57	14.295	0.232	phosphate
7	11.53	0.48	12.870	0.303	sulfate
7	18.00	8.06	140.679	1.354	

This report has been created by IC Net
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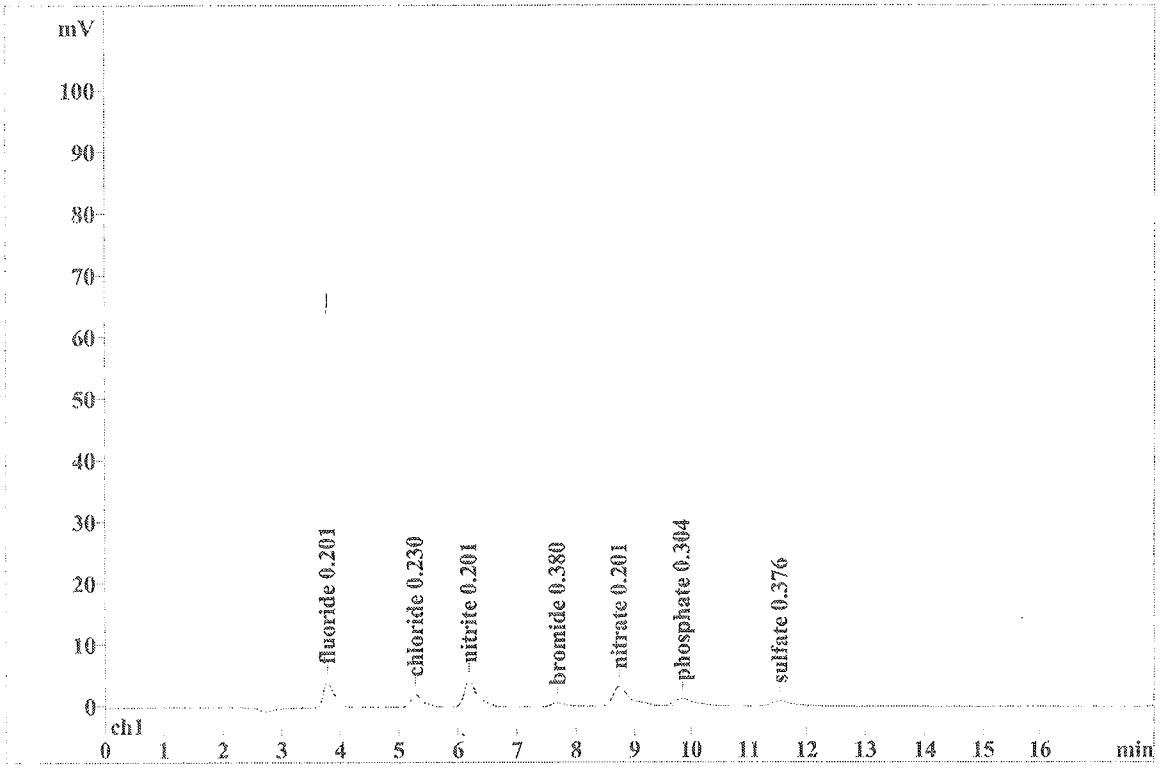
Report date: 9/26/2024 12:44:08 PM
Printed by: ERodel

Ident: AI32-05 S3
Analysis from: 9/23/2024 7:33:36 PM
File: _2024-09-23_19-33.chw Last save: 9/24/2024 10:00:15 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133700

SAMPLE: METHOD 300/9056/4110B
: 0.2 PPM
Vial number: 5
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	4.20	53.533	0.201	fluoride
2	5.29	2.08	29.982	0.230	chloride
3	6.19	4.29	68.562	0.201	nitrite
4	7.69	0.62	11.890	0.380	bromide
5	8.74	3.20	66.615	0.201	nitrate
6	9.86	1.17	29.122	0.304	phosphate
7	11.54	0.88	23.125	0.376	sulfate
7	18.00	16.44	282.829	1.894	

This report has been created by IC Net
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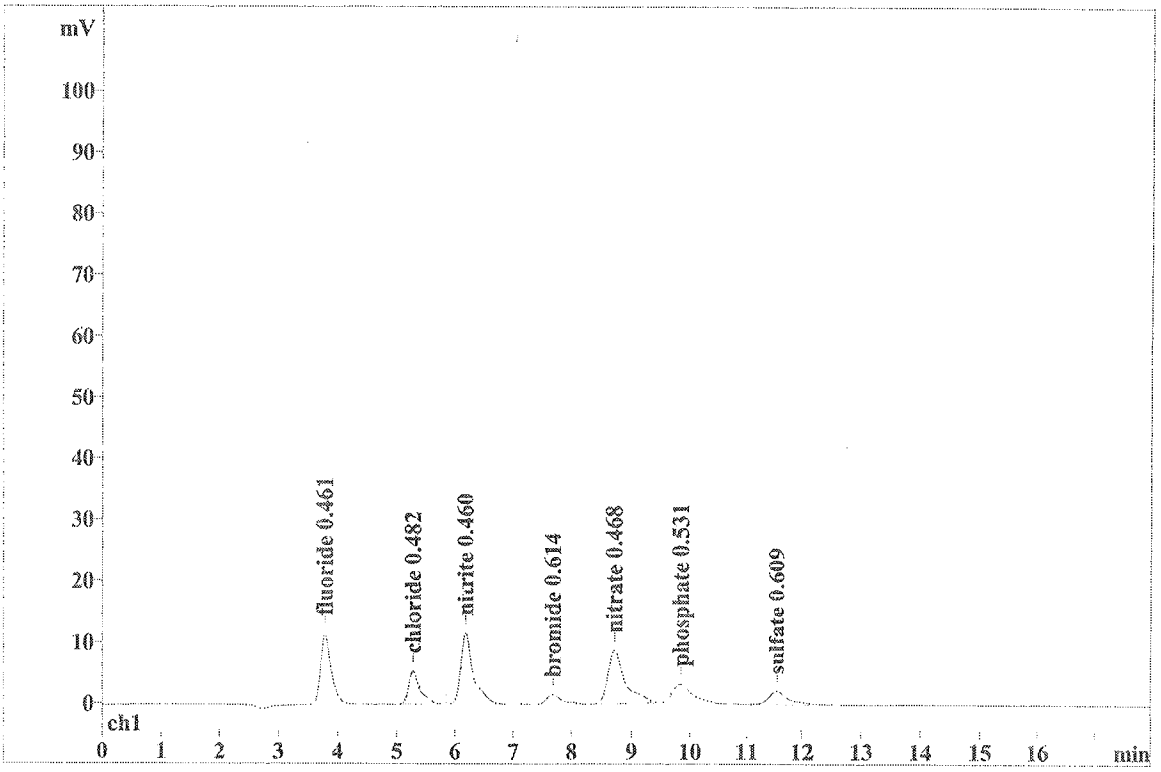
Report date: 9/26/2024 12:44:16 PM
Printed by: ERodel

Ident: AI32-06 S4
Analysis from: 9/23/2024 7:53:53 PM
File: _2024-09-23_19-53.chw Last save: 9/24/2024 10:00:15 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133701

SAMPLE: METHOD 300/9056/4110B
: 0.5 PPM
Vial number: 6
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.78	11.63	143.860	0.461	fluoride
2	5.28	5.49	77.045	0.482	chloride
3	6.19	11.69	183.474	0.460	nitrite
4	7.68	1.60	30.087	0.614	bromide
5	8.71	8.76	176.428	0.468	nitrate
6	9.84	3.18	75.301	0.531	phosphate
7	11.53	2.18	56.114	0.609	sulfate
7	18.00	44.51	742.310	3.625	

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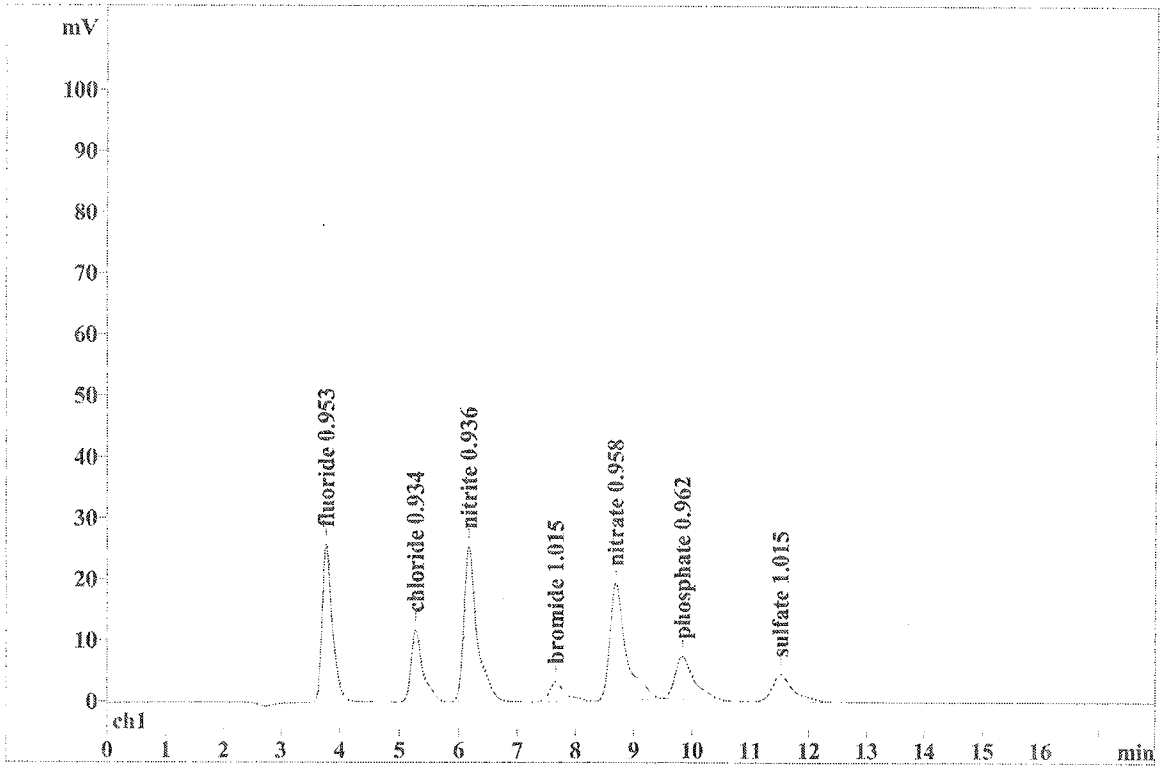
Report date: 9/26/2024 12:44:27 PM
Printed by: ERodel

Ident: AI32-07 S5
Analysis from: 9/23/2024 8:14:10 PM
File: _2024-09-23_20-14.chw Last save: 9/24/2024 10:00:15 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133702

SAMPLE: METHOD 300/9056/4110B
: 1.0 PPM
Vial number: 7
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.77	25.84	314.568	0.953	fluoride
2	5.27	11.78	161.280	0.934	chloride
3	6.17	25.42	395.621	0.936	nitrite
4	7.66	3.30	61.311	1.015	bromide
5	8.69	19.13	377.875	0.958	nitrate
6	9.83	7.00	163.038	0.962	phosphate
7	11.52	4.49	113.685	1.015	sulfate
7	17.99	96.98	1587.377	6.774	

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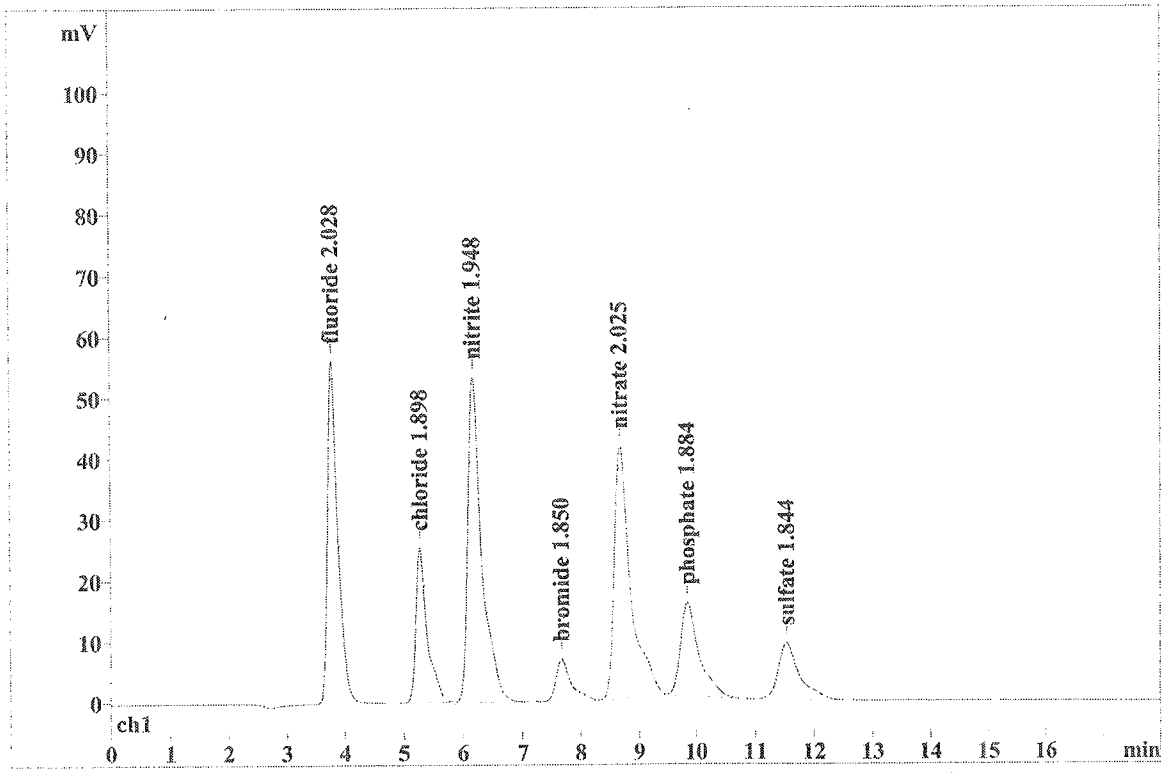
TK 09/30/..

Report date: 9/26/2024 12:44:37 PM
Printed by: ERodel

Ident: AI32-08 S6
Analysis from: 9/23/2024 8:34:27 PM
File: _2024-09-23_20-34.chw Last save: 9/24/2024 10:00:16 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133703

SAMPLE: METHOD 300/9056/4110B
: 2.0 PPM
Vial number: 8
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	56.32	687.626	2.028	fluoride
2	5.29	25.42	340.944	1.898	chloride
3	6.18	53.40	846.132	1.948	nitrite
4	7.67	6.93	126.283	1.850	bromide
5	8.68	41.43	816.230	2.025	nitrate
6	9.85	15.39	350.647	1.884	phosphate
7	11.54	9.35	231.107	1.844	sulfate
7	18.00	208.23	3398.970	13.476	

This report has been created by IC Net
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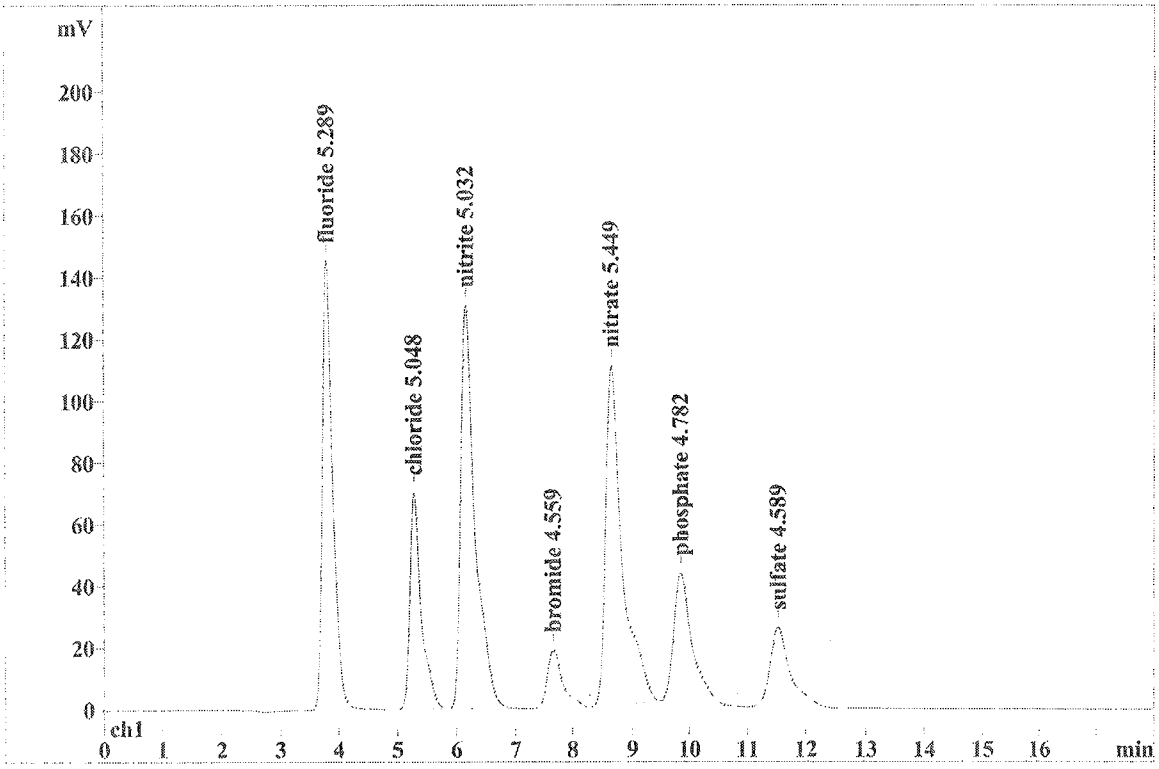
Report date: 9/26/2024 12:44:55 PM
Printed by: ERodel

Ident: AI32-09 S7
Analysis from: 9/23/2024 8:54:44 PM
File: _2024-09-23_20-54.chw Last save: 9/24/2024 10:00:16 AM
Modified!
Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133704

SAMPLE: METHOD 300/9056/4110B
: 5.0 PPM
Vial number: 9
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.80	145.64	1819.272	5.289	fluoride
2	5.28	70.16	928.396	5.048	chloride
3	6.17	130.80	2218.524	5.032	nitrite
4	7.66	18.87	337.174	4.559	bromide
5	8.65	110.28	2223.965	5.449	nitrate
6	9.85	41.94	940.563	4.782	phosphate
7	11.54	25.85	620.041	4.589	sulfate
7	18.00	543.53	9087.936	34.749	

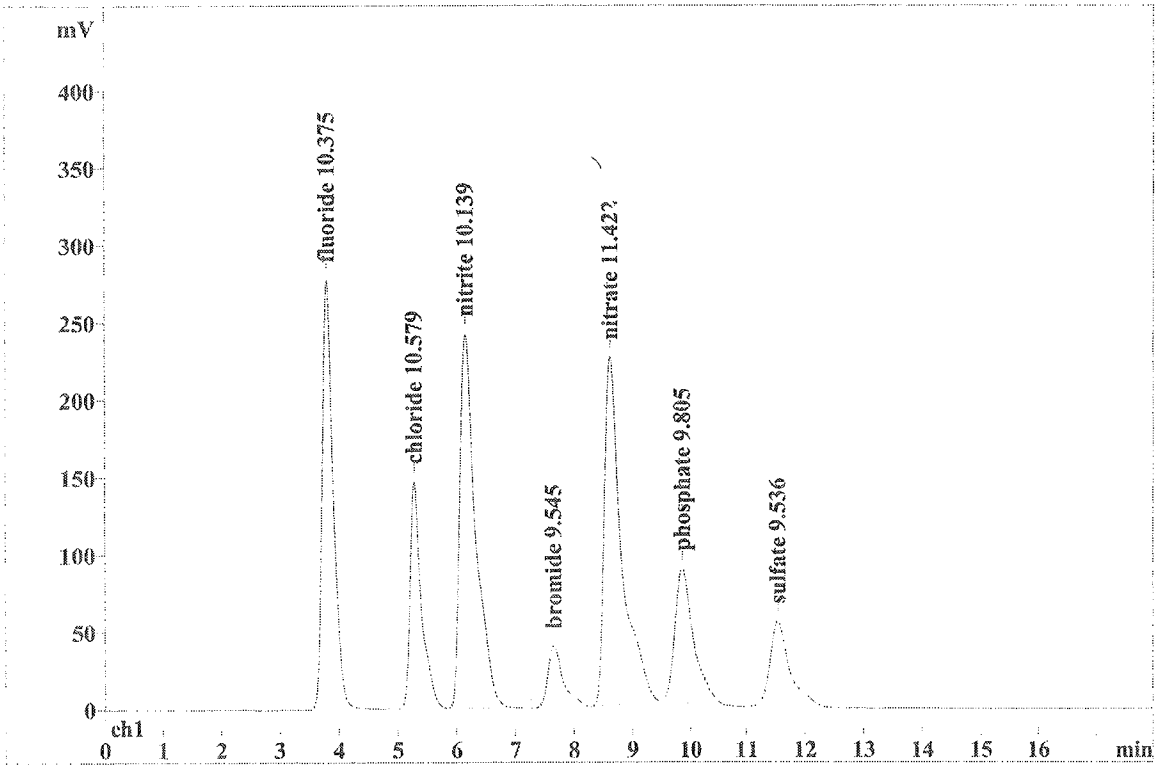
This report has been created by IC Net
METROHM LTD

Report date: 9/26/2024 12:45:11 PM
Printed by: ERodel

Ident: AI32-10 S8
Analysis from: 9/23/2024 9:15:02 PM
File: _2024-09-23_21-15.chw Last save: 9/24/2024 10:00:16 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133705

SAMPLE: METHOD 300/9056/4110B
: 10.0 PPM
Vial number: 10
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.81	278.06	3583.919	10.375	fluoride
2	5.28	147.02	1959.558	10.579	chloride
3	6.15	242.06	4491.163	10.139	nitrite
4	7.65	39.78	725.291	9.545	bromide
5	8.62	225.13	4079.430	11.422	nitrate
6	9.86	86.92	1963.056	9.805	phosphate
7	11.54	55.42	1320.985	9.536	sulfate
7	18.00	1074.39	18723.403	71.400	

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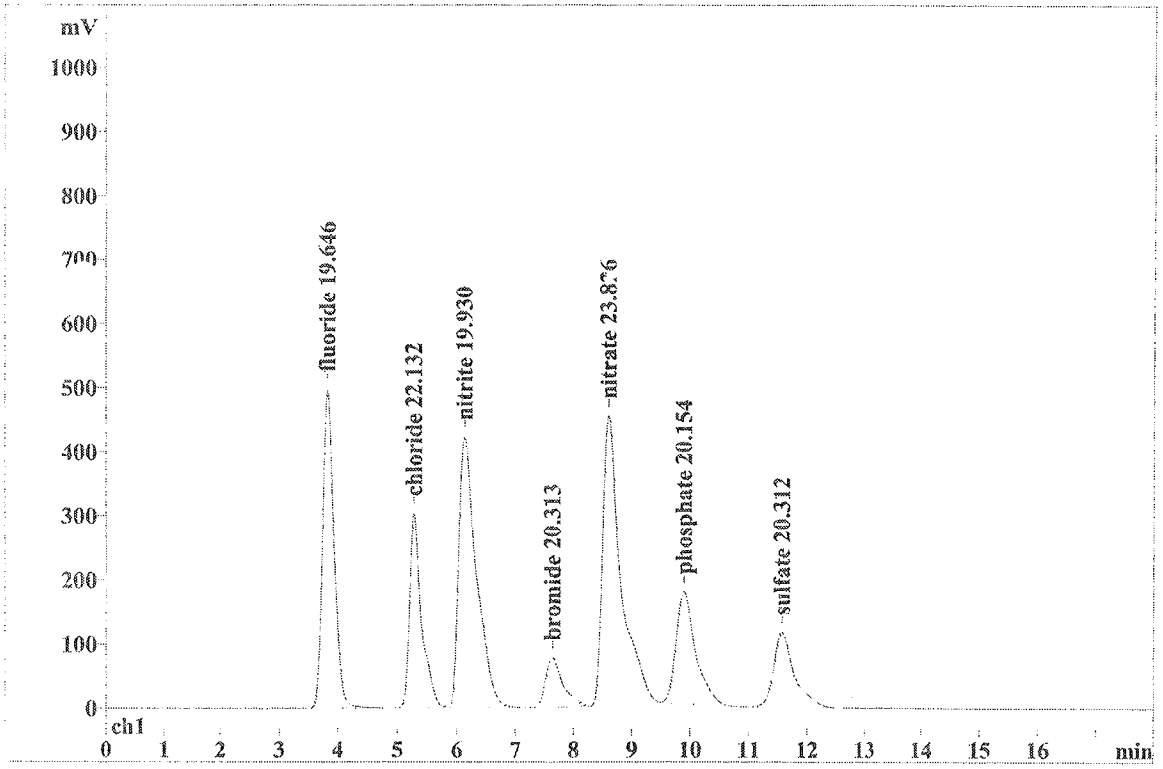
Report date: 9/26/2024 12:45:29 PM
Printed by: ERodel

Ident: AI32-11 S9
Analysis from: 9/23/2024 9:35:19 PM
File: _2024-09-23_21-35.chw Last save: 9/24/2024 10:00:16 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133706

SAMPLE: METHOD 300/9056/4110B
: 20.0 PPM
Vial number: 11
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.83	496.76	6801.324	19.646	fluoride
2	5.28	302.58	4113.643	22.132	chloride
3	6.14	420.51	8848.846	19.930	nitrite
4	7.65	76.98	1563.402	20.313	bromide
5	8.61	451.02	9779.087	23.826	nitrate
6	9.89	174.73	4069.639	20.154	phosphate
7	11.57	116.83	2847.302	20.312	sulfate
7	18.00	2039.41	38023.843	146.314	

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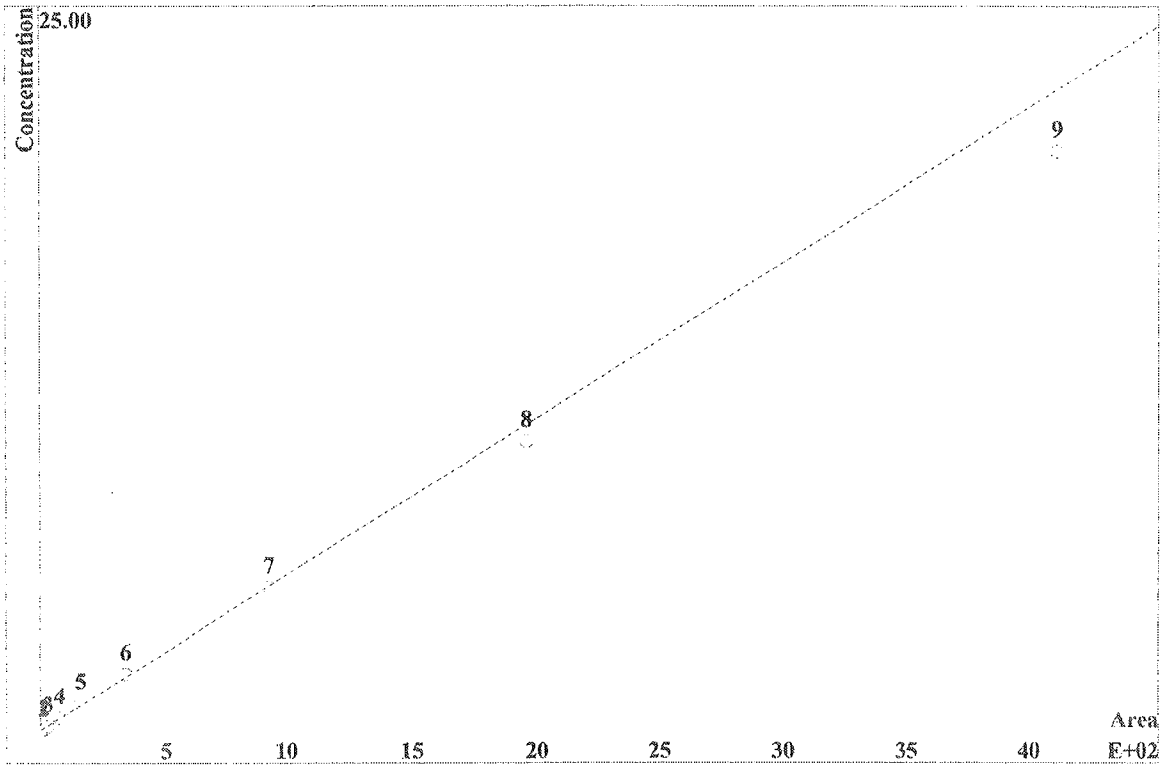
CALIBRATION OF COMPONENT chloride

Method: ICD7-I23.mtw
Equation: Q = 0.00536348·A + 0.0689113
RSD: 5.514 %
Correlation coefficient: 0.999364

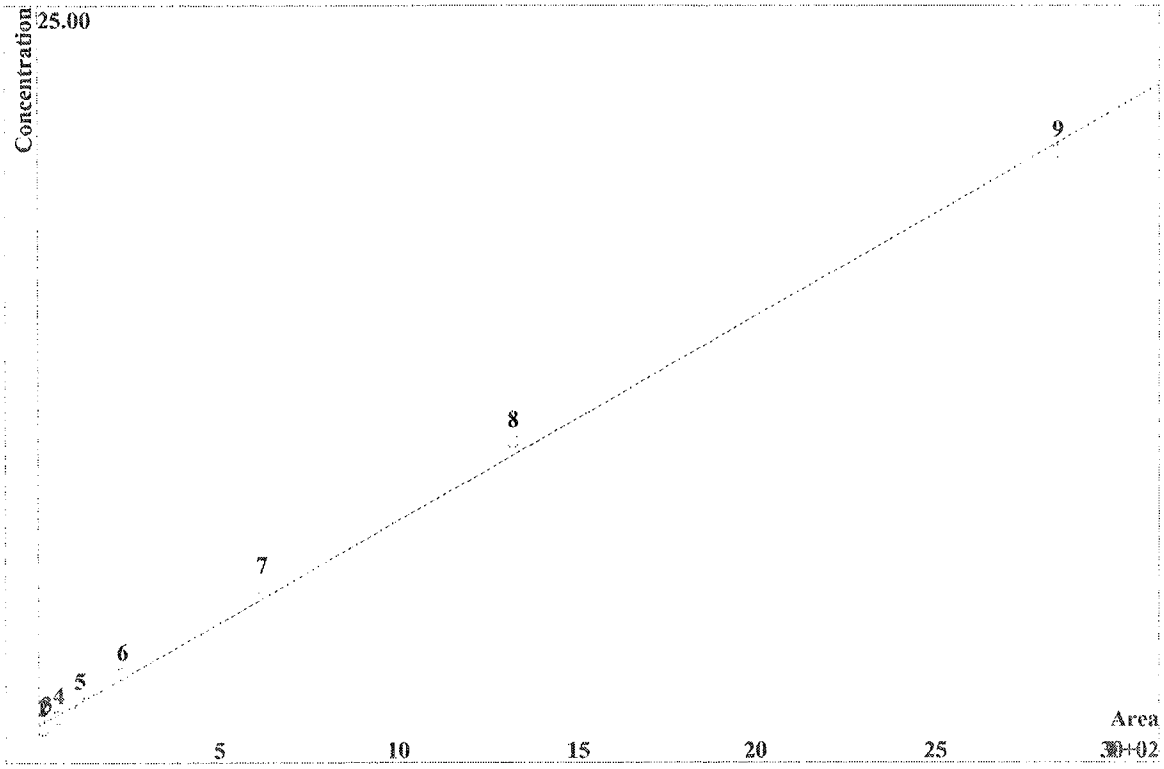


K3 = 0 K2 = 0 K1 = 0.00536348 K0 = 0.0689113
Base: Area
Ref.channel: ch1
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.5195	7.402	0.05	1	5.28	Yes	_2024-09-23_1i
2	1.048	15.06	0.1	1	5.28	Yes	_2024-09-23_1i
3	2.081	29.98	0.2	1	5.28	Yes	_2024-09-23_1i
4	5.49	77.04	0.5	1	5.28	Yes	_2024-09-23_1i
5	11.79	161.3	1	1	5.28	Yes	_2024-09-23_2i
6	25.42	340.9	2	1	5.28	Yes	_2024-09-23_2i
7	70.16	928.4	5	1	5.28	Yes	_2024-09-23_2i
8	147	1960	10	1	5.28	No	_2024-09-23_2
9	302.6	4114	20	1	5.28	No	_2024-09-23_2

CALIBRATION OF COMPONENT sulfate

Method: ICD7-I23.mtw
Equation: Q = 0.00705762·A + 0.212578
RSD: 6.995 %
Correlation coefficient: 0.999119



K3 = 0 K2 = 0 K1 = 0.00705762 K0 = 0.212578
Base: Area
Ref.channel: ch1
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.2767	7.774	0.05	1	11.54	Yes	_2024-09-23_1i
2	0.4793	12.87	0.1	1	11.54	Yes	_2024-09-23_1i
3	0.8799	23.13	0.2	1	11.54	Yes	_2024-09-23_1i
4	2.178	56.11	0.5	1	11.54	Yes	_2024-09-23_1i
5	4.493	113.7	1	1	11.54	Yes	_2024-09-23_2i
6	9.347	231.1	2	1	11.54	Yes	_2024-09-23_2i
7	25.85	620	5	1	11.54	Yes	_2024-09-23_2i
8	55.42	1321	10	1	11.54	Yes	_2024-09-23_2
9	116.8	2348	20	1	11.54	Yes	_2024-09-23_2

SECOND SOURCE VERIFICATION

IC Result Check FormVersion : I23/AI32(2024)

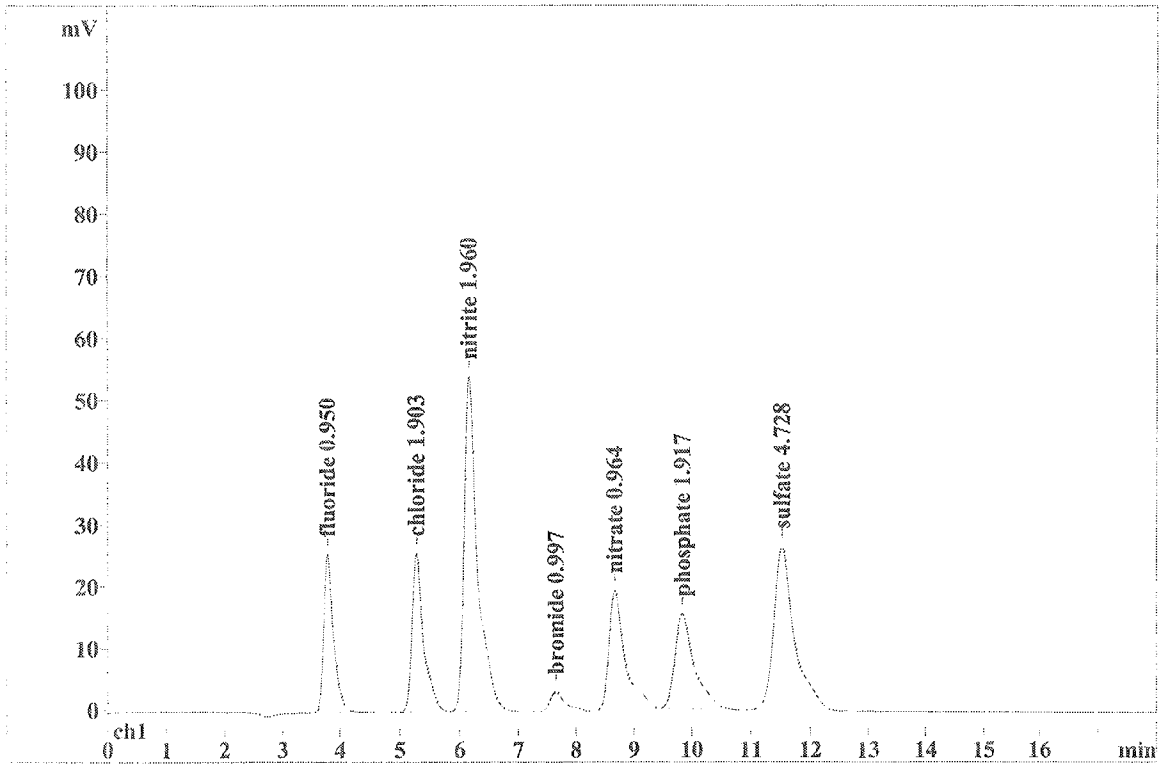
LFID	LSID	Selection	phosphate	nitrite	nitrate	iodide	fluoride	chloride	bromide	sulfate	RawNetID	DF
AI32-01	IB	PINOFCBS	0	0	0	0	0	0	0	0	_2024-09-23_18-12	1
AI32-12	ICV	PINOFCBS	95.9%	98%	96.4%	0%*	95%	95.2%	99.7%	94.6%	_2024-09-23_21-55	1
AI32-13	ICV1	PINOFCBS	96.4%	94.2%	98.1%	0%*	94.4%	92.4%	101%	105.8%	_2024-09-23_22-15	1
AI32-14	ICB	PINOFCBS	0	0	0	0	0	0	0	0	_2024-09-23_22-36	1

Report date: 9/26/2024 12:45:39 PM
Printed by: ERodel

Ident: AI32-12 ICV
Analysis from: 9/23/2024 9:55:36 PM
File: _2024-09-23_21-55.chw Last save: 9/24/2024 10:00:16 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133707

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 12
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.78	25.65	313.580	0.950	fluoride
2	5.27	25.67	342.027	1.903	chloride
3	6.17	54.00	851.459	1.960	nitrite
4	7.65	3.24	59.884	0.997	bromide
5	8.67	19.42	380.280	0.964	nitrate
6	9.84	15.39	357.454	1.917	phosphate
7	11.53	26.60	639.751	4.728	sulfate
7	18.00	169.98	2944.436	13.420	

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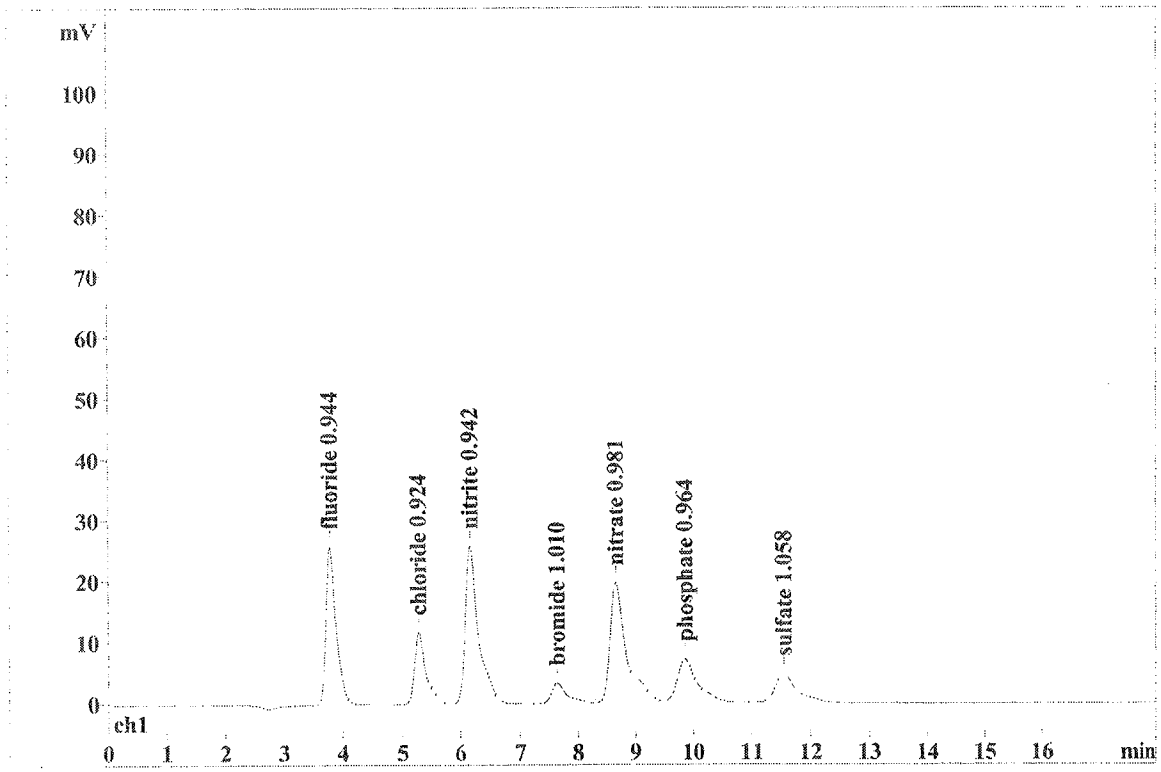
Report date: 9/26/2024 12:45:50 PM
Printed by: ERodel

Ident: AI32-13 ICV1
Analysis from: 9/23/2024 10:15:53 PM
File: _2024-09-23_22-15.chw Last save: 9/24/2024 10:00:16 AM

Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133708

SAMPLE: METHOD 300/9056/4110B
: 1.0 PPM
Vial number: 13
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	25.87	311.293	0.944	fluoride
2	5.28	11.77	159.516	0.924	chloride
3	6.17	25.83	398.134	0.942	nitrite
4	7.65	3.31	60.867	1.010	bromide
5	8.66	19.62	387.179	0.981	nitrate
6	9.86	6.95	163.371	0.964	phosphate
7	11.55	4.77	119.745	1.058	sulfate
7	18.00	98.12	1600.105	6.822	

This report has been created by IC Net
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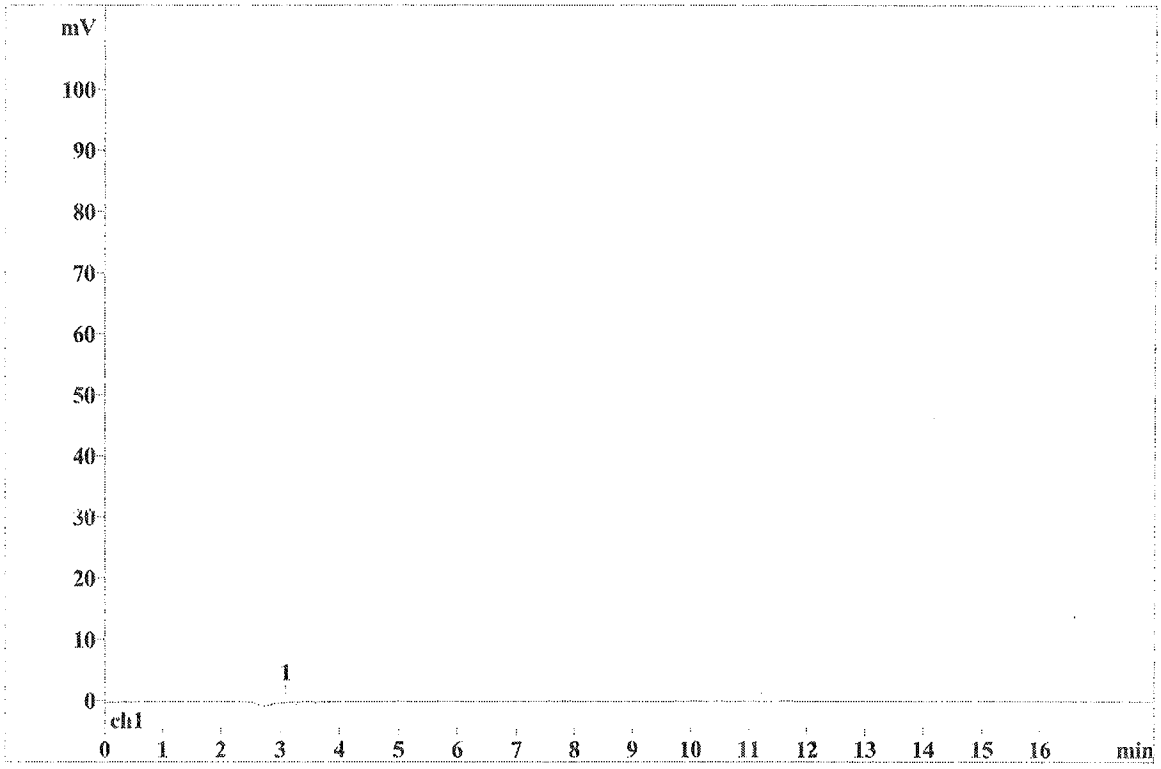
Report date: 9/26/2024 12:46:09 PM
Printed by: ERodel

Ident: AI32-14 ICB
Analysis from: 9/23/2024 10:36:11 PM
File: _2024-09-23_22-36.chw Last save: 9/24/2024 10:00:16 AM
Modified!
Method: ICD7-I23.mtw Last save: 9/23/2024 7:51:36 PM
Run operator: ERodel
Analysis number: 133709

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 14
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.06	0.37	18.095	0.000	

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DAILY CALIBRATION(S)

Continuing Calibration Summary Form

Client : CDM SMITH
Project : VA SALT LAKE CITY
SDG : 24I077
Method : E300.0
ICAL Ref. : 24AI32
InstrumentID: D7
Parameter : CHLORIDE

LFID	LSID	Recovery (%)	AnalysisDateTime
AJ02-01	CCV56	96.2	10/01/2411:47
AJ02-13	CCV58	97.6	10/01/2416:26
AJ02-37	CCV62	94.6	10/02/2400:40
AJ02-42	CCV64	94.5	10/02/2402:21

CCV Acceptance Criteria: 90-110%

Continuing Calibration Summary Form

Client : CDM SMITH
Project : VA SALT LAKE CITY
SDG : 24I077
Method : E300.0
ICAL Ref. : 24AI32
InstrumentID: D7
Parameter : SULFATE

LFID	LSID	Recovery (%)	AnalysisDateTime
AJ02-01	CCV56	95.8	10/01/2411:47
AJ02-13	CCV58	95	10/01/2416:26
AJ02-37	CCV62	91.1	10/02/2400:40
AJ02-42	CCV64	91.6	10/02/2402:21

CCV Acceptance Criteria: 90-110%

IC Result Check FormVersion : I23/AI32(2024)

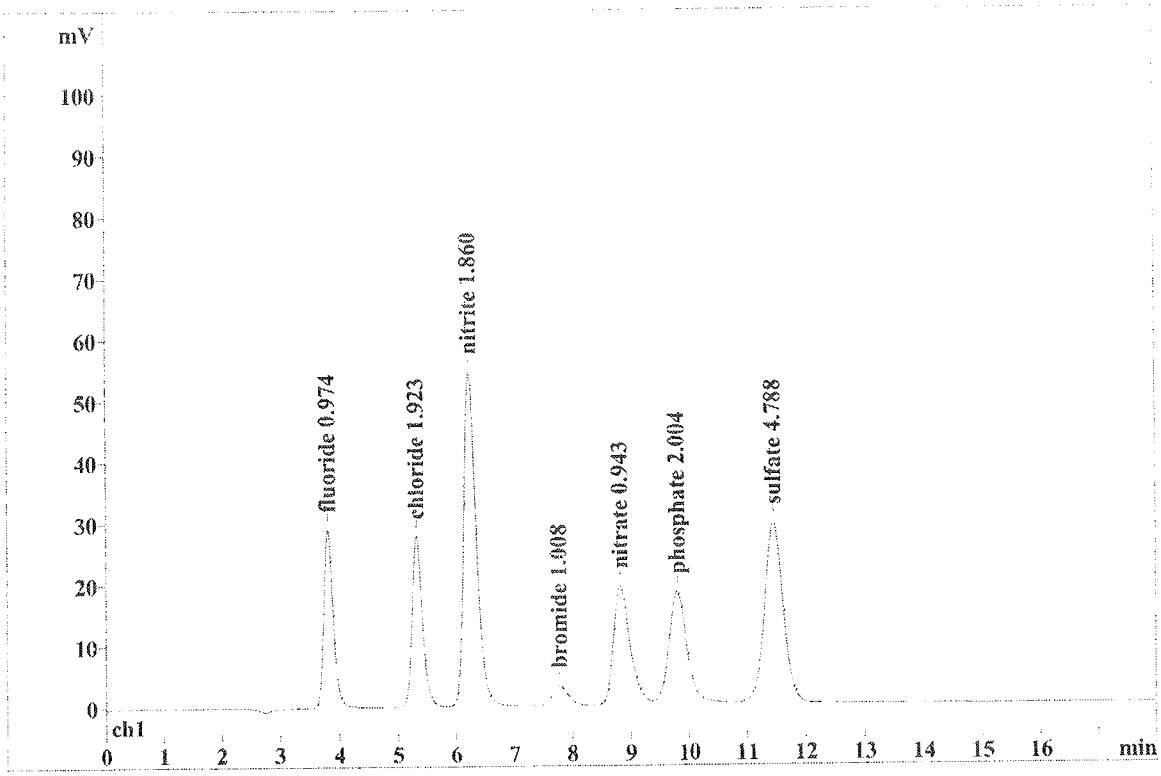
LFID	LSID	Selection	bromide	chloride	nitrate	iodide	fluoride	nitrite	phosphate	sulfate	RawNetID	DF
AJ02-01	CCV56	BCNOFIPS	100.8%	96.2%	94.3%	0%*	97.4%	93%	100.2%	95.8%	_2024-10-01_11-47	1
AJ02-02	CCB56	BCNOFIPS	0	0	0	0	0	0	0	0	_2024-10-01_12-07	1
AJ02-13	CCV58	BCNOFIPS	101.9%	97.6%	95.6%	0%*	97.2%	92.8%	96.7%	95%	_2024-10-01_16-26	1
AJ02-14	CCB58	BCNOFIPS	0	0	0	0	0	0	0	0	_2024-10-01_16-54	1
AJ02-25	CCV60	BCNOFIPS	99.6%	96.5%	90.3%	0%*	95.6%	90.9%	91.7%	92.6%	_2024-10-01_20-37	1
AJ02-26	CCB60	BCNOFIPS	0	0	0	0	0	0	0	0	_2024-10-01_20-57	1
AJ02-37	CCV62	BCNOFIPS	99.3%	94.6%	91%	0%*	96.1%	90%	92.9%	91.1%	_2024-10-02_00-40	1
AJ02-38	CCB62	BCNOFIPS	0	0	0	0	0	0	0	0	_2024-10-02_01-00	1
AJ02-42	CCV64	BCNOFIPS	98.9%	94.5%	91.6%	0%*	96%	90.7%	90%	91.6%	_2024-10-02_02-21	1
AJ02-43	CCB64	BCNOFIPS	0	0	0	0	0	0	0	0	_2024-10-02_02-42	1

Report date: 10/7/2024 1:22:57 PM
Printed by: ERodel

Ident: AJ0[illegible]-01 CCV56
Analysis from: 10/1/2024 11:47:37 AM
File: _2024-10-01_11-47.chw Last save: 10/1/2024 12:05:37 PM

Method: ICD7-I23.mtw Last save: 9/28/2024 2:38:19 PM
Run operator: ERodel
Analysis r mber: 133968

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 1
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.81	29.15	321.929	0.974	fluoride
2	5.33	27.84	345.769	1.923	chloride
3	6.24	54.71	806.736	1.860	nitrite
4	7.78	3.28	60.728	1.008	bromide
5	8.83	19.22	371.464	0.943	nitrate
6	9.80	17.9[illegible]	374.994	2.004	phosphate
7	11.46	29.46	648.348	4.788	sulfate
7	18.00	181.61	2929.967	13.500	

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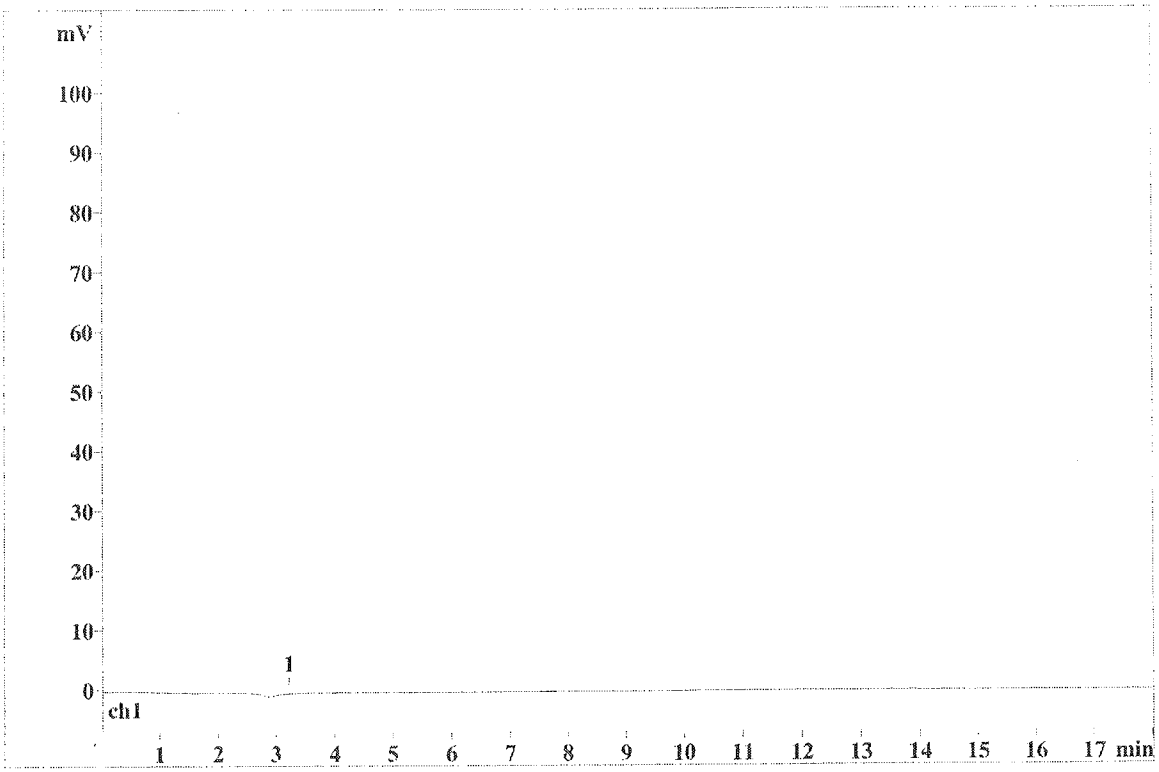
Report date: 10/7/2024 1:23:21 PM
Printed by: ERodel

Ident: AJ02-02 CCB56
Analysis from: 10/1/2024 12:07:52 PM
File: _2024-10-01_12-07.chw Last save: 10/1/2024 12:25:52 PM
Modified!
Method: ICD7-I23.mtw Last save: 9/28/2024 2:38:19 PM
Run operator: ERodel
Analysis number: 13369

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 2
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.22	0.36	18.674	0.000	

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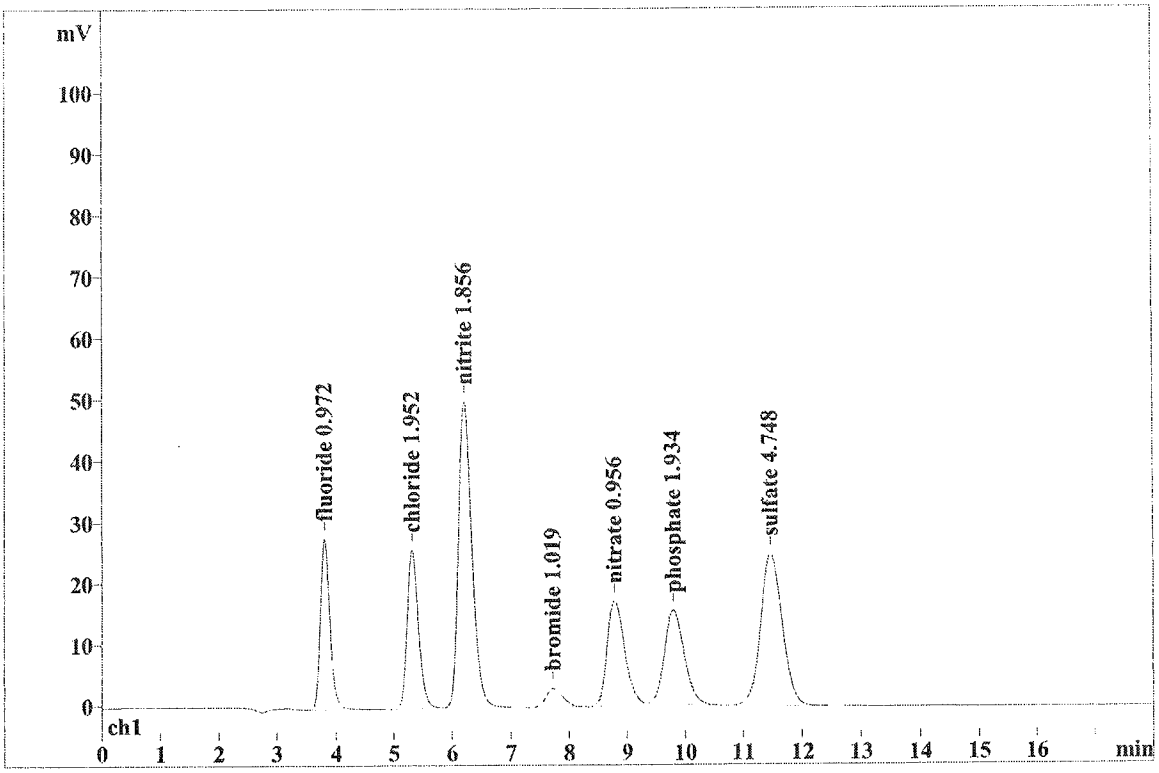
Report date: 10/7/2024 1:44:15 PM
Printed by: ERodel

Ident: AJ02-13 CCV58
Analysis from: 10/1/2024 4:26:55 PM
File: _2024-10-01_16-26.chw Last save: 10/1/2024 4:44:55 PM

Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133981

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 13
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

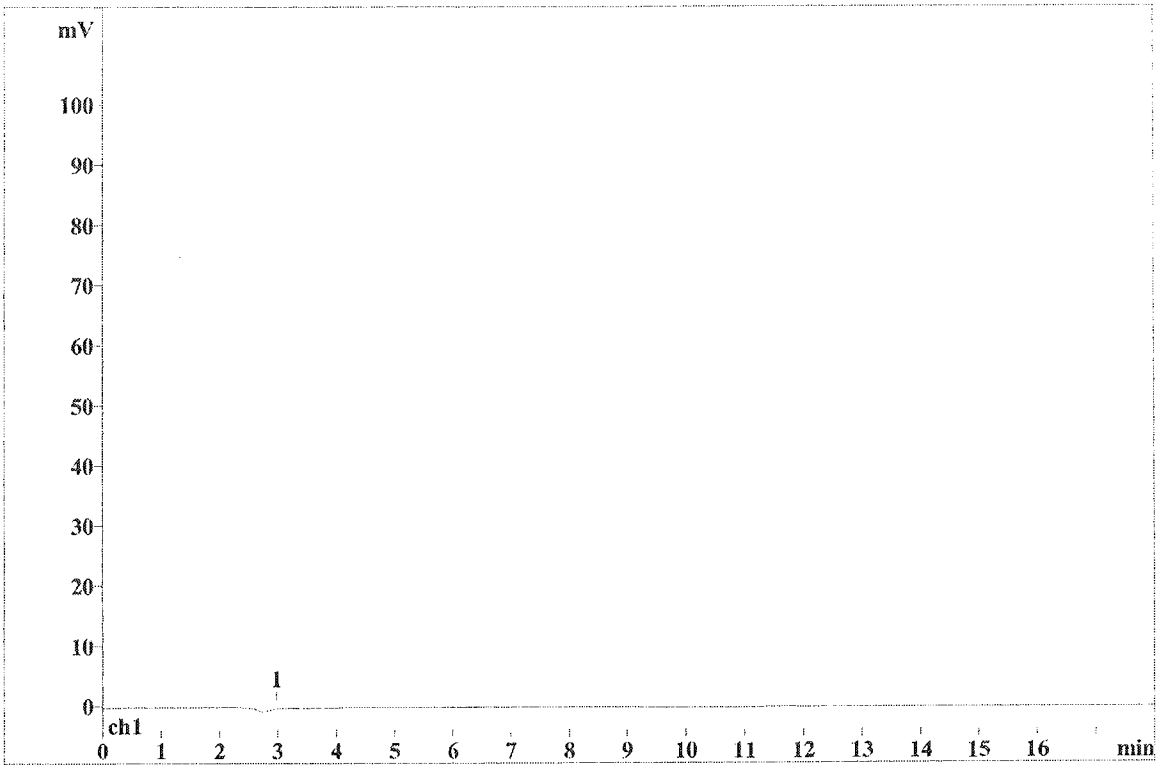
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.81	27.99	321.180	0.972	fluoride
2	5.32	25.96	351.027	1.952	chloride
3	6.22	49.94	804.904	1.856	nitrite
4	7.73	3.03	61.607	1.019	bromide
5	8.77	17.12	376.843	0.956	nitrate
6	9.80	15.40	360.826	1.934	phosphate
7	11.46	24.94	642.644	4.748	sulfate
7	18.00	164.39	2919.031	13.437	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 1:44:45 PM
Printed by: ERodel

Ident: AJ02-14 CCB58
Analysis from: 10/1/2024 4:54:54 PM
File: _2024-10-01_16-54.chw Last save: 10/1/2024 5:12:54 PM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133982

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 14
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	2.99	0.28	6.921	0.000	

This report has been created by IC Net
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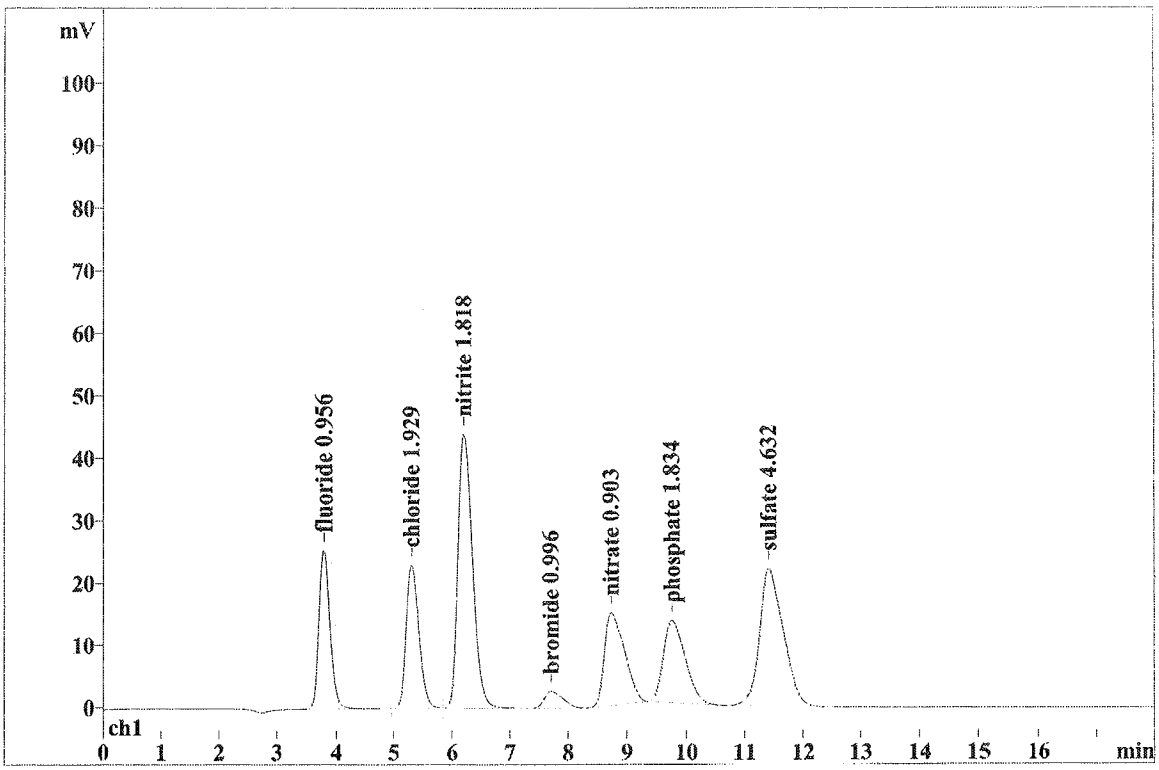
Report date: 10/7/2024 1:54:30 PM
Printed by: ERodel

Ident: AJ02-25 CCV60
Analysis from: 10/1/2024 8:37:40 PM
File: _2024-10-01_20-37.chw Last save: 10/1/2024 8:55:40 PM

Method: ICD7-I23.mcw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133993

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 25
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.80	25.56	315.605	0.956	fluoride
2	5.31	23.08	346.874	1.929	chloride
3	6.21	43.90	788.200	1.818	nitrite
4	7.71	2.69	59.788	0.996	bromide
5	8.74	14.92	355.008	0.903	nitrate
6	9.76	13.25	340.573	1.834	phosphate
7	11.42	22.18	626.185	4.632	sulfate
7	18.00	145.58	2832.233	13.069	

This report has been created by IC Net
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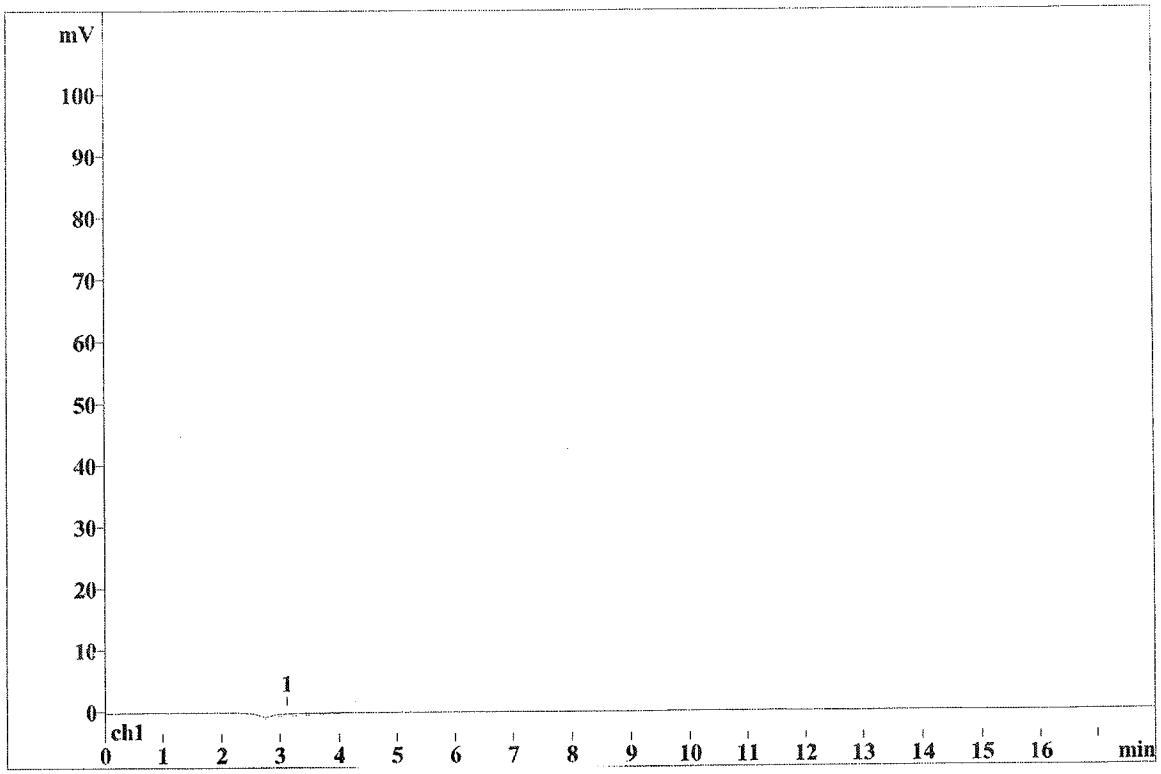
Report date: 10/7/2024 1:54:53 PM
Printed by: ERodel

Ident: AJ02-26 CCB60
Analysis from: 10/1/2024 8:57:55 PM
File: _2024-10-01_20-57.chw Last save: 10/1/2024 9:15:55 PM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 133994

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 26
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.12	0.35	19.640	0.000	

This report has been created by IC Net
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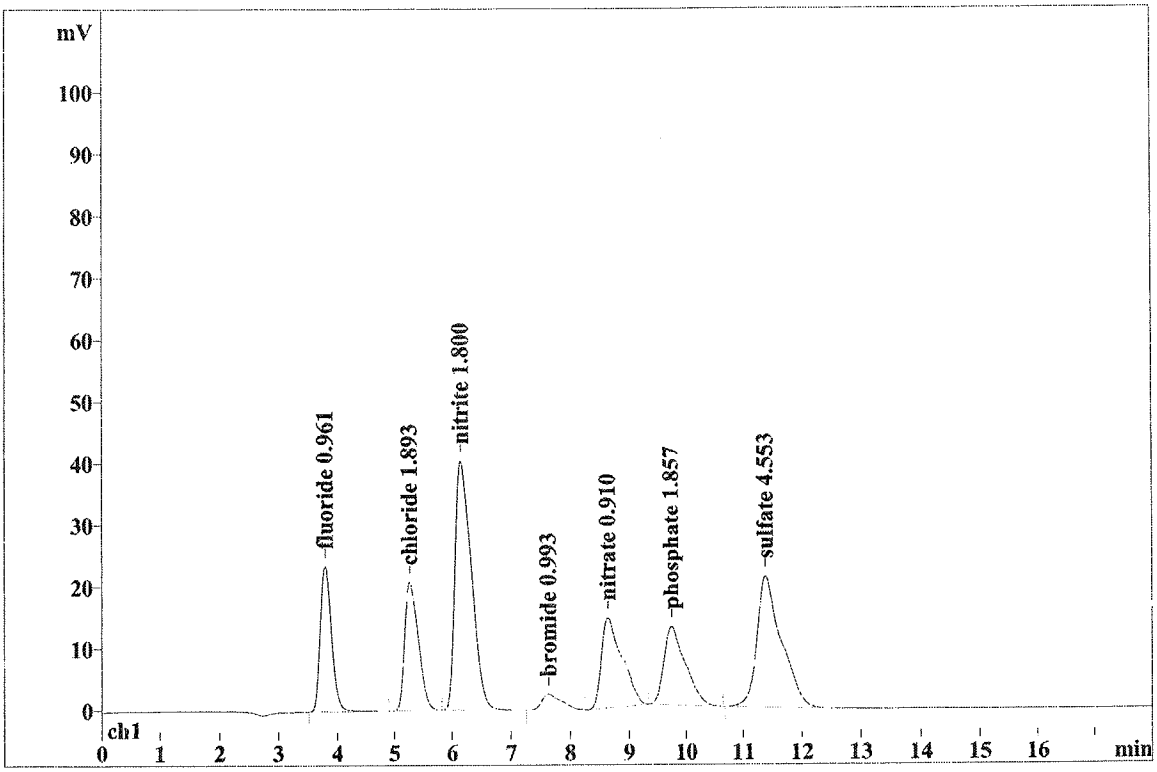
Report date: 10/7/2024 2:01:09 PM
Printed by: ERodel

Ident: AJ02-37 CCV62
Analysis from: 10/2/2024 12:40:38 AM
File: _2024-10-02_00-40.chw Last save: 10/2/2024 12:58:38 AM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 134005

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 37
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

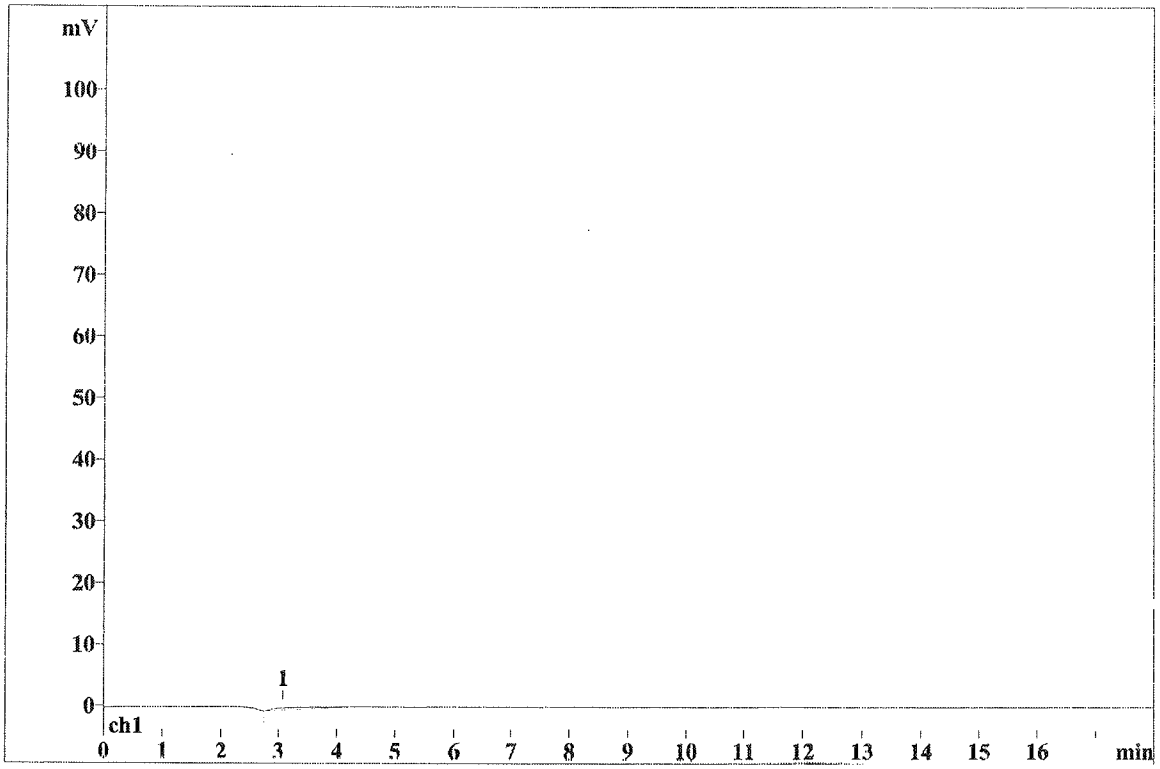
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	23.56	317.495	0.961	fluoride
2	5.27	20.77	340.019	1.893	chloride
3	6.16	40.31	780.271	1.800	nitrite
4	7.63	2.60	59.552	0.993	bromide
5	8.64	14.61	357.885	0.910	nitrate
6	9.73	12.71	345.238	1.857	phosphate
7	11.39	21.28	614.941	4.553	sulfate
7	18.00	135.85	2815.401	12.967	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 2:03:04 PM
Printed by: ERodel

Ident: AJ02-38 CCB62
Analysis from: 10/2/2024 1:00:53 AM
File: _2024-10-02_01-00.chw Last save: 10/2/2024 1:18:53 AM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:30:00 PM
Run operator: ERodel
Analysis number: 134006

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 38
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

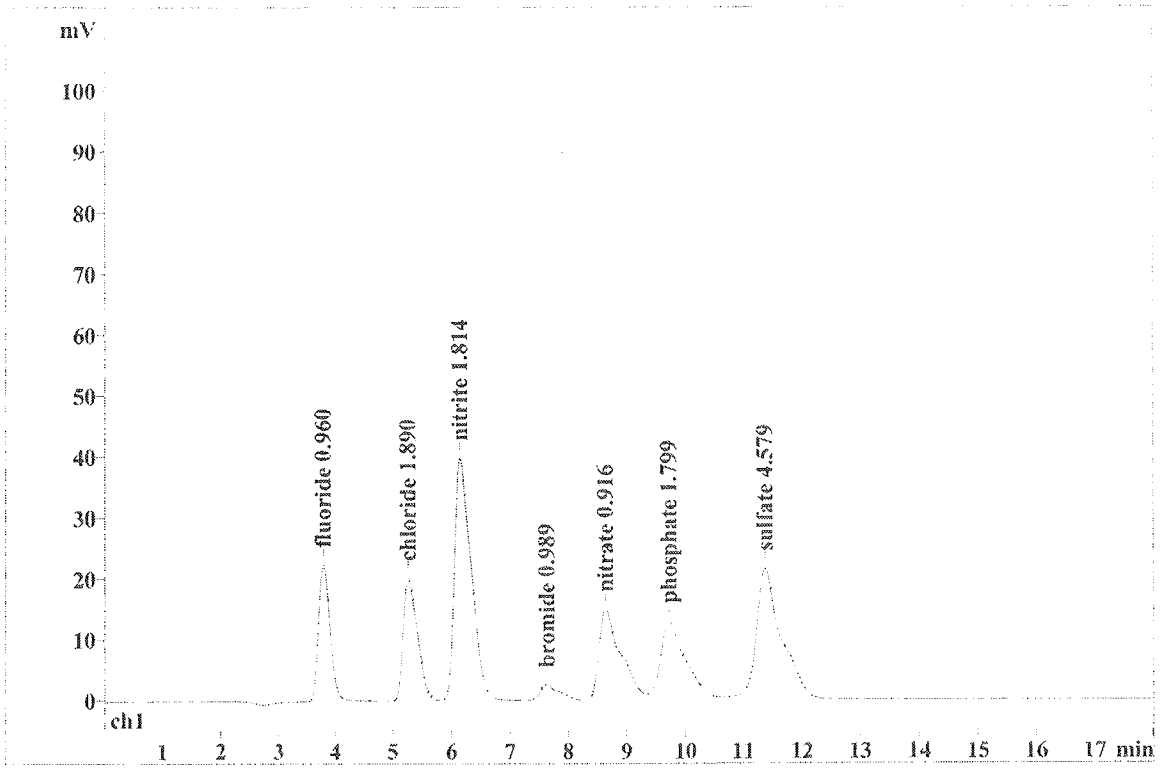
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.10	0.33	18.025	0.000	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 3:05:59 PM
Printed by: ERodel

Ident: AJ03-42 CCV64
Analysis from: 10/2/2024 3:21:53 AM
File: _2024-10-03_02-21.chw Last save: 10/2/2024 2:39:53 AM
Modified!
Method: ICD7-I23.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 134010

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 42
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

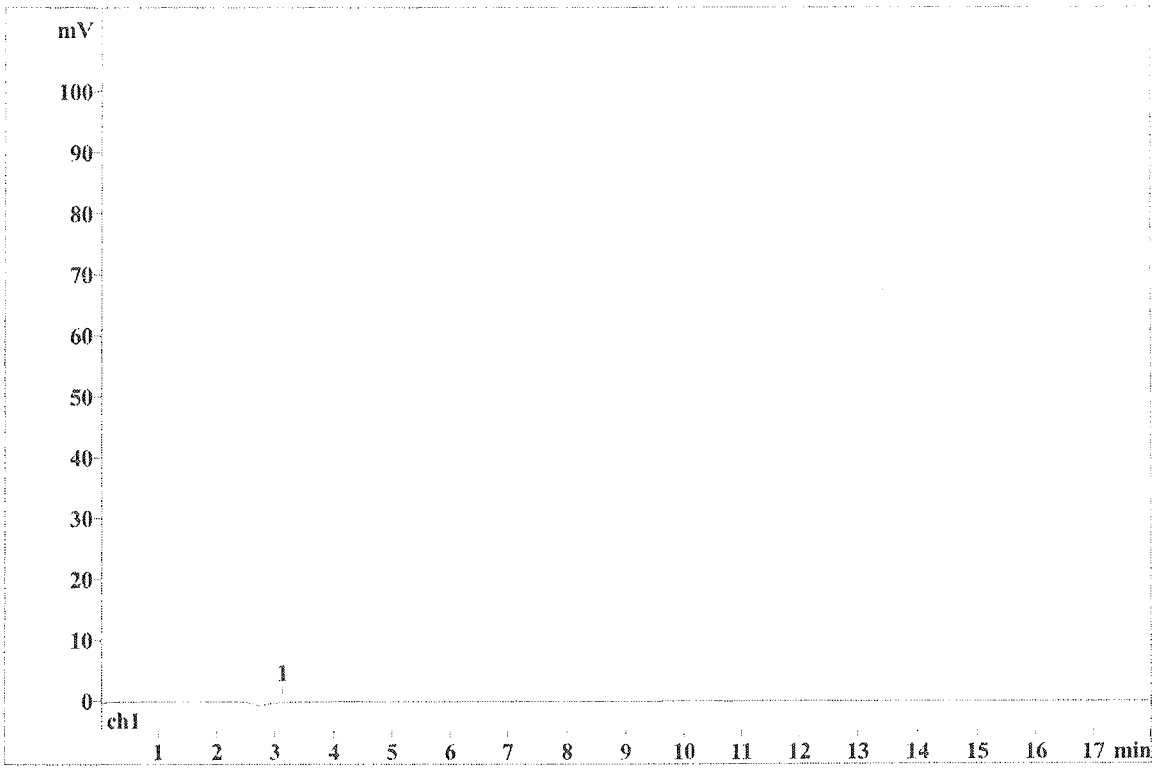
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.79	22.54	317.054	0.960	fluoride
2	5.26	20.24	339.578	1.890	chloride
3	6.15	39.77	786.275	1.814	nitrite
4	7.62	2.57	59.230	0.989	bromide
5	8.64	14.68	360.593	0.916	nitrate
6	9.72	12.29	333.150	1.799	phosphate
7	11.38	21.37	618.737	4.579	sulfate
7	18.00	133.47	2814.918	12.948	

This report has been created by IC Net
METROHM LTD

Report date: 10/7/2024 2:06:19 PM
Printed by: ERodel

Ident: AJ02-43 CCB64
Analysis from: 10/2/2024 2:42:08 AM
File: _2024-10-02_02-42.chw Last save: 10/2/2024 3:00:03 AM
Modified!
Method: ICD7-IC3.mtw Last save: 10/1/2024 2:33:00 PM
Run operator: ERodel
Analysis number: 134011

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 43
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.13	0.34	21.386	0.000	

This report has been created by IC Net
METROHM LTD

ANALYTICAL LOG(S)

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
ION CHROMATOGRAPHY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence. For dillution preparation (sample aliquot/final volume), refer to sample info

Comments:

	Concentration (ppm)
S1	0.05
S2	0.1
S3	0.2
S4	0.5
S5	1.0
S6	2.0
S7	5.0
S8	10.0
S9	20.0

	Linearity (ppm)
F	2
Cl	5
NO_2	20
Br	20
NO_3	2
PO_4	20
SO_4	20

Book #: AD7-048
Instrument No.: D7
Pipette ID's: B42780066, D42763327, 439350100
Analytical Sequence: AI32
Method File: IC07-I23.mtw
Analytical Batch: —

SOP #	Rev. #
☑ EMAX-300.0	14
☑ EMAX-4110B	7
☑ EMAX-9056	10
☐ EMAX-	
STANDARDS ID	
ICAL	SW3B-35-01-03
ICV	SW3B-35-02-01
ICV,	SW3B-35-02-02
LCS	—
MS	—

Filters Lot #:
0.45 µm:
0.22 µm:
Snap Seal Containers Lot #:
4 oz: 08024003
1.5 oz:

Column: Metrosep A Supp 5-150
Flow Rate: 0.70 ml/min

IC ELUENT PREPARATION — Expiration Date: 10/20/24

Std ID	Aliquot	Final Vol*
SP2-06-15-02	20 mL	2 L
SP2-06-15-03	20 mL	

IC REGENERANT PREPARATION — Expiration Date: 10/20/24

Std ID	Aliquot	Final Vol*
SP2-06-23-02	100 mL	1 L

* Reagent Water ID: SW1A-012-14-02

ELECTRONIC DATA ARCHIVAL	
Location	Date
☐ IC-METROHM	
☐ External Hard Drive	

Analyzed By: EIR
Date: 9/23/24

File Name	Method	Ident	Vial	Volume	Dilution	Amount	Internal Standard Amount	Calibration Level	Sample Info 1	Sample Info 2
2024-09-23_18-12.chw	ICD7-123.mtw	AI32-06 IB	1	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
2024-09-23_18-32.chw	ICD7-123.mtw	AI32-02 S0	2	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
2024-09-23_18-53.chw	ICD7-123.mtw	AI32-03 S1	3	1.0	1.0	1.0	100.0	1	METHOD 300/9056/4110B	0.05 PPM
2024-09-23_19-13.chw	ICD7-123.mtw	AI32-04 S2	4	1.0	1.0	1.0	100.0	2	METHOD 300/9056/4110B	0.1 PPM
2024-09-23_19-33.chw	ICD7-123.mtw	AI32-05 S3	5	1.0	1.0	1.0	100.0	3	METHOD 300/9056/4110B	0.2 PPM
2024-09-23_19-53.chw	ICD7-123.mtw	AI32-06 S4	6	1.0	1.0	1.0	100.0	4	METHOD 300/9056/4110B	0.5 PPM
2024-09-23_20-14.chw	ICD7-123.mtw	AI32-07 S5	7	1.0	1.0	1.0	100.0	5	METHOD 300/9056/4110B	1.0 PPM
2024-09-23_20-34.chw	ICD7-123.mtw	AI32-08 S6	8	1.0	1.0	1.0	100.0	6	METHOD 300/9056/4110B	2.0 PPM
2024-09-23_20-54.chw	ICD7-123.mtw	AI32-09 S7	9	1.0	1.0	1.0	100.0	7	METHOD 300/9056/4110B	5.0 PPM
2024-09-23_21-15.chw	ICD7-123.mtw	AI32-10 S8	10	1.0	1.0	1.0	100.0	8	METHOD 300/9056/4110B	10.0 PPM
2024-09-23_21-35.chw	ICD7-123.mtw	AI32-11 S9	11	1.0	1.0	1.0	100.0	9	METHOD 300/9056/4110B	20.0 PPM
2024-09-23_21-55.chw	ICD7-123.mtw	AI32-12 ICV	12	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
2024-09-23_22-15.chw	ICD7-123.mtw	AI32-13 ICV1	13	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	1.0 PPM
2024-09-23_22-36.chw	ICD7-123.mtw	AI32-14 ICB	14	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	

FINAL
EN 9/27/24

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence. For dillution preparation (sample aliquot/final volume), refer to sample info

Comments:

Book #:	AD7-048
Instrument No.:	D7
Pipette ID's:	B42780066
	D42763327
	439350100
Analytical Sequence:	AJ02
Method File:	IC07-I23.mtw
Analytical Batch:	ICJ002W

SOP #	Rev. #
☑ EMAX-300.0	14
☐ EMAX-4110B	7
☐ EMAX-9056	10
☐ EMAX-	
STANDARDS ID	
ICAL	—
ICV	—
CCV	SW33-35-08-01
LCS	SW33-35-08-02
MS	SCP Refers to LCS Parent ID

Filters Lot #: Snap Seal Containers Lot #:

0.45 µm: 3200390424 oz:

0.22 µm: 32503615 1 1.5 oz: 095 24004

Column: Metrosep A Supp 5-150

Flow Rate: 0.70 ml/min

IC ELUENT PREPARATION Expiration Date: 10/27/27

Std ID	Aliquot	Final Vol*
SP2-06-15-02	20 mL	2 L
SP2-06-15-03	20 mL	

IC REGENERANT PREPARATION Expiration Date: 10/27/24

Std ID	Aliquot	Final Vol*
SP2-06-23-04	100 mL	1 L

* Reagent Water ID: SW1A-012-14-02

ELECTRONIC DATA ARCHIVAL	
Location	Date
☐ IC-METROHM	
☐ External Hard Drive	

Analyzed By: EN

Date: 10/1/24

File Name	Method	Ident	Vial	Volume	Dilution	Amount	Internal Standard Amount	Calibration Level	Sample Info 1	Sample Info 2
_2024-10-01_11-47.chw	ICD7-123.mtw	AJ02-01 CCV56	1	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_12-07.chw	ICD7-123.mtw	AJ02-02 CCB56	2	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_12-28.chw	ICD7-123.mtw	AJ02-03 ICJ002WB	3	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_12-48.chw	ICD7-123.mtw	AJ02-04 ICJ002WL	4	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_13-08.chw	ICD7-123.mtw	AJ02-05 ICJ002WC	5	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_13-44.chw	ICD7-123.mtw	AJ02-06 J002-01	6	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_14-05.chw	ICD7-123.mtw	AJ02-07 J002-02	7	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_14-25.chw	ICD7-123.mtw	AJ02-08 J002-03	8	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_14-45.chw	ICD7-123.mtw	AJ02-09 J003-01	9	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_15-05.chw	ICD7-123.mtw	AJ02-10 J003-02I DF=2	10	1.0	1.0	2.0	100.0	0	METHOD 300/9056/4110B	1 ml/20ml HIGH COND
_2024-10-01_15-26.chw	ICD7-123.mtw	AJ02-11 J004-01I DF=2	11	1.0	2.0	1.0	100.0	0	METHOD 300/9056/4110B	10ml/20ml HIGH COND
_2024-10-01_15-46.chw	ICD7-123.mtw	AJ02-12 J004-03	12	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_16-26.chw	ICD7-123.mtw	AJ02-13 CCV58	13	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_16-54.chw	ICD7-123.mtw	AJ02-14 CCB58	14	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_17-15.chw	ICD7-123.mtw	AJ02-15 J004-04I DF=2	15	1.0	2.0	1.0	100.0	0	METHOD 300/9056/4110B	6ml/20ml HIGH COND
_2024-10-01_17-35.chw	ICD7-123.mtw	AJ02-16 J001-13	16	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_17-55.chw	ICD7-123.mtw	AJ02-17 J003-01I DF=10	17	1.0	10.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/20ml
_2024-10-01_18-15.chw	ICD7-123.mtw	AJ02-18 J003-02J DF=10	18	1.0	10.0	1.0	100.0	0	METHOD 300/9056/4110B	1ml/20ml
_2024-10-01_18-36.chw	ICD7-123.mtw	AJ02-19 J004-01J DF=10	19	1.0	10.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/20ml
_2024-10-01_18-56.chw	ICD7-123.mtw	AJ02-20 J004-03I DF=20	20	1.0	20.0	1.0	100.0	0	METHOD 300/9056/4110B	1ml/20ml
_2024-10-01_19-16.chw	ICD7-123.mtw	AJ02-21 J004-04J DF=10	21	1.0	10.0	1.0	100.0	0	METHOD 300/9056/4110B	1ml/20ml
_2024-10-01_19-36.chw	ICD7-123.mtw	AJ02-22 I062-01I DF=20	22	1.0	20.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/40ml
_2024-10-01_19-57.chw	ICD7-123.mtw	AJ02-23 I062-01ID DF=20	23	1.0	20.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/40ml
_2024-10-01_20-17.chw	ICD7-123.mtw	AJ02-24 I062-01IM DF=20	24	1.0	20.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/40ml
_2024-10-01_20-37.chw	ICD7-123.mtw	AJ02-25 CCV60	25	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_20-57.chw	ICD7-123.mtw	AJ02-26 CCB60	26	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-01_21-18.chw	ICD7-123.mtw	AJ02-27 I062-01IS DF=20	27	1.0	20.0	1.0	100.0	0	METHOD 300/9056/4110B	2ml/20ml
_2024-10-01_21-38.chw	ICD7-123.mtw	AJ02-28 I062-01J DF=200	28	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-01_21-58.chw	ICD7-123.mtw	AJ02-29 I062-01JD DF=200	29	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-01_22-18.chw	ICD7-123.mtw	AJ02-30 I062-01JM DF=200	30	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-01_22-39.chw	ICD7-123.mtw	AJ02-31 I062-01JS DF=200	31	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-01_22-59.chw	ICD7-123.mtw	AJ02-32 I062-02I DF=5	32	1.0	5.0	1.0	100.0	0	METHOD 300/9056/4110B	4ml/20ml
_2024-10-01_23-19.chw	ICD7-123.mtw	AJ02-33 I062-02J DF=100	33	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-01_23-39.chw	ICD7-123.mtw	AJ02-34 I062-03I DF=5	34	1.0	5.0	1.0	100.0	0	METHOD 300/9056/4110B	4ml/20ml
_2024-10-02_00-00.chw	ICD7-123.mtw	AJ02-35 I062-03J DF=100	35	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-02_00-20.chw	ICD7-123.mtw	AJ02-36 I062-04I DF=5	36	1.0	5.0	1.0	100.0	0	METHOD 300/9056/4110B	4ml/20ml
_2024-10-02_00-40.chw	ICD7-123.mtw	AJ02-37 CCV62	37	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-02_01-00.chw	ICD7-123.mtw	AJ02-38 CCB62	38	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-02_01-21.chw	ICD7-123.mtw	AJ02-39 I062-04J DF=100	39	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-02_01-41.chw	ICD7-123.mtw	AJ02-40 I077-07I DF=5	40	1.0	5.0	1.0	100.0	0	METHOD 300/9056/4110B	4ml/20ml
_2024-10-02_02-01.chw	ICD7-123.mtw	AJ02-41 I077-07J DF=100	41	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-02_02-21.chw	ICD7-123.mtw	AJ02-42 CCV64	42	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-02_02-42.chw	ICD7-123.mtw	AJ02-43 CCB64	43	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	

FINAL
EN 10/8/24

RETENTION TIME WINDOW

TWENTY FOUR HOUR RETENTION TIME WINDOW
METHOD 300.0

Lab name: **EMAX** **Method:** **EMAX-300.0**

Instrument ID: D7 (800 IC) IC column: METROSEP A SUPP 5
Column size: 150X4.0mm

Compound	ICAL Mean RT	from	to	RTW
FLUORIDE	**3.79**	3.70	3.88	**0.090**
CHLORIDE	**5.28**	5.15	5.42	**0.135**
NITRITE	**6.17**	6.02	6.32	**0.151**
BROMIDE	**7.67**	7.43	7.91	**0.238**
NITRATE	**8.69**	8.41	8.96	**0.272**
PHOSPHATE	**9.85**	9.46	10.25	**0.393**
SULFATE	**11.54**	11.00	12.07	**0.537**

ICD7-I23.MTW

RETENTION TIME WINDOW
METHOD 300.0

Lab name:	**EMAX**	**Method:**	**EMAX-300.0**
Instrument ID:	D7 (800IC)	IC column:	METROSEP A SUPP 5
		Column size:	150X4.0mm

Compound		Retention time Window
FLUORIDE	**(+/-)**	**0.151**
CHLORIDE	**(+/-)**	**0.195**
NITRITE	**(+/-)**	**0.242**
BROMIDE	**(+/-)**	**0.345**
NITRATE	**(+/-)**	**0.420**
PHOSPHATE	**(+/-)**	**0.601**
SULFATE	**(+/-)**	**0.840**
IODIDE	**(+/-)**	**0.920**

8/13/14

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I077

METHOD SM2320B
TOTAL ALKALINITY

One(1) water sample was received on 09/14/24 to be analyzed for Total Alkalinity in accordance with Method SM2320B and project specific requirements.

Holding Time
The sample was analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Alkalinity was not detected in ALI002WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. ALI002WL/ALI002WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Sample Analysis
The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

METHOD SM2320B
TOTAL ALKALINITY

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24I077
Matrix : WATER
InstrumentID : E5

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	PREP. FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	ALI002WB	ND	1	NA	5	5	09/18/2413:04	NA	24E5I0203	24E5I02	ALI002W	NA	NA
LCS1W	ALI002WL	71.8	1	NA	5	5	09/18/2413:11	NA	24E5I0204	24E5I02	ALI002W	NA	NA
LCD1W	ALI002WC	72.5	1	NA	5	5	09/18/2413:18	NA	24E5I0205	24E5I02	ALI002W	NA	NA
MW42S-GW091224	I077-07	241	1	NA	5	5	09/18/2417:13	NA	24E5I0230	24E5I02	ALI002W	09/12/2411:01	09/14/24

Note that Alkalinity concentration is reported as:
Alkalinity to pH 4.5 for results greater than or equal to 20 mg/L
Alkalinity to pH 4.2 for results less than 20 mg/L

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I077
METHOD : METHOD SM2320B

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID :	MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID :	ALI002WB	ALI002WL	ALI002WC
LAB FILE ID :	24E5I0203	24E5I0204	24E5I0205
DATE EXTRACTED :	NA	NA	NA
DATE ANALYZED :	09/18/2413:04	09/18/2413:11	09/18/2413:18
PREP BATCH :	ALI002W	ALI002W	ALI002W
CALIBRATION REF:	24E5I02	24E5I02	24E5I02

ACCESSION:

PARAMETER	MB RESULT (mg/L)	SPIKE AMT (mg/L)	BS RESULT (mg/L)	BS REC (%)	SPIKE AMT (mg/L)	BSD RESULT (mg/L)	BSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
ALKALINITY	ND	73.2	71.8	98	73.2	72.5	99	1	80-120	20

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
ALKALINITY

Note: For samples and relevent QCs/Standards analyzed, refer to attached analytical sequence.

☑ Titration end point: pH 4.5 ± 0.04

☑ Low alkalinity: pH 4.2 ± 0.04

Micropipette ID: N/A

MS/MSD amount of spike: N/A

Reagent Water: RWI-24-003

Comments:

Book#: AAL-052

Instrument No.: ☐ 53 ☑ E5

Analytical Batch: 24E5I02

Analytical Sequence: ALI002W

SOP #	Rev. #
☑ EMAX-2320B	8
☐ EMAX-	

STANDARDS ID		Conc. (mg/L)
0.02N HCL	SWRI-04-21-04	0.0205N
LCS	SWIA-03-29-03	73.2
MS/MSD	N/A	N/A
ICV	N/A	N/A

pH Buffer	ID
pH 4	SWIA-03-26-01
pH 7	SWIA-03-26-09
pH 10	SWIA-03-26-07
pH 8.0 (Check)	SWIA-03-25-10
pH Strip	HC446507

Analyzed By: AW

Date: 09/18/24

PC-TitratION PLUS

pH and Alkalinity In-Run Report

Run Number 1727 **Analytical Batch#** 24E5I02

Seq. #	SampleID	Data File Name	RunDate	RunTime	pH	Volume @pH 8.3	Volume @pH 4.5	Volume @pH 4.2	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	Review Notes
1	ICV PH 8	24E5I02	09/18/24	12:52 PM	7.99	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	
2	INSTR. CHK.	24E5I02	09/18/24	12:59 PM	7.21	.00	.07	.09	.00	2.05	2.05	.00	.00	
3	ALI002WB	24E5I02	09/18/24	1:04 PM	5.79	.00	.03	.05	.00	.45	.45	.00	.00	
4	ALI002WL	24E5I02	09/18/24	1:11 PM	8.80	.85	1.75	-1.00	34.73	71.80	2.34	69.46	.00	
5	ALI002WC	24E5I02	09/18/24	1:18 PM	8.82	.87	1.77	-1.00	35.60	72.47	1.26	71.20	.00	
6	I026-02	24E5I02	09/18/24	1:24 PM	6.47	.00	1.78	-1.00	.00	72.92	72.92	.00	.00	
7	I036-02	24E5I02	09/18/24	1:33 PM	7.18	.00	18.46	-1.00	.00	756.77	756.77	.00	.00	
8	I036-02D	24E5I02	09/18/24	1:46 PM	7.05	.00	18.59	-1.00	.00	762.14	762.14	.00	.00	
9	I036-03	24E5I02	09/18/24	2:04 PM	6.88	.00	34.53	-1.00	.00	1,415.66	1,415.66	.00	.00	
10	I036-07	24E5I02	09/18/24	2:17 PM	6.96	.00	22.12	-1.00	.00	906.93	906.93	.00	.00	
11	I036-09	24E5I02	09/18/24	2:26 PM	7.07	.00	14.96	-1.00	.00	613.42	613.42	.00	.00	
12	CCV1	24E5I02	09/18/24	2:34 PM	8.92	.97	1.77	-1.00	39.58	72.44	.00	65.71	6.72	
13	CCB1	24E5I02	09/18/24	2:40 PM	6.14	.00	.04	.07	.00	.58	.58	.00	.00	
14	I038-01	24E5I02	09/18/24	2:50 PM	7.65	.00	6.71	-1.00	.00	275.29	275.29	.00	.00	
15	I038-02	24E5I02	09/18/24	2:57 PM	7.66	.00	2.82	-1.00	.00	115.53	115.53	.00	.00	
16	I038-03	24E5I02	09/18/24	3:05 PM	7.68	.00	6.75	-1.00	.00	276.86	276.86	.00	.00	
17	I048-01	24E5I02	09/18/24	3:11 PM	6.72	.00	6.55	-1.00	.00	268.75	268.75	.00	.00	
18	I048-02	24E5I02	09/18/24	3:23 PM	7.40	.00	14.74	-1.00	.00	604.42	604.42	.00	.00	

Analyzed by: AW Reviewed by: AW Date: 09/18/24

PC-TitratION PLUS by Hach Associates, Inc.

REPORT ID: 241077

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Run Number 1727 **Analytical Batch#** **24E5I02**

Seq. #	SampleID	Data File Name	RunDate	RunTime	pH	Volume @pH 8.3	Volume @pH 4.5	Volume @pH 4.2	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	Review Notes
19	I048-04	24E5I02	09/18/24	3:31 PM	6.95	.00	13.66	-1.00	.00	560.10	560.10	.00	.00	
20	I048-05	24E5I02	09/18/24	3:42 PM	7.25	.00	13.88	-1.00	.00	568.94	568.94	.00	.00	
21	I048-06	24E5I02	09/18/24	3:50 PM	6.99	.00	10.96	-1.00	.00	449.33	449.33	.00	.00	
22	I048-07	24E5I02	09/18/24	4:00 PM	7.18	.00	10.69	-1.00	.00	438.19	438.19	.00	.00	
23	I048-08	24E5I02	09/18/24	4:12 PM	6.90	.00	22.67	-1.00	.00	929.49	929.49	.00	.00	
24	CCV2	24E5I02	09/18/24	4:20 PM	8.91	.95	1.78	-1.00	38.89	72.87	.00	67.96	4.91	
25	CCB2	24E5I02	09/18/24	4:26 PM	6.13	.00	.04	.07	.00	.59	.59	.00	.00	
26	I048-11	24E5I02	09/18/24	4:34 PM	7.03	.00	10.10	-1.00	.00	414.08	414.08	.00	.00	
27	I048-16	24E5I02	09/18/24	4:46 PM	7.39	.00	18.78	-1.00	.00	770.08	770.08	.00	.00	
28	I048-18	24E5I02	09/18/24	4:57 PM	7.54	.00	15.25	-1.00	.00	625.05	625.05	.00	.00	
29	I048-19	24E5I02	09/18/24	5:05 PM	7.16	.00	11.16	-1.00	.00	457.44	457.44	.00	.00	
30	I077-07	24E5I02	09/18/24	5:13 PM	7.87	.00	5.89	-1.00	.00	241.49	241.49	.00	.00	
31	CCV3	24E5I02	09/18/24	5:20 PM	8.89	.94	1.79	-1.00	38.57	73.52	.00	69.89	3.62	
32	CCB3	24E5I02	09/18/24	5:26 PM	6.24	.00	.04	.07	.00	.74	.74	.00	.00	
33	RINSE	24E5I02	09/18/24	5:32 PM	5.77	.00	.03	.06	.00	.40	.40	.00	.00	

Analyzed by: AW Reviewed by: AW Date: 09/18/24

pH AND ALKALINITY IN-RUN REPORT.SRW

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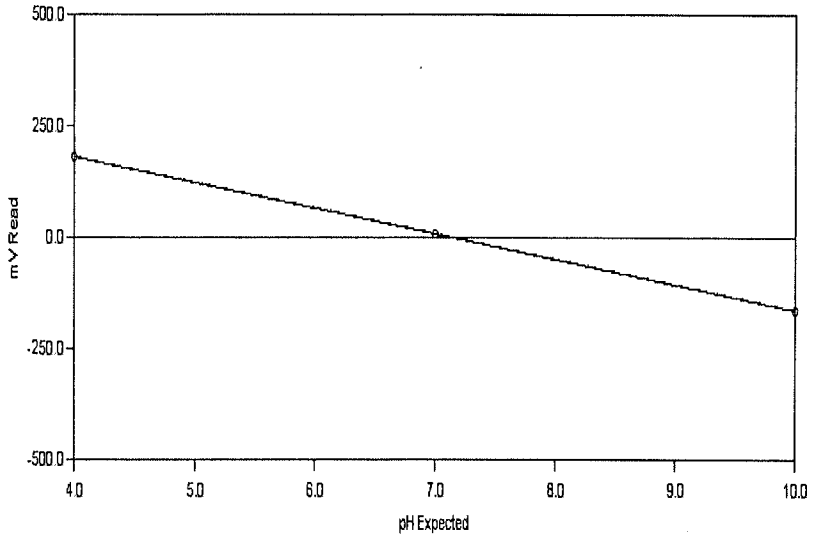
PC-TitratION PLUS
Calibration Report

Calibration Record # 1349



Calibration Settings

Calibration ID	PH CAL 4-7-10	Date	09/18/2024
Channel	1	Time	12:49 PM
Probe Type	pH	Temperature	296.21 K 23.06 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

Calibration Results

Slope	-57.595	CorrCoeff	1.0000
Intercept	8.013	Equation: Y = (-57.595) X + (8.013)	

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-57.595	-65.00	-53.00
Intercept	8.013	-40.00	40.00
Correlation Coefficient	1.0000	0.99	1.00

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

Calibration Data	Standard	Reading
	4.00	181.51
	7.00	6.59
	10.00	-164.06

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PC-Titrate For Windows

Running List Report

Order Number - 24E5I02

	Schedule	Sample Id	Vial	Weight	Volume
1	PH CAL	CAL	1	.00	25.00
2	PH ONLY	ICV PH 8	4	.00	25.00
3	PH-ALK	INSTR. CHK.	5	.00	25.00
4	PH-ALK	ALI002WB	6	.00	25.00
5	PH-ALK	ALI002WL	7	.00	25.00
6	PH-ALK	ALI002WC	8	.00	25.00
7	PH-ALK	I026-02	9	.00	25.00
8	PH-ALK	I036-02	10	.00	25.00
9	PH-ALK	I036-02D	11	.00	25.00
10	PH-ALK	I036-03	12	.00	25.00
11	PH-ALK	I036-07	13	.00	25.00
12	PH-ALK	I036-09	14	.00	25.00
13	PH-ALK	CCV1	15	.00	25.00
14	PH-ALK	CCB1	16	.00	25.00
15	PH-ALK	I038-01	17	.00	25.00
16	PH-ALK	I038-02	18	.00	25.00
17	PH-ALK	I038-03	19	.00	25.00
18	PH-ALK	I048-01	20	.00	25.00
19	PH-ALK	I048-02	21	.00	25.00
20	PH-ALK	I048-04	22	.00	25.00
21	PH-ALK	I048-05	23	.00	25.00
22	PH-ALK	I048-06	24	.00	25.00
23	PH-ALK	I048-07	25	.00	25.00
24	PH-ALK	I048-08	26	.00	25.00
25	PH-ALK	CCV2	27	.00	25.00
26	PH-ALK	CCB2	28	.00	25.00
27	PH-ALK	I048-11	29	.00	25.00
28	PH-ALK	I048-16	30	.00	25.00
29	PH-ALK	I048-18	31	.00	25.00
30	PH-ALK	I048-19	32	.00	25.00
31	PH-ALK	I077-07	33	.00	25.00
32	PH-ALK	CCV3	34	.00	25.00
33	PH-ALK	CCB3	35	.00	25.00
34	PH-ALK	RINSE	36	.00	25.00

PC-TitratION PLUS by Man-Tech Associates, Inc.

runninglist.SRW

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CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I077

METHOD SM4500-NO3E
NITRATE/NITRITE-N

One(1) water sample was received on 09/14/24 to be analyzed for Nitrate/Nitrite-N in accordance with Method SM4500-NO3E and project specific requirements.

Holding Time
The sample was analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Nitrogen, Nitrate-Nitrite was not detected in NAI005WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. NAI005WL/NAI005WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Sample Analysis
The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

METHOD SM4500-NO3E
NITRATE/NITRITE-N

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24I077

Matrix : WATER
InstrumentID : J5

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DFxPREP FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	NAI005WB	ND	1	NA	0.05	0.01	09/23/2416:39	NA	24NAI00510	24NAI005	NAI005W	NA	NA
LCS1W	NAI005WL	0.525	1	NA	0.05	0.01	09/23/2416:39	NA	24NAI00511	24NAI005	NAI005W	NA	NA
LCD1W	NAI005WC	0.533	1	NA	0.05	0.01	09/23/2416:40	NA	24NAI00512	24NAI005	NAI005W	NA	NA
MW42S-GW091224	I077-07	2.03	5	NA	0.25	0.05	09/23/2416:42	NA	24NAI00522	24NAI005	NAI005W	09/12/2411:01	09/14/24

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I077
METHOD : SM4500-NO3E

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: NAI005WB	NAI005WL	NAI005WC
LAB FILE ID	: 24NAI00510	24NAI00511	24NAI00512
DATE PREPARED	: NA	NA	NA
DATE ANALYZED	: 09/23/2416:39	09/23/2416:39	09/23/2416:40
PREP BATCH	: NAI005W	NAI005W	NAI005W
CALIBRATION REF	: 24NAI005	24NAI005	24NAI005

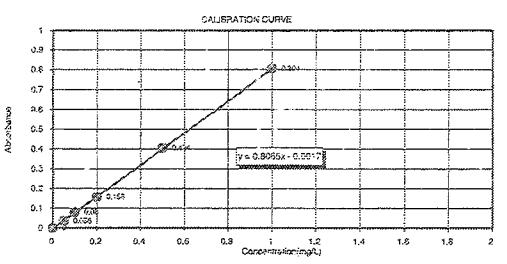
ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Nitrogen, Nitrate-Nitrite	ND	0.500	0.525	105	0.500	0.533	107	2	80-120	20

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

Data File Name	Calibration ID	Conc. mg/L	WL	Abs	CalDate	FC	%Rec
24NAI00501	S0	0	543nm	0	9/23/24 16:28	0.002084568	ND
24NAI00502	S1	0.05	543nm	0.036	9/23/24 16:28	0.046720016	93
24NAI00503	S2	0.1	543nm	0.08	9/23/24 16:28	0.101274452	101
24NAI00504	S3	0.2	543nm	0.158	9/23/24 16:29	0.197984585	99
24NAI00505	S4	0.5	543nm	0.404	9/23/24 16:29	0.50299348	101
24NAI00506	S5	1	543nm	0.804	9/23/24 16:29	0.998942897	100
24NAI00507	NO2-N Std Check	0.5	543nm	0.398	9/23/24 16:29	0.495554238	102
24NAI00508	ICV	0.5	543nm	0.434	9/23/24 16:30	0.540189686	108
24NAI00509	ICB	0	543nm	0.003	9/23/24 16:30	0.005804189	ND
24NAI00520	CCV1	0.5	543nm	0.375	9/23/24 16:42	0.467037147	93
24NAI00521	CCB1	0	543nm	0.003	9/23/24 16:42	0.005804189	ND
24NAI00524	CCV2	0.5	543nm	0.382	9/23/24 16:43	0.475716262	95
24NAI00525	CCB2	0	543nm	0.002	9/23/24 16:43	0.004564315	ND

Reduction Time	Coloring Time	instrumentID: J5
9/23/24 14:40	9/23/24 14:41	
9/23/24 14:44	9/23/24 14:45	
9/23/24 14:48	9/23/24 14:49	
9/23/24 14:52	9/23/24 14:53	
9/23/24 14:56	9/23/24 14:57	
9/23/24 15:00	9/23/24 15:01	
NA	9/23/24 15:02	
9/23/24 15:05	9/23/24 15:06	
9/23/24 15:10	9/23/24 15:11	



$$FC = [(A * CF) - Y] * DF$$

CF= 1.239873543 Y= -0.00208 r= 0.999979

DL Water(mg/L)	0.01	DL Soil(mg/Kg)	0.1
LOD Water(mg/L)	0.02	LOD Soil(mg/Kg)	0.2
LOQ Water(mg/L)	0.05	LOQ Soil(mg/Kg)	0.5

SOP

☑ EMAX-4500-NO3E Rev. 6

Standard / Reagent ID	Description	Conc.	Exp.Date
SW2B-52-15-09	ICAL CCV (mg/L)	10	09/23/24
SW2B-52-15-10	ICV LCS MS Std (mg/L)	10	09/23/24
SW2B-52-16-01	NO2 CHK	10	09/23/24
SW1A-012-13-09	Reagent Water	N/A	06/30/25
N/A	Sand	N/A	N/A
SWP1-89-33-01	Coloring Reagent	**	10/23/24
SWP1-89-31-01	NH4Cl-EDTA Soln	**	06/30/25
SWP1-89-08-03	HCl	1N	06/06/25
N/A	NH4OH	N/A	N/A
N/A	Extraction Solvent	N/A	N/A
N/A	ZnSO4	N/A	N/A
SWP1-86-31-02	NaOH	10N	01/03/25
SWP1-87-33-01	NaOH	1N	01/03/25
SWP1-78-37-01	Cadmium Reduction Column	N/A	12/09/31
518746	Snap Seal	1.5 OZ	N/A

Standard Prep	Intermediate Std Aliquot (ml)	Final Vol (ml)	DateTime
S0	0	20	9/23/24 14:01
S1	0.1	20	9/23/24 14:01
S2	0.2	20	9/23/24 14:01
S3	0.4	20	9/23/24 14:01
S4	1	20	9/23/24 14:01
S5	2	20	9/23/24 14:01
ICV	1	20	9/23/24 14:01
CCV	1	20	9/23/24 14:01
NO2 CHK	1	20	9/23/24 14:01
LCS EV	1	20	9/23/24 14:01
MS EV	1	20	9/23/24 14:01

MicropipetteID: B42780919 C42760318 B42753316

Expected Sample Amount: 20

Notes:

** Concentration can be found in Reagent Log SWP1-89

See notes for dilution preparation

sample aliquot/final volume

LAB QC CHECK

DataFileID	LabSampleID	Result	Expected Value	QC Result
24NAI00510	NAI005WB	ND	ND	MB Passed
24NAI00511	NAI005WL	0.525	0.5	%R=105
24NAI00512	NAI005WC	0.533	0.5	%R=107

MS CHECK

DataFileID	LabSampleID	Result	Expected Value	QC Result
24NAI00514	I062-01	1.90		
24NAI00516	I062-01M	4.15	2.5	%R=90

DUP CHECK

DataFileID	LabSampleID	Result	Expected Value	RPD
24NAI00514	I062-01	1.90		1
24NAI00515	I062-01D	1.89	1.90	

CALIBRATION CHECK pH Meter ID: 97

Buffer ID	Buffer	Rdg	Date
SW1A-03-23-08	1	1.02	9/23/24 10:34
SW1A-03-21-10	7	7.05	9/23/24 10:35
SW1A-03-26-06	10	10.02	9/23/24 10:36
SW1A-03-24-07	Check Std (8)	8	9/23/24 10:37

☐ Leaching Date Time Start: ☐ End:

Filter: 0.45 µm

Analyzed by: AWhite

Reviewed by: AW 09/23/24

DataFileID	LabSampleID	Result	Flag	RUnit	SampleAmt	SUnit	PDateTime	FinalVol (ml)	WL	Abs	ADateTime	Sample Bkgnd	DF	%M	Conc.	DFxPrep Factor	Notes	Analyst	Sample pH	Sample pH Adj	Reduction Time	Coloring Time
24NAI00510	NAI005WB	ND		mg/L	20	ml	NA	20	543nm	0.004	a	9/23/24 16:39	0	1		0.007044	1		AWhite	5.71	8.6	9/23/24 15:14	9/23/24 15:15
24NAI00511	NAI005WL	0.525		mg/L	20	ml	NA	20	543nm	0.422	a	9/23/24 16:39	0	1		0.525311	1		AWhite	5.71	8.6	9/23/24 15:18	9/23/24 15:19
24NAI00512	NAI005WC	0.533		mg/L	20	ml	NA	20	543nm	0.428	a	9/23/24 16:40	0	1		0.53275	1		AWhite	5.71	8.6	9/23/24 15:22	9/23/24 15:23
24NAI00513	MRL	0.0492	J	mg/L	20	ml	NA	20	543nm	0.038	a	9/23/24 16:40	0	1		0.0492	1		AWhite	5.71	8.6	9/23/24 15:27	9/23/24 15:28
24NAI00514	I062-01	1.901		mg/L	20	ml	NA	20	543nm	0.305	a	9/23/24 16:40	0	5		1.90123	5	2ml/10ml	AWhite	1.39	8.54	9/23/24 15:32	9/23/24 15:33
24NAI00515	I062-01D	1.889		mg/L	20	ml	NA	20	543nm	0.303	a	9/23/24 16:40	0	5		1.888831	5	2ml/10ml	AWhite	1.39	8.54	9/23/24 15:37	9/23/24 15:38
24NAI00516	I062-01M	4.152		mg/L	20	ml	NA	20	543nm	0.668	a	9/23/24 16:40	0	5		4.1516	5	2ml/10ml	AWhite	1.39	8.54	9/23/24 15:42	9/23/24 15:43
24NAI00517	I062-02	2.217		mg/L	20	ml	NA	20	543nm	0.356	a	9/23/24 16:41	0	5		2.217398	5	2ml/10ml	AWhite	1.45	8.56	9/23/24 15:47	9/23/24 15:48
24NAI00518	I062-03	2.186		mg/L	20	ml	NA	20	543nm	0.351	a	9/23/24 16:41	0	5		2.186401	5	2ml/10ml	AWhite	1.38	8.51	9/23/24 15:52	9/23/24 15:53
24NAI00519	I062-04	2.137		mg/L	20	ml	NA	20	543nm	0.343	a	9/23/24 16:42	0	5		2.136806	5	2ml/10ml	AWhite	1.36	8.51	9/23/24 15:57	9/23/24 15:58
24NAI00520	CCV1	0.467		mg/L	20	ml	NA	20	543nm	0.375	a	9/23/24 16:42	0	1		0.467037	1		AWhite			9/23/24 16:02	9/23/24 16:03
24NAI00521	CCB1	ND		mg/L	20	ml	NA	20	543nm	0.003	a	9/23/24 16:42	0	1		0.005804	1		AWhite			9/23/24 16:07	9/23/24 16:08
24NAI00522	I077-07	2.025		mg/L	20	ml	NA	20	543nm	0.325	a	9/23/24 16:42	0	5		2.025217	5	2ml/10ml	AWhite	1.38	8.59	9/23/24 16:12	9/23/24 16:13
24NAI00523	I411-01	0.043	J	mg/L	20	ml	NA	20	543nm	0.033	a	9/23/24 16:42	0	1		0.043	1		AWhite	1.24	8.56	9/23/24 16:17	9/23/24 16:18
24NAI00524	CCV2	0.476		mg/L	20	ml	NA	20	543nm	0.382	a	9/23/24 16:43	0	1		0.475716	1		AWhite			9/23/24 16:22	9/23/24 16:23
24NAI00525	CCB2	ND		mg/L	20	ml	NA	20	543nm	0.002	a	9/23/24 16:43	0	1		0.004564	1		AWhite			9/23/24 16:27	9/23/24 16:28

Reviewed by: AW

Date: 09/23/24

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24I077

METHOD SW9060
TOC

One(1) water sample was received on 09/14/24 to be analyzed for TOC in accordance with Method SW9060 and project specific requirements.

Holding Time
The sample was analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Total Organic Carbon was not detected in TCI004WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. TCI004WL/TCI004WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Sample Analysis
The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

METHOD SW9060
TOC

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : Z4I077

Matrix : WATER
InstrumentID : 62

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DIL'N FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATE
MBLK1W	TCI004WB	ND	1	NA	1.00	0.250	09/23/2418:57	NA	TCI003-06	TCI003-03	TCI004W	NA	NA
LCS1W	TCI004WL	25.7	1	NA	1.00	0.250	09/23/2419:11	NA	TCI003-07	TCI003-02	TCI004W	NA	NA
LCD1W	TCI004WC	25.6	1	NA	1.00	0.250	09/23/2419:26	NA	TCI003-08	TCI003-02	TCI004W	NA	NA
MW42S-GW091224	I077-07	0.799J	1	NA	1.00	0.250	09/23/2432:39	NA	TCI003-21	TCI003-15	TCI004W	09/12/2411:01	09/14/24

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24I077
METHOD : SW9060

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: TCI004WB,	TCI004WL	TCI004WC
LAB FILE ID	: TCI003-06	TCI003-07	TCI003-08
DATE PREPARED	: NA	NA	NA
DATE ANALYZED	: 09/23/2418:57	09/23/2419:11	09/23/2419:26
PREP BATCH	: TCI004W	TCI004W	TCI004W
CALIBRATION REF	: TCI003-02	TCI003-02	TCI003-02

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Total Organic Carbon	ND	25.0	25.7	103	25.0	25.6	102	0	80-120	20

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

	Date	Time
Start	9/23/24	16:08
End	9/24/24	10:18

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

☐ Sample was filtered. Filter ID:

Comments:

TCI004W: 24I062
24I080
24I077
24I097

TCI005W 24I081
24I048

MH 9/23/24

All samples pH<2

MH 9/23/24

Dilution prep values can be found in comment column on results table

Reagent Water ID #: SW1A-012-14-02
pH Strips Lot #: HC333774
2 M HCl SWP1-88-45-03

Book #: A62-046
Instrument No.: 62
MH 9/23/24
Micropipette ID: ☒ ~~642780221~~ C427800S6
Micropipette ID: ☒ ~~539360056~~ C427612W4
Micropipette ID: ☐ 942754082
Micropipette ID: ☐
Analytical Sequence: TCI003
Method File: TCI003
Analytical Batch: TCI004W, TCI005W

SOP #	Rev. #
☒ EMAX-5310B	5
☒ EMAX-9060	4
☐ EMAX-	

STANDARDS ID	CONC. (mg/L)
S0 SW1A-012-14-02	0
S1 SW7B-02-30-~~04~~07	1
S2	5
S3	10
S4	40
S5	80
~~S6~~ H09/03 SW7B-02-30-02	1
ICV/LCS SW7B-02-30-04	25
CCV SW7B-02-30-05	50
SW7B-02-30-08	25
SW7B-02-30-06	1

ELECTRONIC DATA ARCHIVAL	
Location	Date
☐ TOC	
☐	

Analyzed By: MH
Date: 9/23/24

	Type	Analysis	Sample Name	Sample ID	Dilution	Result	Comment
1	Standard	NPOC	ICAL - Instrum	TCI003-01	1.000		
2	Control	NPOC	ICV	TCI003-02	1.000	NPOC:25.67 mg/L	
3	Unknown	NPOC	ICB	TCI003-03	1.000	NPOC:0.2277 mg/L	
4	Unknown	NPOC	MRL	TCI003-04	1.000	NPOC:1.178 mg/L	
5	Unknown	NPOC	HCO3/CO3	TCI003-05	1.000	NPOC:0.4008 mg/L	
6	Unknown	NPOC	TCI004WB	TCI003-06	1.000	NPOC:0.1924 mg/L	
7	Unknown	NPOC	TCI004WL	TCI003-07	1.000	NPOC:25.66 mg/L	
8	Unknown	NPOC	TCI004WC	TCI003-08	1.000	NPOC:25.56 mg/L	
9	Unknown	NPOC	I062-01	TCI003-09	1.000	NPOC:7.952 mg/L	
10	Unknown	NPOC	I062-01D	TCI003-10	1.000	NPOC:7.509 mg/L	
11	Unknown	NPOC	I062-01M	TCI003-11	1.000	NPOC:32.77 mg/L	
12	Unknown	NPOC	I062-01S	TCI003-12	1.000	NPOC:32.86 mg/L	
13	Unknown	NPOC	I062-02	TCI003-13	1.000	NPOC:0.8210 mg/L	
14	Unknown	NPOC	I062-03	TCI003-14	1.000	NPOC:8.076 mg/L	
15	Control	NPOC	CCV1	TCI003-15	1.000	NPOC:24.88 mg/L	
16	Unknown	NPOC	CCB1	TCI003-16	1.000	NPOC:0.2298 mg/L	
17	Unknown	NPOC	I062-04	TCI003-17	1.000	NPOC:0.7654 mg/L	
18	Unknown	NPOC	I080-06	TCI003-18	1.000	NPOC:4.101 mg/L	
19	Unknown	NPOC	I080-07	TCI003-19	1.000	NPOC:10.68 mg/L	
20	Unknown	NPOC	I080-10	TCI003-20	1.000	NPOC:10.89 mg/L	
21	Unknown	NPOC	I077-07	TCI003-21	1.000	NPOC:0.7985 mg/L	
22	Unknown	NPOC	I087-02	TCI003-22	1.000	NPOC:1.064 mg/L	
23	Unknown	NPOC	I087-04	TCI003-23	1.000	NPOC:1.335 mg/L	
24	Unknown	NPOC	I087-05	TCI003-24	1.000	NPOC:1.094 mg/L	
25	Unknown	NPOC	I087-06	TCI003-25	1.000	NPOC:1.381 mg/L	
26	Unknown	NPOC	I087-07	TCI003-26	1.000	NPOC:11.75 mg/L	
27	Control	NPOC	CCV2	TCI003-27	1.000	NPOC:24.57 mg/L	
28	Unknown	NPOC	CCB2	TCI003-28	1.000	NPOC:0.2289 mg/L	
29	Unknown	NPOC	I087-08	TCI003-29	1.000	NPOC:1.557 mg/L	
30	Unknown	NPOC	I087-09	TCI003-30	1.000	NPOC:7.124 mg/L	
31	Unknown	NPOC	I087-09D	TCI003-31	1.000	NPOC:8.099 mg/L	
32	Unknown	NPOC	I087-09M	TCI003-32	1.000	NPOC:32.60 mg/L	
33	Unknown	NPOC	I087-09S	TCI003-33	1.000	NPOC:32.86 mg/L	
34	Unknown	NPOC	I087-10	TCI003-34	1.000	NPOC:0.8878 mg/L	
35	Unknown	NPOC	I087-12	TCI003-35	1.000	NPOC:1.613 mg/L	
36	Unknown	NPOC	I087-15	TCI003-36	1.000	NPOC:5.709 mg/L	
37	Unknown	NPOC	I087-16I	TCI003-37	3.000	NPOC:13.66 mg/L	DF=3, TAN, SUSPENDED SOLIDS
38	Unknown	NPOC	I087-17	TCI003-38	1.000	NPOC:8.129 mg/L	
39	Control	NPOC	CCV3	TCI003-39	1.000	NPOC:24.76 mg/L	
40	Unknown	NPOC	CCB3	TCI003-40	1.000	NPOC:0.2416 mg/L	
41	Unknown	NPOC	TCI005WB	TCI003-41	1.000	NPOC:0.1870 mg/L	
42	Unknown	NPOC	TCI005WL	TCI003-42	1.000	NPOC:25.48 mg/L	
43	Unknown	NPOC	TCI005WC	TCI003-43	1.000	NPOC:25.57 mg/L	
44	Unknown	NPOC	I081-04	TCI003-44	1.000	NPOC:0.9907 mg/L	
45	Unknown	NPOC	I081-04D	TCI003-45	1.000	NPOC:0.9787 mg/L	
46	Unknown	NPOC	I081-04M	TCI003-46	1.000	NPOC:25.27 mg/L	
47	Unknown	NPOC	I081-04S	TCI003-47	1.000	NPOC:25.36 mg/L	
48	Unknown	NPOC	I081-05	TCI003-48	1.000	NPOC:1.742 mg/L	
49	Unknown	NPOC	I048-01	TCI003-49	1.000	NPOC:4.615 mg/L	
50	Unknown	NPOC	I048-02	TCI003-50	1.000	NPOC:8.377 mg/L	
51	Control	NPOC	CCV4	TCI003-51	1.000	NPOC:50.05 mg/L	
52	Unknown	NPOC	CCB4	TCI003-52	1.000	NPOC:0.2590 mg/L	
53	Unknown	NPOC	I048-04	TCI003-53	1.000	NPOC:7.465 mg/L	
54	Unknown	NPOC	I048-05	TCI003-54	1.000	NPOC:5.572 mg/L	
55	Unknown	NPOC	I048-06	TCI003-55	1.000	NPOC:5.178 mg/L	
56	Unknown	NPOC	I048-07	TCI003-56	1.000	NPOC:4.930 mg/L	
57	Unknown	NPOC	I048-08I	TCI003-57	2.000	NPOC:14.30 mg/L	DF=2, ODOR
58	Unknown	NPOC	I048-11	TCI003-58	1.000	NPOC:3.186 mg/L	
59	Unknown	NPOC	I048-11D	TCI003-59	1.000	NPOC:3.133 mg/L	
60	Unknown	NPOC	I048-11M	TCI003-60	1.000	NPOC:27.83 mg/L	
61	Unknown	NPOC	I048-11S	TCI003-61	1.000	NPOC:27.91 mg/L	
62	Unknown	NPOC	I048-16	TCI003-62	1.000	NPOC:5.028 mg/L	
63	Control	NPOC	CCV5	TCI003-63	1.000	NPOC:25.24 mg/L	
64	Unknown	NPOC	CCB5	TCI003-64	1.000	NPOC:0.2397 mg/L	
65	Unknown	NPOC	I048-18	TCI003-65	1.000	NPOC:3.832 mg/L	
66	Unknown	NPOC	I048-19	TCI003-66	1.000	NPOC:4.785 mg/L	
67	Control	NPOC	CCV6	TCI003-67	1.000	NPOC:1.218 mg/L	

	Type	Analysis	Sample Name	Sample ID	Dilution	Result	Comment
68	Unknown	NPOC	CCB6	TCI003-68	1.000	NPOC:0.1934 mg/L	
69							
70							
71							
72							
73							
74							
75							
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91							
92							
93						MH	9/24/24
94							

	Type	Analysis	Sample Name	Sample ID	Dilution	Result	Comment
1	Standard	NPOC	ICAL - Instrum	TCI003-01	1.000		DF= Dilution Factor
2	Control	NPOC	ICV	TCI003-02	1.000	NPOC:25.67 mg/L	DF=X, Aliquot/Final Volume
3	Unknown	NPOC	ICB	TCI003-03	1.000	NPOC:0.2277 mg/L	
4	Unknown	NPOC	MRL	TCI003-04	1.000	NPOC:1.178 mg/L	
5	Unknown	NPOC	HCO3/CO3	TCI003-05	1.000	NPOC:0.4008 mg/L	
6	Unknown	NPOC	TCI004WB	TCI003-06	1.000	NPOC:0.1924 mg/L	
7	Unknown	NPOC	TCI004WL	TCI003-07	1.000	NPOC:25.66 mg/L	
8	Unknown	NPOC	TCI004WC	TCI003-08	1.000	NPOC:25.56 mg/L	
9	Unknown	NPOC	I062-01	TCI003-09	1.000	NPOC:7.952 mg/L	
10	Unknown	NPOC	I062-01D	TCI003-10	1.000	NPOC:7.509 mg/L	
11	Unknown	NPOC	I062-01M	TCI003-11	1.000	NPOC:32.77 mg/L	
12	Unknown	NPOC	I062-01S	TCI003-12	1.000	NPOC:32.86 mg/L	
13	Unknown	NPOC	I062-02	TCI003-13	1.000	NPOC:0.8210 mg/L	
14	Unknown	NPOC	I062-03	TCI003-14	1.000	NPOC:8.076 mg/L	
15	Control	NPOC	CCV1	TCI003-15	1.000	NPOC:24.88 mg/L	
16	Unknown	NPOC	CCB1	TCI003-16	1.000	NPOC:0.2298 mg/L	
17	Unknown	NPOC	I062-04	TCI003-17	1.000	NPOC:0.7654 mg/L	
18	Unknown	NPOC	I080-06	TCI003-18	1.000	NPOC:4.101 mg/L	
19	Unknown	NPOC	I080-07	TCI003-19	1.000	NPOC:10.68 mg/L	
20	Unknown	NPOC	I080-10	TCI003-20	1.000	NPOC:10.89 mg/L	
21	Unknown	NPOC	I077-07	TCI003-21	1.000	NPOC:0.7985 mg/L	
22	Unknown	NPOC	I087-02	TCI003-22	1.000	NPOC:1.064 mg/L	
23	Unknown	NPOC	I087-04	TCI003-23	1.000	NPOC:1.335 mg/L	
24	Unknown	NPOC	I087-05	TCI003-24	1.000	NPOC:1.094 mg/L	
25	Unknown	NPOC	I087-06	TCI003-25	1.000	NPOC:1.381 mg/L	
26	Unknown	NPOC	I087-07	TCI003-26	1.000	NPOC:11.75 mg/L	
27	Control	NPOC	CCV2	TCI003-27	1.000	NPOC:24.57 mg/L	
28	Unknown	NPOC	CCB2	TCI003-28	1.000	NPOC:0.2289 mg/L	
29	Unknown	NPOC	I087-08	TCI003-29	1.000	NPOC:1.557 mg/L	
30	Unknown	NPOC	I087-09	TCI003-30	1.000	NPOC:7.124 mg/L	
31	Unknown	NPOC	I087-09D	TCI003-31	1.000	NPOC:8.099 mg/L	
32	Unknown	NPOC	I087-09M	TCI003-32	1.000	NPOC:32.60 mg/L	
33	Unknown	NPOC	I087-09S	TCI003-33	1.000	NPOC:32.86 mg/L	
34	Unknown	NPOC	I087-10	TCI003-34	1.000	NPOC:0.8878 mg/L	
35	Unknown	NPOC	I087-12	TCI003-35	1.000	NPOC:1.613 mg/L	
36	Unknown	NPOC	I087-15	TCI003-36	1.000	NPOC:5.709 mg/L	
37	Unknown	NPOC	I087-16I	TCI003-37	3.000	NPOC:13.66 mg/L	DF=3X, 5ml/15ml
38	Unknown	NPOC	I087-17	TCI003-38	1.000	NPOC:8.129 mg/L	
39	Control	NPOC	CCV3	TCI003-39	1.000	NPOC:24.76 mg/L	
40	Unknown	NPOC	CCB3	TCI003-40	1.000	NPOC:0.2416 mg/L	
41	Unknown	NPOC	TCI005WB	TCI003-41	1.000	NPOC:0.1870 mg/L	
42	Unknown	NPOC	TCI005WL	TCI003-42	1.000	NPOC:25.48 mg/L	
43	Unknown	NPOC	TCI005WC	TCI003-43	1.000	NPOC:25.57 mg/L	
44	Unknown	NPOC	I081-04	TCI003-44	1.000	NPOC:0.9907 mg/L	
45	Unknown	NPOC	I081-04D	TCI003-45	1.000	NPOC:0.9787 mg/L	
46	Unknown	NPOC	I081-04M	TCI003-46	1.000	NPOC:25.27 mg/L	
47	Unknown	NPOC	I081-04S	TCI003-47	1.000	NPOC:25.36 mg/L	
48	Unknown	NPOC	I081-05	TCI003-48	1.000	NPOC:1.742 mg/L	
49	Unknown	NPOC	I048-01	TCI003-49	1.000	NPOC:4.615 mg/L	
50	Unknown	NPOC	I048-02	TCI003-50	1.000	NPOC:8.377 mg/L	
51	Control	NPOC	CCV4	TCI003-51	1.000	NPOC:50.05 mg/L	
52	Unknown	NPOC	CCB4	TCI003-52	1.000	NPOC:0.2590 mg/L	
53	Unknown	NPOC	I048-04	TCI003-53	1.000	NPOC:7.465 mg/L	
54	Unknown	NPOC	I048-05	TCI003-54	1.000	NPOC:5.572 mg/L	
55	Unknown	NPOC	I048-06	TCI003-55	1.000	NPOC:5.178 mg/L	
56	Unknown	NPOC	I048-07	TCI003-56	1.000	NPOC:4.930 mg/L	
57	Unknown	NPOC	I048-08I	TCI003-57	2.000	NPOC:14.30 mg/L	DF=2X, 7.5ml/15ml
58	Unknown	NPOC	I048-11	TCI003-58	1.000	NPOC:3.186 mg/L	
59	Unknown	NPOC	I048-11D	TCI003-59	1.000	NPOC:3.133 mg/L	
60	Unknown	NPOC	I048-11M	TCI003-60	1.000	NPOC:27.83 mg/L	
61	Unknown	NPOC	I048-11S	TCI003-61	1.000	NPOC:27.91 mg/L	
62	Unknown	NPOC	I048-16	TCI003-62	1.000	NPOC:5.028 mg/L	
63	Control	NPOC	CCV5	TCI003-63	1.000	NPOC:25.24 mg/L	
64	Unknown	NPOC	CCB5	TCI003-64	1.000	NPOC:0.2397 mg/L	
65	Unknown	NPOC	I048-18	TCI003-65	1.000	NPOC:3.832 mg/L	
66	Unknown	NPOC	I048-19	TCI003-66	1.000	NPOC:4.785 mg/L	
67	Control	NPOC	CCV6	TCI003-67	1.000	NPOC:1.218 mg/L	

	Type	Analysis	Sample Name	Sample ID	Dilution	Result	Comment
68	Unknown	NPOC	CCB6	TCI003-68	1.000	NPOC:0.1934 mg/L	
69							
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71							
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91							
92							
93							MH 9124124
94							

Instr.Information

System	TOC-9060/415.1/5310B
Detector	Combustion
Catalyst	Regular Sensitivity
Cell Length	long

Cal. Curve

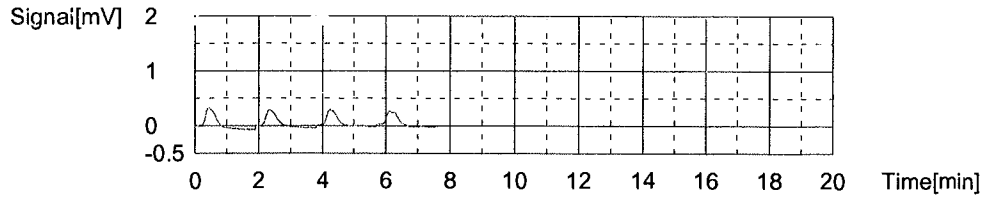
Sample Name:	ICAL - Instrument 62
Sample ID:	TCI003-01
Cal. Curve:	TCI003.2024_09_23_15_00_02.cal

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.6752	50uL	1	*******		09/23/24 04:08:43 PM
2	0.6460	50uL	1	*******		09/23/24 04:10:47 PM
3	0.5934	50uL	1	*******		09/23/24 04:12:51 PM
4	0.6340	50uL	1	*******		09/23/24 04:14:55 PM

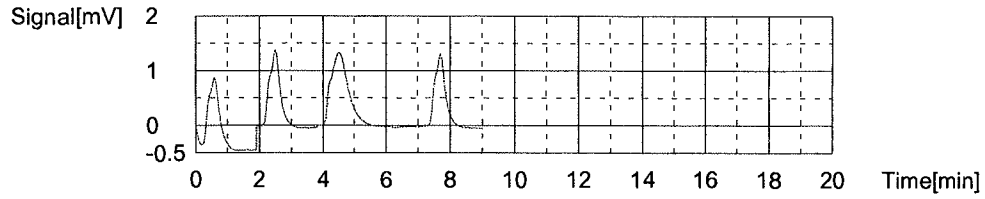
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 0.6371



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.952	50uL	1	*******		09/23/24 04:23:29 PM
2	3.204	50uL	1	*******		09/23/24 04:25:33 PM
3	3.078	50uL	1	*******		09/23/24 04:27:37 PM
4	3.095	50uL	1	*******		09/23/24 04:29:41 PM

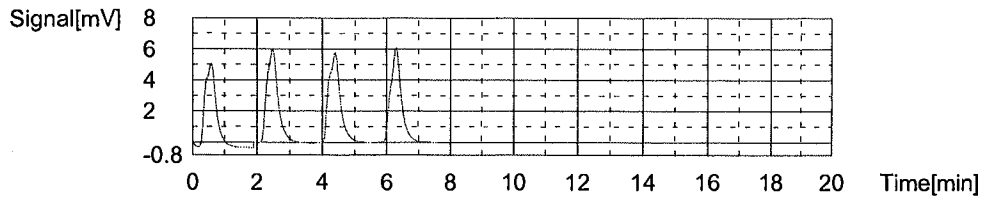
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 3.082



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	13.28	50uL	1	*******		09/23/24 04:38:15 PM
2	14.31	50uL	1	*******		09/23/24 04:40:19 PM
3	14.31	50uL	1	*******		09/23/24 04:42:23 PM
4	14.15	50uL	1	*******		09/23/24 04:44:27 PM

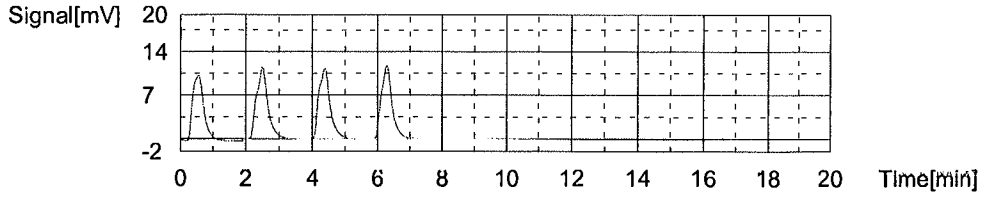
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 14.01



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	25.67	50uL	1	*******		09/23/24 04:53:03 PM
2	27.55	50uL	1	*******		09/23/24 04:55:07 PM
3	27.97	50uL	1	*******		09/23/24 04:57:11 PM
4	27.81	50uL	1	*******		09/23/24 04:59:15 PM

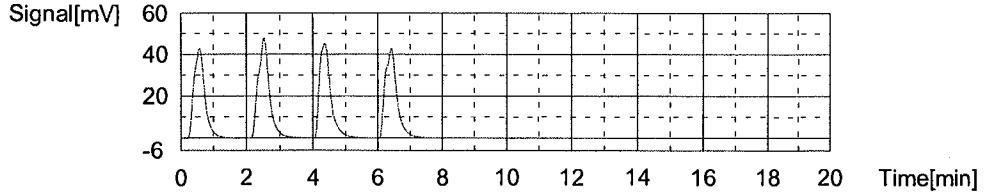
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 27.25



Conc: 40.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	102.6	50uL	1	*******		09/23/24 05:07:54 PM
2	111.4	50uL	1	*******		09/23/24 05:09:58 PM
3	110.6	50uL	1	*******		09/23/24 05:12:08 PM
4	109.9	50uL	1	*******		09/23/24 05:14:15 PM

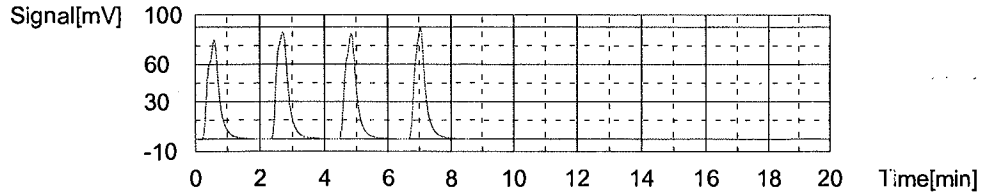
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 108.6



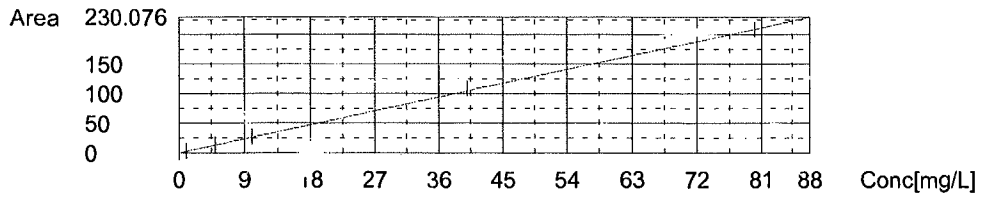
Conc: 80.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	198.1	50uL	1	*******		09/23/24 05:23:06 PM
2	214.2	50uL	1	*******		09/23/24 05:25:23 PM
3	211.4	50uL	1	*******		09/23/24 05:27:45 PM
4	211.9	50uL	1	*******		09/23/24 05:30:01 PM

Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 208.9



Slope: 2.615
Intercept 0.000
r^2 0.999677



Control Sample

Sample Name: ICV
Sample ID: TCI003-02
Method: TCI003.tpl
Chk. Result Control value: 25.67 / Control exceeds range!

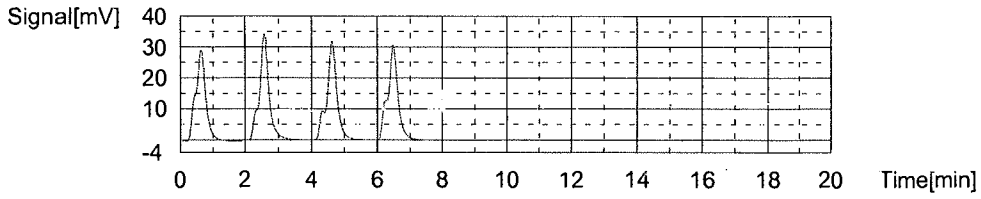
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:25.67 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.56	24.31mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:38:45 PM
2	68.97	26.38mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:40:56 PM
3	68.54	26.22mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:43:00 PM
4	67.37	25.77mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:45:05 PM

Mean Area 67.11
Mean Conc. 25.67mg/L



Sample

Sample Name: ICB
Sample ID: TCI003-03
Origin: TCI003.cal
Chk. Result

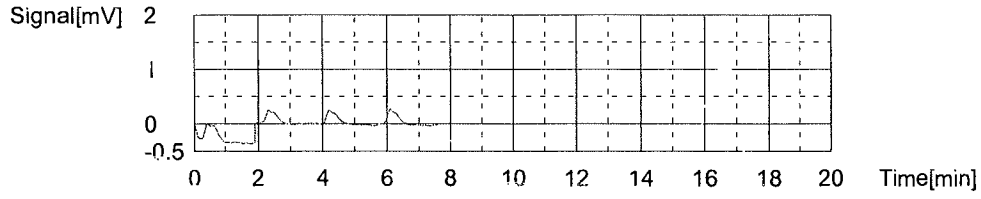
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2277 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7289	0.2788mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:53:42 PM
2	0.5318	0.2034mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:55:54 PM
3	0.5187	0.1984mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 05:57:58 PM
4	0.6014	0.2300mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:00:02 PM

Mean Area 0.5952
Mean Conc. 0.2277mg/L



Sample

Sample Name: MRL
Sample IO: TCI003-04
Origin: TCI003.cal
Chk. Result

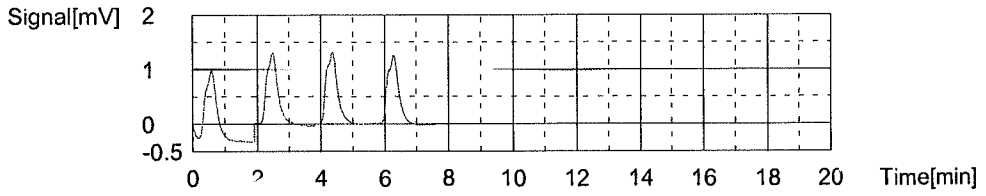
Type	Anal.	Oil.	Result
Unknown	NPOC	1.000	NPOC:1.178 mg/L

1. Oet

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Oil.	Ex.	Cal. Curve	Date / Time
1	2.913	1.114mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:08:39 PM
2	3.137	1.200mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:10:43 PM
3	3.189	1.220mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:12:47 PM
4	3.085	1.180mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:14:52 PM

Mean Area 3.081
Mean Conc. 1.178mg/L



Sample

Sample Name: HCO3/CO3
Sample IO: TCI003-05
Origin: TCI003.cal
Chk. Result

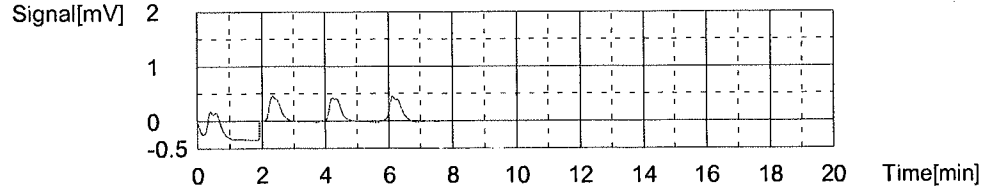
Type	Anal.	Oil.	Result
Unknown	NPOC	1.000	NPOC:0.4008 mg/L

1. Oet

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Oil.	Ex.	Cal. Curve	Date / Time
1	1.068	0.4085mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:36:12 PM
2	1.025	0.3920mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:38:16 PM
3	1.014	0.3878mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:40:20 PM
4	1.085	0.4150mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:42:24 PM

Mean Area 1.048
Mean Conc. 0.4008mg/L



Sample

Sample Name: TCI004WB
Sample ID: TCI003-06
Origin: TCI003.cal
Chk. Result

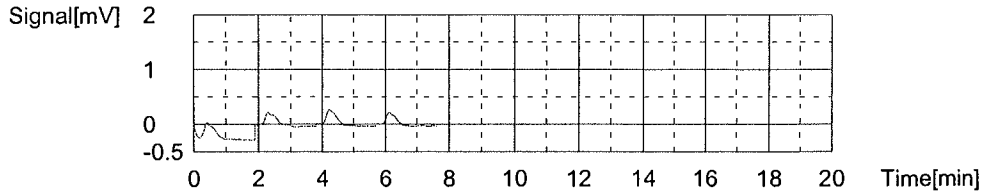
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPCC:0.1924 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5659	0.2164mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:50:59 PM
2	0.4474	0.1711mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:53:03 PM
3	0.5584	0.2136mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:55:07 PM
4	0.4401	0.1683mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 06:57:11 PM

Mean Area 0.5030
Mean Conc. 0.1924mg/L



Sample

Sample Name: TCI004WL
Sample ID: TCI003-07
Origin: TCI003.cal
Chk. Result

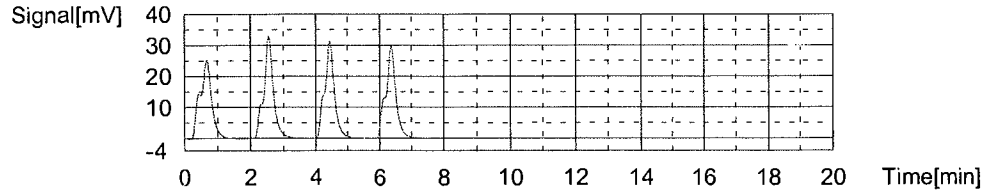
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.66 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.68	24.36mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:05:45 PM
2	68.70	26.28mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:07:50 PM
3	68.46	26.18mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:09:54 PM
4	67.52	25.83mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:11:58 PM

Mean Area 67.09
Mean Conc. 25.66mg/L



Sample

Sample Name: TCI004WC
Sample ID: TCI003-08
Origin: TCI003.cal
Chk. Result

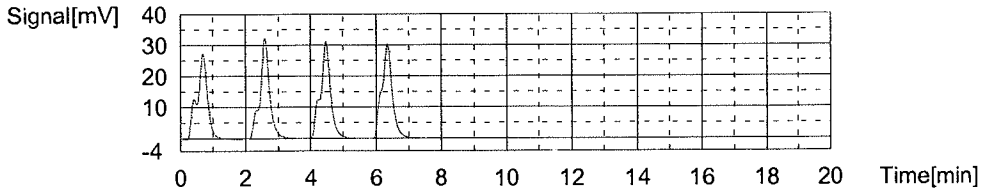
Type	Anal.	Oil.	Result
Unknown	NPOC	1.000	NPOC:25.56 mg/L

1. Oet

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Oil.	Ex.	Cal. Curve	Oate / Time
1	63.49	24.28mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:20:32 PM
2	67.30	25.74mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:22:37 PM
3	68.09	26.04mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:24:41 PM
4	68.38	26.15mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:26:45 PM

Mean Area 66.81
Mean Conc. 25.56mg/L



Sample

Sample Name: I062-01
Sample IO: TCI003-09
Origin: TCI003.cal
Chk. Result

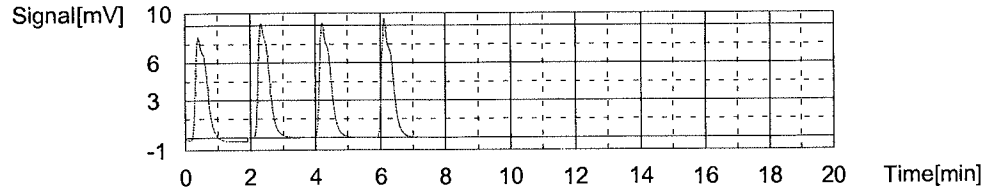
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:7.952 mg/L

1. Oet

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Oil.	Ex.	Cal. Curve	Oate / Time
1	19.54	7.474mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:35:19 PM
2	21.19	8.105mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:37:24 PM
3	21.34	8.162mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:39:28 PM
4	21.09	8.067mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:41:32 PM

Mean Area 20.79
Mean Conc. 7.952mg/L



Sample

Sample Name: I062-010
Sample IO: TCI003-10
Origin: TCI003.cal
Chk. Result

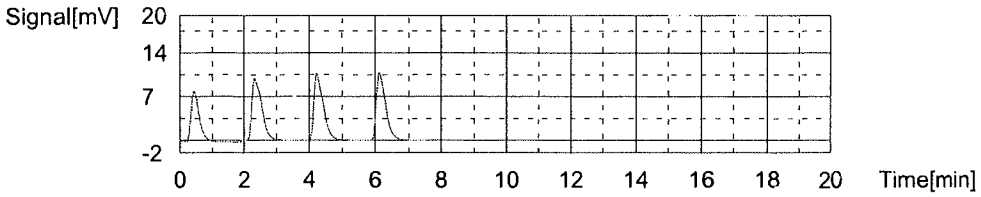
Type	Anal.	Oil.	Result
Unk..own	NPOC	1.000	NPOC:7.509 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.60	5.584mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:50:06 PM
2	21.32	8.155mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:52:11 PM
3	21.42	8.193mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:54:15 PM
4	21.19	8.105mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 07:56:19 PM

Mean Area 19.63
Mean Conc. 7.509mg/L



Sample

Sample Name: I062-01M
Sample ID: TCI003-11
Origin: TCI003.cal
Chk. Result

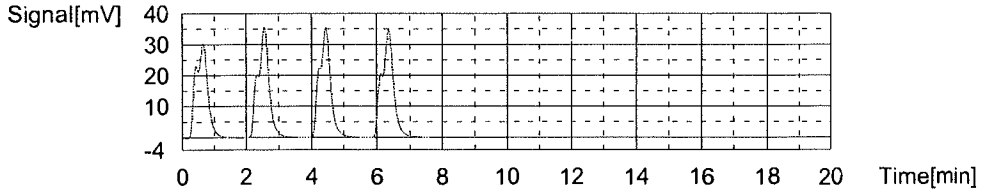
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:32.77 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.85	31.31mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:04:53 PM
2	87.19	33.35mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:06:57 PM
3	87.35	33.41mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:09:02 PM
4	86.33	33.02mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:11:07 PM

Mean Area 85.68
Mean Conc. 32.77mg/L



Sample

Sample Name: I062-01S
Sample ID: TCI003-12
Origin: TCI003.cal
Chk. Result

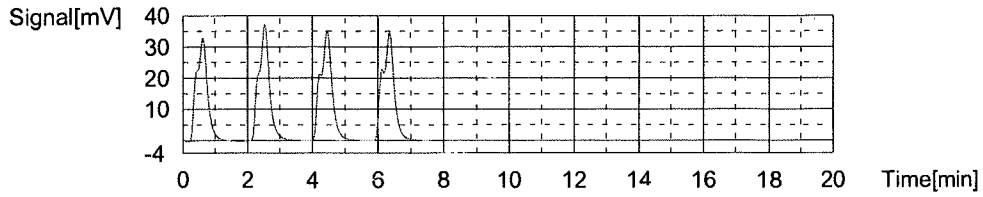
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:32.86 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	80.45	30.77mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:19:42 PM
2	88.08	33.69mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:21:46 PM
3	87.95	33.64mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:23:51 PM
4	87.20	33.35mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:25:55 PM

Mean Area 85.92
Mean Conc. 32.86mg/L



Sample

Sample Name: I062-02
Sample ID: TCI003-13
Origin: TCI003.cal
Chk. Result

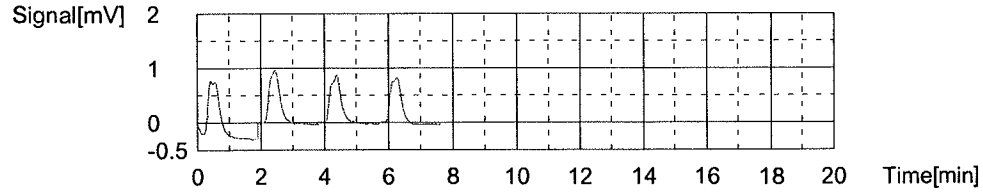
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.8210 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.381	0.9107mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:34:29 PM
2	2.220	0.8491mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:36:33 PM
3	2.040	0.7803mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:38:38 PM
4	1.945	0.7439mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:40:42 PM

Mean Area 2.147
Mean Conc. 0.8210mg/L



Sample

Sample Name: I062-03
Sample ID: TCI003-14
Origin: TCI003.cal
Chk. Result

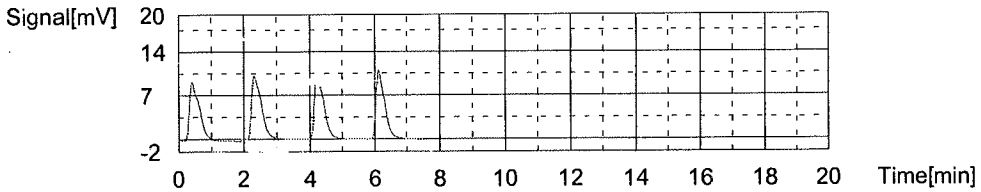
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:8.076 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.07	7.676mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:49:16 PM
2	21.59	8.258mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:51:20 PM
3	21.45	8.204mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:53:25 PM
4	21.35	8.166mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 08:55:29 PM

Mean Area 21.12
Mean Conc. 8.076mg/L



Control Sample

Sample Name: CCV1
Sample ID: TCI003-15
Method: TCI003.tpl
Chk. Result Control value: 24.88 / Control exceeds range!

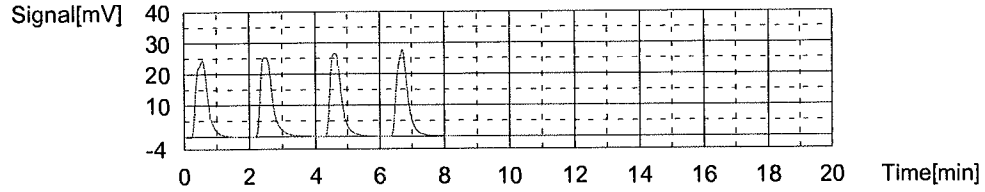
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:24.88 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.33	23.84mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:04:08 PM
2	65.59	25.09mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:06:25 PM
3	66.40	25.40mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:08:38 PM
4	65.85	25.19mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:10:54 PM

Mean Area 65.04
Mean Conc. 24.88mg/L



Sample

Sample Name: CCB1
Sample ID: TCI003-16
Origin: TCI003.cal
Chk. Result

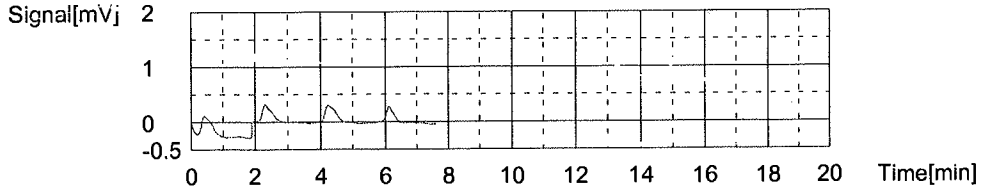
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2298 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7279	0.2784mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:19:28 PM
2	0.5832	0.2231mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:21:32 PM
3	0.6691	0.2559mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:23:37 PM
4	0.4234	0.1619mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:25:41 PM

Mean Area 0.6009
Mean Conc. 0.2298mg/L



Sample

Sample Name: I062-04
Sample ID: TCI003-17
Origin: TCI003.cal
Chk. Result

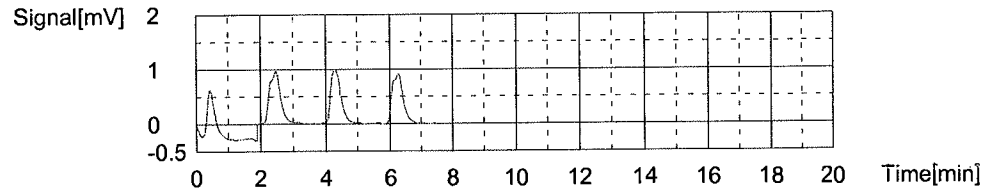
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.7654 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.422	0.5439mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:34:16 PM
2	2.172	0.8307mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:36:20 PM
3	2.169	0.8296mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:38:25 PM
4	2.242	0.8575mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:40:29 PM

Mean Area 2.001
Mean Conc. 0.7654mg/L



Sample

Sample Name: I080-06
Sample ID: TCI003-18
Origin: TCI003.cal
Chk. Result

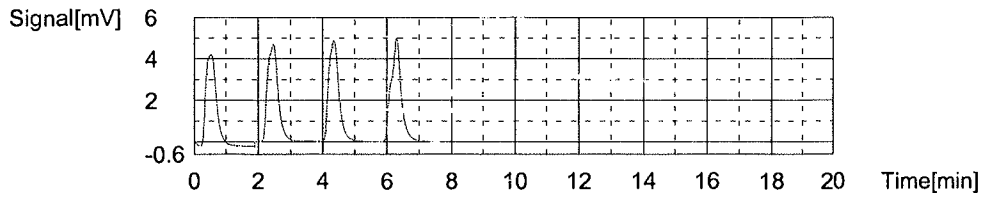
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.101 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.21	3.905mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:49:03 PM
2	10.77	4.119mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:51:07 PM
3	10.97	4.196mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:53:11 PM
4	10.94	4.184mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 09:55:16 PM

Mean Area 10.72
Mean Conc. 4.101mg/L



Sample

Sample Name: I080-07
Sample ID: TCI003-19
Origin: TCI003.cal
Chk. Result

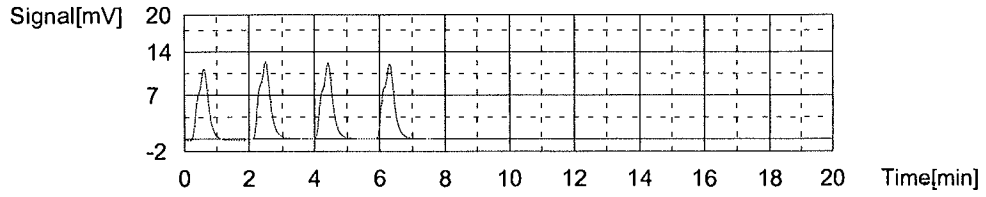
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:10.68 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.43	10.11mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:03:50 PM
2	28.49	10.90mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:05:54 PM
3	28.23	10.80mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:07:58 PM
4	28.52	10.91mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:10:03 PM

Mean Area 27.92
Mean Conc. 10.68mg/L



Sample

Sample Name: I080-10
Sample ID: TCI003-20
Origin: TCI003.cal
Chk. Result

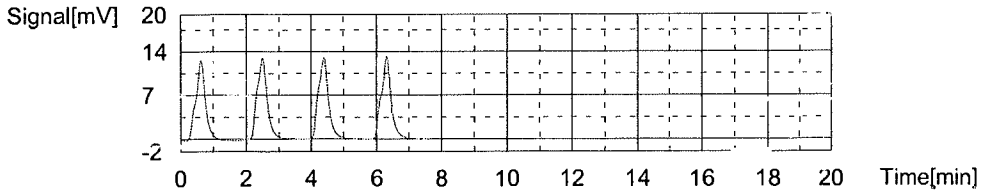
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:10.89 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.35	10.46mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:18:38 PM
2	28.78	11.01mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:20:42 PM
3	29.14	11.15mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:22:46 PM
4	28.64	10.95mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:24:51 PM

Mean Area 28.48
Mean Conc. 10.89mg/L



Sample

Sample Name: I077-07
Sample ID: TCI003-21
Origin: TCI003.cal
Chk. Result

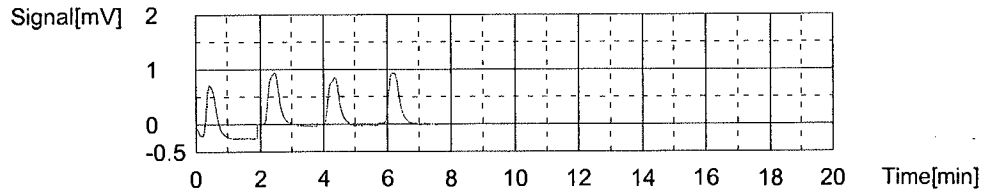
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.7985 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.969	0.7531mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:33:25 PM
2	2.195	0.8395mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:35:29 PM
3	2.054	0.7856mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:37:33 PM
4	2.133	0.8158mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:39:38 PM

Mean Area 2.088
Mean Conc. 0.7985mg/L



Sample

Sample Name: I087-02
Sample ID: TCI003-22
Origin: TCI003.cal
Chk. Result

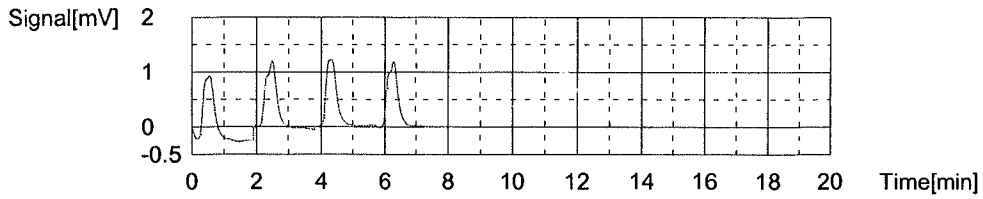
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.064 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.685	1.027mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:48:12 PM
2	2.825	1.081mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:50:16 PM
3	2.799	1.071mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:52:20 PM
4	2.820	1.079mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 10:54:25 PM

Mean Area 2.782
Mean Conc. 1.064mg/L



Sample

Sample Name: I087-04
Sample ID: TCI003-23
Origin: TCI003.cal
Chk. Result

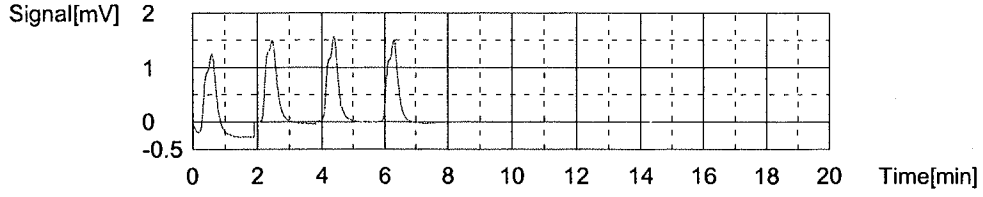
Type	Anal.	Dil.	Result
Unknown	NPOC	1.00	NPOC:1.335 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.411	1.305mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:03:00 PM
2	3.518	1.346mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:05:04 PM
3	3.543	1.355mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:07:08 PM
4	3.494	1.336mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:09:13 PM

Mean Area 3.492
Mean Conc. 1.335mg/L



Sample

Sample Name: I087-05
Sample ID: TCI003-24
Origin: TCI003.cal
Chk. Result

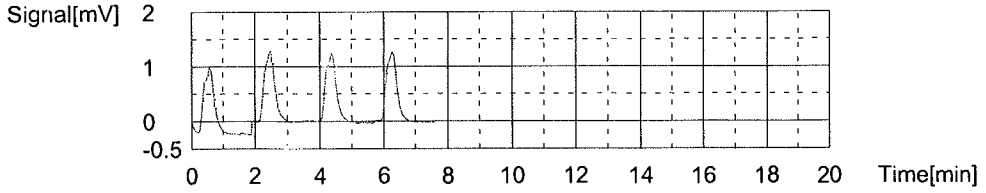
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.094 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.738	1.047mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:17:47 PM
2	2.885	1.103mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:19:52 PM
3	2.883	1.103mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:21:56 PM
4	2.938	1.124mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:24:00 PM

Mean Area 2.861
Mean Conc. 1.094mg/L



Sample

Sample Name: I087-06
Sample ID: TCI003-25
Origin: TCI003.cal
Chk. Result

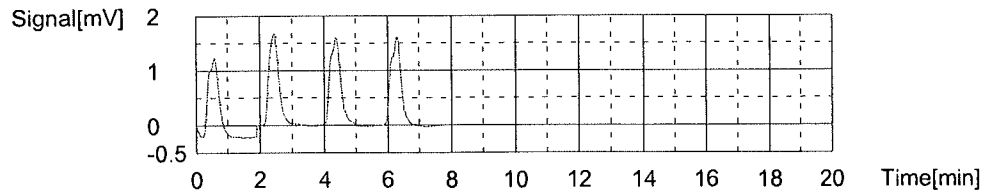
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.381 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.401	1.301mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:32:34 PM
2	3.522	1.347mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:34:39 PM
3	3.822	1.462mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:36:43 PM
4	3.698	1.414mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:38:48 PM

Mean Area 3.611
Mean Conc. 1.381mg/L



Sample

Sample Name: I087-07
Sample ID: TCI003-26
Origin: TCI003.cal
Chk. Result

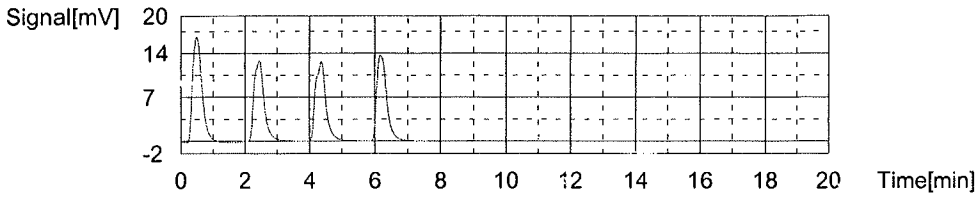
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:11.75 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.71	13.28mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:47:22 PM
2	29.19	11.16mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:49:27 PM
3	29.54	11.30mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:51:31 PM
4	29.43	11.26mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/23/24 11:53:35 PM

Mean Area 30.72
Mean Conc. 11.75mg/L



Control Sample

Sample Name: CCV2
Sample ID: TCI003-27
Method: TCI003.tpl
Chk. Result Control value: 24.57 / Control exceeds range!

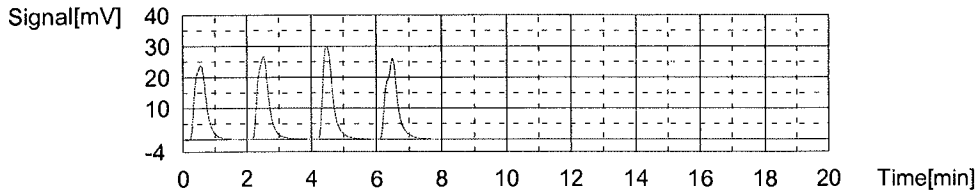
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:24.57 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.63	23.19mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:02:12 AM
2	66.11	25.29mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:04:25 AM
3	65.43	25.03mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:06:30 AM
4	64.81	24.79mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:08:43 AM

Mean Area 64.25
Mean Conc. 24.57mg/L



Sample

Sample Name: CCB2
Sample ID: TCI003-28
Origin: TCI003.cal
Chk. Result

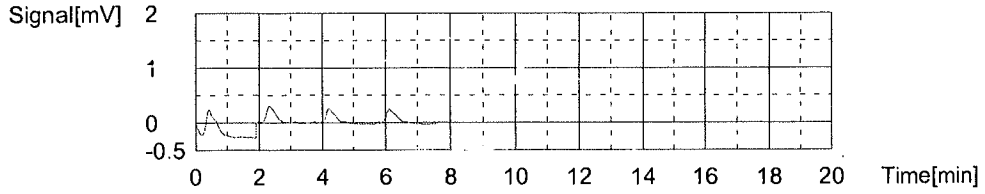
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2289 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9299	0.3557mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:17:17 AM
2	0.5357	0.2049mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:19:22 AM
3	0.4409	0.1686mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:21:26 AM
4	0.4871	0.1863mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:23:31 AM

Mean Area 0.5984
Mean Conc. 0.2289mg/L



Sample

Sample Name: I087-08
Sample ID: TCI003-29
Origin: TCI003.cal
Chk. Result

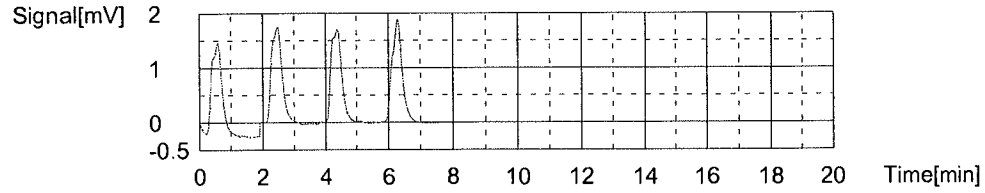
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.557 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.870	1.480mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:32:05 AM
2	4.160	1.591mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:34:09 AM
3	4.094	1.566mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:36:14 AM
4	4.164	1.593mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:38:18 AM

Mean Area 4.072
Mean Conc. 1.557mg/L



Sample

Sample Name: I087-09
Sample ID: TCI003-30
Origin: TCI003.cal
Chk. Result

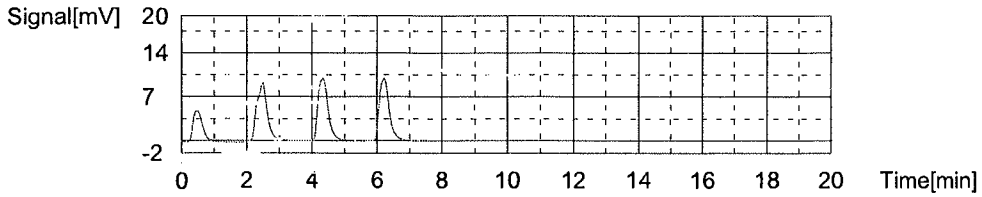
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:7.124 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.25	3.920mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:46:52 AM
2	21.18	8.101mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:48:56 AM
3	21.56	8.246mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:51:01 AM
4	21.51	8.227mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 12:53:05 AM

Mean Area 18.63
Mean Conc. 7.124mg/L



Sample

Sample Name: I087-09D
Sample ID: TCI003-31
Origin: TCI003.cal
Chk. Result

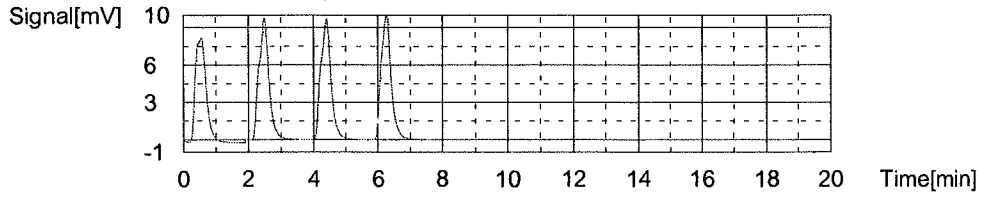
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	NPOC:8.099 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.75	7.554mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:01:40 AM
2	21.50	8.223mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:03:44 AM
3	21.81	8.342mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:05:49 AM
4	21.64	8.277mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:07:53 AM

Mean Area 21.18
Mean Conc. 8.099mg/L



Sample

Sample Name: I087-09M
Sample ID: TCI003-32
Origin: TCI003.cal
Chk. Result

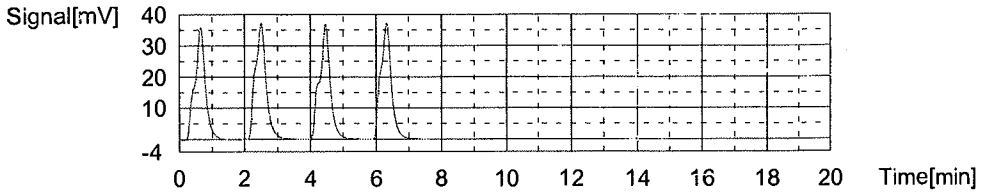
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:32.60 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.11	31.02mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:16:28 AM
2	86.73	33.17mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:18:32 AM
3	86.56	33.11mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:20:37 AM
4	86.57	33.11mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:22:41 AM

Mean Area 85.24
Mean Conc. 32.60mg/L



Sample

Sample Name: I087-09S
Sample ID: TCI003-33
Origin: TCI003.cal
Chk. Result

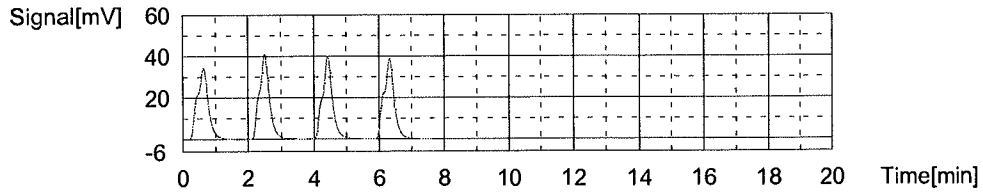
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:32.86 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.32	31.49mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:31:16 AM
2	87.43	33.44mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:33:20 AM
3	86.82	33.21mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:35:25 AM
4	87.13	33.33mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:37:29 AM

Mean Area 85.92
Mean Conc. 32.86mg/L



Sample

Sample Name: I087-10
Sample ID: TCI003-34
Origin: TCI003.cal
Chk. Result

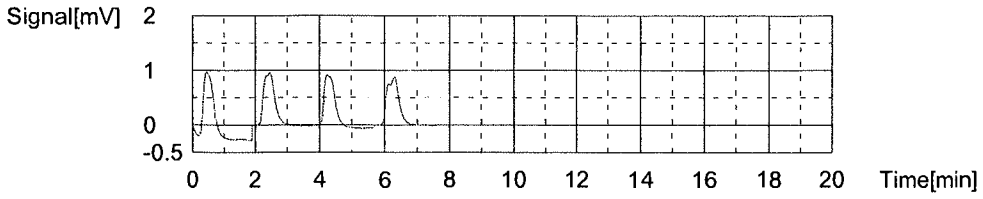
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.8878 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.601	0.9948mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:46:04 AM
2	2.309	0.8831mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:48:08 AM
3	2.161	0.8265mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:50:13 AM
4	2.214	0.8468mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 01:52:17 AM

Mean Area 2.321
Mean Conc. 0.8878mg/L



Sample

Sample Name: I087-12
Sample ID: TCI003-35
Origin: TCI003.cal
Chk. Result

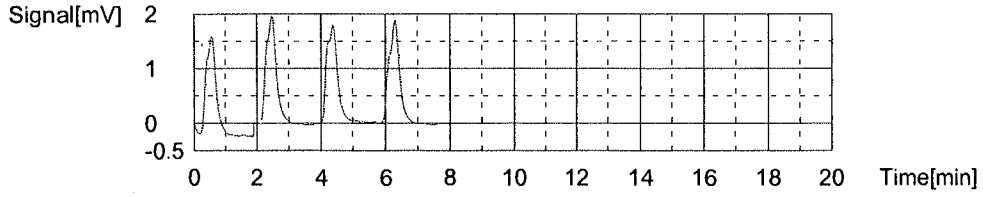
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.613 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.833	1.466mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:00:52 AM
2	4.433	1.696mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:02:56 AM
3	4.304	1.646mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:05:01 AM
4	4.296	1.643mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:07:05 AM

Mean Area 4.216
Mean Conc. 1.613mg/L



Sample

Sample Name: I087-15
Sample ID: TCI003-36
Origin: TCI003.cal
Chk. Result

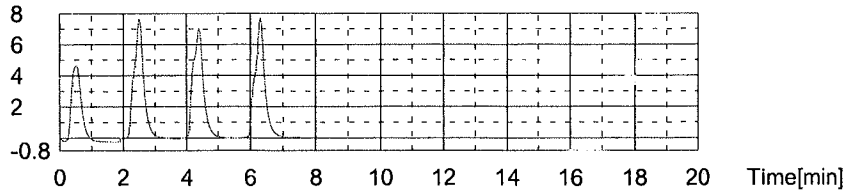
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:5.709 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.55	4.035mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:15:41 AM
2	16.35	6.254mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:17:45 AM
3	16.43	6.284mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:19:49 AM
4	16.38	6.265mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:21:54 AM

Mean Area 14.93
Mean Conc. 5.709mg/L



Sample

Sample Name: I087-16I
Sample ID: TCI003-37
Origin: TCI003.cal
Chk. Result

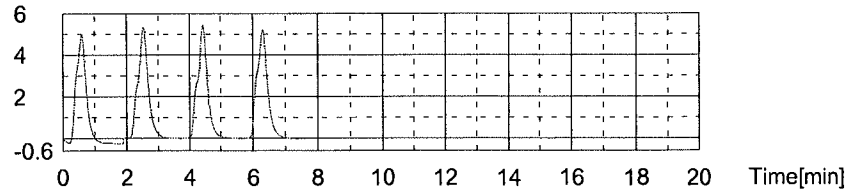
Type	Anal.	Dil.	Result
Unknown	NPOC	3.000	NPOC:13.66 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.34	13.01mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:30:29 AM
2	12.12	13.91mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:32:33 AM
3	12.09	13.87mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:34:37 AM
4	12.06	13.84mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:36:42 AM

Mean Area 11.90
Mean Conc. 13.66mg/L



Sample

Sample Name: I087-17
Sample ID: TCI003-38
Origin: TCI003.cal
Chk. Result

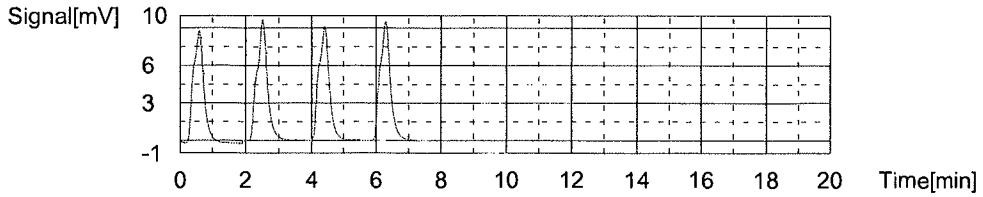
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:8.129 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.65	7.898mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:45:17 AM
2	21.38	8.177mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:47:21 AM
3	21.37	8.174mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:49:25 AM
4	21.61	8.265mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 02:51:30 AM

Mean Area 21.25
Mean Conc. 8.129mg/L



Control Sample

Sample Name: CCV3
Sample ID: TCI003-39
Method: TCI003.tpl
Chk. Result Control value: 24.76 / Control exceeds range!

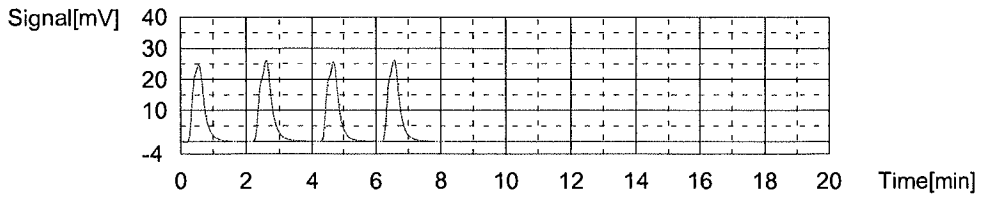
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:24.76 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.21	23.79mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:00:13 AM
2	65.78	25.16mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:02:27 AM
3	65.81	25.17mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:04:31 AM
4	65.17	24.93mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:06:49 AM

Mean Area 64.74
Mean Conc. 24.76mg/L



Sample

Sample Name: CCB3
Sample ID: TCI003-40
Origin: TCI003.cal
Chk. Result

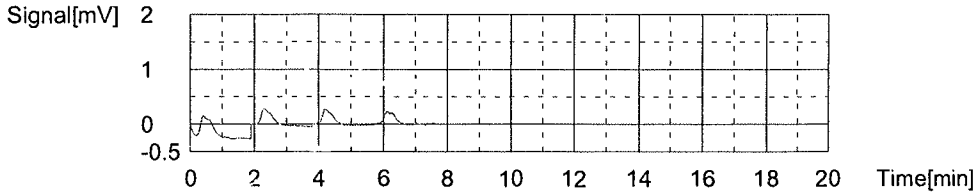
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2416 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8474	0.3241mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:15:25 AM
2	0.6174	0.2361mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:17:29 AM
3	0.5579	0.2134mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:19:33 AM
4	0.5038	0.1927mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:21:38 AM

Mean Area 0.6316
Mean Conc. 0.2416mg/L



Sample

Sample Name: TCI005WB
Sample ID: TCI003-41
Origin: TCI003.cal
Chk. Result

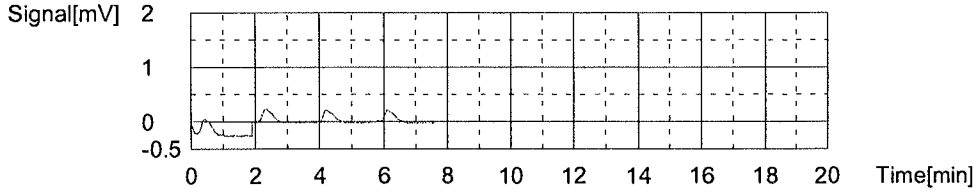
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.1870 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5539	0.2119mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:30:14 AM
2	0.4645	0.1777mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:32:18 AM
3	0.4945	0.1891mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:34:22 AM
4	0.4431	0.1695mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:36:27 AM

Mean Area 0.4890
Mean Conc. 0.1870mg/L



Sample

Sample Name: TCI005WL
Sample ID: TCI003-42
Origin: TCI003.cal
Chk. Result

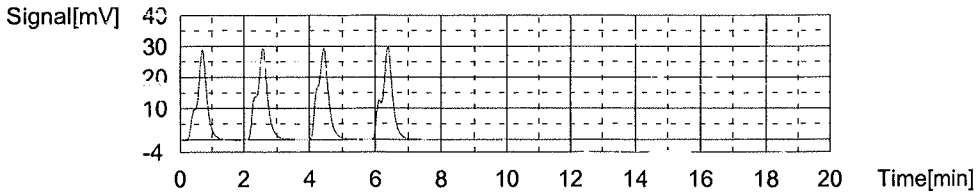
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.48 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.77	24.39mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:45:01 AM
2	68.21	26.09mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:47:06 AM
3	67.28	25.73mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:49:10 AM
4	67.22	25.71mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:51:15 AM

Mean Area 66.62
Mean Conc. 25.48mg/L



Sample

Sample Name: TCI005WC
Sample ID: TCI003-43
Origin: TCI003.cal
Chk. Result

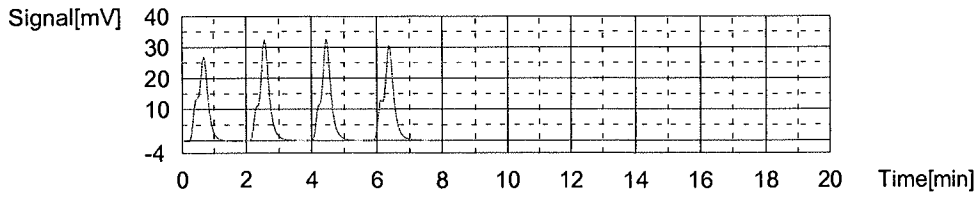
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.57 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.84	24.42mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 03:59:49 AM
2	68.30	26.12mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:01:54 AM
3	68.07	26.04mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:03:58 AM
4	67.16	25.69mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:06:03 AM

Mean Area 66.84
Mean Conc. 25.57mg/L



Sample

Sample Name: I081-04
Sample ID: TCI003-44
Origin: TCI003.cal
Chk. Result

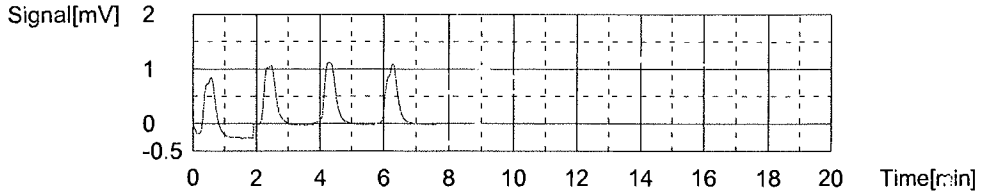
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.9907 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.517	0.9627mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:14:38 AM
2	2.687	1.028mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:16:43 AM
3	2.584	0.9883mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:18:47 AM
4	2.573	0.9841mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:20:52 AM

Mean Area 2.590
Mean Conc. 0.9907mg/L



Sample

Sample Name: I081-04D
Sample ID: TCI003-45
Origin: TCI003.cal
Chk. Result

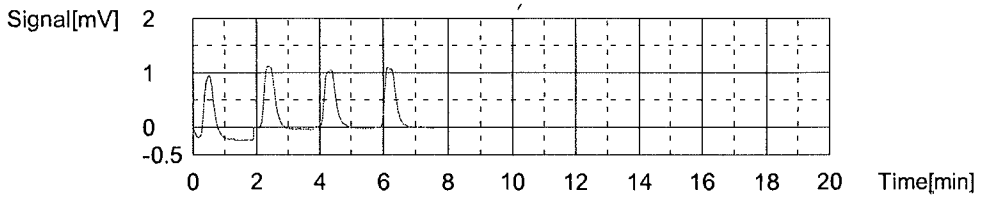
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.9787 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.391	0.9145mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:29:27 AM
2	2.634	1.007mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:31:32 AM
3	2.611	0.9987mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:33:36 AM
4	2.599	0.9941mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:35:41 AM

Mean Area 2.559
Mean Conc. 0.9787mg/L



Sample

Sample Name: I081-04M
Sample ID: TCI003-46
Origin: TCI003.cal
Chk. Result

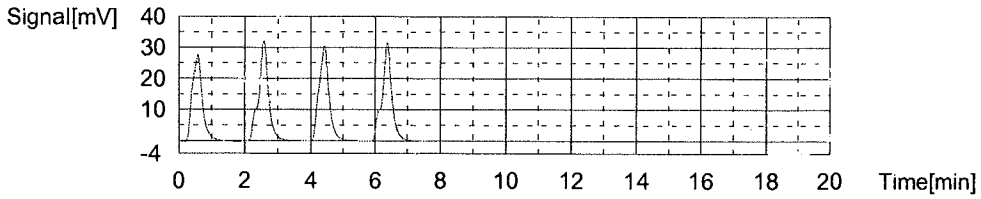
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.27 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.52	23.53mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:44:15 AM
2	68.17	26.07mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:46:20 AM
3	67.56	25.84mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:48:24 AM
4	67.00	25.63mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:50:28 AM

Mean Area 66.06
Mean Conc. 25.27mg/L



Sample

Sample Name: I081-04S
Sample ID: TCI003-47
Origin: TCI003.cal
Chk. Result

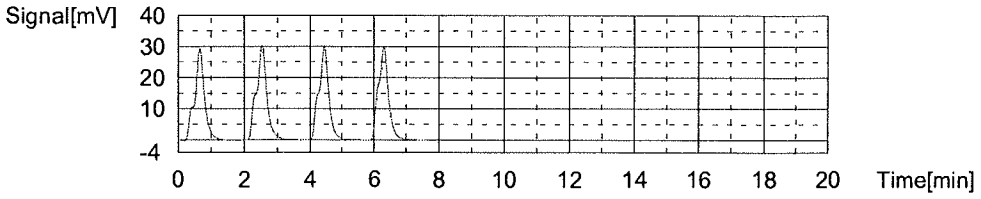
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.36 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.25	24.19mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 04:59:03 AM
2	67.87	25.96mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:01:08 AM
3	67.26	25.73mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:03:12 AM
4	66.85	25.57mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:05:17 AM

Mean Area 66.31
Mean Conc. 25.36mg/L



Sample

Sample Name: I081-05
Sample ID: TCI003-48
Origin: TCI003.cal
Chk. Result

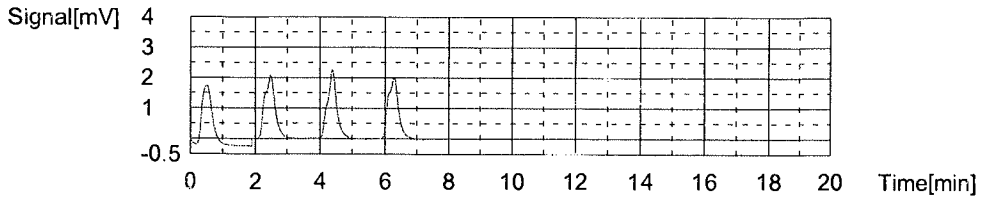
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.742 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil	Ex.	Cal. Curve	Date / Time
1	4.228	1.617mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:13:52 AM
2	4.854	1.857mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:16:00 AM
3	4.518	1.728mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:18:04 AM
4	4.613	1.764mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:20:08 AM

Mean Area 4.553
Mean Conc. 1.742mg/L



Sample

Sample Name: I048-01
Sample ID: TCI003-49
Origin: TCI003.cal
Chk. Result

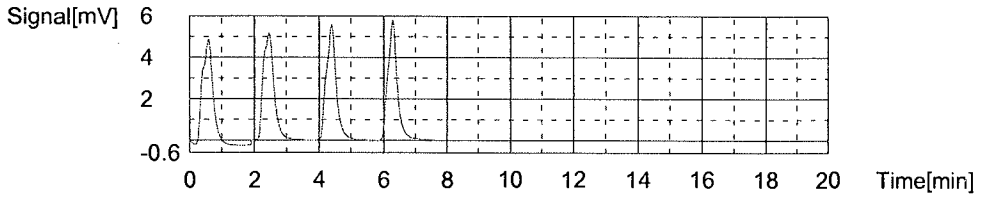
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.615 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.61	4.441mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:28:44 AM
2	12.24	4.682mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:30:49 AM
3	12.20	4.666mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:32:53 AM
4	12.21	4.670mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:34:57 AM

Mean Area 12.07
Mean Conc. 4.615mg/L



Sample

Sample Name: I048-02
Sample ID: TCI003-50
Origin: TCI003.cal
Chk. Result

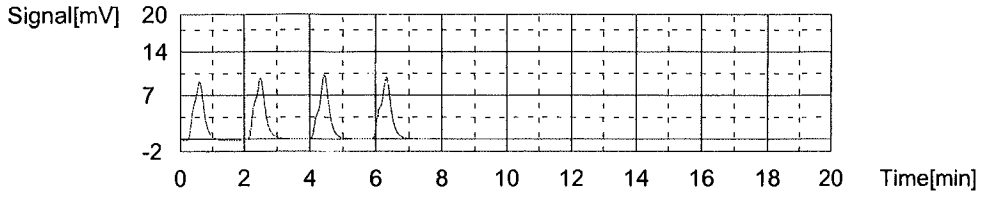
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:8.377 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.22	8.116mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:43:33 AM
2	22.12	8.460mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:45:37 AM
3	22.21	8.495mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:47:42 AM
4	22.06	8.438mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:49:47 AM

Mean Area 21.90
Mean Conc. 8.377mg/L



Control Sample

Sample Name: CCV4
Sample ID: TCI003-51
Method: TCI003.tpl
Chk. Result Control value: 50.05 / Control exceeds range!

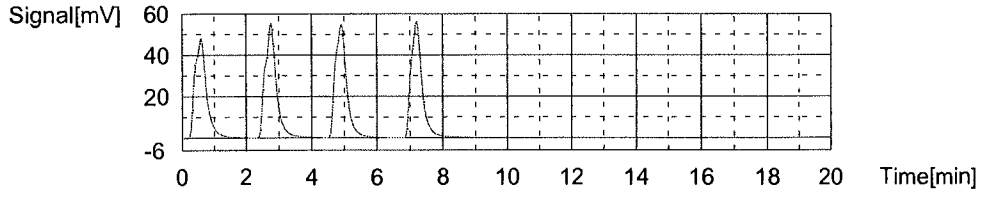
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:50.05 m /L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	123.6	47.27mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 05:58:38 AM
2	133.2	50.95mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:00:57 AM
3	134.5	51.44mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:03:26 AM
4	132.1	50.53mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:05:47 AM

Mean Area 130.8
Mean Conc. 50.05mg/L



Sample

Sample Name: CCB4
Sample ID: TCI003-52
Origin: TCI003.cal
Chk. Result

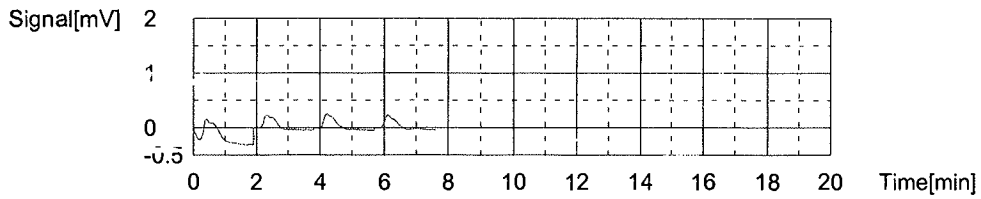
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2590 mg/L

1. Det

Anal : NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.019	0.3897mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:14:22 AM
2	0.5637	0.2156mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:16:26 AM
3	0.6179	0.2363mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:18:31 AM
4	0.5079	0.1943mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:20:35 AM

Mean Area 0.6771
Mean Conc. 0.2590mg/L



Sample

Sample Name: I048-04
Sample ID: TCI003-53
Origin: TCI003.cal
Chk. Result

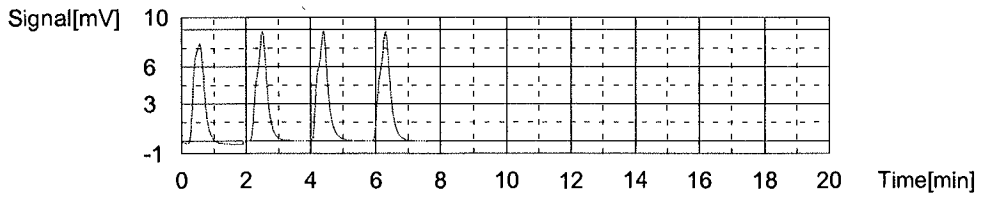
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:7.465 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.55	7.095mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:29:11 AM
2	19.40	7.420mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:31:15 AM
3	20.05	7.669mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:33:20 AM
4	20.07	7.676mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:35:24 AM

Mean Area 19.52
Mean Conc. 7.465mg/L



Sample

Sample Name: I048-05
Sample ID: TCI003-54
Origin: TCI003.cal
Chk. Result

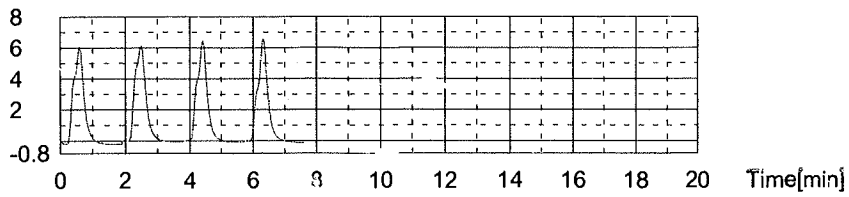
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:5.572 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.37	5.496mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:44:00 AM
2	14.61	5.588mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:46:04 AM
3	14.60	5.584mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:48:09 AM
4	14.69	5.619mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:50:13 AM

Mean Area 14.57
Mean Conc. 5.572mg/L



Sample

Sample Name: I048-06
Sample ID: TCI003-55
Origin: TCI003.cal
Chk. Result

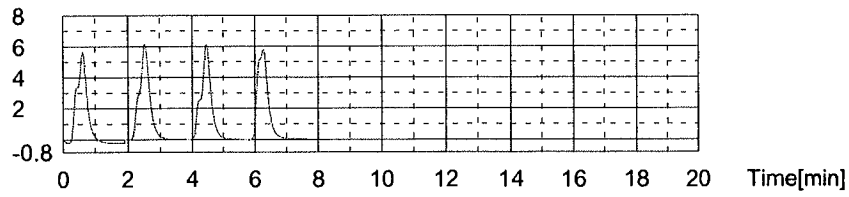
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:5.178 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.21	5.053mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 06:58:49 AM
2	13.51	5.167mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:00:53 AM
3	13.59	5.198mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:02:58 AM
4	13.84	5.294mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:05:04 AM

Mean Area 13.54
Mean Conc. 5.178mg/L



Sample

Sample Name: I048-07
Sample ID: TCI003-56
Origin: TCI003.cal
Chk. Result

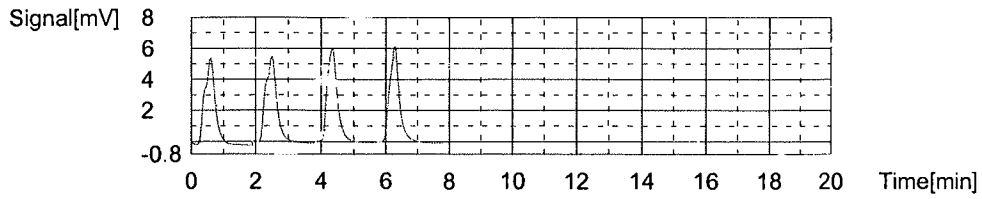
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.930 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.68	4.850mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:13:41 AM
2	12.87	4.923mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:15:45 AM
3	12.94	4.949mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:17:49 AM
4	13.07	4.999mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:20:04 AM

Mean Area 12.89
Mean Conc. 4.930mg/L



Sample

Sample Name: I048-08I
Sample ID: TCI003-57
Origin: TCI003.cal
Chk. Result

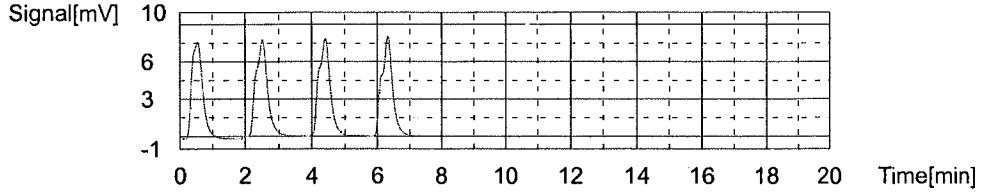
Type	Anal.	Dil.	Result
Unknown	NPOC	2.000	NPOC:14.30 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.21	13.93mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:28:40 AM
2	18.80	14.38mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:30:44 AM
3	18.97	14.51mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:32:49 AM
4	18.82	14.40mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:34:53 AM

Mean Area 18.70
Mean Conc. 14.30mg/L



Sample

Sample Name: I048-11
Sample ID: TCI003-58
Origin: TCI003.cal
Chk. Result

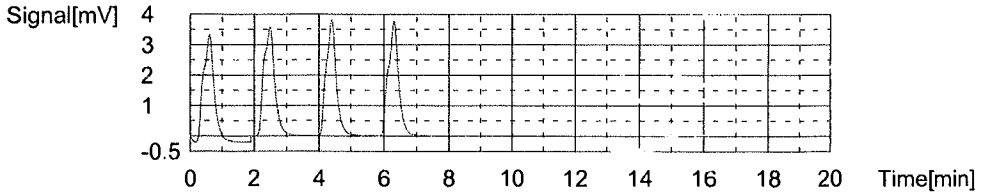
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.186 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.263	3.160mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:43:30 AM
2	8.410	3.217mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:45:34 AM
3	8.386	3.207mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:47:39 AM
4	8.257	3.158mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:49:43 AM

Mean Area 8.329
Mean Conc. 3.186mg/L



Sample

Sample Name: I048-11D
Sample ID: TCI003-59
Origin: TCI003.cal
Chk. Result

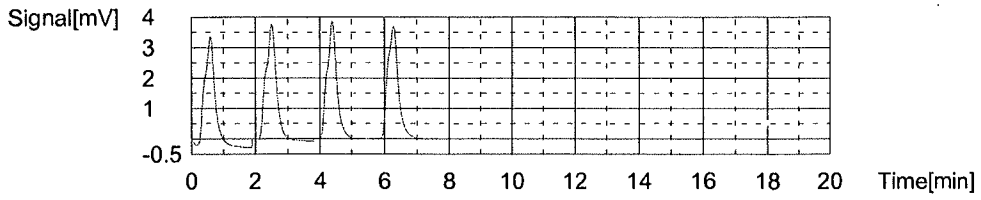
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.133 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.775	2.974mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 07:58:19 AM
2	8.411	3.217mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:00:24 AM
3	8.304	3.176mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:02:28 AM
4	8.270	3.163mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:04:33 AM

Mean Area 8.190
Mean Conc. 3.133mg/L



Sample

Sample Name: I048-11M
Sample ID: TCI003-60
Origin: TCI003.cal
Chk. Result

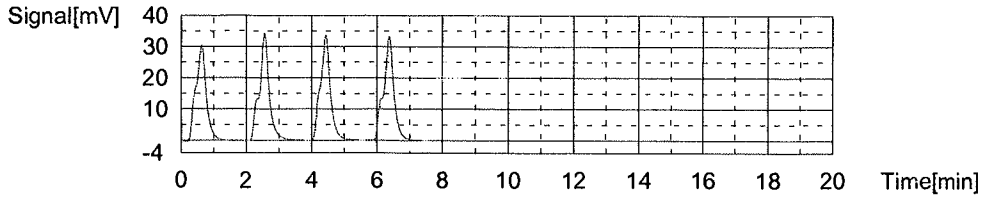
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:27.83 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.68	26.65mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:13:08 AM
2	73.77	28.22mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:15:13 AM
3	74.08	28.33mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:17:17 AM
4	73.52	28.12mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:19:22 AM

Mean Area 72.76
Mean Conc. 27.83mg/L



Sample

Sample Name: I048-11S
Sample ID: TCI003-61
Origin: TCI003.cal
Chk. Result

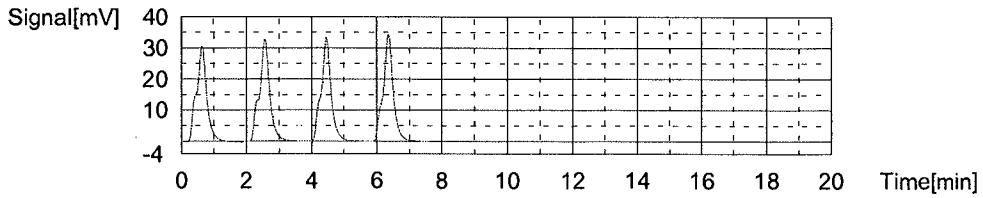
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:27.91 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.77	26.69mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:27:58 AM
2	74.53	28.51mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:30:03 AM
3	74.12	28.35mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:32:07 AM
4	73.51	28.12mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:34:12 AM

Mean Area 72.98
Mean Conc. 27.91mg/L



Sample

Sample Name: I048-16
Sample ID: TCI003-62
Origin: TCI003.cal
Chk. Result

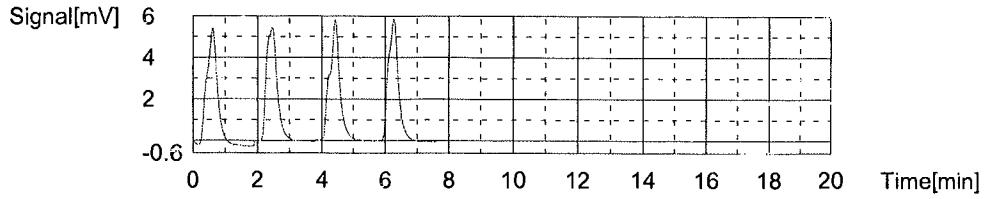
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:5.028 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.97	4.961mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:42:47 AM
2	13.09	5.007mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:44:52 AM
3	13.35	5.106mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:46:56 AM
4	13.17	5.037mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:49:01 AM

Mean Area 13.15
Mean Conc. 5.028mg/L



Control Sample

Sample Name: CCV5
Sample ID: TCI003-63
Method: TCI003.tpl
Chk. Result Control value: 25.24 / Control exceeds range!

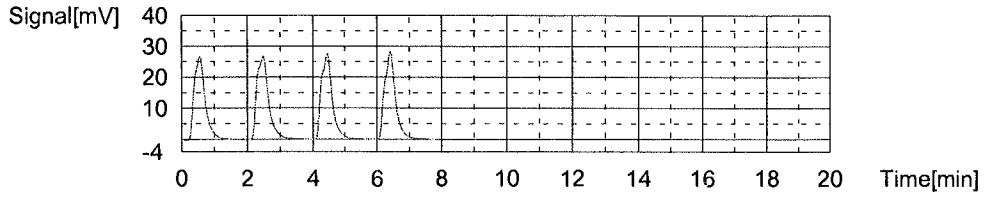
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:25.24 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.25	24.19mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:57:36 AM
2	67.15	25.68mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 08:59:45 AM
3	67.06	25.65mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:01:53 AM
4	66.45	25.42mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:04:03 AM

Mean Area 65.98
Mean Conc. 25.24mg/L



Sample

Sample Name: CCB5
Sample ID: TCI003-64
Origin: TCI003.cal
Chk. Result

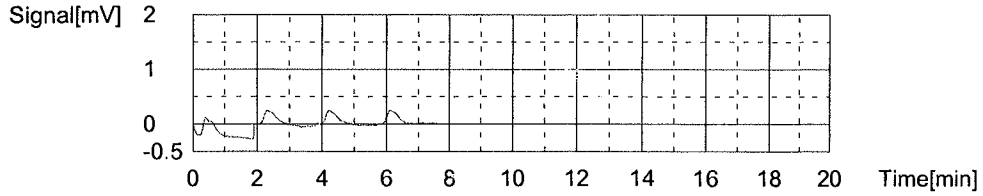
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2397 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7649	0.2926mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:12:39 AM
2	0.6131	0.2345mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:14:44 AM
3	0.5706	0.2182mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:16:48 AM
4	0.5581	0.2135mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:18:53 AM

Mean Area 0.6267
Mean Conc. 0.2397mg/L



Sample

Sample Name: I048-18
Sample ID: TCI003-65
OrIgIn: TCI003.cal
Chk. Result

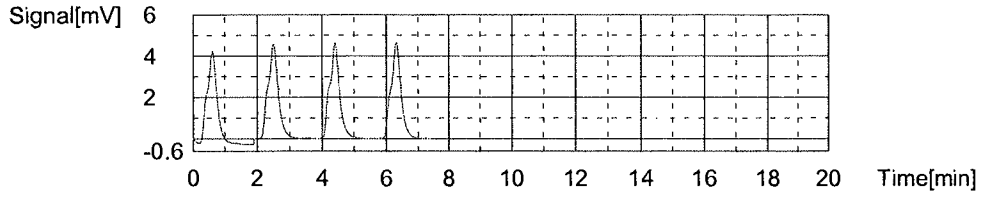
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.832 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.669	3.698mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:27:28 AM
2	10.14	3.878mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:29:32 AM
3	10.11	3.867mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:31:37 AM
4	10.16	3.886mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:33:41 AM

Mean Area 10.02
Mean Conc. 3.832mg/L



Sample

Sample Name: I048-19
Sample ID: TCI003-66
Origin: TCI003.cal
Chk. Result

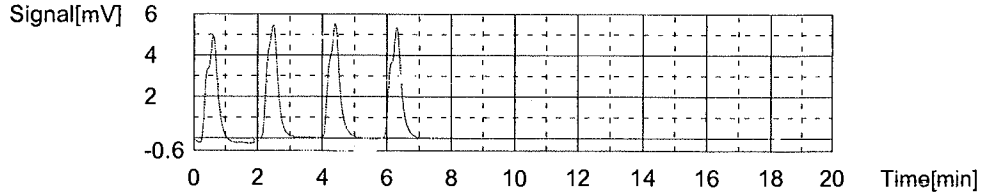
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.785 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.31	4.708mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:42:17 AM
2	12.58	4.812mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:44:22 AM
3	12.68	4.850mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:46:26 AM
4	12.47	4.770mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:48:31 AM

Mean Area 12.51
Mean Conc. 4.785mg/L



Control Sample

Sample Name: CCV6
Sample ID: TCI003-67
Method: TCI003.tpl
Chk. Result Control value: 1.218 / Control exceeds range!

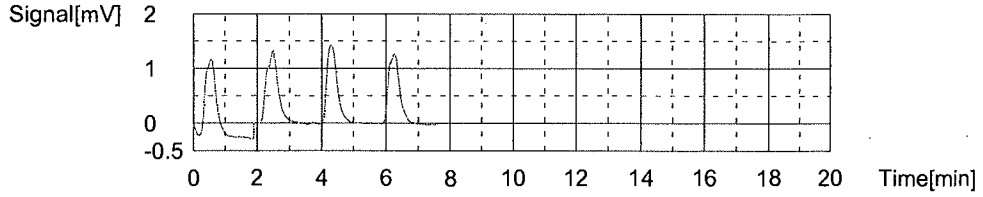
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:1.21[illegible] mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.247	1.242mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:57:07 AM
2	3.225	1.234mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 09:59:11 AM
3	3.251	1.243mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 10:01:16 AM
4	3.020	1.155mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 10:03:20 AM

Mean Area 3.186
Mean Conc. 1.218mg/L



Sample

Sample Name: CCB6
Sample ID: TCI003-68
Origin: TCI003.cal
Chk. Result

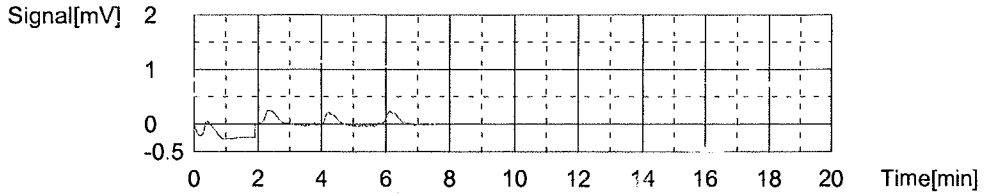
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.1934 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5025	0.1922mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 10:11:56 AM
2	0.5370	0.2054mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 10:14:00 AM
3	0.4861	0.1859mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 10:16:05 AM
4	0.4966	0.1899mg/L	50uL	1		TCI003.2024_09_23_16_00_02.cal	09/24/24 10:18:09 AM

Mean Area 0.5056
Mean Conc. 0.1934mg/L



EMAX LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 11-19-2024
EMAX Batch No.: 24J033

Attn: Cherie Zakowski

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202

Subject: Laboratory Report
Project: VA SALT LAKE CITY

Enclosed is the Laboratory report for samples received on 10/03/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
MW40S-GW093024	J033-01	09/30/24	WATER	VOCS BY 8260C
MW40D-GW093024	J033-02	09/30/24	WATER	VOCS BY 8260C
MW43S-GW100124	J033-03	10/01/24	WATER	VOCS BY 8260C
MW43D-GW100124	J033-04	10/01/24	WATER	VOCS BY 8260C
MW44D-GW100124	J033-05	10/01/24	WATER	VOCS BY 8260C
MW44S-GW100124	J033-06	10/01/24	WATER	VOCS BY 8260C
MW42D-GW100224	J033-07	10/02/24	WATER	VOCS BY 8260C
				ANIONS BY IC
				NITRATE/NITRITE AS N
				TOTAL ALKALINITY
				TOTAL ORGANIC CARBON
				DISSOLVED GAS
FB10-GW100224	J033-08	10/02/24	WATER	VOCS BY 8260C
				ANIONS BY IC
				NITRATE/NITRITE AS N
				TOTAL ALKALINITY
				TOTAL ORGANIC CARBON
				DISSOLVED GAS
TB06-GW100224	J033-09	10/02/24	WATER	VOCS BY 8260C

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912024-26
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

CHAIN OF CUSTODY

EMAX Laboratories, Inc.	3051 Fujita St, Torrance, CA 90505 Tel # : 310-618-8889 FAX#: 310-618-0818 Email: info@emaxlabs.com	PO NUMBER:	EMAX CONTROL NO. 24J033
		SAMPLE STORAGE	PROJECT CODE:

CLIENT : CDM SMITH

PROJECT : 700 S 1600 E PCE Plume

COORDINATOR Cberie Zakowski

TEI 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmitb.com

SEND REPORT TO

COMPANY CDM Smitb

ADDRESS 555 17th St Ste 500

Denver, CO 80201

EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sl	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

TAT: ☐ Rush __24__hrs. ☐ Rush __48_hrs ☐ Rush_72_hrs ☐ 7 days ☐ 14 days ☒ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	ANALYSIS REQUIRED: VOCs (8260C)	Anions (Cl, SO4)	Nitrate/Nitrite (SM4500-NO3E)	Alkalinity (SM2320B)	TOC (SW9060)	TDS (SM 2540C)	Dissolved Gases (RSK-175)	PRESERVATIVE CODE	COMMENTS
1	MW40S-GW093024	SLC VA	9/30/24	1815	3	40mL	VOA	GW		X							HCl	
2	MW40D-GW093024	SLC VA	9/30/24	1910	3	40mL	VOA	GW		X							HCl	
3	MW43S-GW100124	SLC VA	10/1/24	1135	3	40mL	VOA	GW		X							HCl	
4	MW43D-GW100124	SLC VA	10/1/24	1225	3	40mL	VOA	GW		X							HCl	
5	MW44D-GW100124	SLC VA	10/1/24	1515	3	40mL	VOA	GW		X							HCl	
6	MW44S-GW100124	SLC VA	10/1/24	1720	3	40mL	VOA	GW		X							HCl	
7	MW47D-GW100224	SLC VA	10/2/24	1210	8	Varies		GW		X	X	X	X	X		X	IC HS IC HS IC HCl	
8	FD10-GW100224	SLC VA	10/2/24	0300	8	Varies		GW		X	X	X	X	X		X	IC HS IC HS IC HCl	
9	TBOE-GW100224	SLC VA	10/2/24	1400	3	40mL	VOA	O		X							HCl	

Instructions

Please CC Maria Day at dayml@cdmsmitb.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s
1	4.6	

SAMPLER Isaac Nance

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Isaac Nance	10/2/24	1500	
	10/03/24	9:15	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples sball be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged witb EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

EMAX LABORATORIES, INC.

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 24J033
☒ Fedex ☐ UPS ☐ GSO ☐ Others	2801 9086 0847	Recipient Maria Rivera
☐ EMAX Courier ☐ Client Delivery		Date 10/03/24 Time 9:15

COC INSPECTION

☒ Client Name	☒ Client PM/FC	☒ Sampler Name	☒ Sampling Date/Time	☒ Sample ID	☒ Matrix
☒ Address	☒ Tel # / Fax #	☐ Courier Signature	☒ Analysis Required	☐ Preservative (if any)	☒ TAT
Safety Issues (if any)	☐ High concentrations expected	☐ From Superfund Site	☐ Rad screening required		

Note: _____

PACKAGING INSPECTION

Container	☒ Cooler	☐ Box	☐ Other		
Condition	☒ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☒ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☒ bag
Temperatures (Cool, ≤6 °C but not frozen)	☒ Cooler 1 4.6 °C	☐ Cooler 2 ____ °C	☐ Cooler 3 ____ °C	☐ Cooler 4 ____ °C	☐ Cooler 5 ____ °C
	☐ Cooler 6 ____ °C	☐ Cooler 7 ____ °C	☐ Cooler 8 ____ °C	☐ Cooler 9 ____ °C	☐ Cooler 10 ____ °C
Thermometer:	*A - S/N* 240412221	*B - S/N* ____	*C - S/N* ____	*D - S/N* 230044057	

Comments: ☐ Temperature is out of range. PM was informed IMMEDIATELY.

Note: _____

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
4, 5	10-12, 13-15	D10	No initial / date	R1
7-8	19-34	D10	No date on correction	R1

10/3/24

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

NOTES/OBSERVATIONS:

SAMPLE MATRIX IS DRINKING WATER? ☐ YES ☒ NO

☐ Continue to next page.

LEGEND:

Code	Description- Sample Management
D1	Analysis is not indicated in _____
D2	Analysis mismatch COC vs label
D3	Sample ID mismatch COC vs label
D4	Sample ID is not indicated in _____
D5	Container -[improper] [leaking] [broken]
D6	Date/Time is not indicated in _____
D7	Date/Time mismatch COC vs label
D8	Sample listed in COC is not received
D9	Sample received is not listed in COC
D10	No initial/date on corrections in COC/label
D11	Container count mismatch COC vs received
D12	Container size mismatch COC vs received

Code	Description-Sample Management
D13	Out of Holding Time
D14	Bubble is >6mm
D15	No trip blank in cooler
D16	Preservation not indicated in _____
D17	Preservation mismatch COC vs label
D18	Insufficient chemical preservative
D19	Insufficient Sample
D20	No filtration info for dissolved analysis
D21	No sample for moisture determination
D22	_____
D23	_____
D24	_____

Code	Description-Sample Management
R1	Proceed as indicated in ☒ COC ☐ Label
R2	Refer to attached instruction
R3	Cancel the analysis
R4	Use vial with smallest bubble first
R5	Log-in with latest sampling date and time+ 1 min
R6	Adjust pH as necessary
R7	Filter and preserved as necessary
R8	_____
R9	_____
R10	_____
R11	_____
R12	_____

REVIEWS:

Sample Labeling maria rivera Date 10/03/24

SRF Date 10/3/24

PM Date 10/3/24

ORIGIN ID:NPHA (000) 000-0000

CDM SMITH, INC
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHIP DATE: 02OCT24
ACTWGT: 56.60 LB
CAD: 6997117/SSF02541
DIMS: 24x15x14 IN

BILL THIRD PARTY

Part # 156297-[illegible] 08/25

ATTN: SAMPLE RECIEVING
EMAX LABS
3051 FUJITA ST

915
D
sealed

ORRANCE CA 90505
618-8889

REF: 275859-TK5.GW

DEPT:

FedEx
Express

E

J243024071301uv

TRK# 0201 2801 9086 0847

THU - 03 OCT 8:00A
FIRST OVERNIGHT

W1 HHRA

ASR
90505
CA-US LAX

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range or estimated value.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

SDG#: 24J033

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24J033

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of nine(9) water samples were received on 10/03/24 to be analyzed for Volatile Organics by GC/MS in accordance with Method SW5030B/8260C and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Instrument Performance and Calibration
Instrument tune check was performed prior to calibration. Result was within acceptance criteria. Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using secondary source (ICV). Continuing calibration (CCV) was carried out at a frequency required by the project. All project calibration requirements were satisfied except for few analytes in associated CCV,s were not within 20% of expected values. However, note that the analytes in question were biased high and were not detected in any of the associated field samples. Note that" Minimum Response Factor" for all analytes were within method recommended response factors with the exception of Acetone and 2-Butanone. However, percent recoveries for all target analytes were within 70-130% on all calibration points. Refer to calibration summary forms of ICAL, ICV and CCV for details. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, two(2) method blanks were analyzed. VO01J11B and VO06J12B were compliant to project requirement. Refer to sample result summary forms for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD plus one LCS were analyzed. All analytes were within LCS limits in VO01J11L/VO01J11C and VO01J12C, except for results qualified with [*]. Refer to LCS summary forms for details. Refer to LCS summary forms for details.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met with the exception of those that were discussed within the associated QC parameter.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24J033
Instrument ID : 01

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	VO01J11L	1	NA	10/09/2417:05	10/09/2417:05	RJV234	RHV134	VO01J11	Lab Control Sample (LCS)
LCD1W	VO01J11C	1	NA	10/09/2417:35	10/09/2417:35	RJV235	RHV134	VO01J11	LCS Duplicate
MBLK1W	VO01J11B	1	NA	10/09/2418:34	10/09/2418:34	RJV237	RHV134	VO01J11	Method Blank
TB06-GW100224	24J033-09	1	NA	10/09/2421:03	10/09/2421:03	RJV242	RHV134	VO01J11	Field Sample
FB10-GW100224	24J033-08	1	NA	10/09/2423:01	10/09/2423:01	RJV246	RHV134	VO01J11	Field Sample
MW40S-GW093024	24J033-01	1	NA	10/09/2423:59	10/09/2423:59	RJV248	RHV134	VO01J11	Field Sample
MW40D-GW093024	24J033-02	1	NA	10/10/2400:29	10/10/2400:29	RJV249	RHV134	VO01J11	Field Sample
MW43S-GW100124	24J033-03	1	NA	10/10/2400:58	10/10/2400:58	RJV250	RHV134	VO01J11	Field Sample
MW43D-GW100124	24J033-04	1	NA	10/10/2401:27	10/10/2401:27	RJV251	RHV134	VO01J11	Field Sample
MW44D-GW100124	24J033-05	1	NA	10/10/2401:57	10/10/2401:57	RJV252	RHV134	VO01J11	Field Sample
MW44S-GW100124	24J033-06	1	NA	10/10/2402:26	10/10/2402:26	RJV253	RHV134	VO01J11	Field Sample
MW42D-GW100224	24J033-07	1	NA	10/10/2402:55	10/10/2402:55	RJV254	RHV134	VO01J11	Field Sample
MBLK2W!	VO06J12B	1	NA	10/11/2417:06	10/11/2417:06	RJW260	RIW080	VO06J12	Method Blank
MW43D-GW100124!	24J033-04I	10	NA	10/11/241B:25	10/11/2418:25	RJW263	RIW080	VO06J12	Diluted Sample
LCS2W!	VO06J12C	1	NA	10/12/2400:57	10/12/2400:57	RJW278	RIW080	VO06J12	LCS Duplicate

! Instrument ID : 06
FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/30/24 18:15
Project	: VA SALT LAKE CITY	Date Received:	10/03/24
Batch No.	: 24J033	Date Extracted:	10/09/24 23:59
Sample ID	: MW40S-GW093024	Date Analyzed:	10/09/24 23:59
Lab Samp ID:	24J033-01	Dilution Factor:	1
Lab File ID:	RJV248	Matrix:	WATER
Ext Btch ID:	V001J11	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.47J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	7.0	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	1.3	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.11J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.1	10.0	101	70-130
Bromofluorobenzene	9.46	10.0	95	70-130
Toluene-d8	11.0	10.0	110	70-130
Dibromofluoromethane	9.98	10.0	100	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV248.D Vial: 17
Acq On : 9 Oct 2024 11:59 pm Operator: DNguye/CLingl
Sample : 24J033-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 16 15:42 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	900655	10.00	ug/l	-0.02
53) CHLOROBENZENE-D5	13.70	117	723411	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	367716	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	273324	9.98	ug/l	-0.01
Spiked Amount 10.000			Recovery = 99.80%			
41) 1,2-Dichloroethane-d4	7.97	65	246294	10.12	ug/l	-0.02
Spiked Amount 10.000			Recovery = 101.20%			
54) Toluene-d8	11.02	98	974341	11.02	ug/l	-0.02
Spiked Amount 10.000			Recovery = 110.20%			
76) 4-Bromofluorobenzene	15.99	95	441114	9.46	ug/l	-0.02
Spiked Amount 10.000			Recovery = 94.60%			
Target Compounds						Qvalue
31) Chloroform	6.92	83	382964	6.99	ug/l	95
44) Trichloroethene	9.06	130	3564	0.11	ug/l	85
47) Bromodichloromethane	9.73	83	18607	0.47	ug/l	89
61) Tetrachloroethene	12.29	164	30836	1.25	ug/l	93

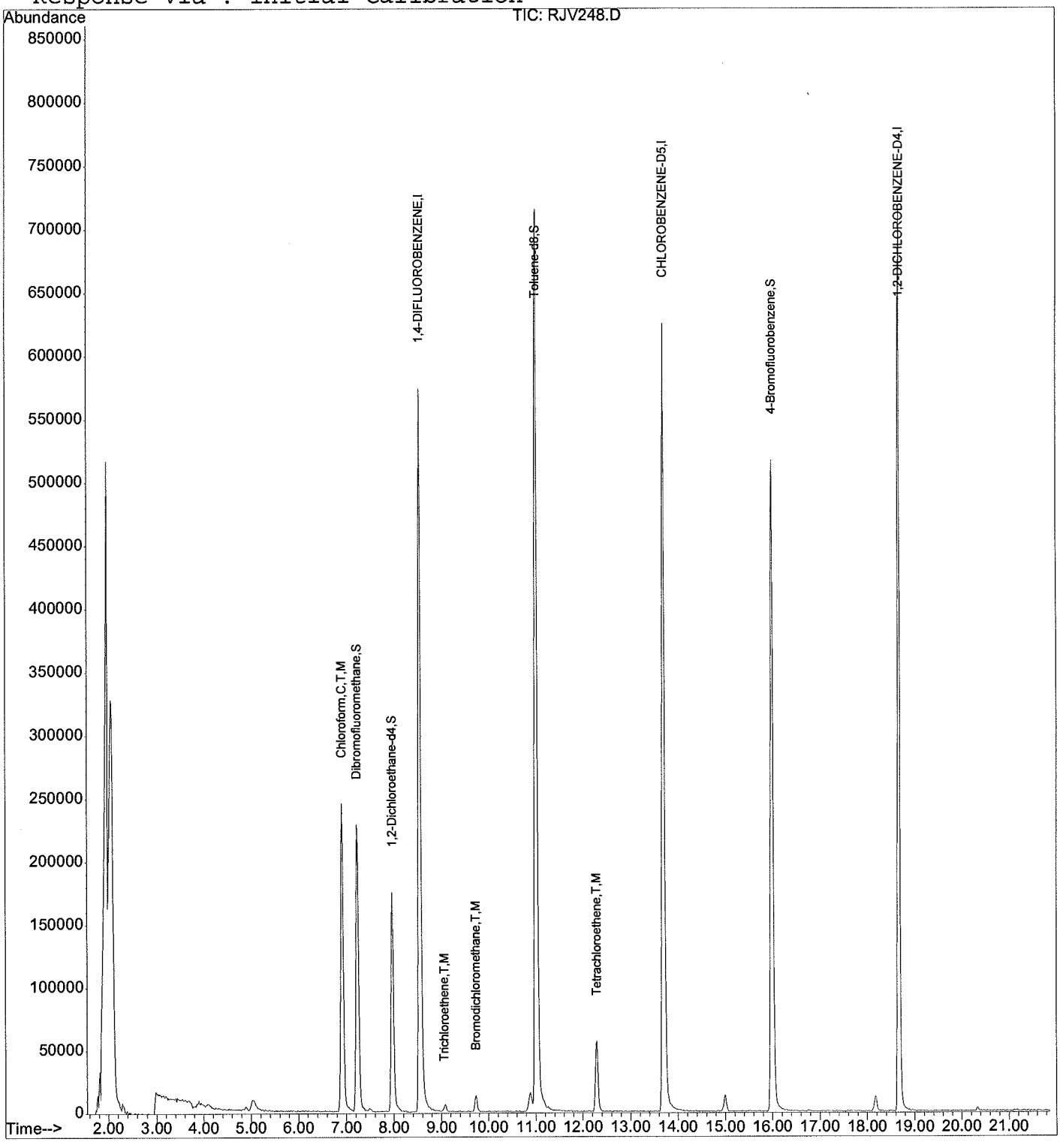
(#) = qualifier out of range (m) = manual integration
RJV248.D VO01H09.M Wed Oct 16 15:45:10 2024 Page 1

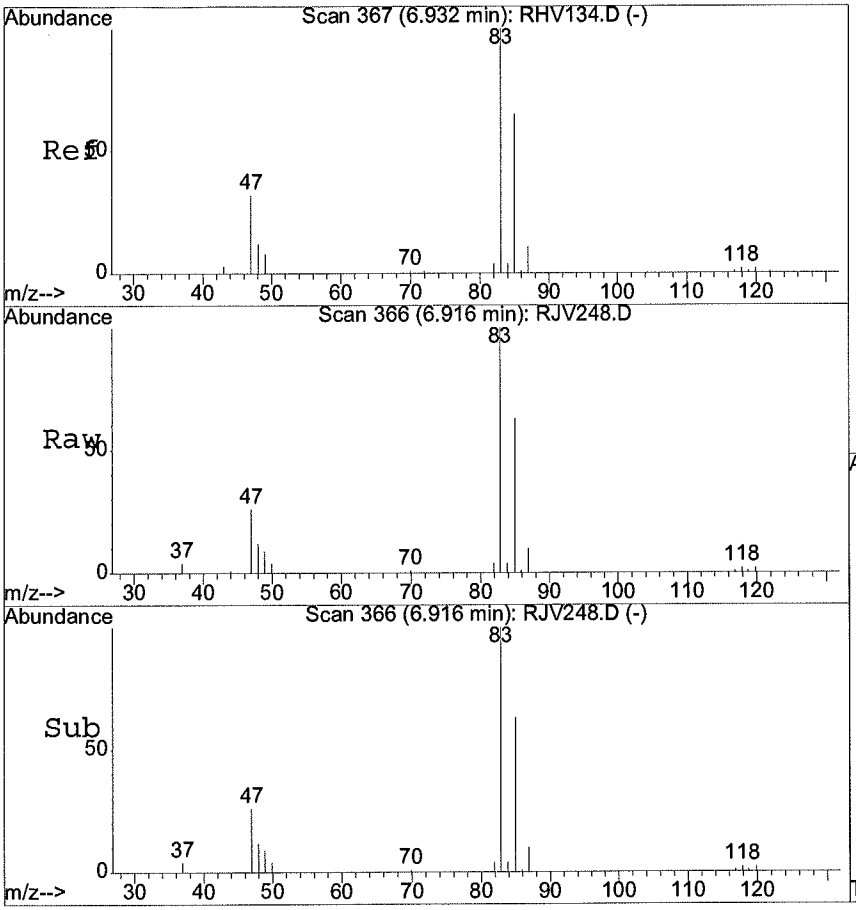
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV248.D
Acq On : 9 Oct 2024 11:59 pm
Sample : 24J033-01
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 16 15:42 2024

Vial: 17
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

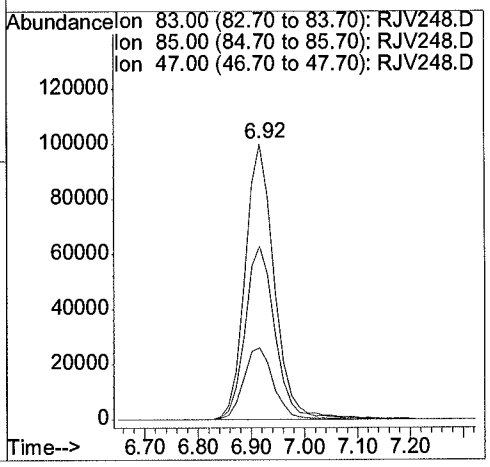


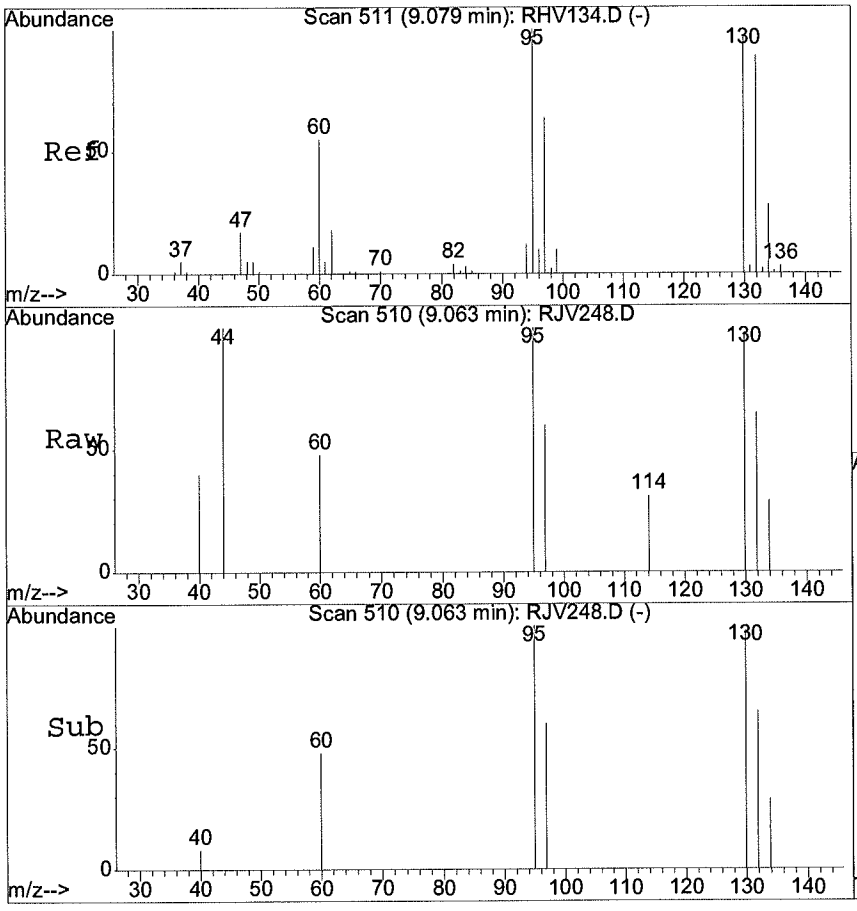


#31
Chloroform
Concen: 6.99 ug/l
RT: 6.92 min Scan# 366
Delta R.T. -0.01 min
Lab File: RJV248.D
Acq: 9 Oct 2024 11:59 pm

Tgt Ion: 83 Resp: 382964

Ion	Ratio	Lower	Upper
83	100		
85	64.5	38.4	98.4
47	26.8	0.0	59.6

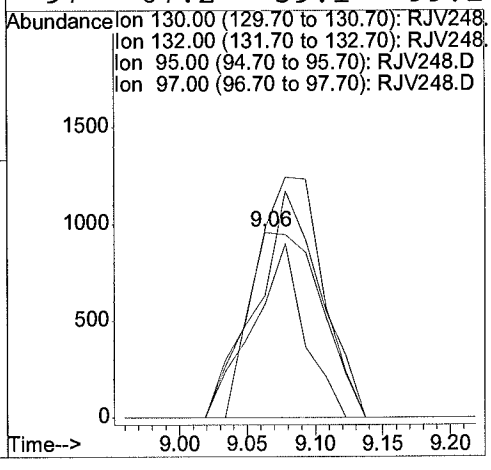


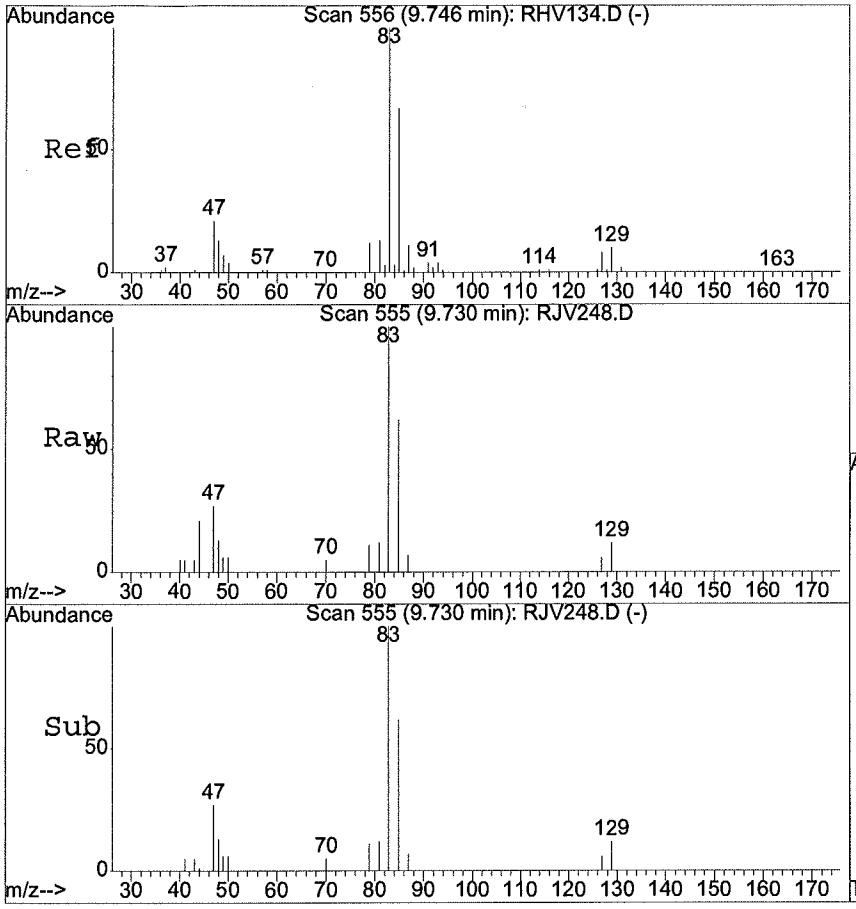


#44
Trichloroethene
Concen: 0.11 ug/l
RT: 9.06 min Scan# 510
Delta R.T. -0.02 min
Lab File: RJV248.D
Acq: 9 Oct 2024 11:59 pm

Tgt Ion:130 Resp: 3564

Ion	Ratio	Lower	Upper
130	100		
132	109.0	62.7	122.7
95	124.9	72.0	132.0
97	67.2	39.1	99.1

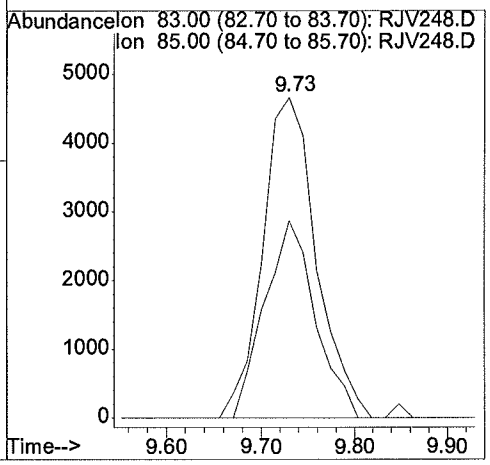


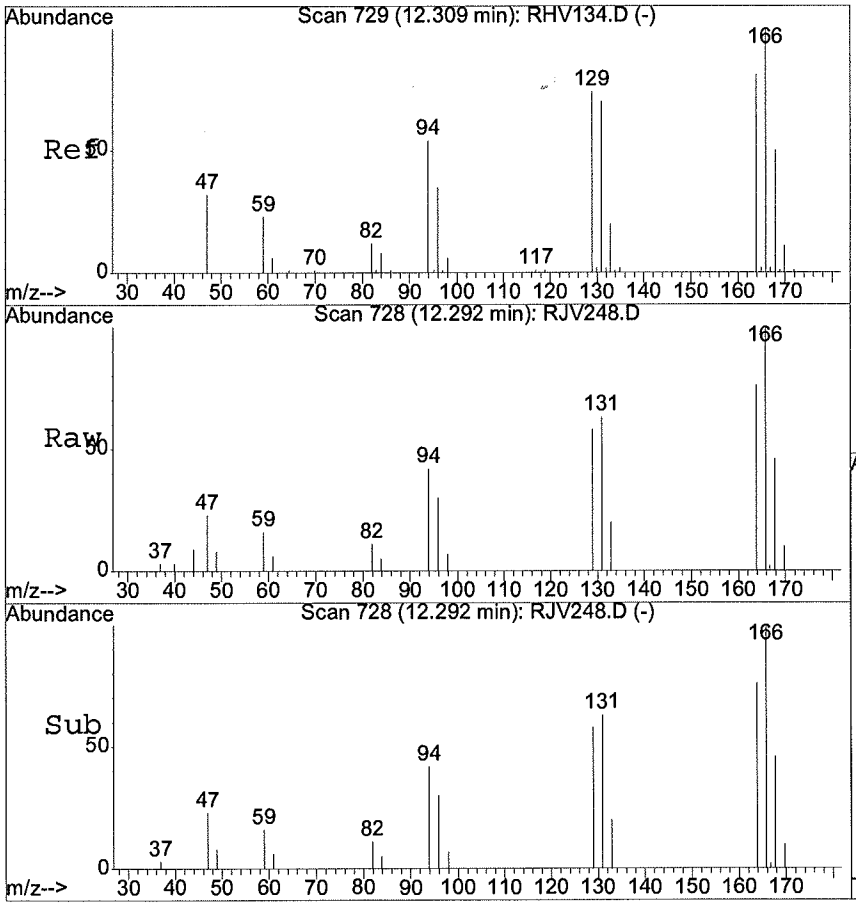


#47
Bromodichloromethane
Concen: 0.47 ug/l
RT: 9.73 min Scan# 555
Delta R.T. -0.02 min
Lab File: RJV248.D
Acq: 9 Oct 2024 11:59 pm

Tgt Ion: 83 Resp: 18607

Ion	Ratio	Lower	Upper
83	100		
85	58.1	36.5	96.5

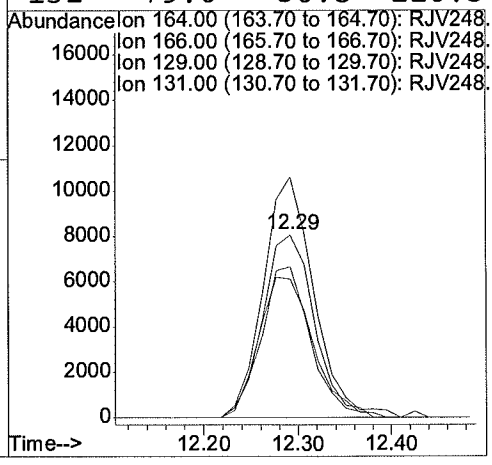




#61
Tetrachloroethene
Concen: 1.25 ug/l
RT: 12.29 min Scan# 728
Delta R.T. -0.02 min
Lab File: RJV248.D
Acq: 9 Oct 2024 11:59 pm

Tgt Ion:164 Resp: 30836

Ion	Ratio	Lower	Upper
164	100		
166	130.3	98.2	158.2
129	81.6	62.8	122.8
131	79.8	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	09/30/24 19:10
Project	: VA SALT LAKE CITY	Date Received:	10/03/24
Batch No.	: 24J033	Date Extracted:	10/10/24 00:29
Sample ID	: MW40D-GW093024	Date Analyzed:	10/10/24 00:29
Lab Samp ID:	24J033-02	Dilution Factor:	1
Lab File ID:	RJV249	Matrix:	WATER
Ext Btch ID:	VO01J11	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.24J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.4	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.17J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	14	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.6	10.0	106	70-130
Bromofluorobenzene	9.63	10.0	96	70-130
Toluene-d8	11.0	10.0	110	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV249.D Vial: 18
Acq On : 10 Oct 2024 12:29 am Operator: DNguye/CLingl
Sample : 24J033-02 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 16 15:43 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	881786	10.00	ug/l	-0.02
53) CHLOROBENZENE-D5	13.70	117	727333	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	361807	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	278846	10.40	ug/l	-0.02
Spiked Amount 10.000			Recovery = 104.00%			
41) 1,2-Dichloroethane-d4	7.97	65	252229	10.58	ug/l	-0.02
Spiked Amount 10.000			Recovery = 105.80%			
54) Toluene-d8	11.02	98	981054	11.04	ug/l	-0.02
Spiked Amount 10.000			Recovery = 110.40%			
76) 4-Bromofluorobenzene	15.99	95	441996	9.63	ug/l	-0.02
Spiked Amount 10.000			Recovery = 96.30%			
Target Compounds						Qvalue
13) Acetone	4.10	43	16189	1.69	ug/l	91
30) cis-1,2-Dichloroethene	6.69	96	5079	0.17	ug/l	83
31) Chloroform	6.92	83	127955	2.39	ug/l	95
47) Bromodichloromethane	9.74	83	9353	0.24	ug/l	95
61) Tetrachloroethene	12.29	164	354508	14.32	ug/l	92

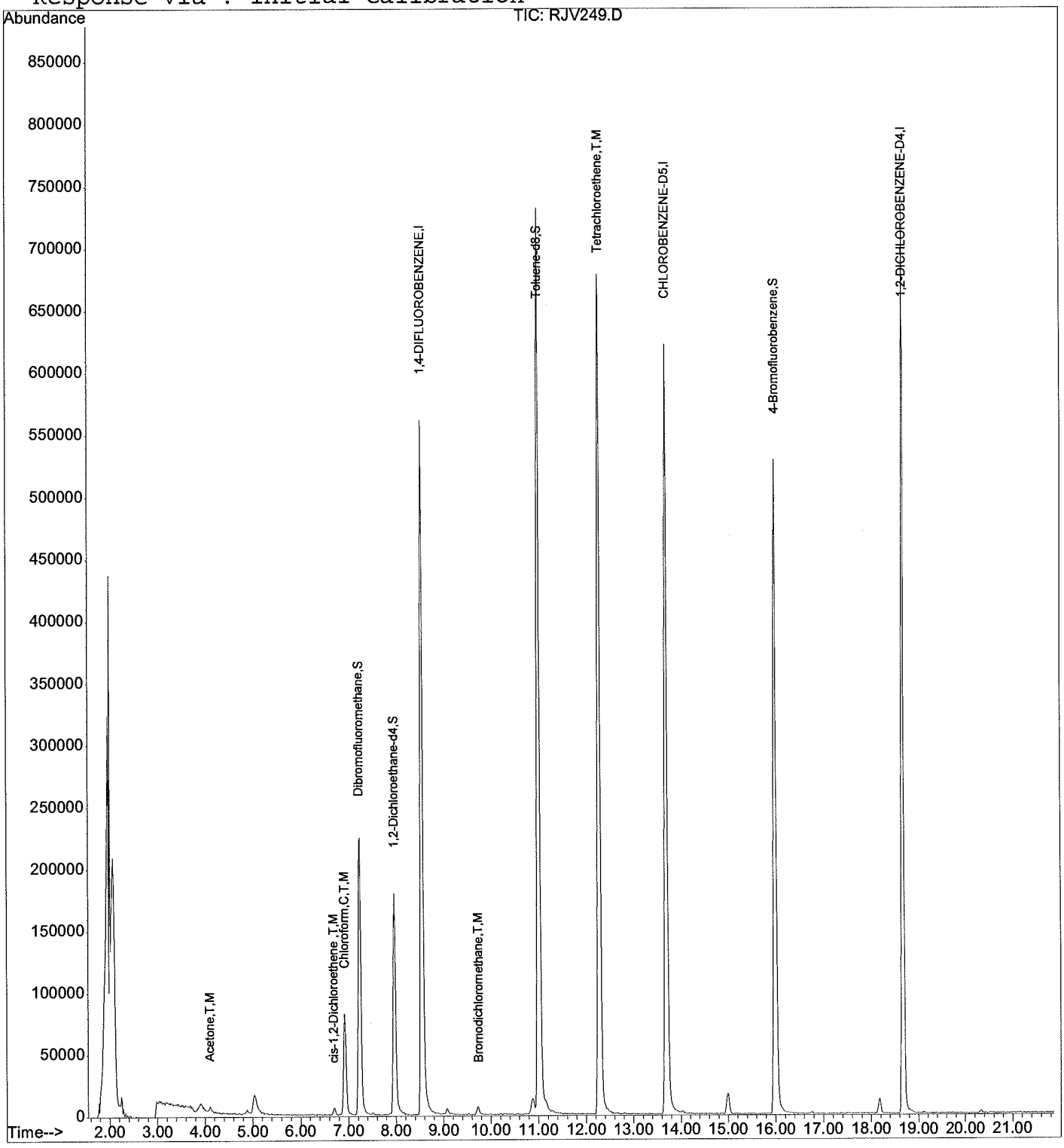
(#) = qualifier out of range (m) = manual integration
RJV249.D VO01H09.M Wed Oct 16 15:45:25 2024 Page 1

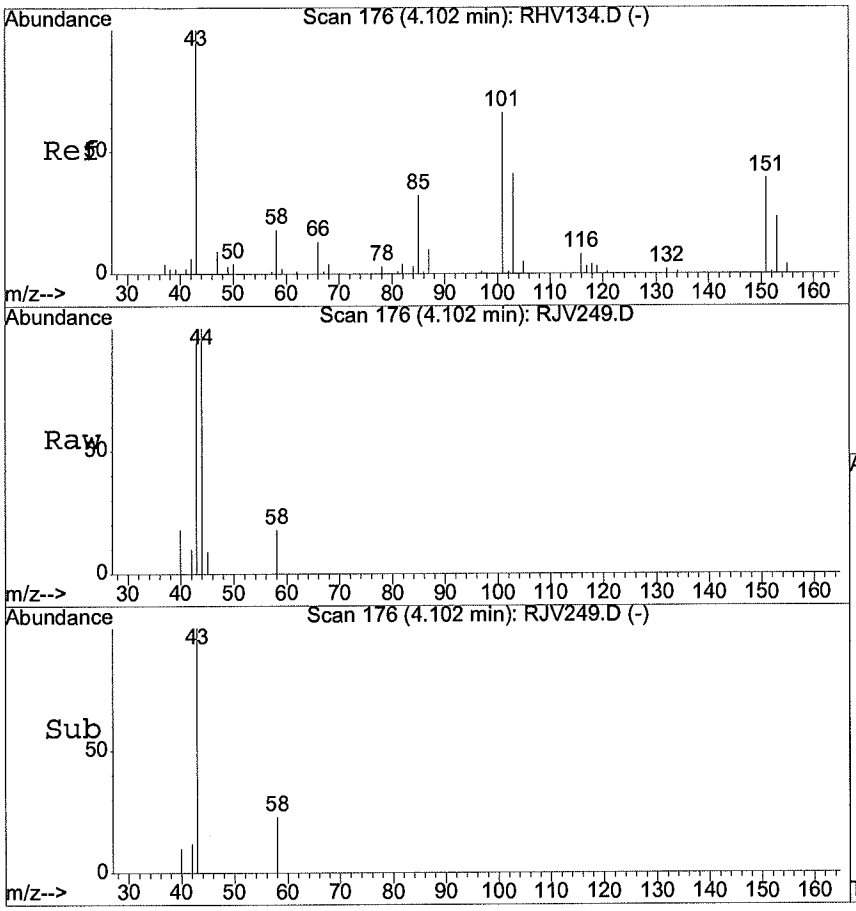
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV249.D
Acq On : 10 Oct 2024 12:29 am
Sample : 24J033-02
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 16 15:43 2024

Vial: 18
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

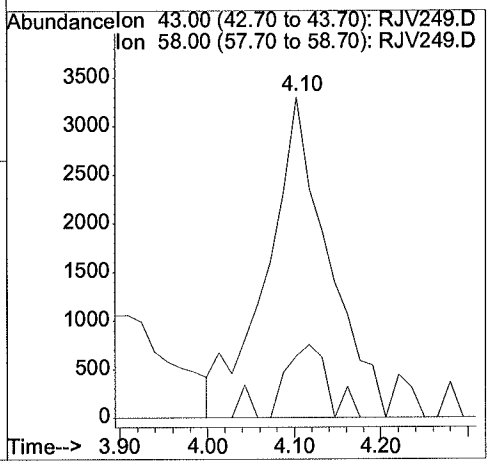


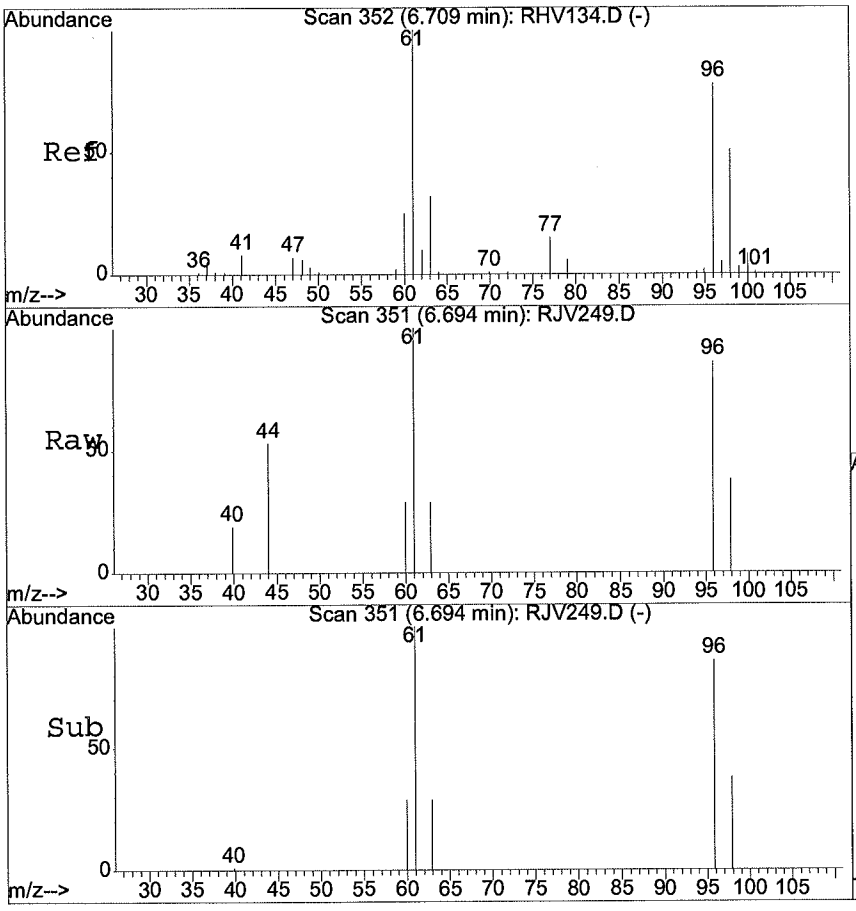


#13
Acetone
Concen: 1.69 ug/l
RT: 4.10 min Scan# 176
Delta R.T. 0.00 min
Lab File: RJV249.D
Acq: 10 Oct 2024 12:29 am

Tgt Ion: 43 Resp: 16189

Ion	Ratio	Lower	Upper
43	100		
58	15.4	0.0	49.5

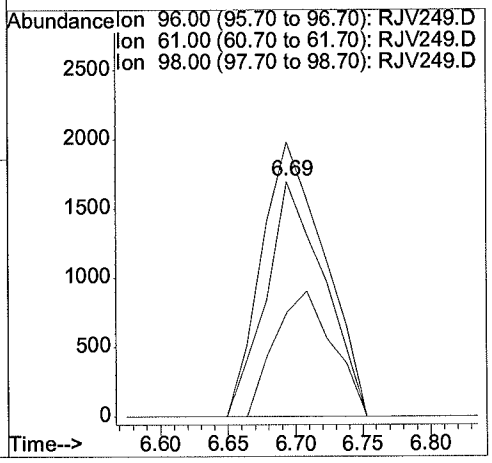


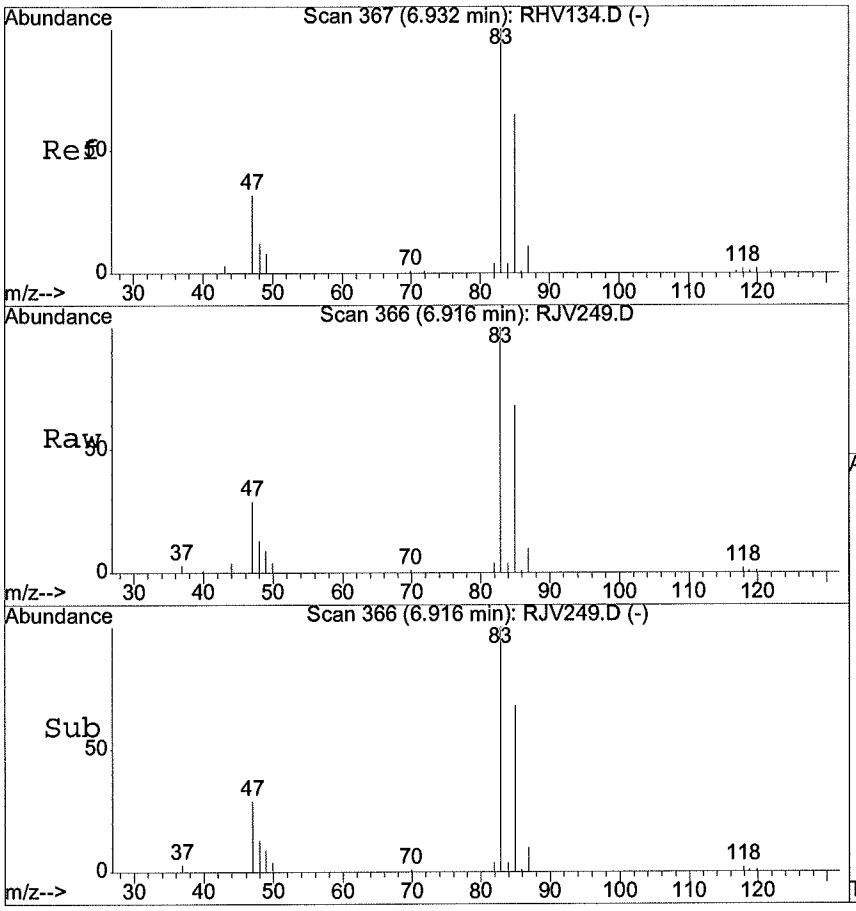


#30
cis-1,2-Dichloroethene
Concen: 0.17 ug/l
RT: 6.69 min Scan# 351
Delta R.T. -0.02 min
Lab File: RJV249.D
Acq: 10 Oct 2024 12:29 am

Tgt Ion: 96 Resp: 5079

Ion	Ratio	Lower	Upper
96	100		
61	126.6	119.2	179.2
98	53.1	35.1	95.1

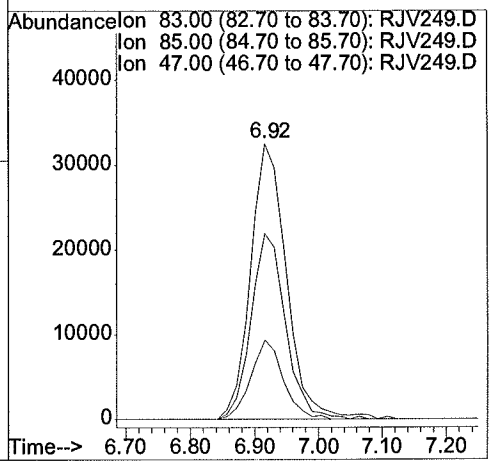


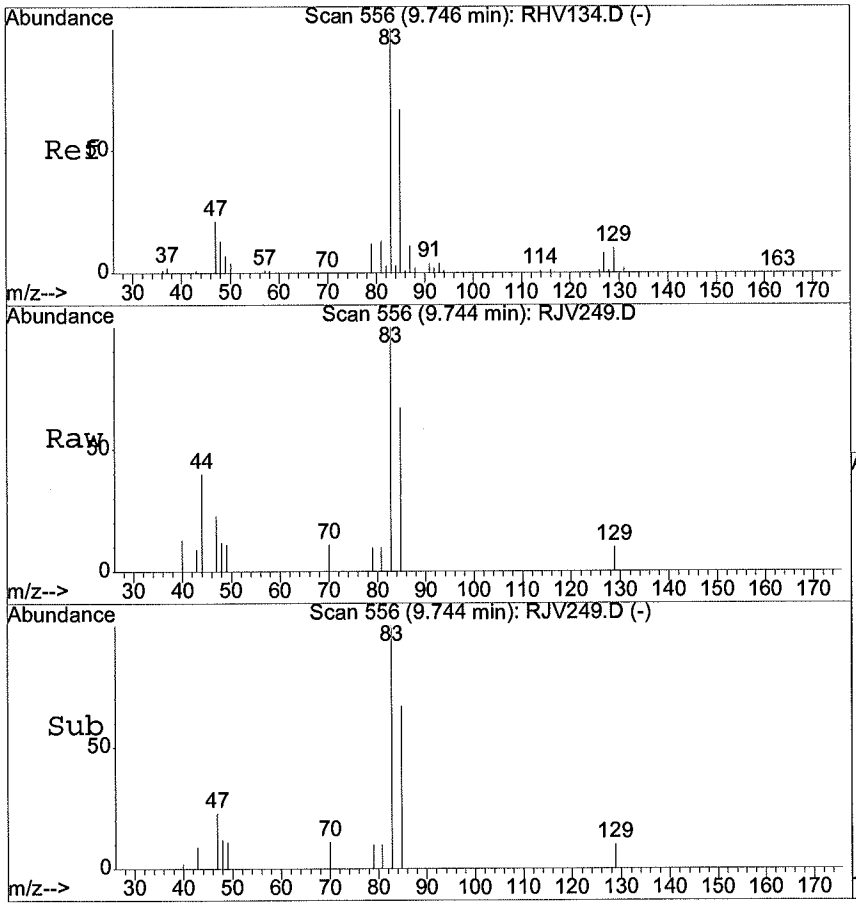


#31
Chloroform
Concen: 2.39 ug/l
RT: 6.92 min Scan# 366
Delta R.T. -0.02 min
Lab File: RJV249.D
Acq: 10 Oct 2024 12:29 am

Tgt Ion: 83 Resp: 127955

Ion	Ratio	Lower	Upper
83	100		
85	64.8	38.4	98.4
47	26.0	0.0	59.6

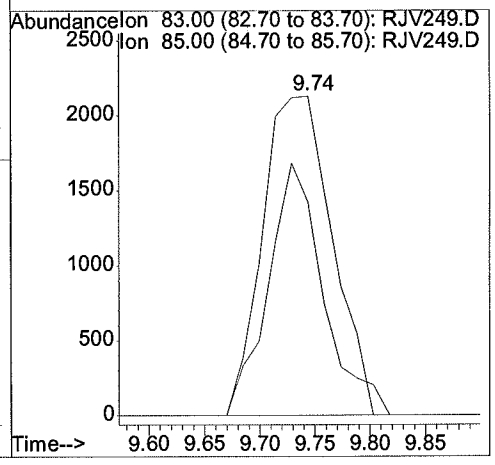


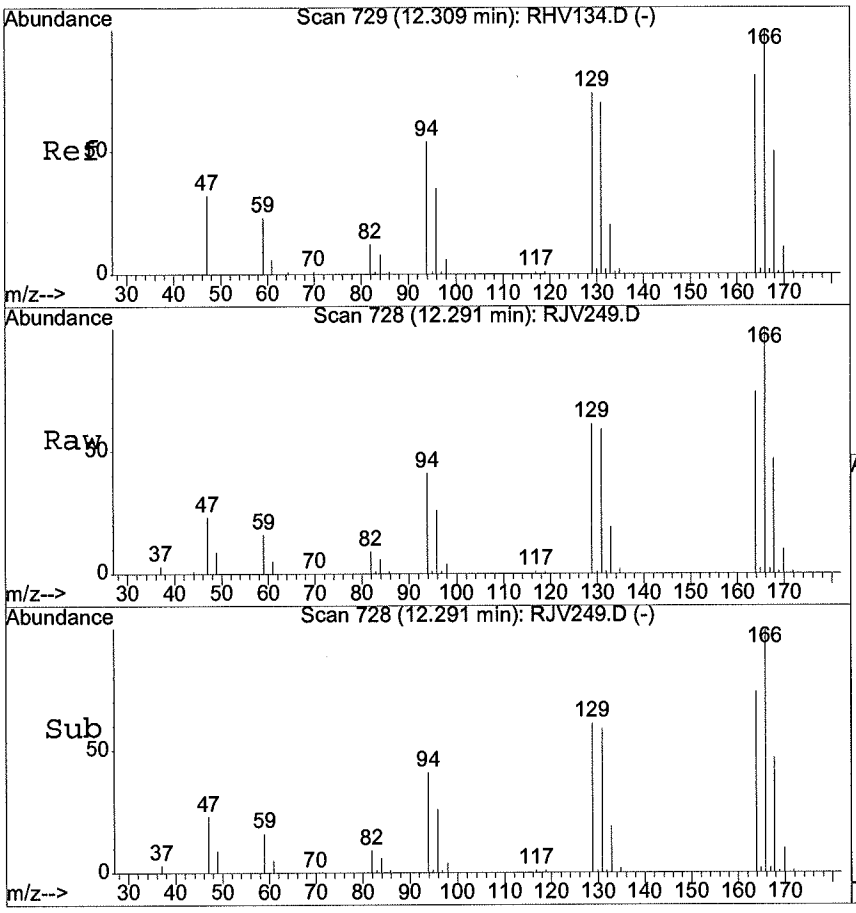


#47
Bromodichloromethane
Concen: 0.24 ug/l
RT: 9.74 min Scan# 556
Delta R.T. -0.00 min
Lab File: RJV249.D
Acq: 10 Oct 2024 12:29 am

Tgt Ion: 83 Resp: 9353

Ion	Ratio	Lower	Upper
83	100		
85	62.6	36.5	96.5

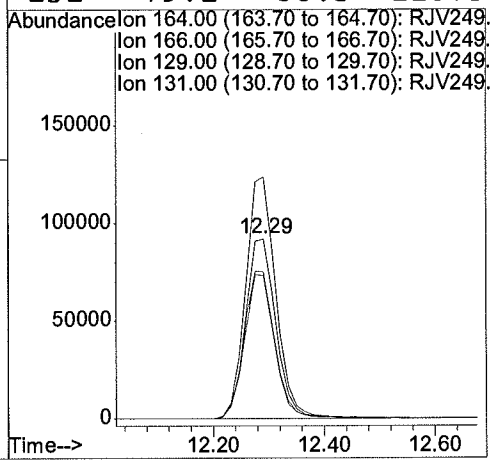




#61
Tetrachloroethene
Concen: 14.32 ug/l
RT: 12.29 min Scan# 728
Delta R.T. -0.02 min
Lab File: RJV249.D
Acq: 10 Oct 2024 12:29 am

Tgt Ion:164 Resp: 354508

Ion	Ratio	Lower	Upper
164	100		
166	132.9	98.2	158.2
129	82.6	62.8	122.8
131	79.1	58.3	118.3



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/01/24 11:35
Project	: VA SALT LAKE CITY	Date Received:	10/03/24
Batch No.	: 24J033	Date Extracted:	10/10/24 00:5B
Sample ID	: MW43S-GW100124	Date Analyzed:	10/10/24 00:5B
Lab Samp ID:	24J033-03	Dilution Factor:	1
Lab File ID:	RJV250	Matrix:	WATER
Ext Btch ID:	VO01J11	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.50J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	7.6	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.52J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.20J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.3	10.0	103	70-130
Bromofluorobenzene	9.57	10.0	96	70-130
Toluene-dB	11.1	10.0	111	70-130
Dibromofluoromethane	10.2	10.0	102	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV250.D Vial: 19
Acq On : 10 Oct 2024 12:58 am Operator: DNguye/CLingl
Sample : 24J033-03 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 16 15:44 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	857746	10.00	ug/l	-0.02
53) CHLOROBENZENE-D5	13.70	117	700213	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	352565	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	266646	10.22	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.20%		
41) 1,2-Dichloroethane-d4	7.97	65	238210	10.27	ug/l	-0.02
Spiked Amount 10.000			Recovery =	102.70%		
54) Toluene-d8	11.02	98	947990	11.08	ug/l	-0.02
Spiked Amount 10.000			Recovery =	110.80%		
76) 4-Bromofluorobenzene	15.99	95	428142	9.57	ug/l	-0.02
Spiked Amount 10.000			Recovery =	95.70%		
Target Compounds						Qvalue
31) Chloroform	6.91	83	398404	7.64	ug/l	96
44) Trichloroethene	9.08	130	6017	0.20	ug/l	89
47) Bromodichloromethane	9.73	83	18626	0.50	ug/l	98
61) Tetrachloroethene	12.29	164	12390	0.52	ug/l	90

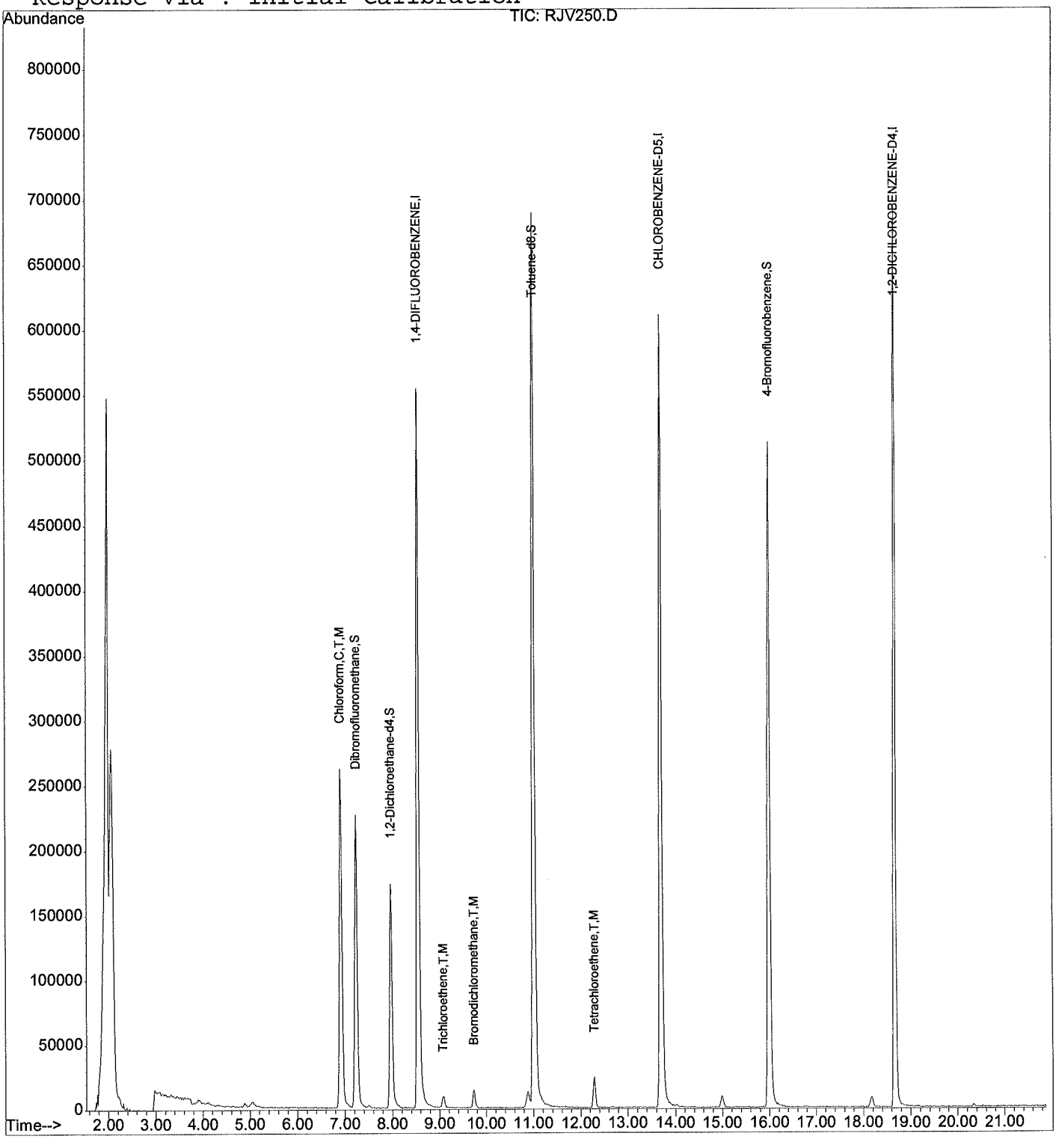
(#) = qualifier out of range (m) = manual integration

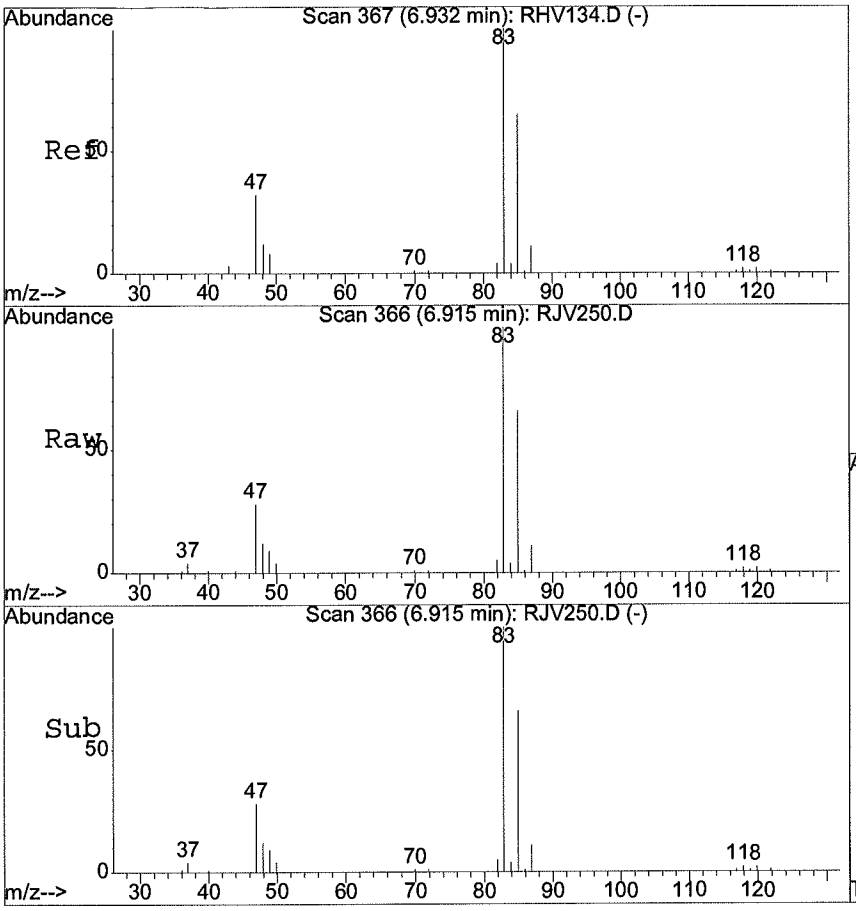
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV250.D
Acq On : 10 Oct 2024 12:58 am
Sample : 24J033-03
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 16 15:44 2024

Vial: 19
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

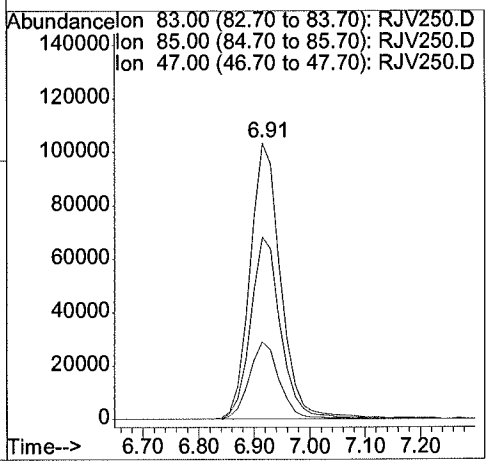


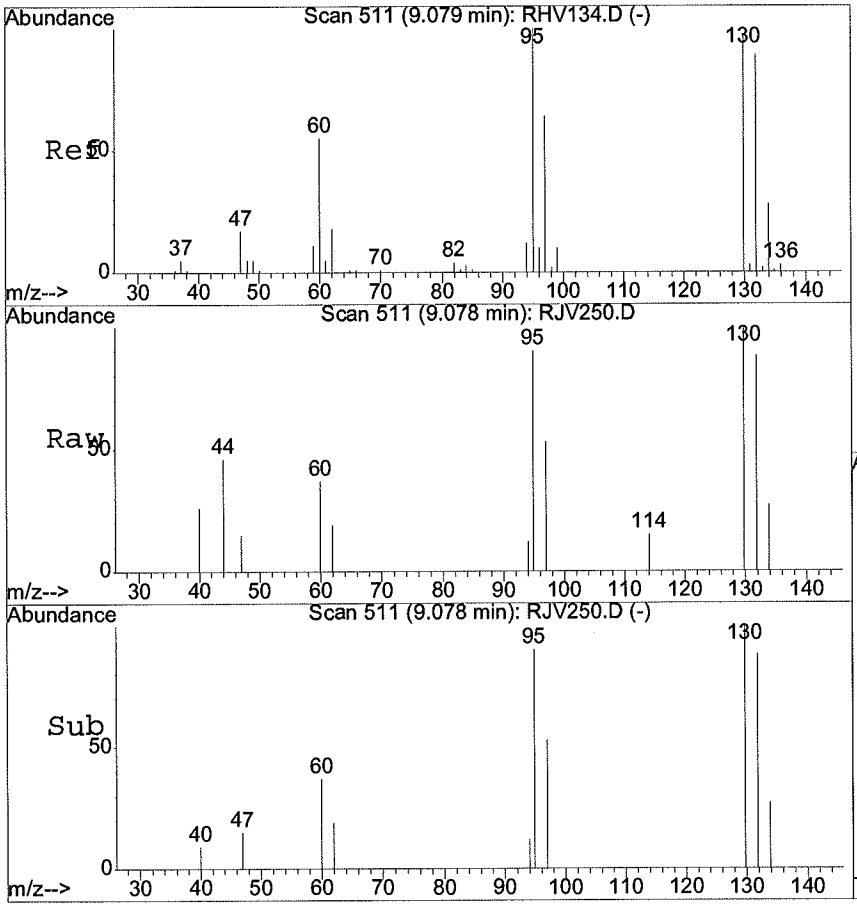


#31
Chloroform
Concen: 7.64 ug/l
RT: 6.91 min Scan# 366
Delta R.T. -0.02 min
Lab File: RJV250.D
Acq: 10 Oct 2024 12:58 am

Tgt Ion: 83 Resp: 398404

Ion	Ratio	Lower	Upper
83	100		
85	64.9	38.4	98.4
47	27.5	0.0	59.6

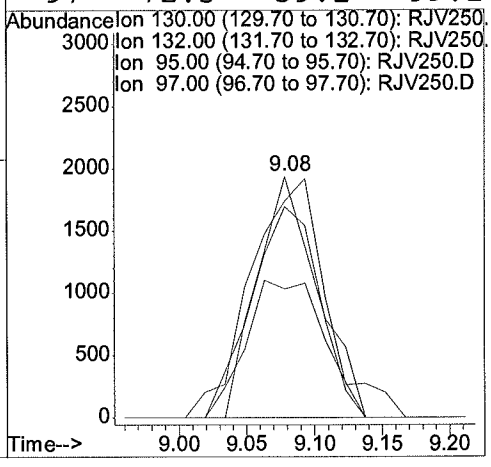


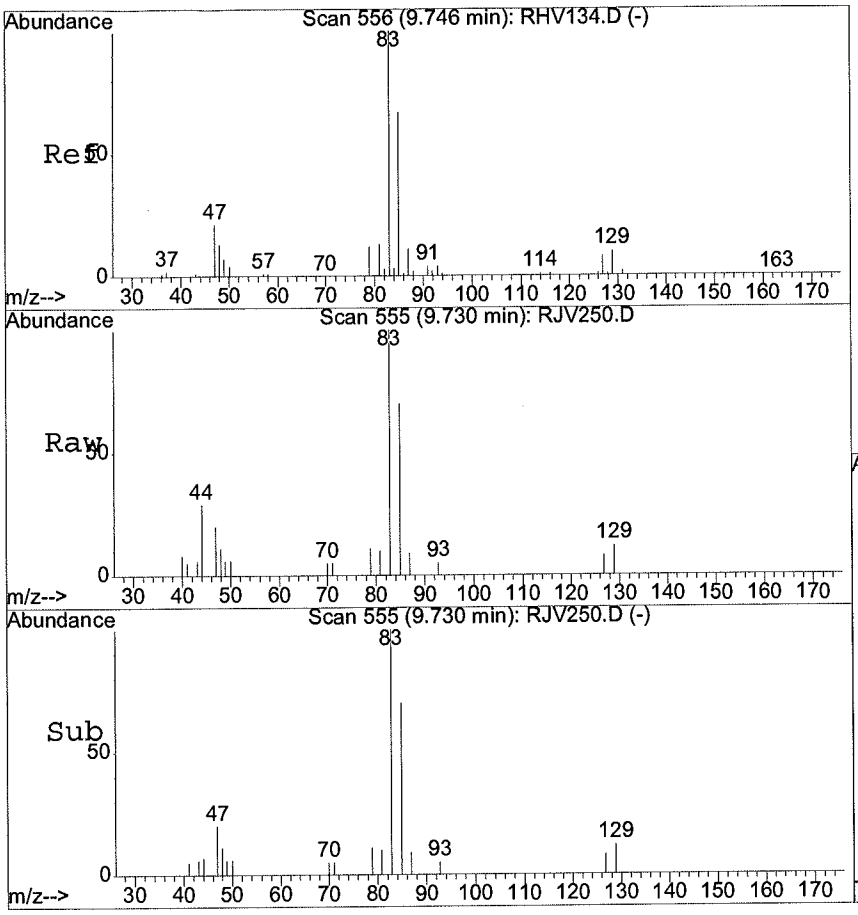


#44
Trichloroethene
Concen: 0.20 ug/l
RT: 9.08 min Scan# 511
Delta R.T. -0.00 min
Lab File: RJV250.D
Acq: 10 Oct 2024 12:58 am

Tgt Ion:130 Resp: 6017

Ion	Ratio	Lower	Upper
130	100		
132	98.3	62.7	122.7
95	123.3	72.0	132.0
97	72.5	39.1	99.1

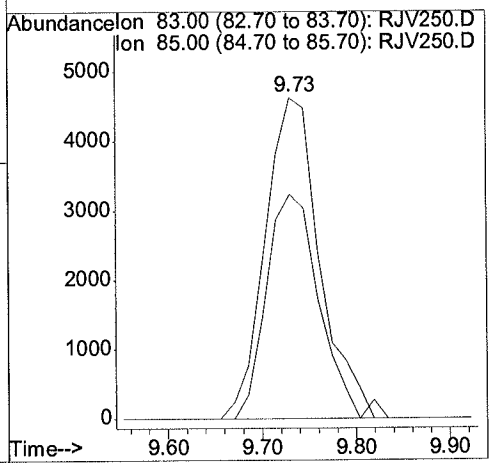


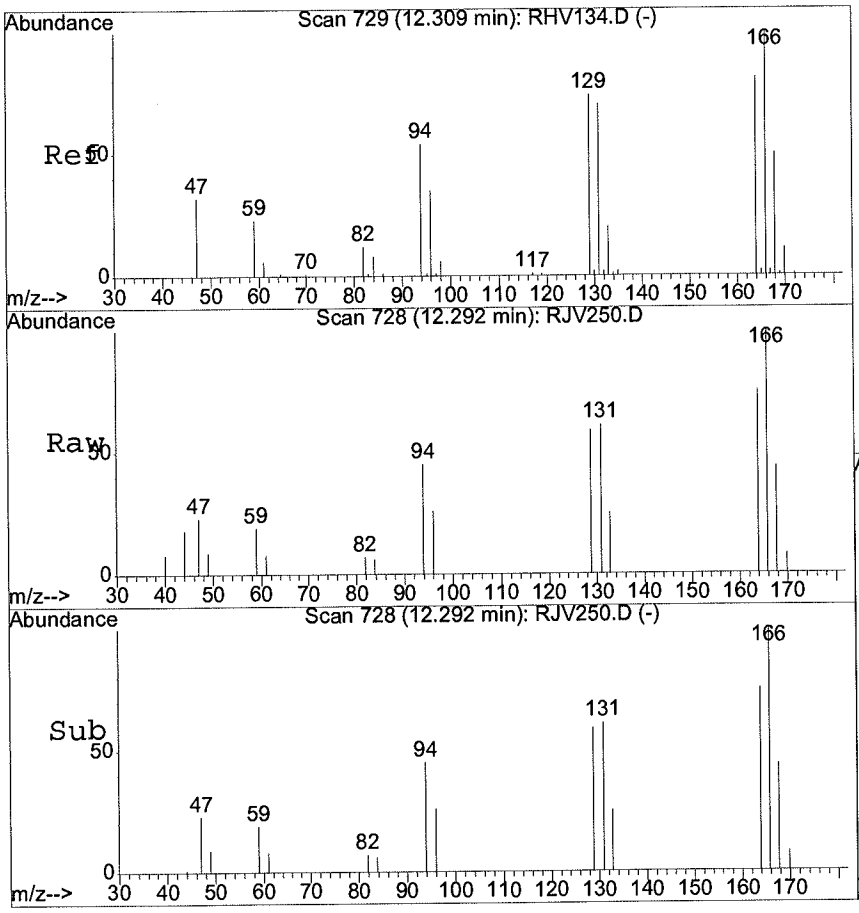


#47
Bromodichloromethane
Concen: 0.50 ug/l
RT: 9.73 min Scan# 555
Delta R.T. -0.02 min
Lab File: RJV250.D
Acq: 10 Oct 2024 12:58 am

Tgt Ion: 83 Resp: 18626

Ion	Ratio	Lower	Upper
83	100		
85	68.1	36.5	96.5

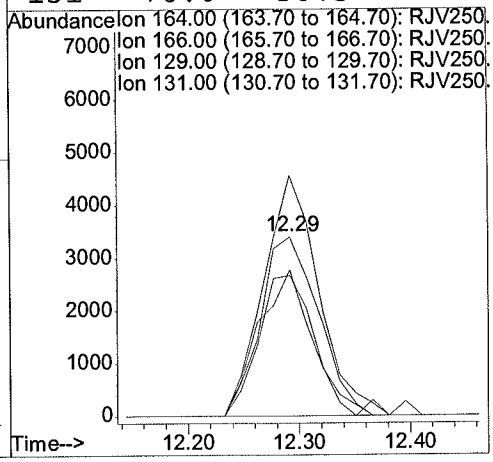




#61
Tetrachloroethene
Concen: 0.52 ug/l
RT: 12.29 min Scan# 728
Delta R.T. -0.02 min
Lab File: RJV250.D
Acq: 10 Oct 2024 12:58 am

Tgt Ion:164 Resp: 12390

Ion	Ratio	Lower	Upper
164	100		
166	127.6	98.2	158.2
129	74.1	62.8	122.8
131	76.0	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/01/24 12:25
Project	: VA SALT LAKE CITY	Date Received:	10/03/24
Batch No.	: 24J033	Date Extracted:	10/10/24 01:27 # 10/11/24 18:25
Sample ID	: MW43D-GW100124	Date Analyzed:	10/10/24 01:27 # 10/11/24 18:25
Lab Samp ID:	J033-04 #J033-04I	Dilution Factor:	1 # 10
Lab File ID:	RJV251 #RJW263	Matrix:	WATER
Ext Btch ID:	VD01J11 #VD06J12	% Moisture:	NA
Calib. Ref.:	RHV134 #RIW080	Instrument ID:	01 # 06

	PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
	1,1,1-Trichloroethane	ND	1.0	0.10
	1,1,2,2-Tetrachloroethane	ND	1.0	0.11
	1,1,2-Trichloroethane	ND	1.0	0.10
	1,1-Dichloroethane	ND	1.0	0.10
	1,1-Dichloroethene	ND	1.0	0.10
	1,2,3-Trichlorobenzene	ND	1.0	0.15
	1,2,4-Trichlorobenzene	ND	1.0	0.15
	1,2,4-Trimethylbenzene	ND	1.0	0.11
	1,2-Dibromo-3-chloropropane	ND	2.0	0.25
	1,2-Dichlorobenzene	ND	1.0	0.10
	1,2-Dichloroethane	ND	1.0	0.10
	1,2-Dichloropropane	ND	1.0	0.10
	1,3,5-Trimethylbenzene	ND	1.0	0.12
	1,3-Dichlorobenzene	ND	1.0	0.11
	1,4-Dichlorobenzene	ND	1.0	0.10
	2-Butanone	ND	20	2.5
	2-Hexanone	ND	20	2.5
	Acetone	6.1J	20	2.5
	Benzene	ND	1.0	0.10
	Bromochloromethane	ND	1.0	0.11
	Bromodichloromethane	0.20J	1.0	0.10
	Bromoform	ND	1.0	0.15
	Bromomethane	ND	1.0	0.16
	Carbon Disulfide	ND	1.0	0.25
	Carbon Tetrachloride	ND	1.0	0.10
	Chlorobenzene	ND	1.0	0.10
	Chloroethane	ND	1.0	0.27
	Chloroform	3.5	1.0	0.10
	Chloromethane	ND	1.0	0.15
	cis-1,2-Dichloroethylene	1.3	1.0	0.10
	Dibromochloromethane	ND	1.0	0.10
	Dichlorodifluoromethane	ND	1.0	0.15
	Ethylbenzene	ND	1.0	0.10
	Isopropylbenzene	ND	1.0	0.10
	m,p-Xylene	ND	2.0	0.21
	4-Methyl-2-Pentanone	ND	20	2.5
	Methylene Chloride	ND	2.0	0.50
	tert-Butyl Methyl Ether	ND	1.0	0.13
	o-Xylene	ND	1.0	0.10
	Styrene	ND	1.0	0.25
#	Tetrachloroethene	130	10	1.5
	Toluene	0.15J	1.0	0.10
	Trans-1,2-DCE	ND	1.0	0.10
	cis-1,3-Dichloropropene	ND	1.0	0.10
	Trans-1,3-Dichloropropene	ND	1.0	0.11
	TCE	1.4	1.0	0.10
	Trichlorofluoromethane	ND	1.0	0.15
	Vinyl Chloride	ND	1.0	0.12
	1,2-Dibromoethane	ND	1.0	0.10
	Vinyl Acetate	ND	2.0	0.25
	Trichlorotrifluoroethane	ND	1.0	0.15
	Methyl Acetate	ND	2.0	0.25

	SURRDGATE PARAMETER(S)	RESULT	SPK AMT	%RECOVERY	QC LIMIT
	1,2-Dichloroethane-d4	10.3	10.0	103	70-130
	Bromofluorobenzene	9.63	10.0	96	70-130
	Toluene-d8	11.1	10.0	111	70-130
	Dibromofluoromethane	10.4	10.0	104	70-130
#	1,2-Dichloroethane-d4	92.3	100	92	70-130
#	Bromofluorobenzene	98.0	100	98	70-130
#	Toluene-d8	104	100	104	70-130
#	Dibromofluoromethane	108	100	108	70-130

Result(s) associated as marked on the header

Notes:

Sample Amount	: 25ml	Final Volume	: 25ml
Prepared by	: DNguye	Analyzed by	: DNguye
# Sample Amount	: 2.5ml	Final Volume	: 25ml
# Prepared by	: PMai	Analyzed by	: PMai

Detection limits are reported relative to sample result significant figures.

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/01/24 12:25
Project	: VA SALT LAKE CITY	Date Received:	10/03/24
Batch No.	: 24J033	Date Extracted:	10/10/24 01:27
Sample ID	: MW43D-GW100124	Date Analyzed:	10/10/24 01:27
Lab Samp ID:	24J033-04	Dilution Factor:	1
Lab File ID:	RJV251	Matrix:	WATER
Ext Btch ID:	VO01J11	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	6.1J	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.20J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.5	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	1.3	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	130E	1.0	0.15
Toluene	0.15J	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	1.4	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.3	10.0	103	70-130
Bromofluorobenzene	9.63	10.0	96	70-130
Toluene-d8	11.1	10.0	111	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV251.D
Acq On : 10 Oct 2024 1:27 am
Sample : 24J033-04
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 16 15:46 2024

Vial: 20
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	835761	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.70	117	687663	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.68	152	349141	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	263521	10.37	ug/l	-0.02
Spiked Amount 10.000			Recovery = 103.70%			
41) 1,2-Dichloroethane-d4	7.97	65	232572	10.29	ug/l	-0.02
Spiked Amount 10.000			Recovery = 102.90%			
54) Toluene-d8	11.02	98	931375	11.08	ug/l	-0.02
Spiked Amount 10.000			Recovery = 110.80%			
76) 4-Bromofluorobenzene	15.99	95	426454	9.63	ug/l	-0.02
Spiked Amount 10.000			Recovery = 96.30%			
Target Compounds						Qvalue
13) Acetone	4.10	43	31017	6.09	ug/l	94
30) cis-1,2-Dichloroethene	6.71	96	37791	1.33	ug/l	84
31) Chloroform	6.92	83	177057	3.48	ug/l	96
44) Trichloroethene	9.06	130	41871	1.43	ug/l	93
47) Bromodichloromethane	9.73	83	7428	0.20	ug/l	99
55) Toluene	11.15	91	15802	0.15	ug/l	93
61) Tetrachloroethene	12.28	164	2976953	127.20	ug/l	94

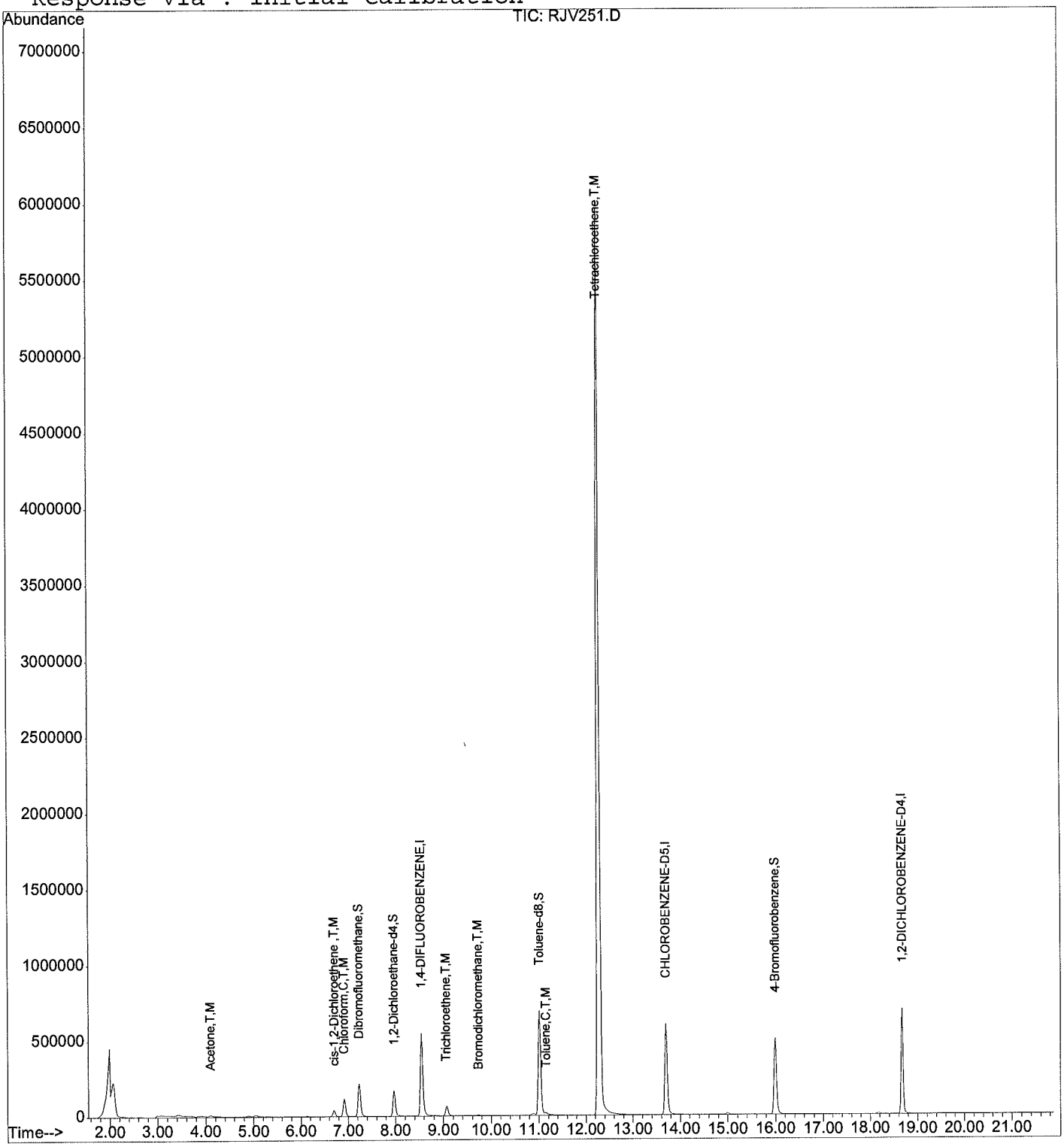
(#) = qualifier out of range (m) = manual integration

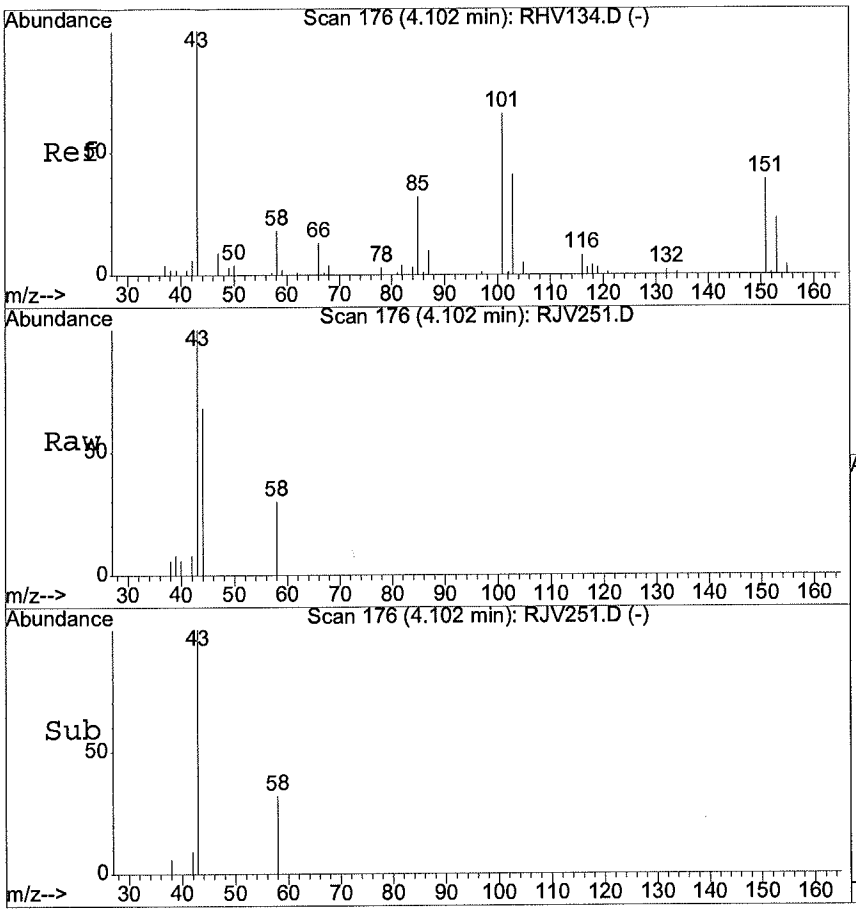
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV251.D
Acq On : 10 Oct 2024 1:27 am
Sample : 24J033-04
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 16 15:46 2024

Vial: 20
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

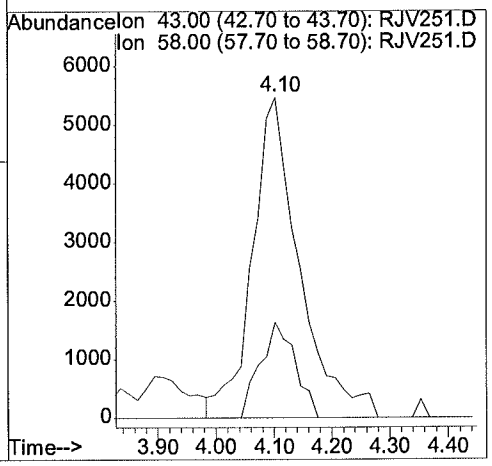


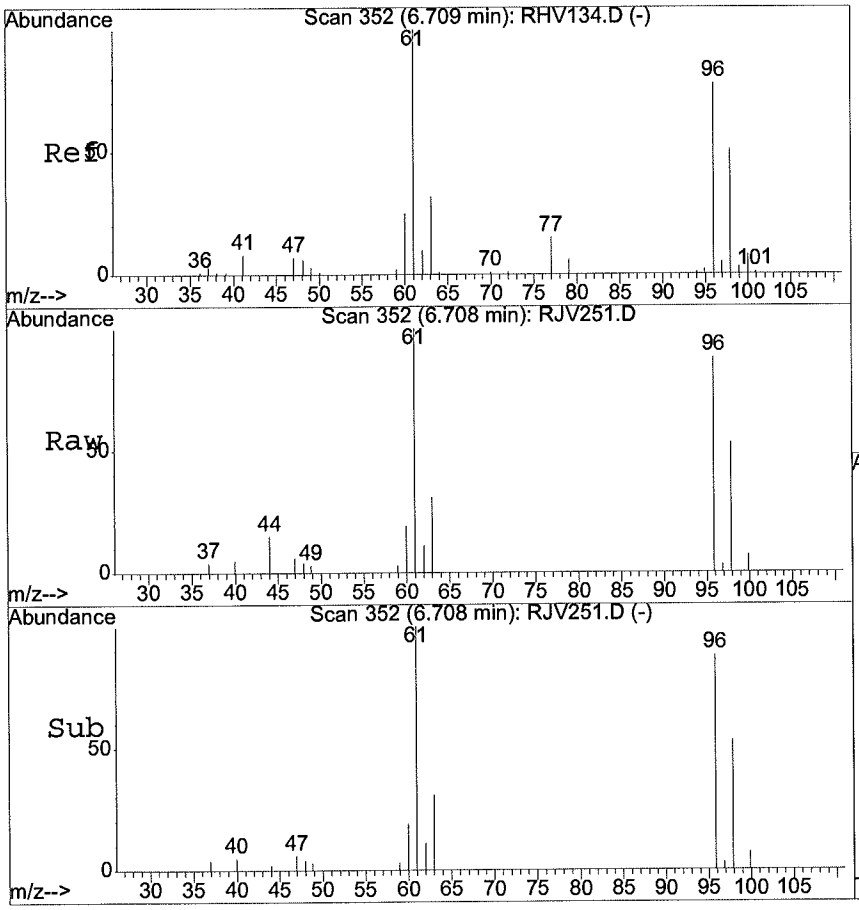


#13
Acetone
Concen: 6.09 ug/l
RT: 4.10 min Scan# 176
Delta R.T. 0.00 min
Lab File: RJV251.D
Acq: 10 Oct 2024 1:27 am

Tgt Ion: 43 Resp: 31017

Ion	Ratio	Lower	Upper
43	100		
58	22.3	0.0	49.5

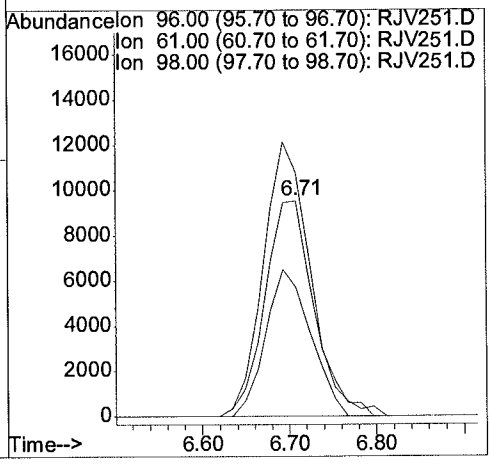


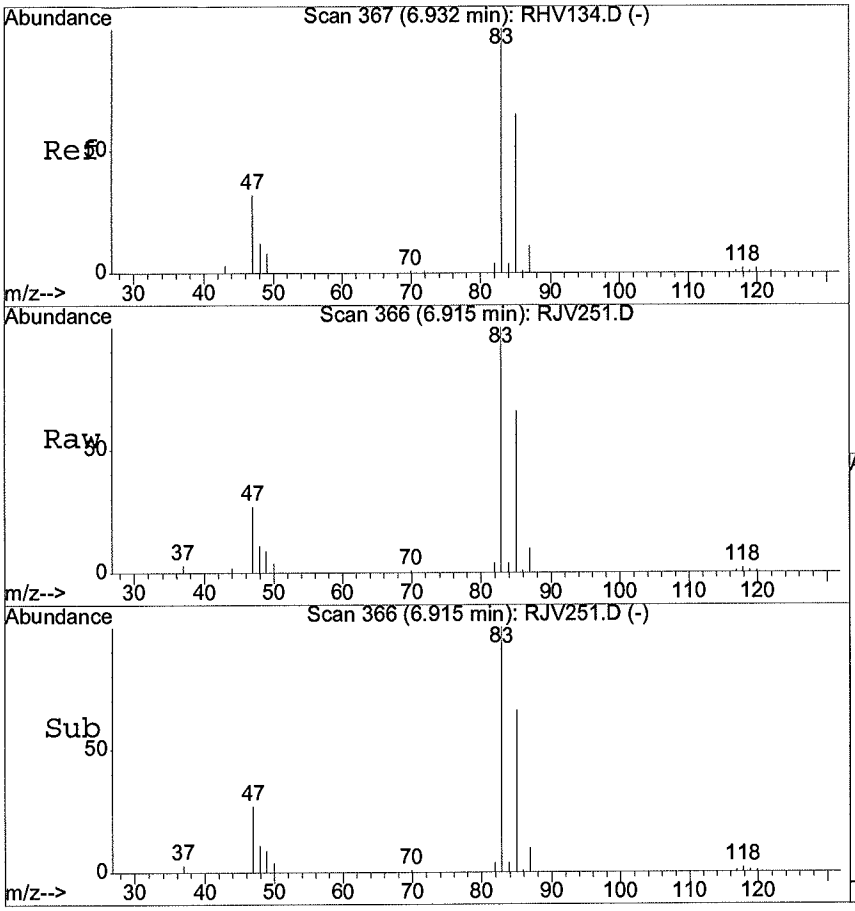


#30
cis-1,2-Dichloroethene
Concen: 1.33 ug/l
RT: 6.71 min Scan# 352
Delta R.T. -0.00 min
Lab File: RJV251.D
Acq: 10 Oct 2024 1:27 am

Tgt Ion: 96 Resp: 37791

Ion	Ratio	Lower	Upper
96	100		
61	121.7	119.2	179.2
98	62.4	35.1	95.1

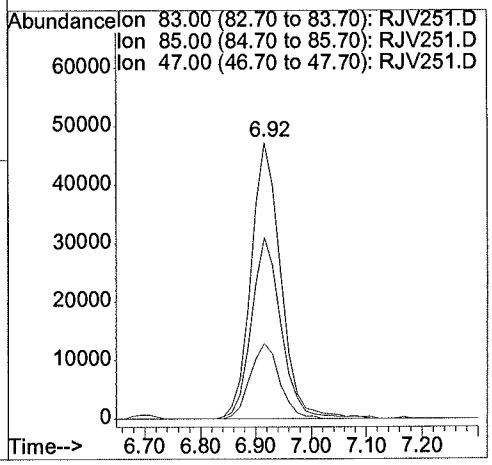


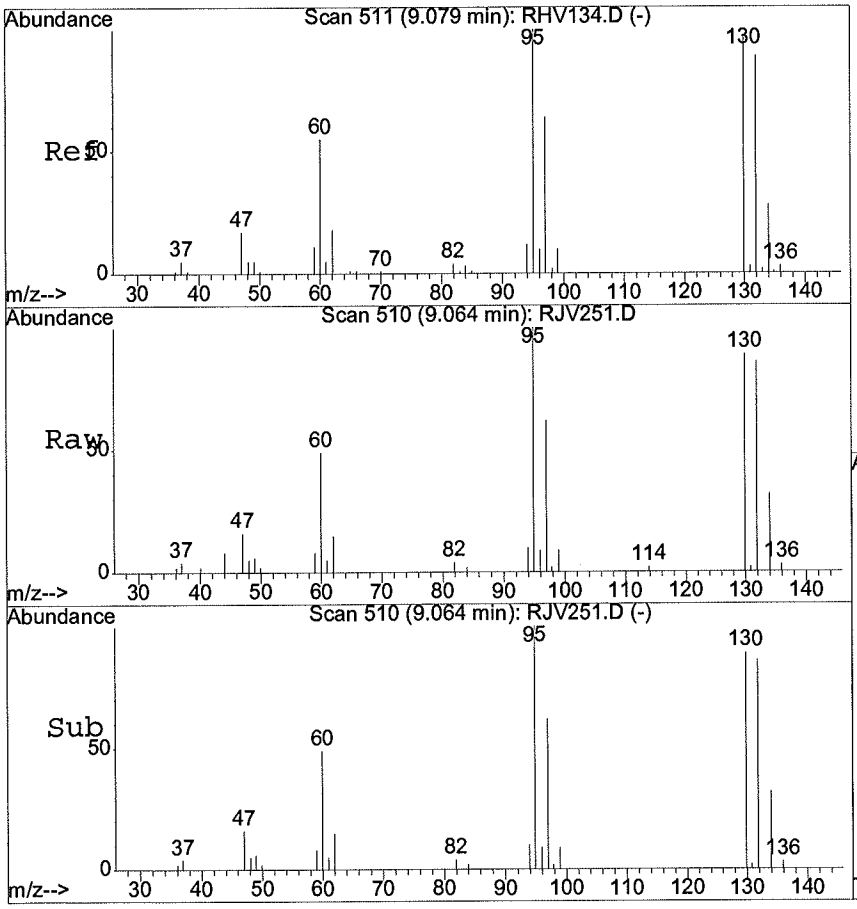


#31
Chloroform
Concen: 3.48 ug/l
RT: 6.92 min Scan# 366
Delta R.T. -0.02 min
Lab File: RJV251.D
Acq: 10 Oct 2024 1:27 am

Tgt Ion: 83 Resp: 177057

Ion	Ratio	Lower	Upper
83	100		
85	65.4	38.4	98.4
47	26.9	0.0	59.6

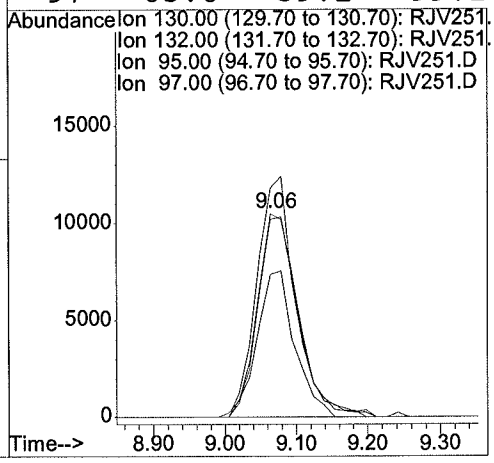


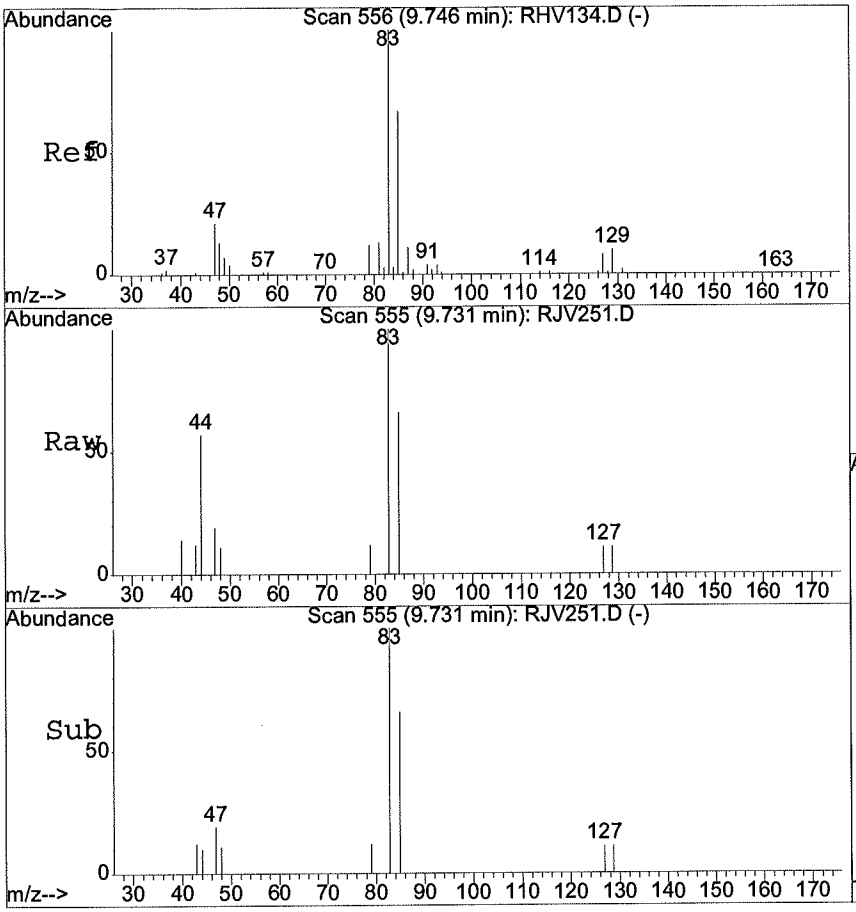


#44
Trichloroethene
Concen: 1.43 ug/l
RT: 9.06 min Scan# 510
Delta R.T. -0.01 min
Lab File: RJV251.D
Acq: 10 Oct 2024 1:27 am

Tgt Ion:130 Resp: 41871

Ion	Ratio	Lower	Upper
130	100		
132	96.9	62.7	122.7
95	112.2	72.0	132.0
97	65.6	39.1	99.1

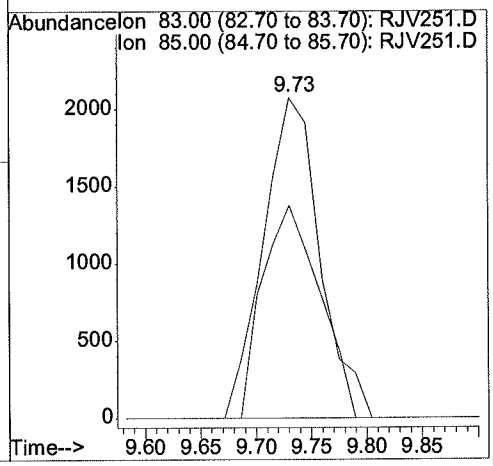


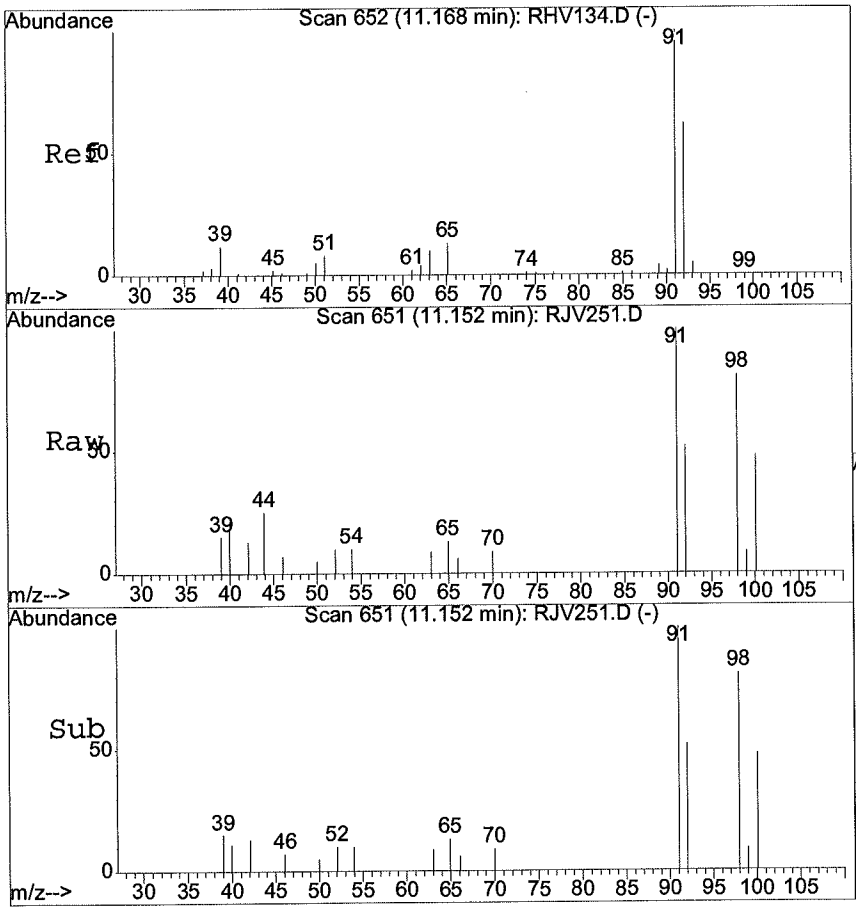


#47
Bromodichloromethane
Concen: 0.20 ug/l
RT: 9.73 min Scan# 555
Delta R.T. -0.01 min
Lab File: RJV251.D
Acq: 10 Oct 2024 1:27 am

Tgt Ion: 83 Resp: 7428

Ion	Ratio	Lower	Upper
83	100		
85	67.2	36.5	96.5

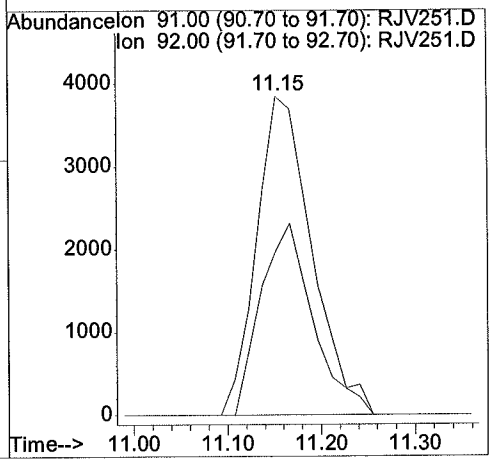


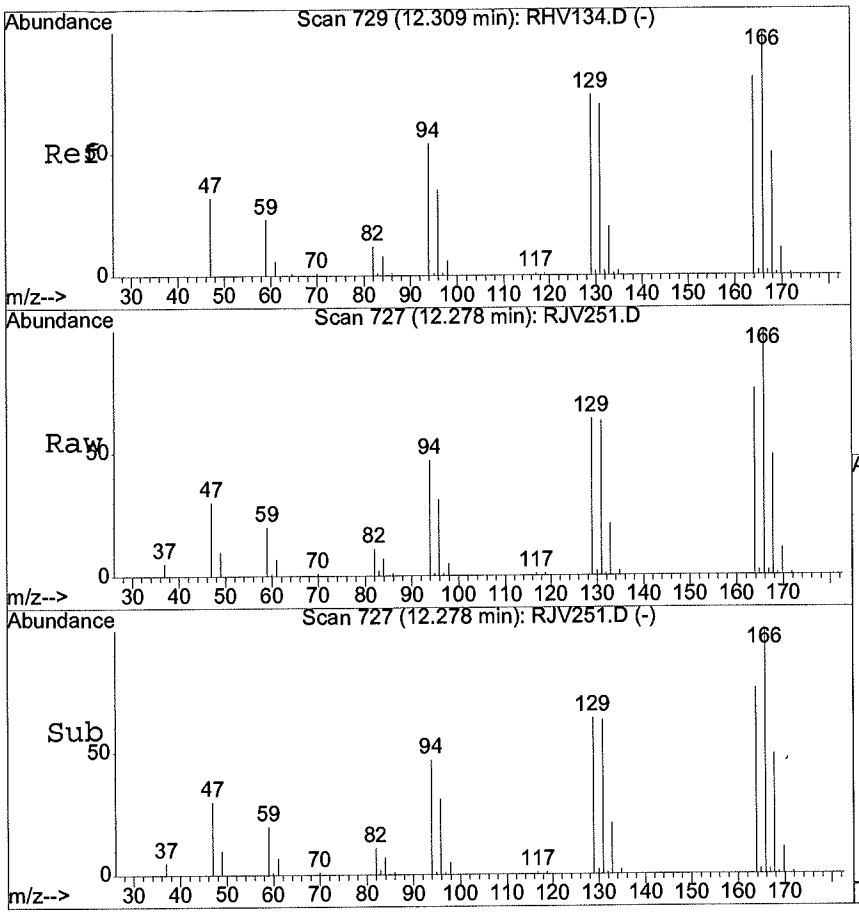


#55
Toluene
Concen: 0.15 ug/l
RT: 11.15 min Scan# 651
Delta R.T. -0.02 min
Lab File: RJV251.D
Acq: 10 Oct 2024 1:27 am

Tgt Ion: 91 Resp: 15802

Ion	Ratio	Lower	Upper
91	100		
92	56.9	32.4	92.4

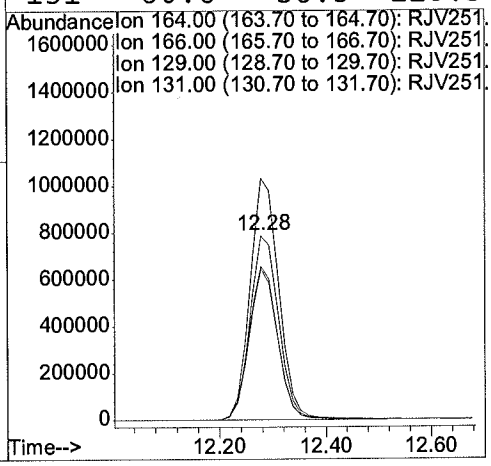




#61
Tetrachloroethene
Concen: 127.20 ug/l
RT: 12.28 min Scan# 727
Delta R.T. -0.03 min
Lab File: RJV251.D
Acq: 10 Oct 2024 1:27 am

Tgt Ion:164 Resp: 2976953

Ion	Ratio	Lower	Upper
164	100		
166	131.1	98.2	158.2
129	83.2	62.8	122.8
131	80.6	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/01/24 12:25
Project	: VA SALT LAKE CITY	Date Received:	10/03/24
Batch No.	: 24J033	Date Extracted:	10/11/24 18:25
Sample ID	: MW43D-GW100124	Date Analyzed:	10/11/24 18:25
Lab Samp ID:	24J033-04I	Dilution Factor:	10
Lab File ID:	RJW263	Matrix:	WATER
Ext Btch ID:	VOO6J12	% Moisture:	NA
Calib. Ref.:	RIW0B0	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	10	1.0
1,1,2,2-Tetrachloroethane	ND	10	1.1
1,1,2-Trichloroethane	ND	10	1.0
1,1-Dichloroethane	ND	10	1.0
1,1-Dichloroethene	ND	10	1.0
1,2,3-Trichlorobenzene	ND	10	1.5
1,2,4-Trichlorobenzene	ND	10	1.5
1,2,4-Trimethylbenzene	ND	10	1.1
1,2-Dibromo-3-chloropropane	ND	20	2.5
1,2-Dichlorobenzene	ND	10	1.0
1,2-Dichloroethane	ND	10	1.0
1,2-Dichloropropane	ND	10	1.0
1,3,5-Trimethylbenzene	ND	10	1.2
1,3-Dichlorobenzene	ND	10	1.1
1,4-Dichlorobenzene	ND	10	1.0
2-Butanone	ND	200	25
2-Hexanone	ND	200	25
Acetone	ND	200	25
Benzene	ND	10	1.0
Bromochloromethane	ND	10	1.1
Bromodichloromethane	ND	10	1.0
Bromoform	ND	10	1.5
Bromomethane	ND	10	1.6
Carbon Disulfide	ND	10	2.5
Carbon Tetrachloride	ND	10	1.0
Chlorobenzene	ND	10	1.0
Chloroethane	ND	10	2.7
Chloroform	ND	10	1.0
Chloromethane	ND	10	1.5
cis-1,2-Dichloroethylene	ND	10	1.0
Dibromochloromethane	ND	10	1.0
Dichlorodifluoromethane	ND	10	1.5
Ethylbenzene	ND	10	1.0
Isopropylbenzene	ND	10	1.0
m,p-Xylene	ND	20	2.1
4-Methyl-2-Pentanone	ND	200	25
Methylene Chloride	ND	20	5.0
tert-Butyl Methyl Ether	ND	10	1.3
o-Xylene	ND	10	1.0
Styrene	ND	10	2.5
Tetrachloroethene	130	10	1.5
Toluene	ND	10	1.0
Trans-1,2-DCE	ND	10	1.0
cis-1,3-Dichloropropene	ND	10	1.0
Trans-1,3-Dichloropropene	ND	10	1.1
TCE	1.4J	10	1.0
Trichlorofluoromethane	ND	10	1.5
Vinyl Chloride	ND	10	1.2
1,2-Dibromoethane	ND	10	1.0
Vinyl Acetate	ND	20	2.5
Trichlorotrifluoroethane	ND	10	1.5
Methyl Acetate	ND	20	2.5

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	92.3	100	92	70-130
Bromofluorobenzene	98.0	100	98	70-130
Toluene-dB	104	100	104	70-130
Dibromofluoromethane	108	100	108	70-130

Notes:
Sample Amount : 2.5ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J11\RJW263.D Vial: 8
Acq On : 11 Oct 2024 6:25 pm Operator: PMai
Sample : 24J033-04I 10X Inst : 06
Misc : 0.5mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Nov 11 16:15 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

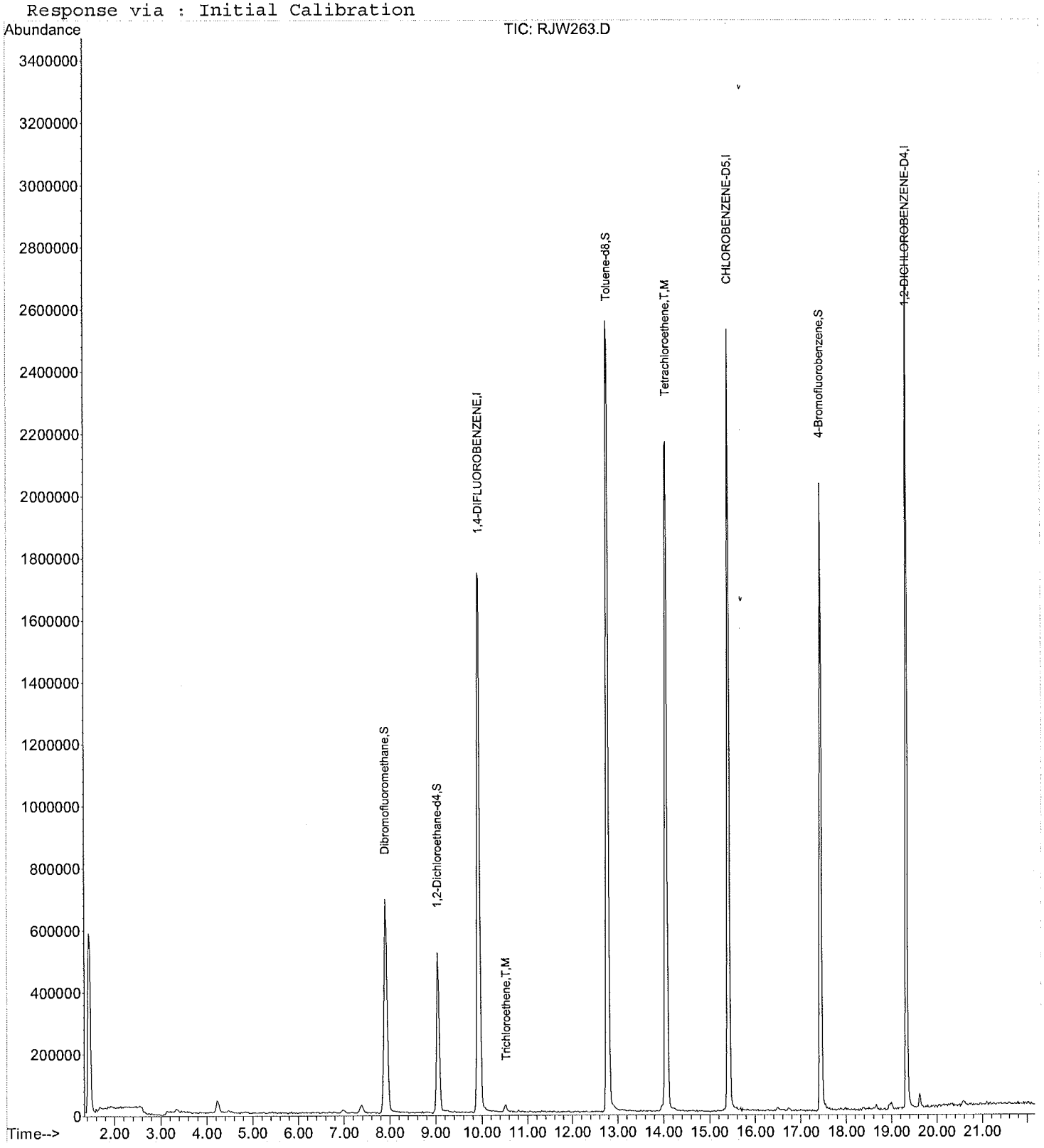
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.94	114	3554261	10.00	ug/l	-0.02
54) CHLOROBENZENE-D5	15.42	117	2761126	10.00	ug/l	-0.01
74) 1,2-DICHLOROBENZENE-D4	19.33	152	1165204	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	7.91	111	1084629	10.76	ug/l	-0.06
Spiked Amount 10.000			Recovery =	107.60%		
42) 1,2-Dichloroethane-d4	9.04	65	725272	9.23	ug/l	-0.04
Spiked Amount 10.000			Recovery =	92.30%		
55) Toluene-d8	12.79	98	3704733	10.37	ug/l	-0.02
Spiked Amount 10.000			Recovery =	103.70%		
77) 4-Bromofluorobenzene	17.44	95	1275055	9.80	ug/l	-0.01
Spiked Amount 10.000			Recovery =	98.00%		
Target Compounds						Qvalue
45) Trichloroethene	10.53	130	14695	0.14	ug/l	95
62) Tetrachloroethene	14.07	164	1147938	13.39	ug/l	97

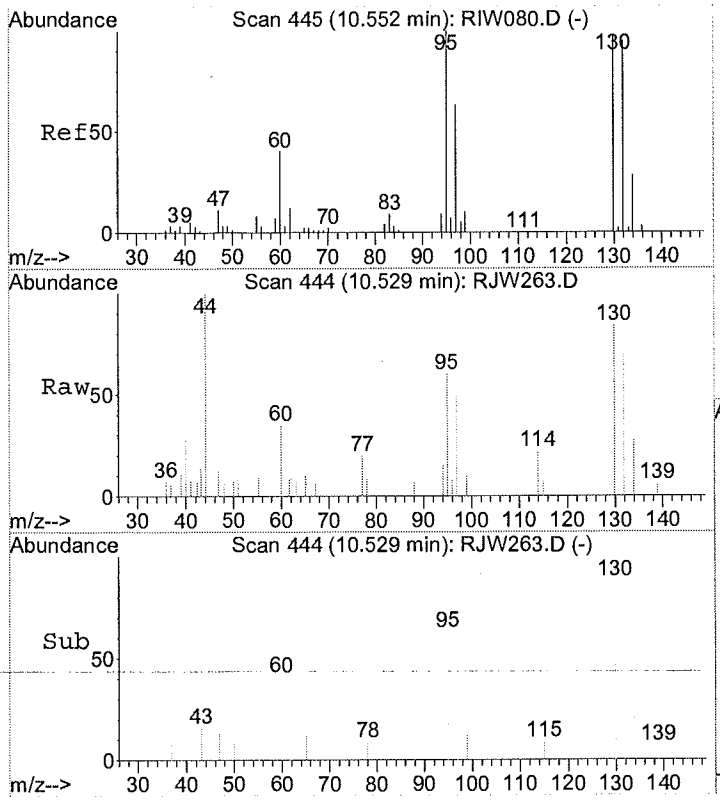
(#) = qualifier out of range (m) = manual integration
RJW263.D VO06I19B.M Mon Nov 11 16:15:50 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J11\RJW263.D Vial: 8
Acq On : 11 Oct 2024 6:25 pm Operator: PMai
Sample : 24J033-04I 10X Inst : 06
Misc : 0.5mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Nov 11 16:15 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration

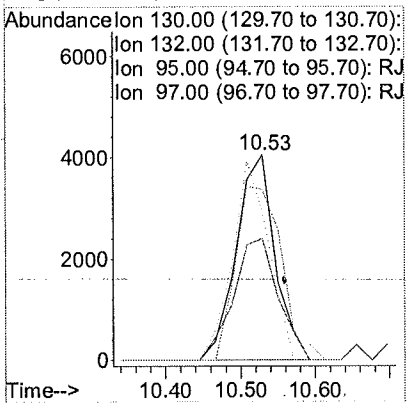


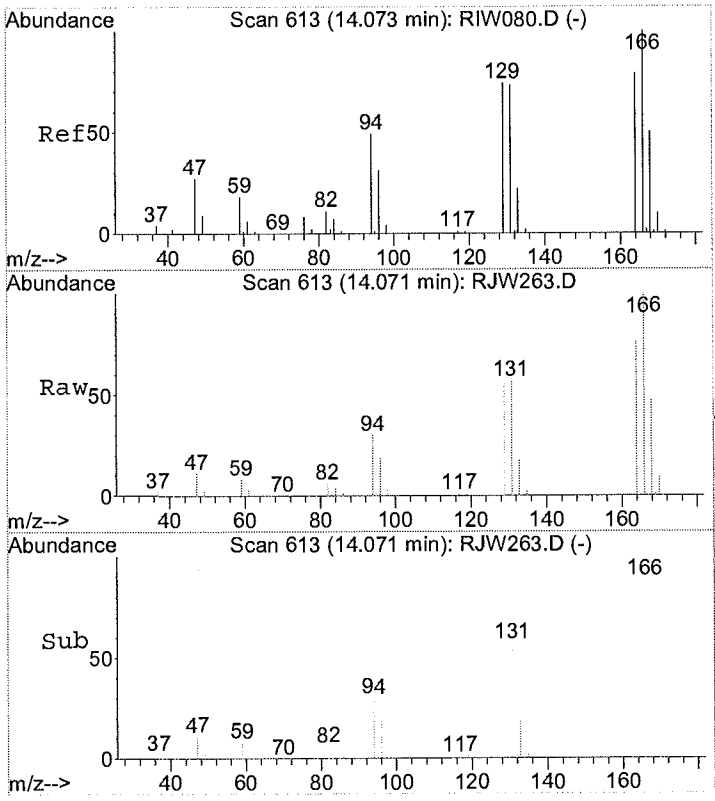


#45
Trichloroethene
Concen: 0.14 ug/l
RT: 10.53 min Scan# 444
Delta R.T. -0.02 min
Lab File: RJW263.D
Acq: 11 Oct 2024 6:25 pm

Tgt Ion:130 Resp: 14695

Ion	Ratio	Lower	Upper
130	100		
132	97.7	65.5	125.5
95	93.6	73.2	133.2
97	68.4	38.8	98.8

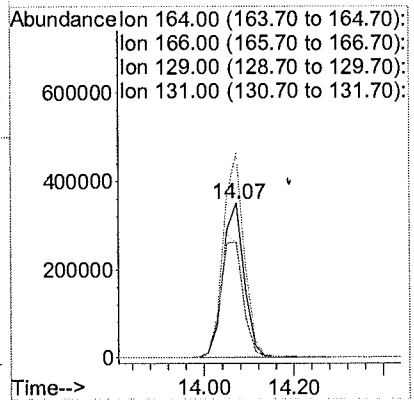




#62
Tetrachloroethene
Concen: 13.39 ug/l
RT: 14.07 min Scan# 613
Delta R.T. -0.00 min
Lab File: RJW263.D
Acq: 11 Oct 2024 6:25 pm

Tgt Ion:164 Resp: 1147938

Ion	Ratio	Lower	Upper
164	100		
166	130.8	100.5	160.5
129	83.6	57.4	117.4
131	80.2	54.7	114.7



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/01/24 15:15
Project	: VA SALT LAKE CITY	Date Received:	10/03/24
Batch No.	: 24J033	Date Extracted:	10/10/24 01:57
Sample ID	: MW44D-GW100124	Date Analyzed:	10/10/24 01:57
Lab Samp ID:	24J033-05	Dilution Factor:	1
Lab File ID:	RJV252	Matrix:	WATER
Ext Btch ID:	V001J11	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.25J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.7	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.32J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.5	10.0	105	70-130
Bromofluorobenzene	9.59	10.0	96	70-130
Toluene-dB	11.3	10.0	113	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV252.D
Acq On : 10 Oct 2024 1:57 am
Sample : 24J033-05
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 16 15:47 2024

Vial: 21
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	807136	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.70	117	661610	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	325798	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	255845	10.42	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.20%			
41) 1,2-Dichloroethane-d4	7.97	65	229634	10.52	ug/l	-0.02
Spiked Amount 10.000			Recovery = 105.20%			
54) Toluene-d8	11.02	98	911887	11.28	ug/l	-0.02
Spiked Amount 10.000			Recovery = 112.80%			
76) 4-Bromofluorobenzene	15.99	95	396303	9.59	ug/l	-0.02
Spiked Amount 10.000			Recovery = 95.90%			
Target Compounds						Qvalue
31) Chloroform	6.92	83	133077	2.71	ug/l	94
47) Bromodichloromethane	9.73	83	8887	0.25	ug/l	94
61) Tetrachloroethene	12.29	164	7203	0.32	ug/l	94

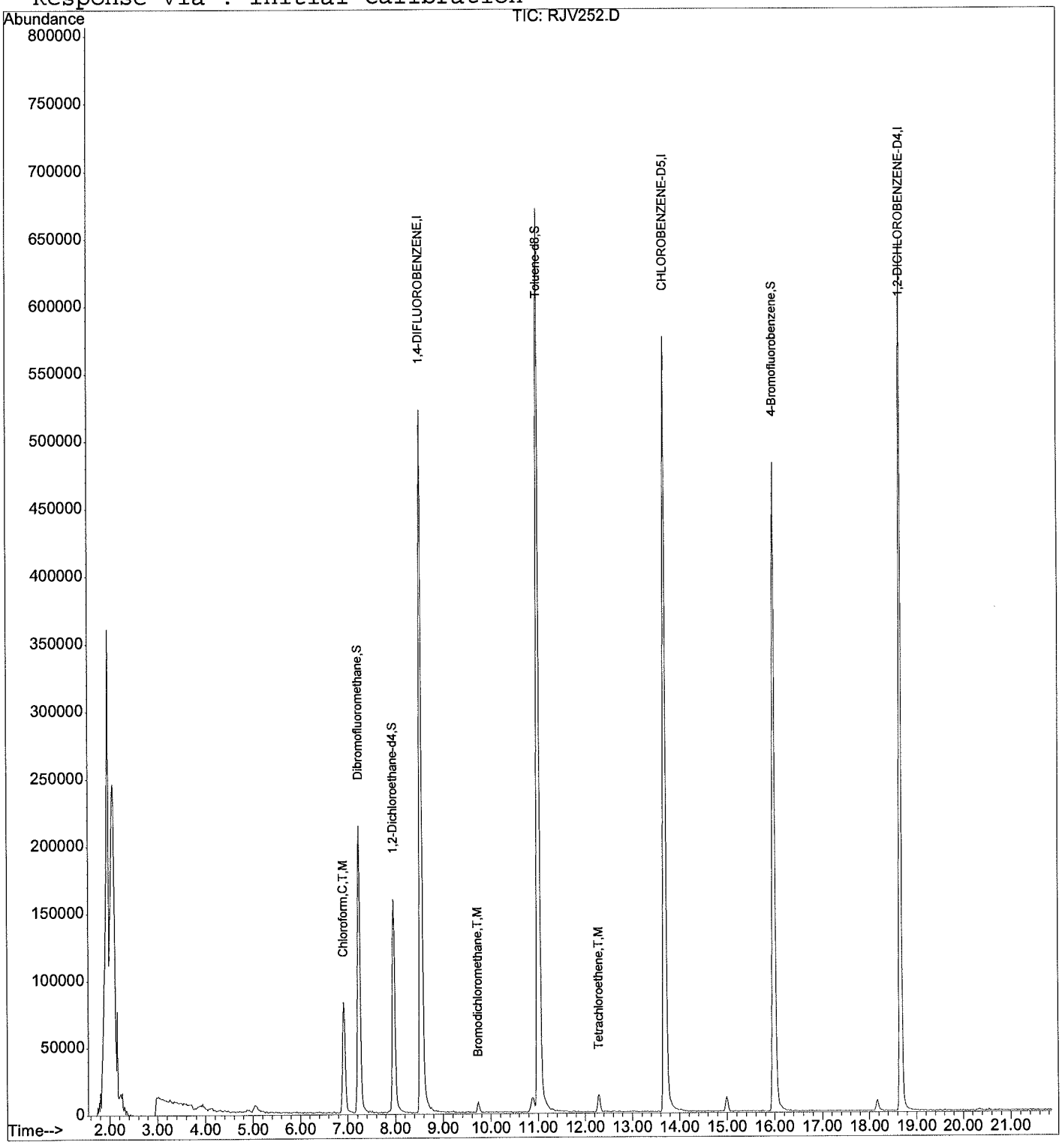
(#) = qualifier out of range (m) = manual integration
RJV252.D VO01H09.M Wed Oct 16 15:47:23 2024 Page 1

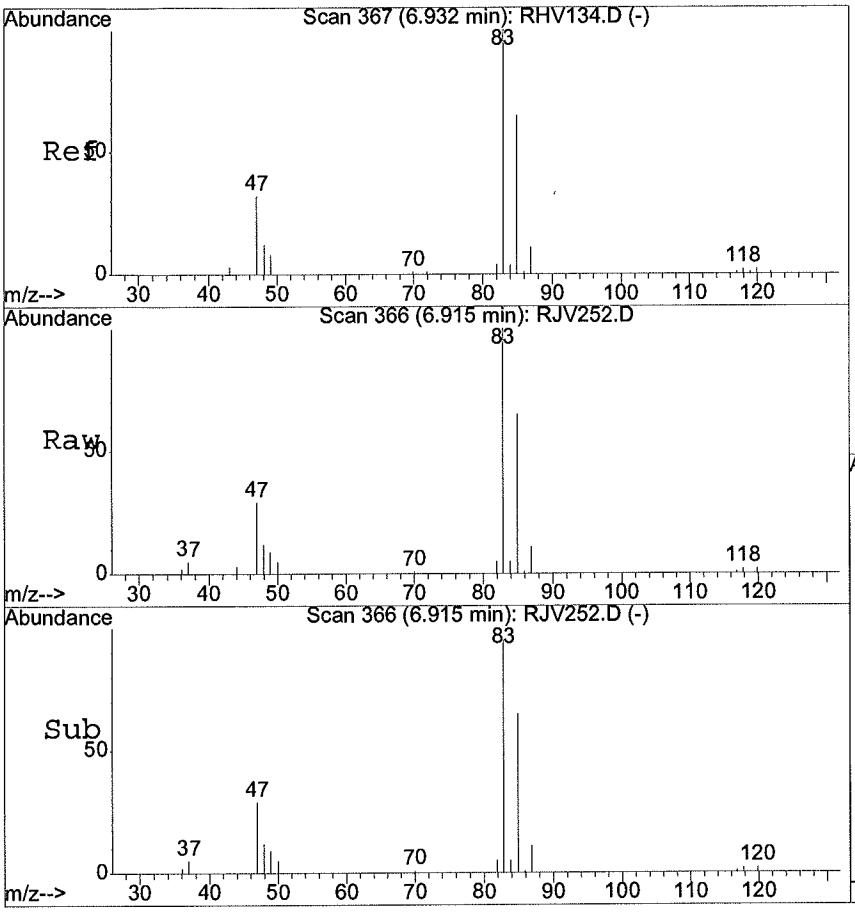
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV252.D
Acq On : 10 Oct 2024 1:57 am
Sample : 24J033-05
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 16 15:47 2024

Vial: 21
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

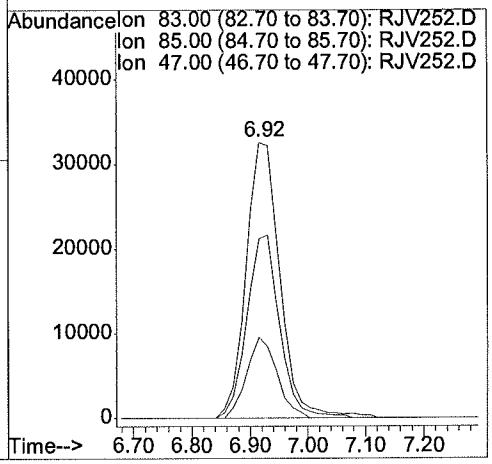


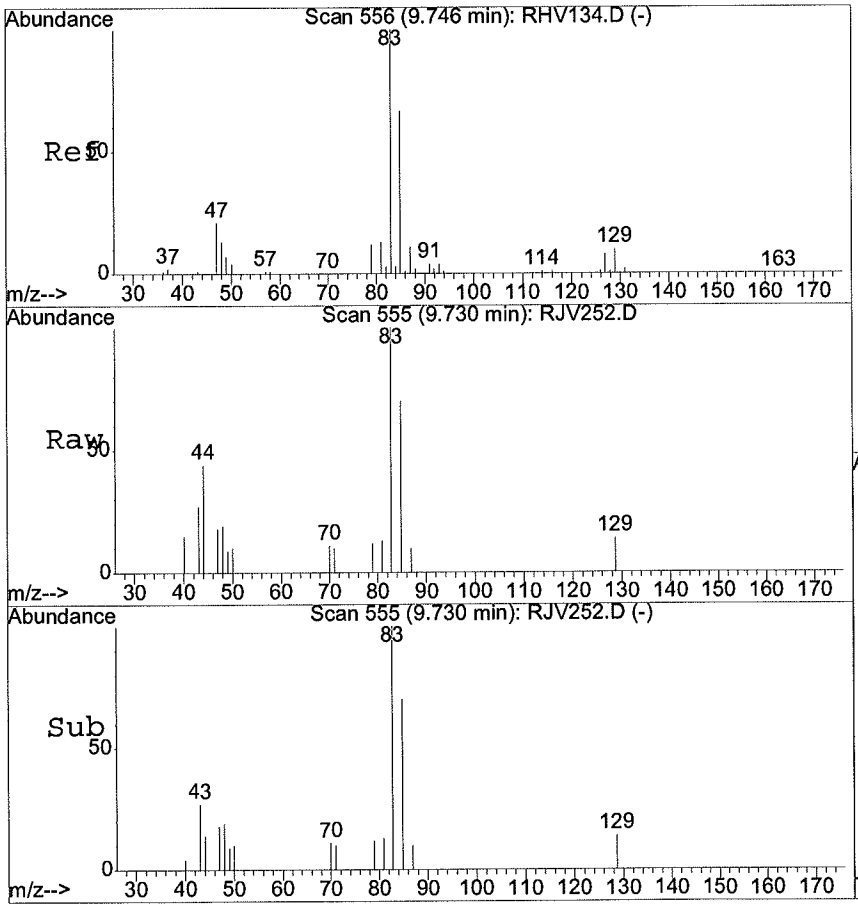


#31
Chloroform
Concen: 2.71 ug/l
RT: 6.92 min Scan# 366
Delta R.T. -0.02 min
Lab File: RJV252.D
Acq: 10 Oct 2024 1:57 am

Tgt Ion: 83 Resp: 133077

Ion	Ratio	Lower	Upper
83	100		
85	64.1	38.4	98.4
47	26.3	0.0	59.6

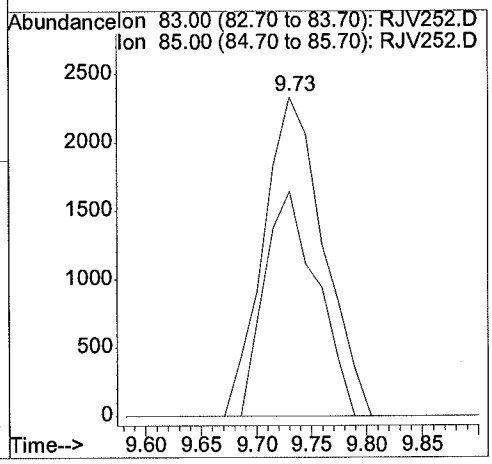


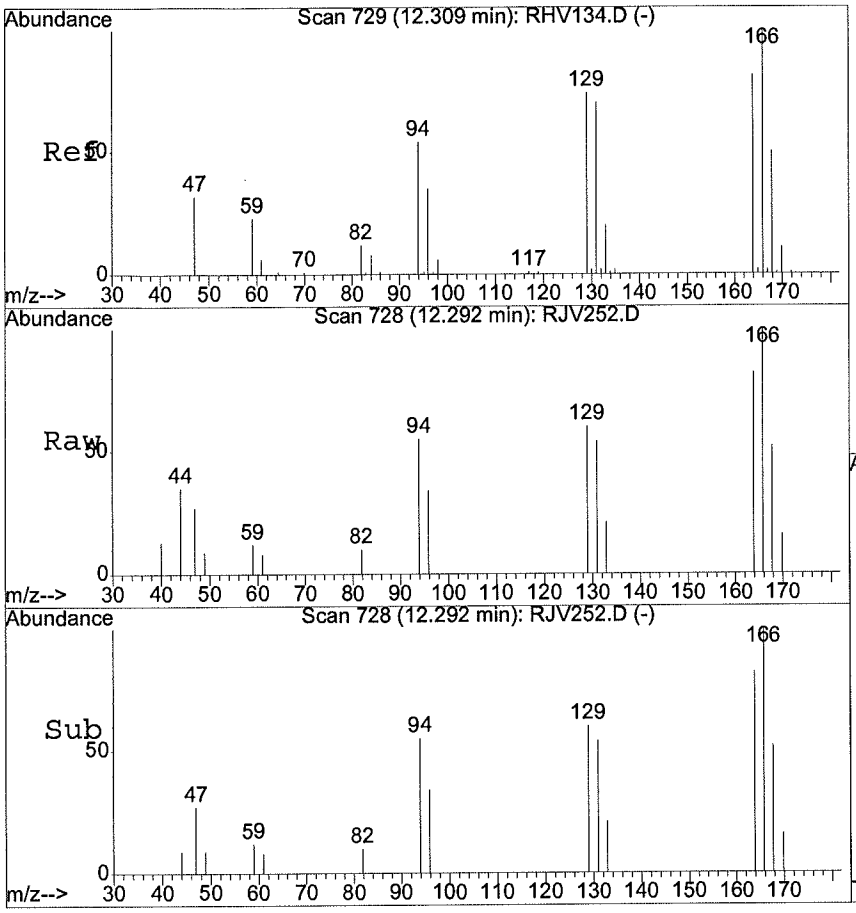


#47
Bromodichloromethane
Concen: 0.25 ug/l
RT: 9.73 min Scan# 555
Delta R.T. -0.01 min
Lab File: RJV252.D
Acq: 10 Oct 2024 1:57 am

Tgt Ion: 83 Resp: 8887

Ion	Ratio	Lower	Upper
83	100		
85	61.8	36.5	96.5

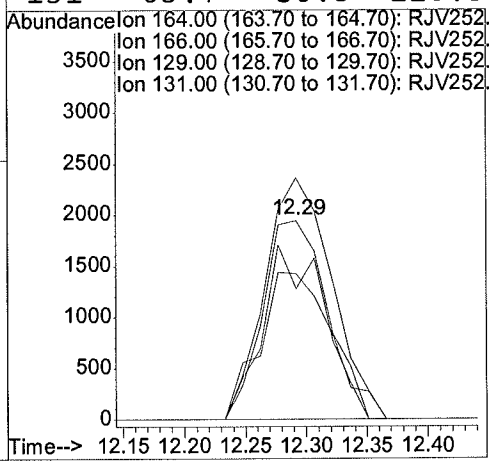




#61
Tetrachloroethene
Concen: 0.32 ug/l
RT: 12.29 min Scan# 728
Delta R.T. -0.02 min
Lab File: RJV252.D
Acq: 10 Oct 2024 1:57 am

Tgt Ion:164 Resp: 7203

Ion	Ratio	Lower	Upper
164	100		
166	125.4	98.2	158.2
129	82.1	62.8	122.8
131	83.7	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/01/24 17:20
Project	: VA SALT LAKE CITY	Date Received:	10/03/24
Batch No.	: 24J033	Date Extracted:	10/10/24 02:26
Sample ID	: MW44S-GW100124	Date Analyzed:	10/10/24 02:26
Lab Samp ID:	24J033-06	Dilution Factor:	1
Lab File ID:	RJV253	Matrix:	WATER
Ext Btch ID:	VOO1J11	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.48J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	7.6	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.14J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	5B	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.36J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.6	10.0	106	70-130
Bromofluorobenzene	9.56	10.0	96	70-130
Toluene-d8	10.9	10.0	109	70-130
Dibromofluoromethane	10.3	10.0	103	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV253.D Vial: 22
Acq On : 10 Oct 2024 2:26 am Operator: DNguye/CLingl
Sample : 24J033-06 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 16 15:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

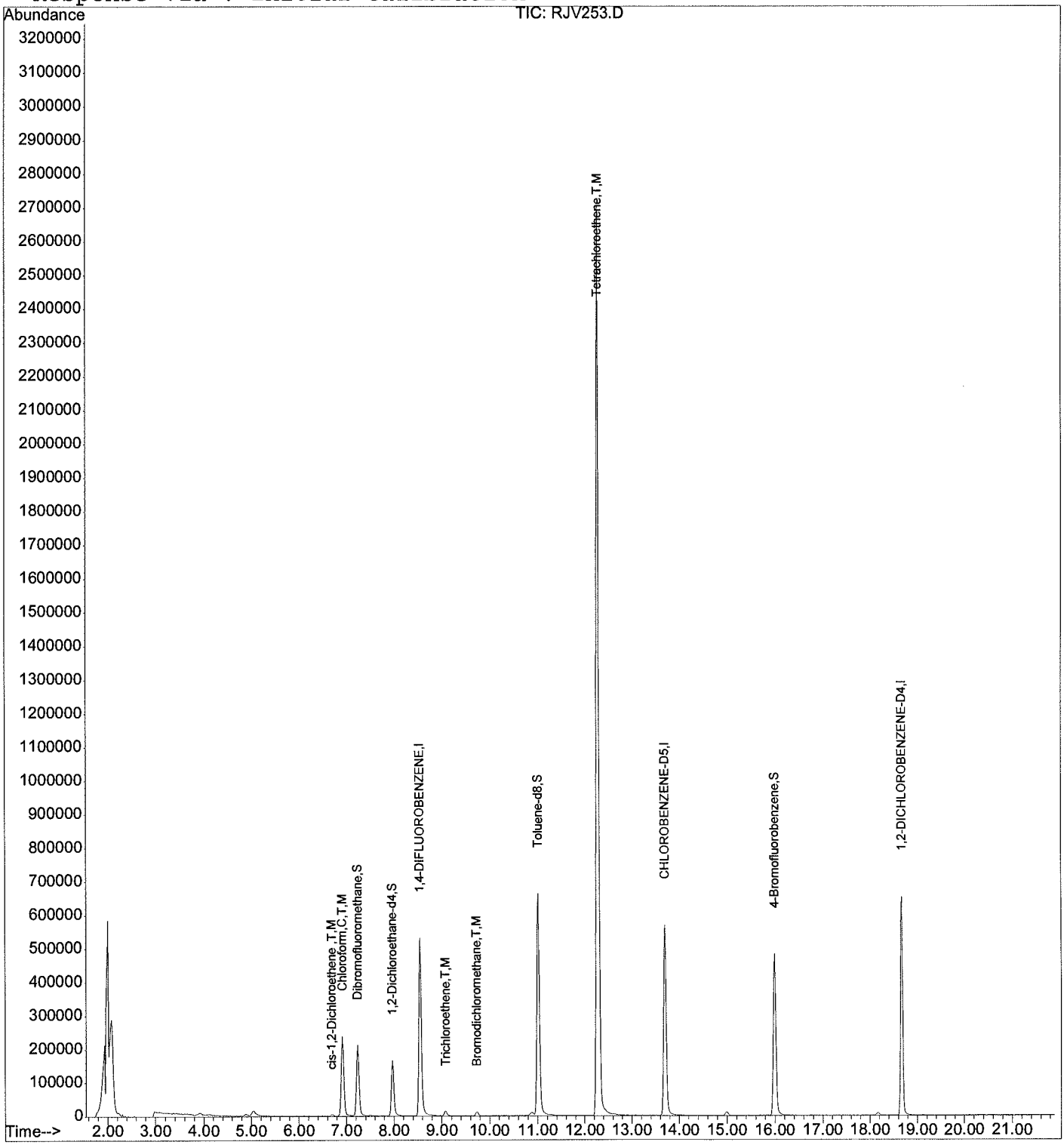
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	803062	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.70	117	668666	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.68	152	335023	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	251488	10.30	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.00%			
41) 1,2-Dichloroethane-d4	7.97	65	230790	10.63	ug/l	-0.02
Spiked Amount 10.000			Recovery = 106.30%			
54) Toluene-d8	11.02	98	887604	10.86	ug/l	-0.01
Spiked Amount 10.000			Recovery = 108.60%			
76) 4-Bromofluorobenzene	15.99	95	406359	9.56	ug/l	-0.02
Spiked Amount 10.000			Recovery = 95.60%			
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.69	96	3803	0.14	ug/l	89
31) Chloroform	6.92	83	369481	7.57	ug/l	94
44) Trichloroethene	9.08	130	10122	0.36	ug/l	96
47) Bromodichloromethane	9.73	83	16783	0.48	ug/l	95
61) Tetrachloroethene	12.28	164	1326056	58.27	ug/l	93

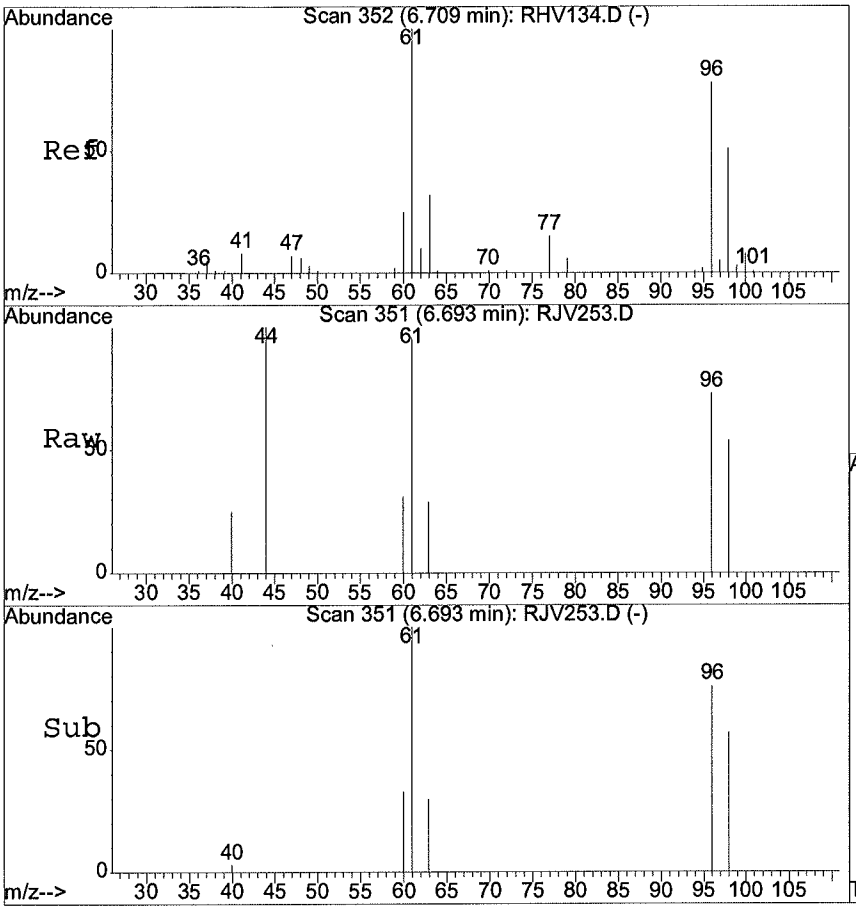
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV253.D Vial: 22
Acq On : 10 Oct 2024 2:26 am Operator: DNguye/CLing
Sample : 24J033-06 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 16 15:48 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

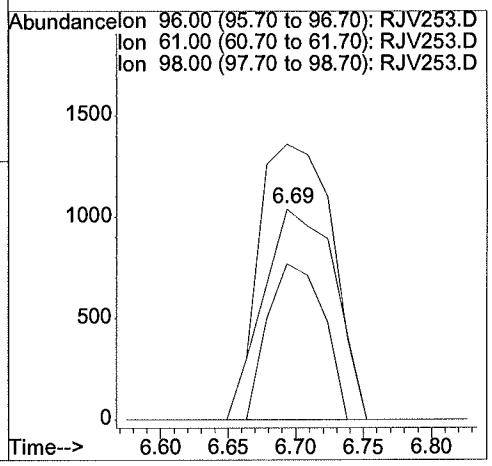


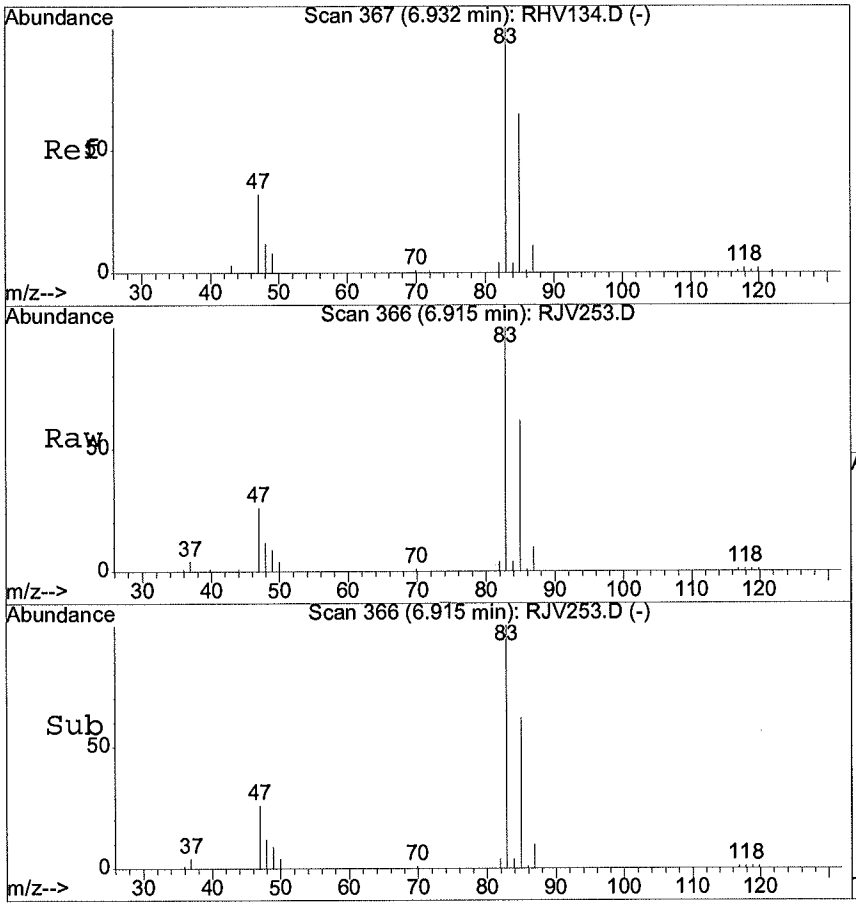


#30
cis-1,2-Dichloroethene
Concen: 0.14 ug/l
RT: 6.69 min Scan# 351
Delta R.T. -0.02 min
Lab File: RJV253.D
Acq: 10 Oct 2024 2:26 am

Tgt Ion: 96 Resp: 3803

Ion	Ratio	Lower	Upper
96	100		
61	134.1	119.2	179.2
98	57.5	35.1	95.1

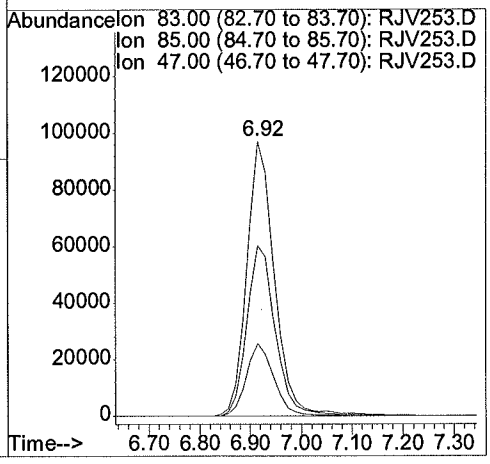


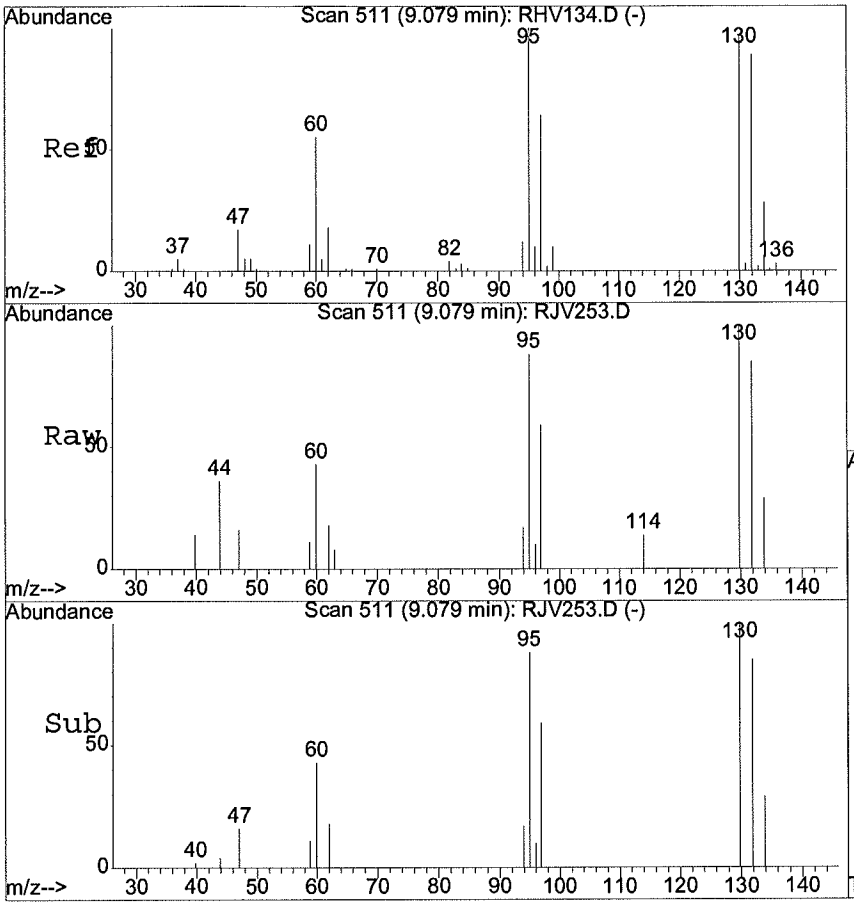


#31
Chloroform
Concen: 7.57 ug/l
RT: 6.92 min Scan# 366
Delta R.T. -0.02 min
Lab File: RJV253.D
Acq: 10 Oct 2024 2:26 am

Tgt Ion: 83 Resp: 369481

Ion	Ratio	Lower	Upper
83	100		
85	63.5	38.4	98.4
47	26.2	0.0	59.6

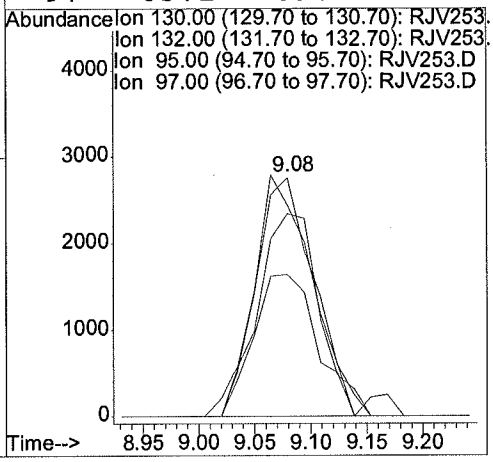


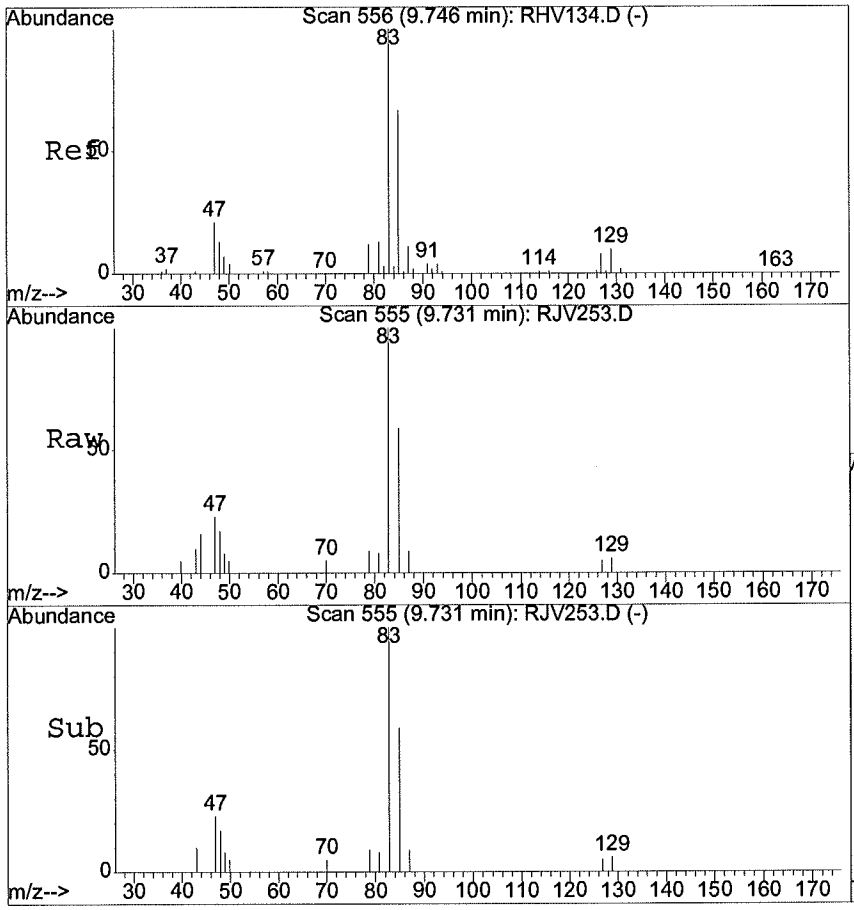


#44
Trichloroethene
Concen: 0.36 ug/l
RT: 9.08 min Scan# 511
Delta R.T. 0.00 min
Lab File: RJV253.D
Acq: 10 Oct 2024 2:26 am

Tgt Ion:130 Resp: 10122

Ion	Ratio	Lower	Upper
130	100		
132	89.1	62.7	122.7
95	103.0	72.0	132.0
97	63.1	39.1	99.1

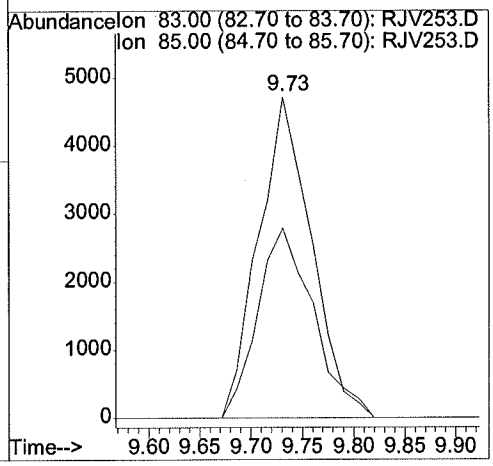


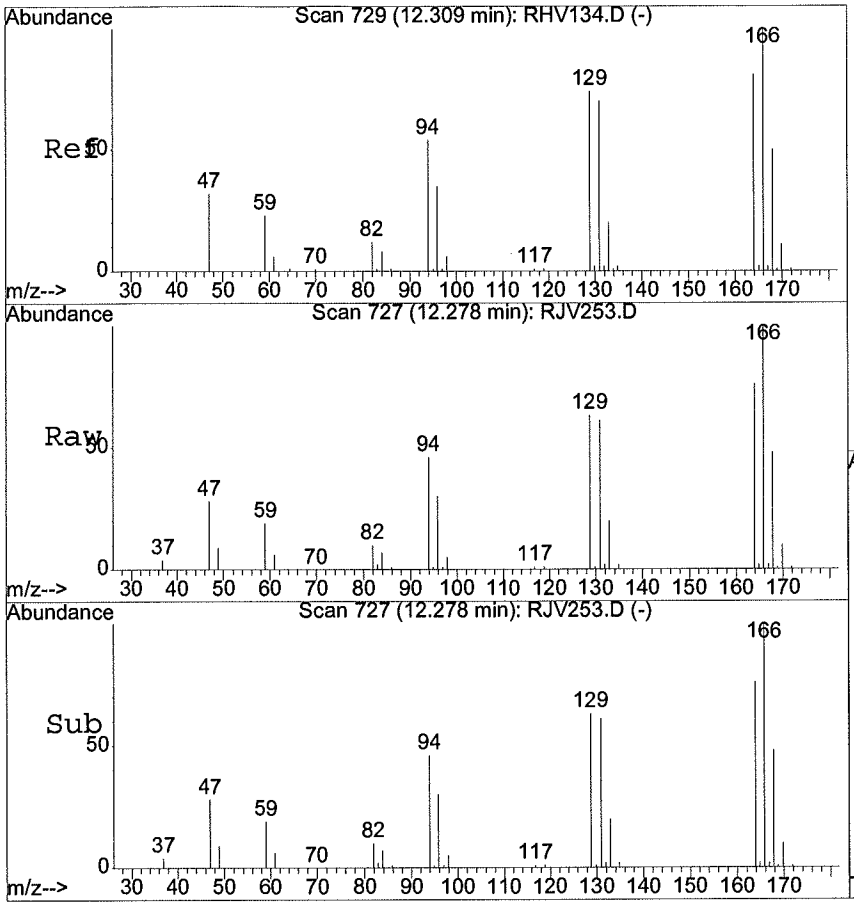


#47
Bromodichloromethane
Concen: 0.48 ug/l
RT: 9.73 min Scan# 555
Delta R.T. -0.01 min
Lab File: RJV253.D
Acq: 10 Oct 2024 2:26 am

Tgt Ion: 83 Resp: 16783

Ion	Ratio	Lower	Upper
83	100		
85	62.8	36.5	96.5

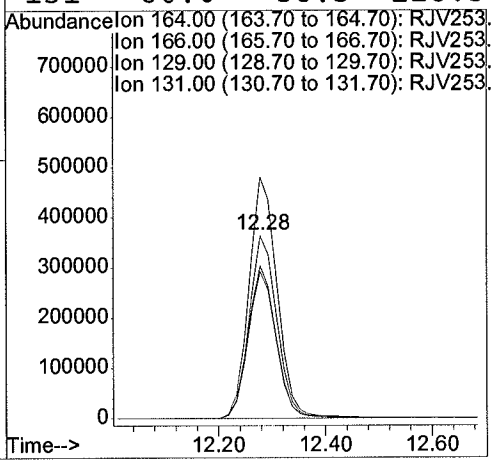




#61
Tetrachloroethene
Concen: 58.27 ug/l
RT: 12.28 min Scan# 727
Delta R.T. -0.03 min
Lab File: RJV253.D
Acq: 10 Oct 2024 2:26 am

Tgt Ion:164 Resp: 1326056

Ion	Ratio	Lower	Upper
164	100		
166	132.9	98.2	158.2
129	83.4	62.8	122.8
131	80.6	58.3	118.3



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/02/24 12:10
Project	: VA SALT LAKE CITY	Date Received:	10/03/24
Batch No.	: 24J033	Date Extracted:	10/10/24 02:55
Sample ID	: MW42D-GW100224	Date Analyzed:	10/10/24 02:55
Lab Samp ID:	24J033-07	Dilution Factor:	1
Lab File ID:	RJV254	Matrix:	WATER
Ext Btch ID:	VO01J11	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	5.6J	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.42J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.B	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.59J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	B7	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.67J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.B	10.0	10B	70-130
Bromofluorobenzene	9.39	10.0	94	70-130
Toluene-d8	11.1	10.0	111	70-130
Dibromofluoromethane	10.6	10.0	106	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV254.D
Acq On : 10 Oct 2024 2:55 am
Sample : 24J033-07
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 16 15:48 2024

Vial: 23
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

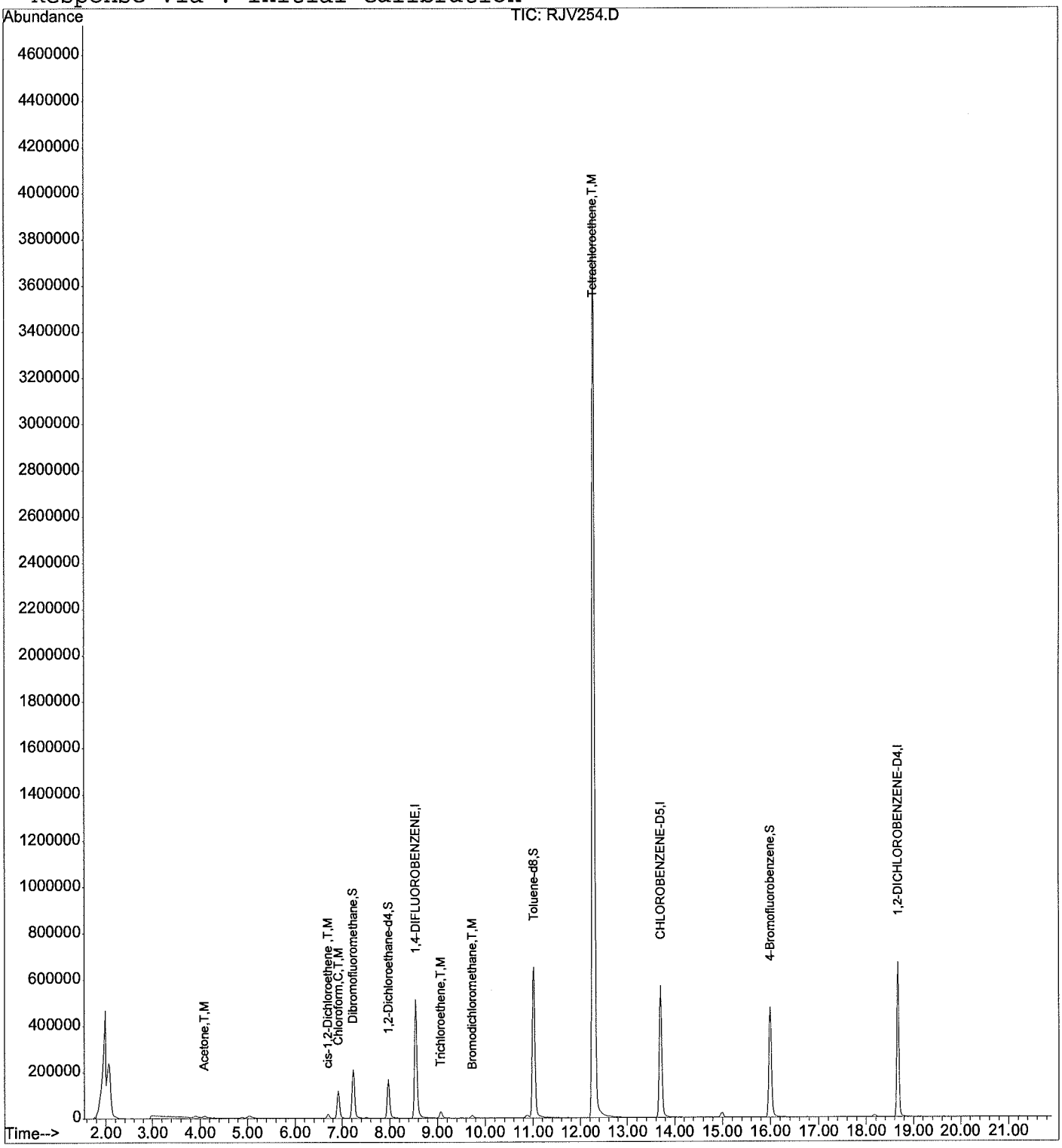
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	779217	10.00	ug/l	-0.02
53) CHLOROBENZENE-D5	13.70	117	655864	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	332055	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	251011	10.59	ug/l	-0.02
Spiked Amount 10.000			Recovery =	105.90%		
41) 1,2-Dichloroethane-d4	7.97	65	228185	10.83	ug/l	-0.02
Spiked Amount 10.000			Recovery =	108.30%		
54) Toluene-d8	11.02	98	893029	11.14	ug/l	-0.02
Spiked Amount 10.000			Recovery =	111.40%		
76) 4-Bromofluorobenzene	15.99	95	395499	9.39	ug/l	-0.02
Spiked Amount 10.000			Recovery =	93.90%		
Target Compounds						Qvalue
13) Acetone	4.09	43	27164	5.56	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	15577	0.59	ug/l	88
31) Chloroform	6.91	83	182009	3.84	ug/l	94
44) Trichloroethene	9.06	130	18207	0.67	ug/l	96
47) Bromodichloromethane	9.73	83	14412	0.42	ug/l	98
61) Tetrachloroethene	12.28	164	1932404	86.57	ug/l	93

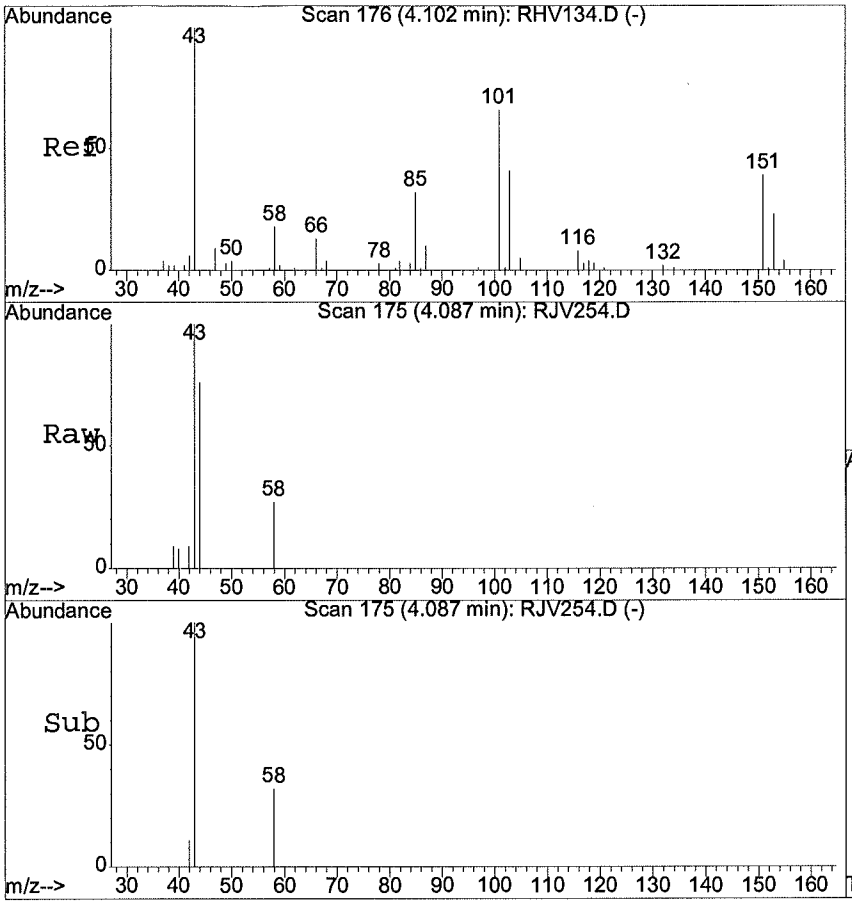
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV254.D Vial: 23
Acq On : 10 Oct 2024 2:55 am Operator: DNguye/CLing
Sample : 24J033-07 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 16 15:48 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

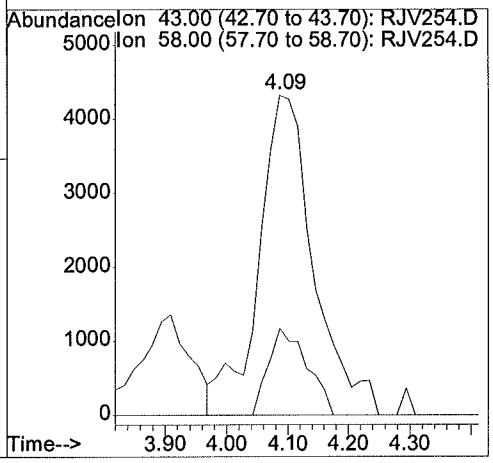


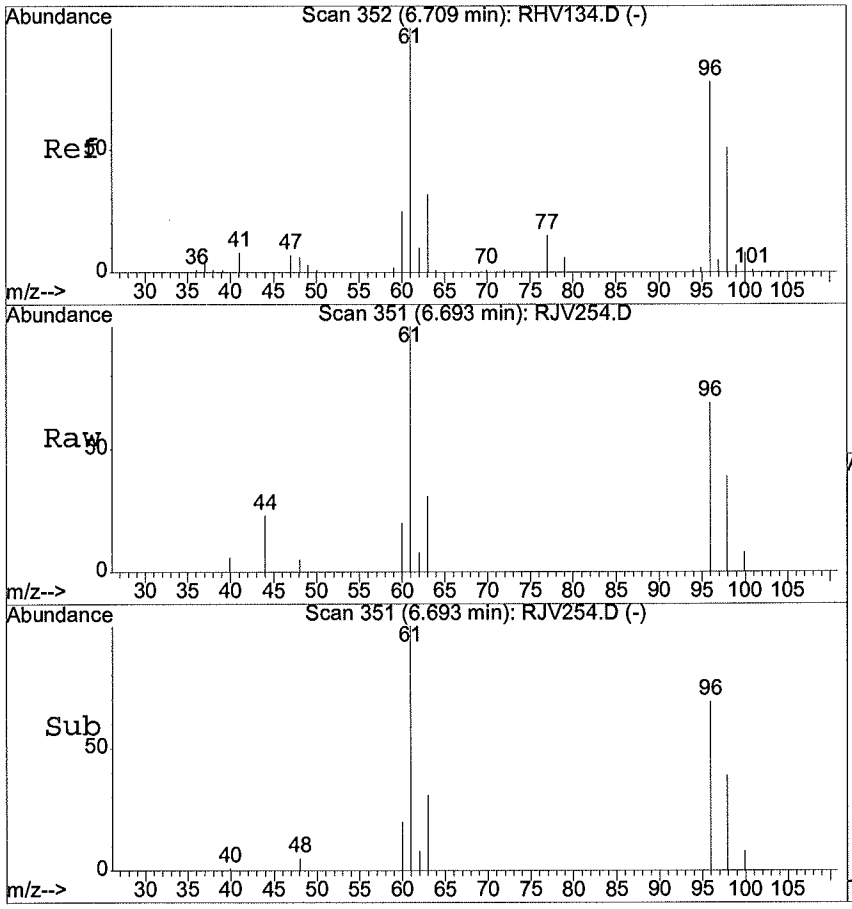


#13
Acetone
Concen: 5.56 ug/l
RT: 4.09 min Scan# 175
Delta R.T. -0.01 min
Lab File: RJV254.D
Acq: 10 Oct 2024 2:55 am

Tgt Ion: 43 Resp: 27164

Ion	Ratio	Lower	Upper
43	100		
58	19.3	0.0	49.5

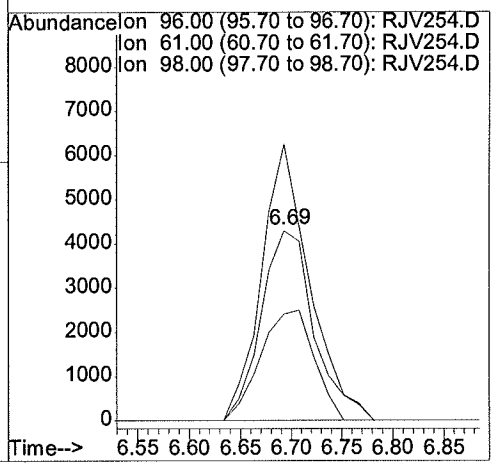


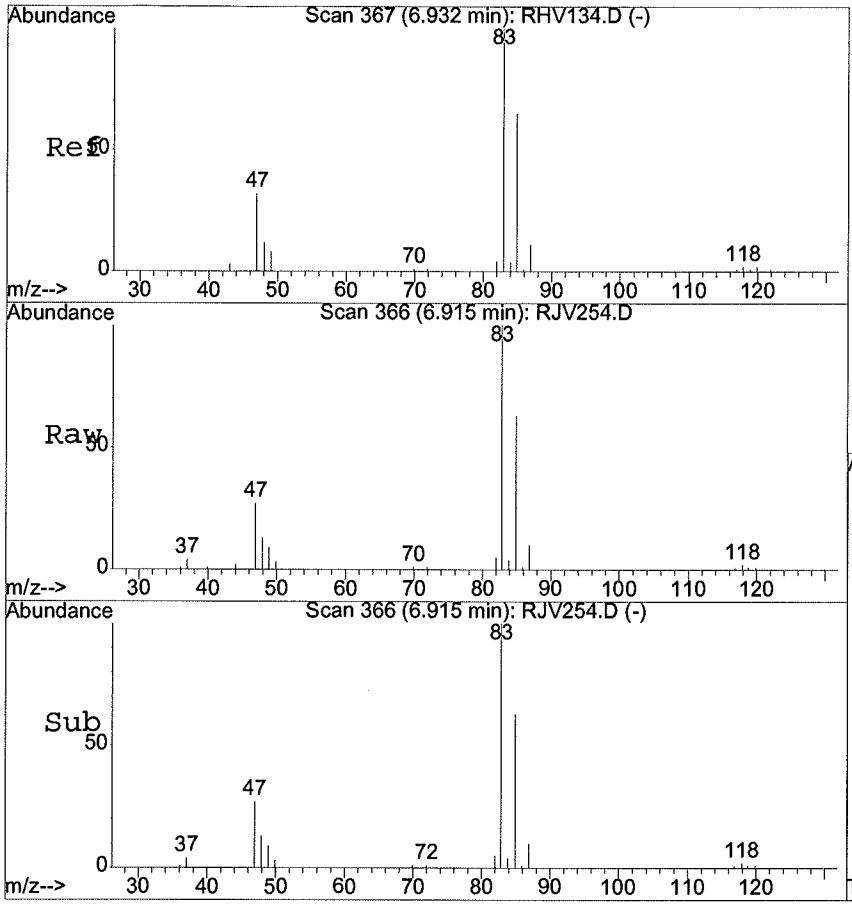


#30
cis-1,2-Dichloroethene
Concen: 0.59 ug/l
RT: 6.69 min Scan# 351
Delta R.T. -0.02 min
Lab File: RJV254.D
Acq: 10 Oct 2024 2:55 am

Tgt Ion: 96 Resp: 15577

Ion	Ratio	Lower	Upper
96	100		
61	132.2	119.2	179.2
98	58.9	35.1	95.1

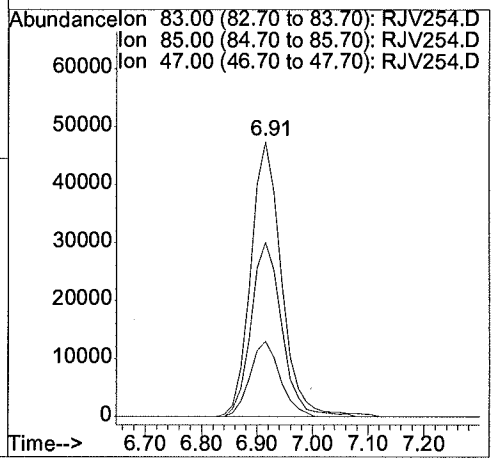


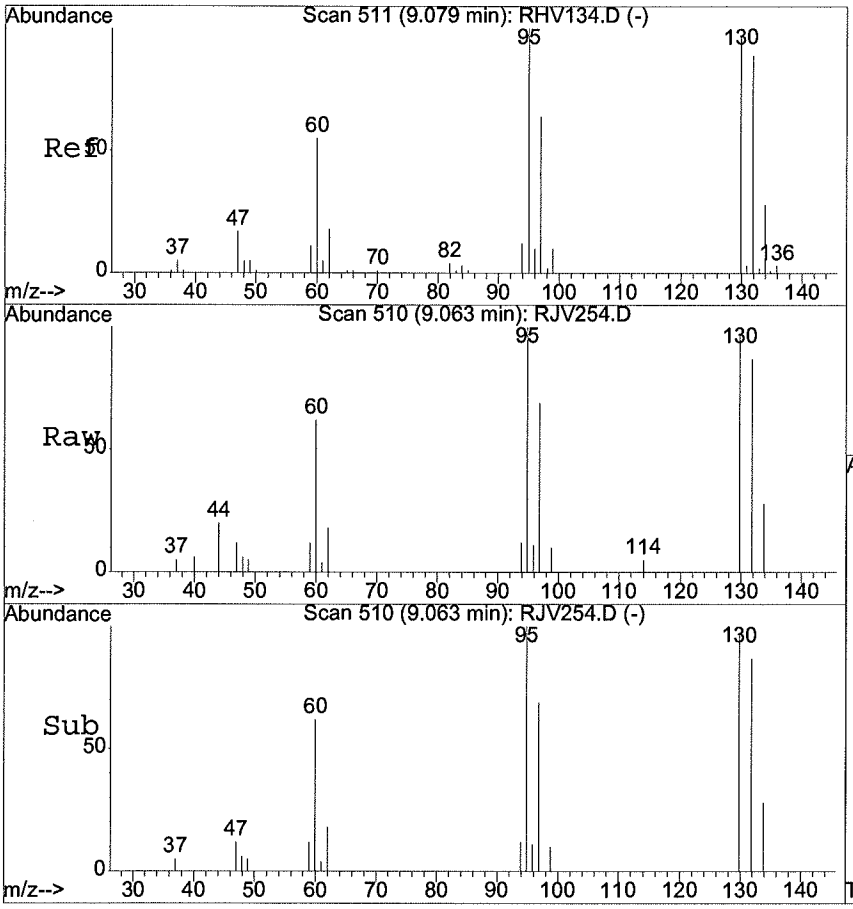


#31
Chloroform
Concen: 3.84 ug/l
RT: 6.91 min Scan# 366
Delta R.T. -0.02 min
Lab File: RJV254.D
Acq: 10 Oct 2024 2:55 am

Tgt Ion: 83 Resp: 182009

Ion	Ratio	Lower	Upper
83	100		
85	63.4	38.4	98.4
47	26.8	0.0	59.6

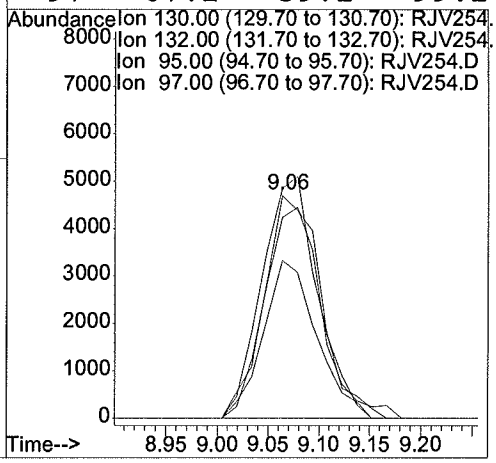


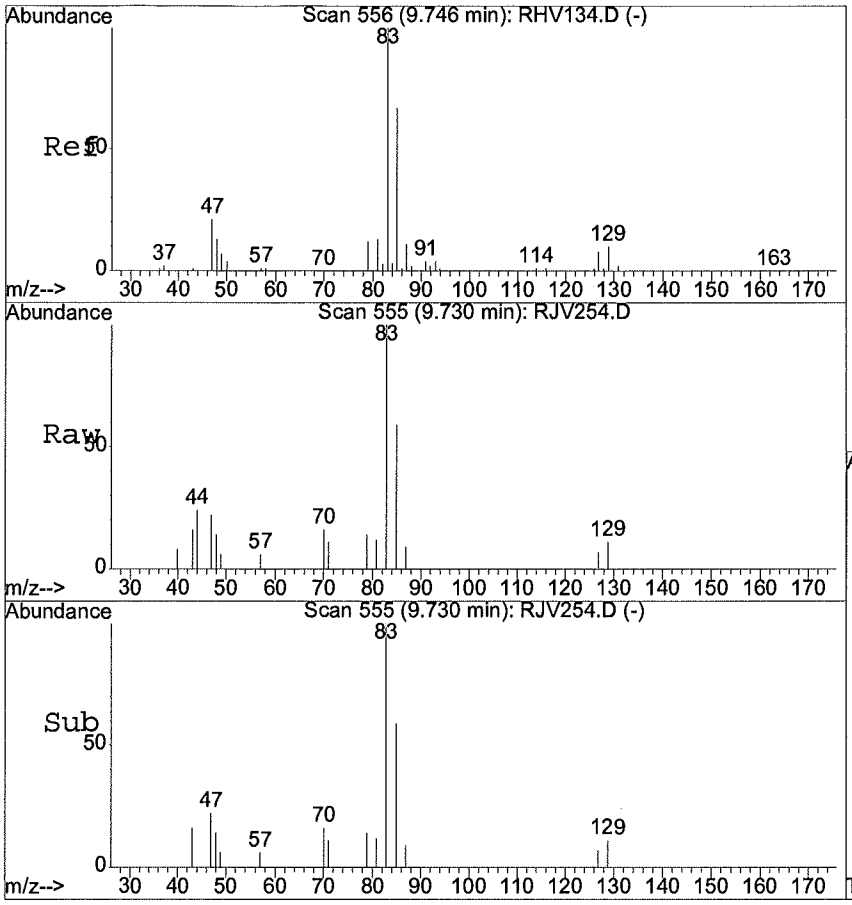


#44
Trichloroethene
Concen: 0.67 ug/l
RT: 9.06 min Scan# 510
Delta R.T. -0.02 min
Lab File: RJV254.D
Acq: 10 Oct 2024 2:55 am

Tgt Ion:130 Resp: 18207

Ion	Ratio	Lower	Upper
130	100		
132	96.2	62.7	122.7
95	107.1	72.0	132.0
97	67.2	39.1	99.1

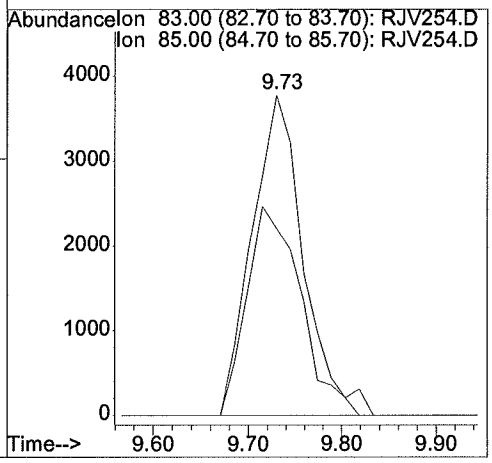


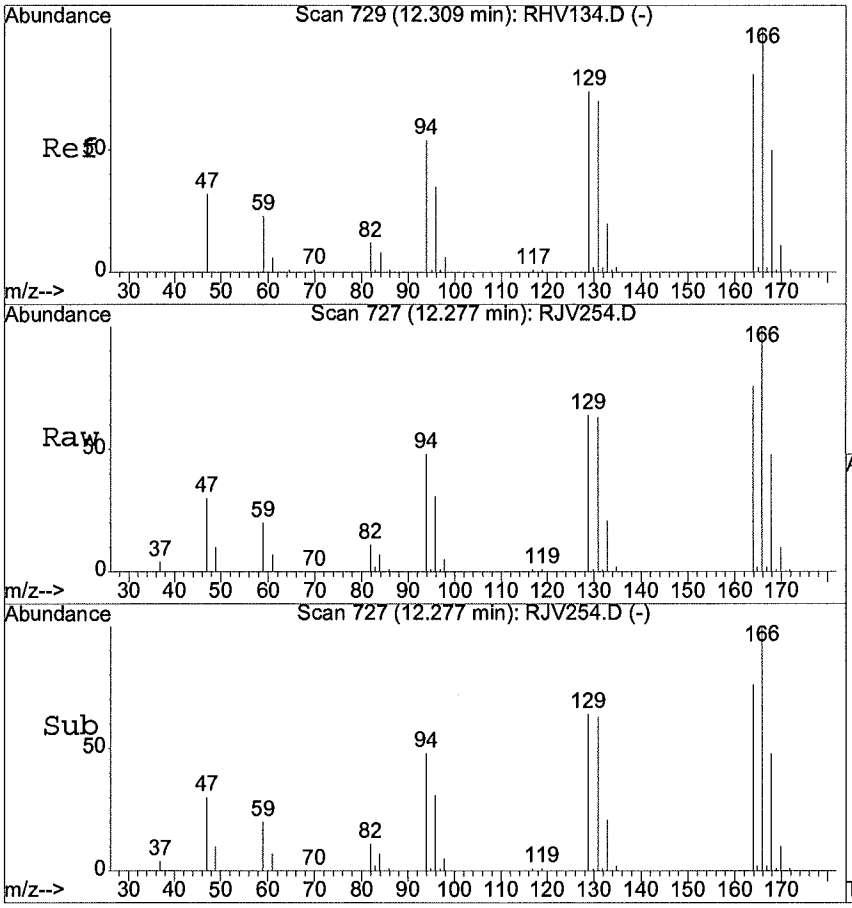


#47
Bromodichloromethane
Concen: 0.42 ug/l
RT: 9.73 min Scan# 555
Delta R.T. -0.02 min
Lab File: RJV254.D
Acq: 10 Oct 2024 2:55 am

Tgt Ion: 83 Resp: 14412

Ion	Ratio	Lower	Upper
83	100		
85	68.4	36.5	96.5

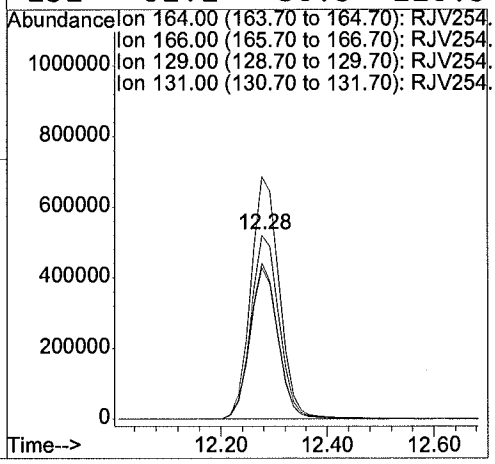




#61
Tetrachloroethene
Concen: 86.57 ug/l
RT: 12.28 min Scan# 727
Delta R.T. -0.03 min
Lab File: RJV254.D
Acq: 10 Oct 2024 2:55 am

Tgt Ion:164 Resp: 1932404

Ion	Ratio	Lower	Upper
164	100		
166	132.6	98.2	158.2
129	83.7	62.8	122.8
131	81.1	58.3	118.3



METHDD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/02/24 08:00
Project	: VA SALT LAKE CITY	Date Received:	10/03/24
Batch No.	: 24J033	Date Extracted:	10/09/24 23:01
Sample ID	: FB10-GW100224	Date Analyzed:	10/09/24 23:01
Lab Samp ID:	24J033-08	Dilution Factor:	1
Lab File ID:	RJV246	Matrix:	WATER
Ext Btch ID:	VD01J11	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.41J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.9	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.62J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	93	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.67J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECDVERY	QC LIMIT
1,2-Dichloroethane-d4	10.1	10.0	101	70-130
Bromofluorobenzene	9.43	10.0	94	70-130
Toluene-dB	10.9	10.0	109	70-130
Dibromofluoromethane	10.2	10.0	102	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV246.D Vial: 15
Acq On : 9 Oct 2024 11:01 pm Operator: DNguye/CLingl
Sample : 24J033-08 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 16 15:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	917783	10.00	ug/l	-0.02
53) CHLOROBENZENE-D5	13.70	117	749418	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	374123	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	283774	10.17	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.70%		
41) 1,2-Dichloroethane-d4	7.97	65	249533	10.06	ug/l	-0.02
Spiked Amount 10.000			Recovery =	100.60%		
54) Toluene-d8	11.02	98	994917	10.86	ug/l	-0.02
Spiked Amount 10.000			Recovery =	108.60%		
76) 4-Bromofluorobenzene	15.99	95	447517	9.43	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.30%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.69	96	19203	0.62	ug/l	83
31) Chloroform	6.92	83	217569	3.90	ug/l	93
44) Trichloroethene	9.08	130	21568	0.67	ug/l	95
47) Bromodichloromethane	9.73	83	16404	0.41	ug/l	99
61) Tetrachloroethene	12.29	164	2363494	92.66	ug/l	93

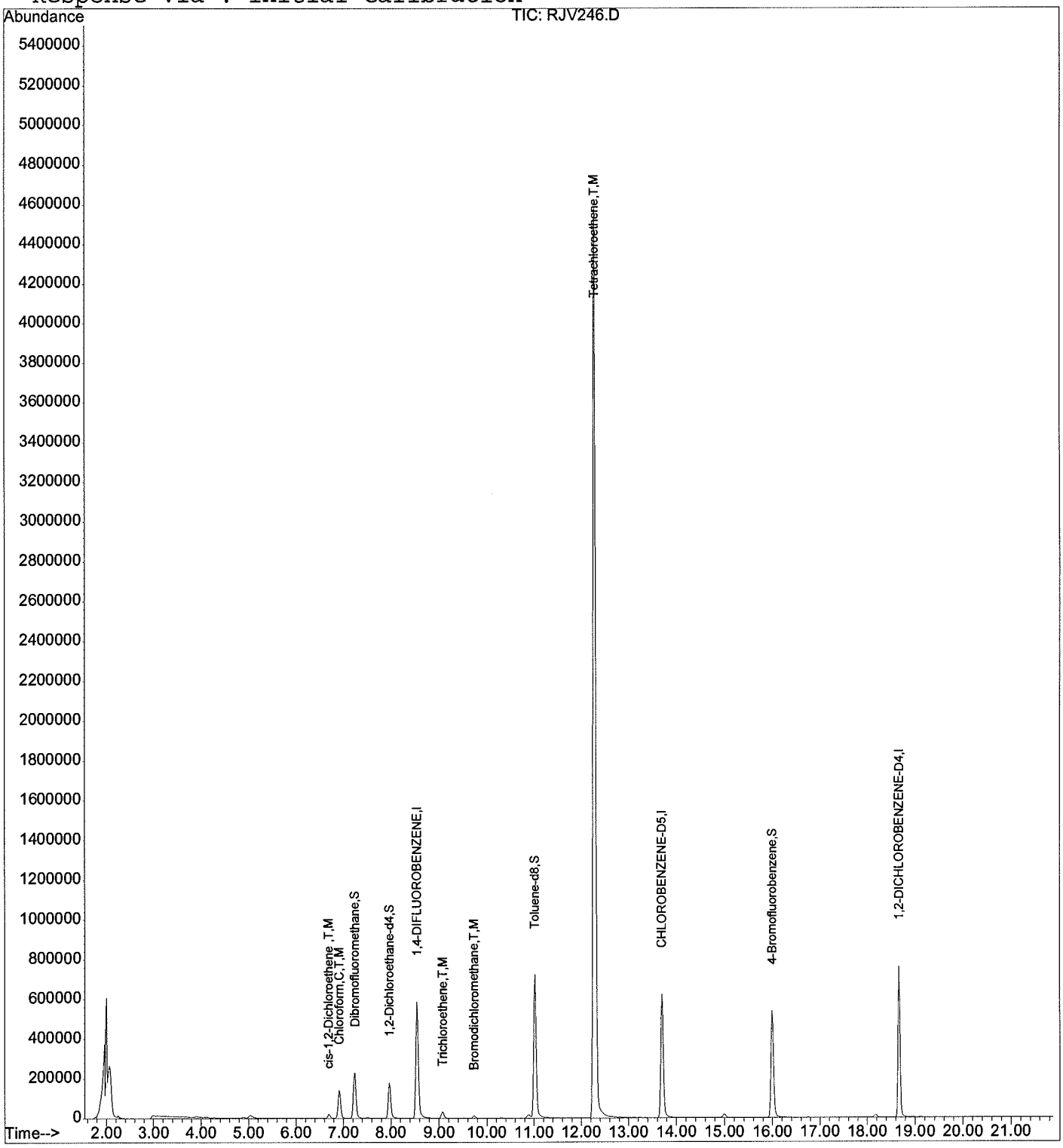
(#) = qualifier out of range (m) = manual integration
RJV246.D VO01H09.M Wed Oct 16 15:41:58 2024 Page 1

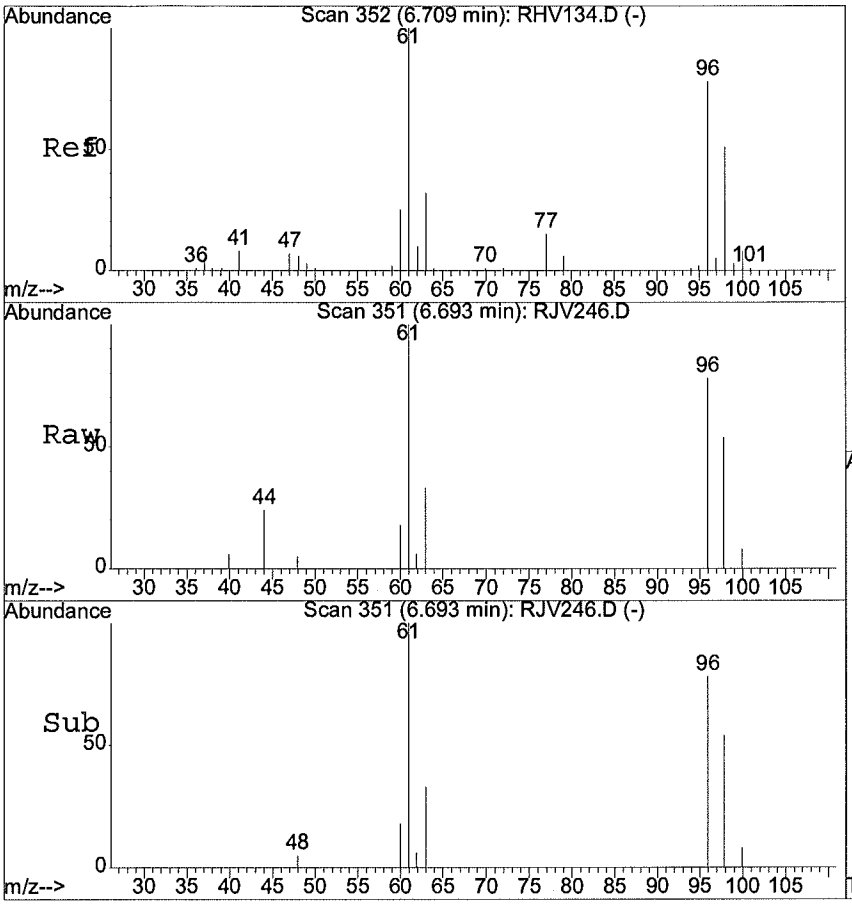
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV246.D
Acq On : 9 Oct 2024 11:01 pm
Sample : 24J033-08
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 16 15:41 2024

Vial: 15
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration

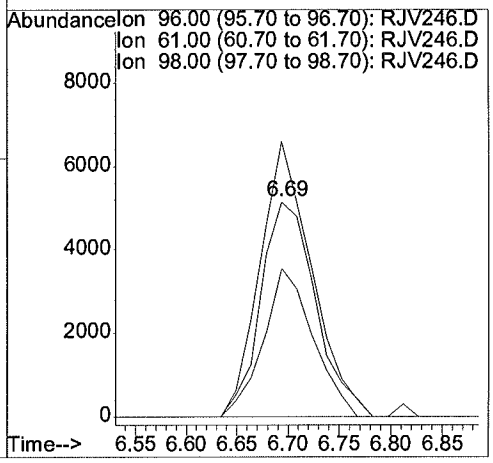


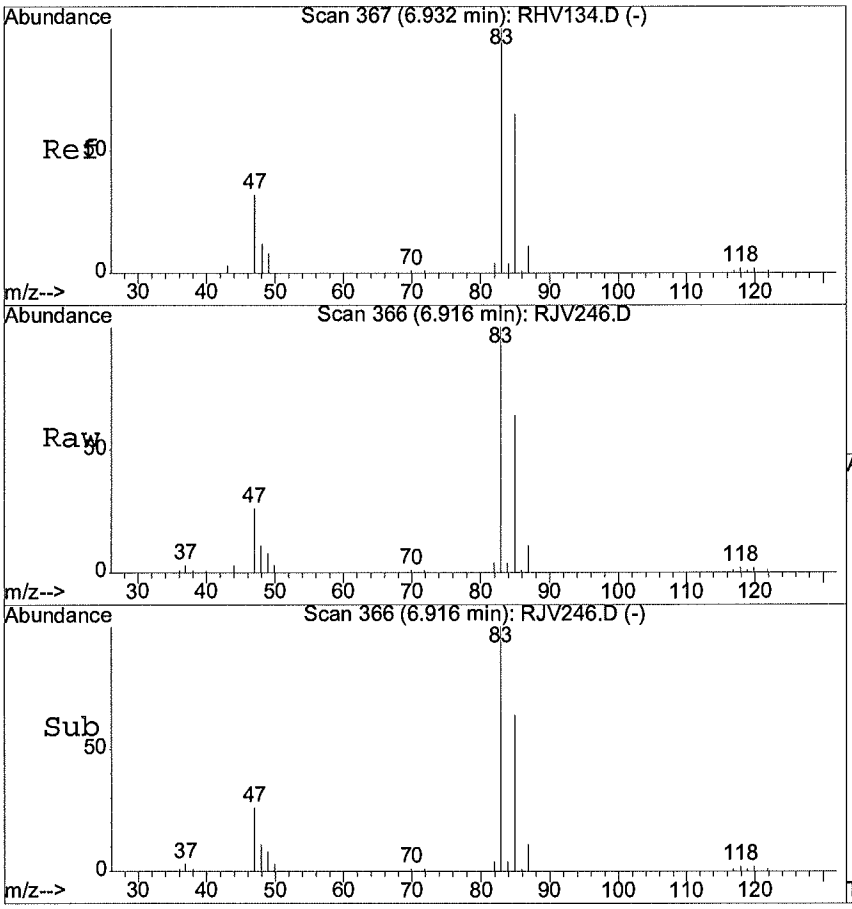


#30
cis-1,2-Dichloroethene
Concen: 0.62 ug/l
RT: 6.69 min Scan# 351
Delta R.T. -0.02 min
Lab File: RJV246.D
Acq: 9 Oct 2024 11:01 pm

Tgt Ion: 96 Resp: 19203

Ion	Ratio	Lower	Upper
96	100		
61	120.6	119.2	179.2
98	62.6	35.1	95.1

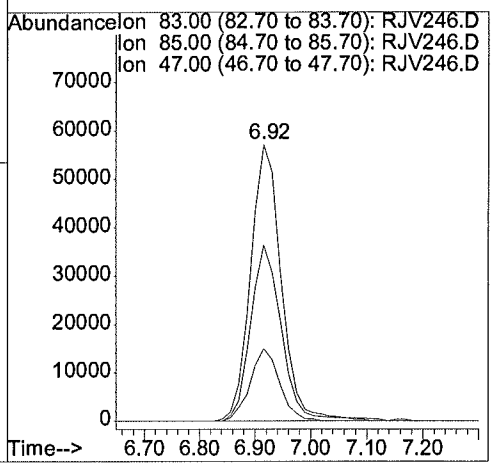


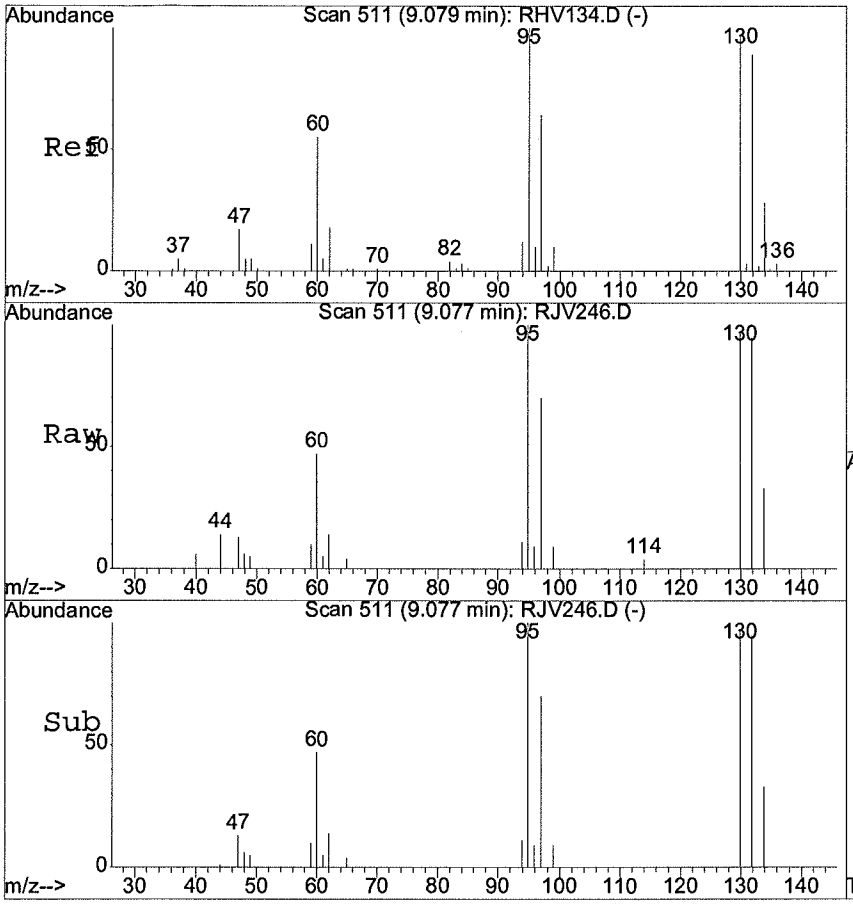


#31
Chloroform
Concen: 3.90 ug/l
RT: 6.92 min Scan# 366
Delta R.T. -0.02 min
Lab File: RJV246.D
Acq: 9 Oct 2024 11:01 pm

Tgt Ion: 83 Resp: 217569

Ion	Ratio	Lower	Upper
83	100		
85	63.4	38.4	98.4
47	24.9	0.0	59.6

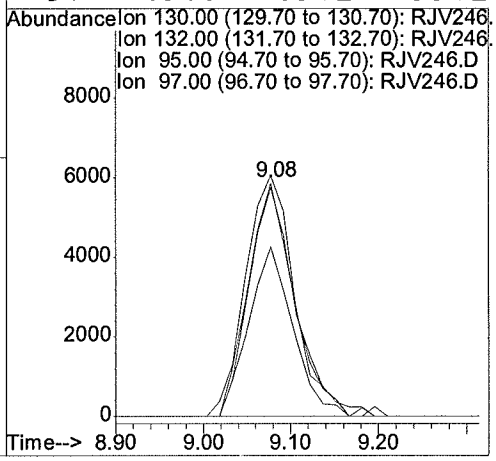


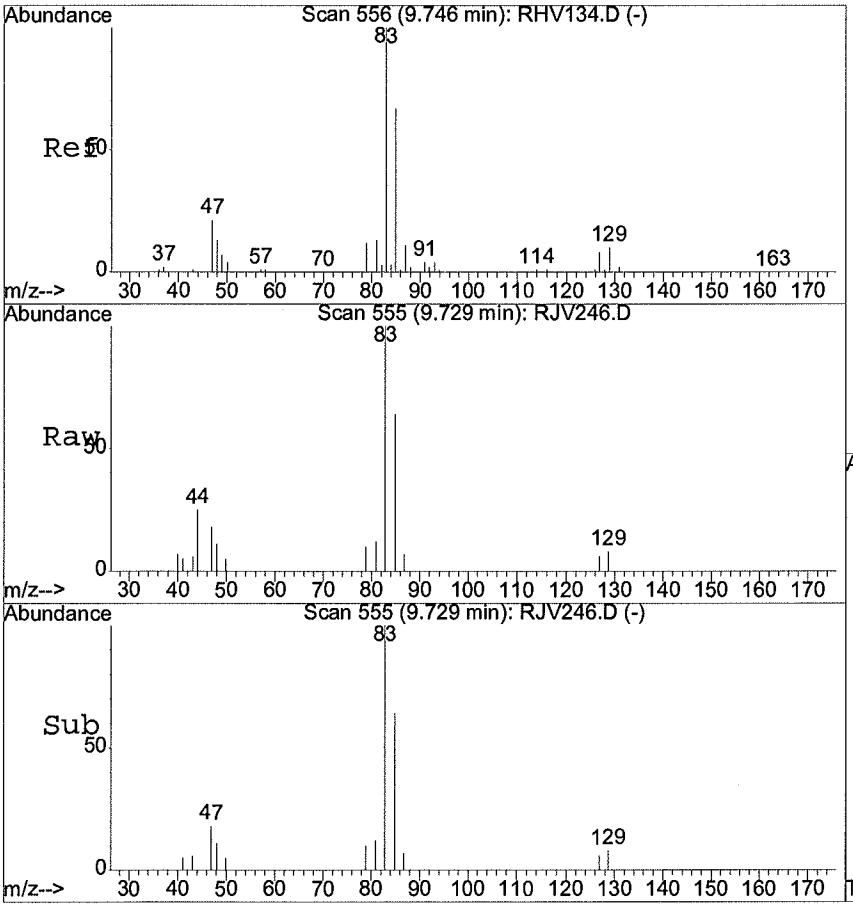


#44
Trichloroethene
Concen: 0.67 ug/l
RT: 9.08 min Scan# 511
Delta R.T. -0.00 min
Lab File: RJV246.D
Acq: 9 Oct 2024 11:01 pm

Tgt Ion:130 Resp: 21568

Ion	Ratio	Lower	Upper
130	100		
132	98.6	62.7	122.7
95	110.0	72.0	132.0
97	69.8	39.1	99.1

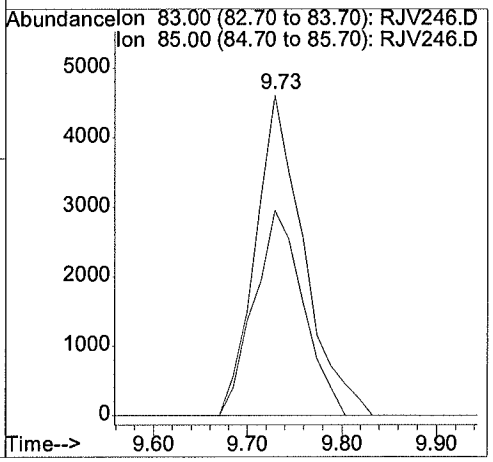


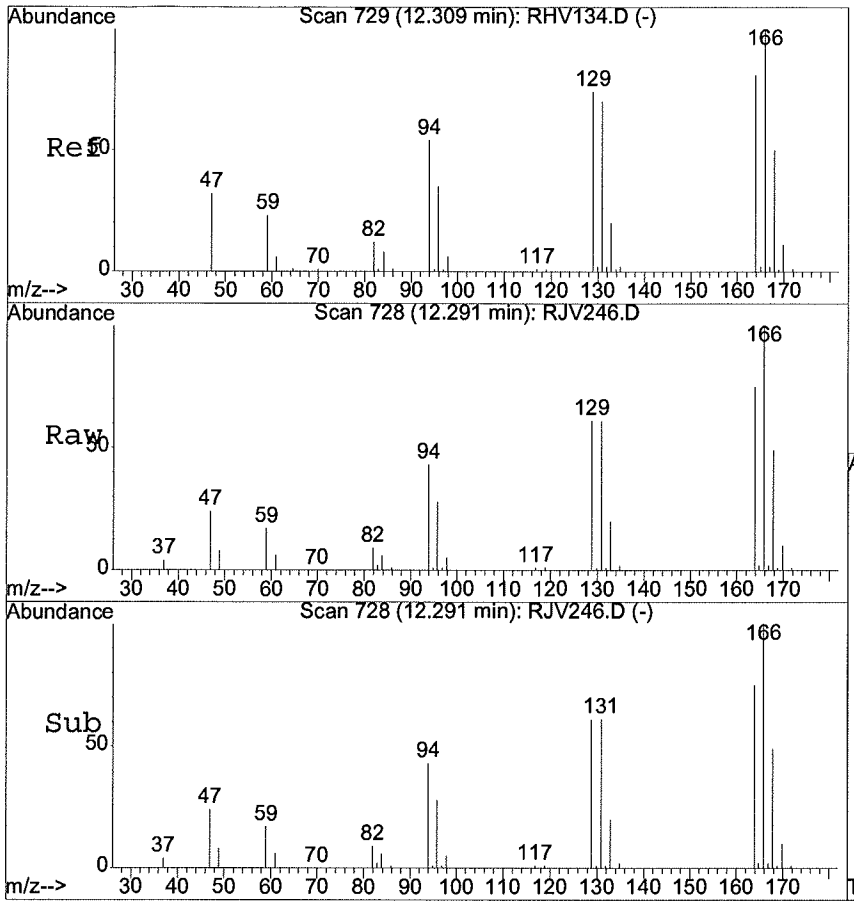


#47
Bromodichloromethane
Concen: 0.41 ug/l
RT: 9.73 min Scan# 555
Delta R.T. -0.02 min
Lab File: RJV246.D
Acq: 9 Oct 2024 11:01 pm

Tgt Ion: 83 Resp: 16404

Ion	Ratio	Lower	Upper
83	100		
85	65.3	36.5	96.5

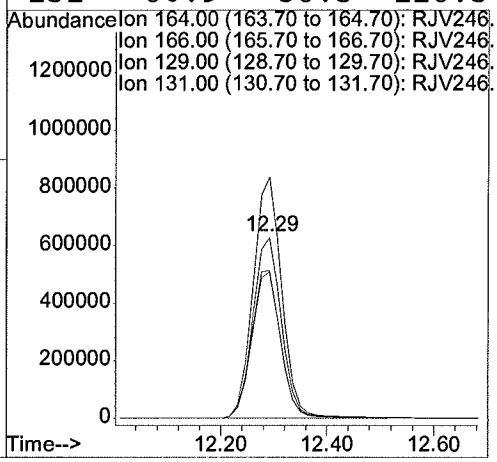




#61
Tetrachloroethene
Concen: 92.66 ug/l
RT: 12.29 min Scan# 728
Delta R.T. -0.02 min
Lab File: RJV246.D
Acq: 9 Oct 2024 11:01 pm

Tgt Ion:164 Resp: 2363494

Ion	Ratio	Lower	Upper
164	100		
166	132.8	98.2	158.2
129	83.2	62.8	122.8
131	80.9	58.3	118.3



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/02/24 14:00
Project	: VA SALT LAKE CITY	Date Received:	10/03/24
Batch No.	: 24J033	Date Extracted:	10/09/24 21:03
Sample ID	: TB06-GW100224	Date Analyzed:	10/09/24 21:03
Lab Samp ID:	24J033-09	Dilution Factor:	1
Lab File ID:	RJV242	Matrix:	WATER
Ext Btch ID:	V001J11	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.75	10.0	98	70-130
Bromofluorobenzene	9.34	10.0	93	70-130
Toluene-d8	11.1	10.0	111	70-130
Dibromofluoromethane	10.2	10.0	102	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV242.D Vial: 11
Acq On : 9 Oct 2024 9:03 pm Operator: DNguye/CLingl
Sample : 24J033-09 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 16 15:39 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	986008	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.70	117	806264	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.68	152	408673	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	305104	10.18	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.80%		
41) 1,2-Dichloroethane-d4	7.97	65	259975	9.75	ug/l	-0.02
Spiked Amount 10.000			Recovery =	97.50%		
54) Toluene-d8	11.02	98	1093425	11.10	ug/l	-0.02
Spiked Amount 10.000			Recovery =	111.00%		
76) 4-Bromofluorobenzene	15.99	95	484068	9.34	ug/l	-0.02
Spiked Amount 10.000			Recovery =	93.40%		

Target Compounds Qvalue

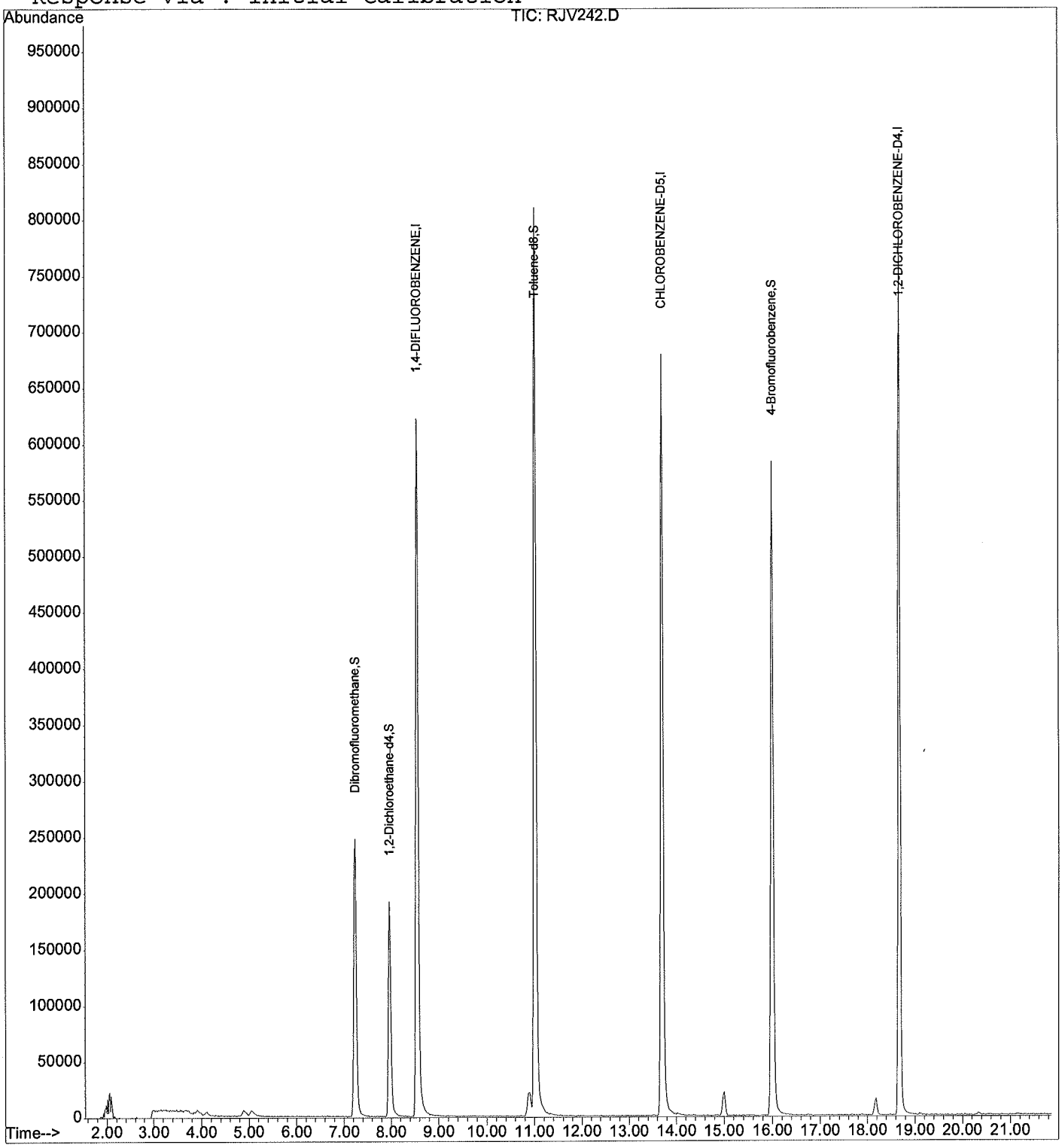
(#) = qualifier out of range (m) = manual integration
RJV242.D VO01H09.M Wed Oct 16 15:40:02 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV242.D
Acq On : 9 Oct 2024 9:03 pm
Sample : 24J033-09
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 16 15:39 2024

Vial: 11
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



QC SUMMARIES

METHOD SW50308/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/09/24 18:34
Project	: VA SALT LAKE CITY	Date Received:	10/09/24
Batch No.	: 24J033	Date Extracted:	10/09/24 18:34
Sample ID	: MBLK1W	Date Analyzed:	10/09/24 18:34
Lab Samp ID:	VO01J11B	Dilution Factor:	1
Lab File ID:	RJV237	Matrix:	WATER
Ext Btch ID:	VO01J11	% Moisture:	NA
Calib. Ref.:	RHV134	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	8.96	10.0	90	70-130
Bromofluorobenzene	9.31	10.0	93	70-130
Toluene-d8	11.0	10.0	110	70-130
Dibromofluoromethane	9.80	10.0	98	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: V001J11B	V001J11L	V001J11C
LAB FILE ID	: RJV237	RJV234	RJV235
DATE PREPARED	: 10/09/24 18:34	10/09/24 17:05	10/09/24 17:35
DATE ANALYZED	: 10/09/24 18:34	10/09/24 17:05	10/09/24 17:35
PREP BATCH	: V001J11	V001J11	V001J11
CALIBRATION REF	: RHV134	RHV134	RHV134

ACCESSION:

PARAMETERS	MBResult (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	9.04	90	10.0	9.28	93	3	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.31	93	10.0	9.74	97	5	71-121	20
1,1,2-Trichloroethane	ND	10.0	12.1	121*	10.0	12.3	123*	2	80-119	20
1,1-Dichloroethane	ND	10.0	12.0	120	10.0	12.0	120	0	77-125	20
1,1-Dichloroethene	ND	10.0	11.2	112	10.0	11.2	112	0	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	8.70	87	10.0	8.79	88	1	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	8.60	86	10.0	8.75	88	2	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.24	82	10.0	8.43	84	2	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	8.47	85	10.0	8.62	86	2	62-138	20
1,2-Dichlorobenzene	ND	10.0	8.49	85	10.0	8.63	86	2	80-119	20
1,2-Dichloroethane	ND	10.0	9.43	94	10.0	9.53	95	1	73-128	20
1,2-Dichloropropane	ND	10.0	12.8	128*	10.0	12.9	129*	1	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	7.82	78	10.0	7.94	79	2	75-124	20
1,3-Dichlorobenzene	ND	10.0	8.43	84	10.0	8.66	87	3	80-119	20
1,4-Dichlorobenzene	ND	10.0	8.62	86	10.0	8.69	87	1	79-118	20
2-Butanone	ND	50.0	55.7	111	50.0	55.8	112	0	56-143	20
2-Hexanone	ND	50.0	56.3	113	50.0	58.1	116	3	57-139	20
Acetone	ND	50.0	54.7	109	50.0	54.5	109	0	39-160	20
Benzene	ND	10.0	12.7	127*	10.0	12.9	129*	2	79-120	20
Bromochloromethane	ND	10.0	11.9	119	10.0	12.2	122*	2	78-120	20
Bromodichloromethane	ND	10.0	9.76	98	10.0	10.0	100	2	79-125	20
Bromoform	ND	10.0	7.21	72	10.0	7.77	78	7	66-130	20
Bromomethane	ND	10.0	9.68	97	10.0	9.55	96	1	53-141	20
Carbon Disulfide	ND	10.0	11.1	111	10.0	11.3	113	2	64-133	20
Carbon Tetrachloride	ND	10.0	8.32	83	10.0	8.53	85	2	72-136	20
Chlorobenzene	ND	10.0	11.0	110	10.0	11.2	112	2	82-118	20
Chloroethane	ND	10.0	12.5	125	10.0	11.7	117	7	60-138	20
Chloroform	ND	10.0	10.4	104	10.0	10.4	104	0	79-124	20
Chloromethane	ND	10.0	11.9	119	10.0	11.0	110	8	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	12.0	120	10.0	12.2	122	2	78-123	20
Dibromochloromethane	ND	10.0	10.4	104	10.0	10.8	108	4	74-126	20
Dichlorodifluoromethane	ND	10.0	9.59	96	10.0	9.07	91	6	32-152	20
Ethylbenzene	ND	10.0	11.6	116	10.0	11.8	118	2	79-121	20
Isopropylbenzene	ND	10.0	11.9	119	10.0	12.7	127	7	72-131	20
m,p-Xylene	ND	20.0	22.1	111	20.0	22.3	112	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	58.6	117	50.0	60.2	120	3	67-130	20
Methylene Chloride	ND	10.0	12.5	125*	10.0	12.7	127*	2	74-124	20
tert-Butyl Methyl Ether	ND	10.0	13.7	137*	10.0	14.0	140*	2	71-124	20
o-Xylene	ND	10.0	12.9	129*	10.0	13.6	136*	5	78-122	20
Styrene	ND	10.0	13.5	135*	10.0	14.3	143*	6	78-123	20
Tetrachloroethene	ND	10.0	11.5	115	10.0	11.7	117	2	74-129	20
Toluene	ND	10.0	12.6	126*	10.0	12.8	128*	2	80-121	20
Trans-1,2-DCE	ND	10.0	11.9	119	10.0	11.9	119	0	75-124	20
cis-1,3-Dichloropropene	ND	10.0	11.6	116	10.0	11.5	115	1	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	11.4	114	10.0	11.3	113	1	73-127	20
TCE	ND	10.0	10.4	104	10.0	10.8	108	4	79-123	20
Trichlorofluoromethane	ND	10.0	7.09	71	10.0	6.85	69	3	65-141	20
Vinyl Chloride	ND	10.0	11.3	113	10.0	11.1	111	2	58-137	20
1,2-Dibromoethane	ND	10.0	11.1	111	10.0	11.3	113	2	77-121	20
Vinyl Acetate	ND	10.0	9.15	92	10.0	8.55	86	7	54-146	20
Trichlorotrifluoroethane	ND	10.0	13.0	130	10.0	13.1	131	1	70-136	20
Methyl Acetate	ND	10.0	11.6	116	10.0	10.9	109	6	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	8.99	90	10.0	8.98	90	70-130
Bromofluorobenzene	10.0	9.41	94	10.0	9.36	94	70-130
Toluene-d8	10.0	11.1	111	10.0	11.1	111	70-130
Dibromofluoromethane	10.0	9.85	99	10.0	9.97	100	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate
* Out of QC Limit

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/11/24 17:06
Project	: VA SALT LAKE CITY	Date Received:	10/11/24
Batch No.	: 24J033	Date Extracted:	10/11/24 17:06
Sample ID	: MBLK2W	Date Analyzed:	10/11/24 17:06
Lab Samp ID:	VO06J12B	Dilution Factor:	1
Lab File ID:	RJW260	Matrix:	WATER
Ext Btch ID:	VO06J12	% Moisture:	NA
Calib. Ref.:	RIW080	Instrument ID:	06

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	9.81	10.0	98	70-130
Bromofluorobenzene	9.78	10.0	98	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	10.9	10.0	109	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : PMai Analyzed by : PMai
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
8ATCH NO. : 24J033
METHOD : SW5030B/8260C

MATRIX : WATER % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID : MBLK2W LCS2W
LAB SAMPLE ID : V006J12B V006J12C
LAB FILE ID : RJW260 RJW278
DATE PREPARED : 10/11/24 17:06 10/12/24 00:57
DATE ANALYZED : 10/11/24 17:06 10/12/24 00:57
PREP 8ATCH : V006J12 V006J12
CALI8RATION REF: RIW080 RIW080

ACCESSION:

PARAMETERS	M8Result (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	QCLimit (%)
1,1,1-Trichloroethane	ND	10.0	9.89	99	74-131
1,1,2,2-Tetrachloroethane	ND	10.0	10.1	101	71-121
1,1,2-Trichloroethane	ND	10.0	11.2	112	80-119
1,1-Dichloroethane	ND	10.0	9.89	99	77-125
1,1-Dichloroethene	ND	10.0	7.67	77	71-131
1,2,3-Trichlorobenzene	ND	10.0	7.30	73	69-129
1,2,4-Trichlorobenzene	ND	10.0	7.75	78	69-130
1,2,4-Trimethylbenzene	ND	10.0	9.65	97	76-124
1,2-Dibromo-3-chloropropane	ND	10.0	8.25	83	62-138
1,2-Dichlorobenzene	ND	10.0	10.3	103	80-119
1,2-Dichloroethane	ND	10.0	9.68	97	73-128
1,2-Dichloropropane	ND	10.0	9.88	99	78-122
1,3,5-Trimethylbenzene	ND	10.0	9.85	99	75-124
1,3-Dichlorobenzene	ND	10.0	9.97	100	80-119
1,4-Dichlorobenzene	ND	10.0	9.92	99	79-118
2-Butanone	ND	50.0	58.2	116	56-143
2-Hexanone	ND	50.0	57.6	115	57-139
Acetone	ND	50.0	52.4	105	39-160
8enzene	ND	10.0	10.7	107	79-120
8romochloromethane	ND	10.0	11.6	116	78-120
8romodichloromethane	ND	10.0	10.4	104	79-125
8romoform	ND	10.0	10.1	101	66-130
8romomethane	ND	10.0	11.2	112	53-141
Carbon Disulfide	ND	10.0	ND	0.00	64-133
Carbon Tetrachloride	ND	10.0	9.94	99	72-136
Chlorobenzene	ND	10.0	11.0	110	82-118
Chloroethane	ND	10.0	10.6	106	60-138
Chloroform	ND	10.0	10.6	106	79-124
Chloromethane	ND	10.0	9.50	95	50-139
cis-1,2-Dichloroethylene	ND	10.0	10.6	106	78-123
Dibromochloromethane	ND	10.0	11.1	111	74-126
Dichlorodifluoromethane	ND	10.0	8.93	89	32-152
Ethylbenzene	ND	10.0	9.83	98	79-121
Isopropylbenzene	ND	10.0	9.80	98	72-131
m,p-Xylene	ND	20.0	19.4	97	80-121
4-Methyl-2-Pentanone	ND	50.0	60.6	121	67-130
Methylene Chloride	ND	10.0	8.43	84	74-124
tert-Butyl Methyl Ether	ND	10.0	12.8	128*	71-124
o-Xylene	ND	10.0	10.3	103	78-122
Styrene	ND	10.0	10.0	100	78-123
Tetrachloroethene	ND	10.0	10.9	109	74-129
Toluene	ND	10.0	11.2	112	80-121
Trans-1,2-DCE	ND	10.0	10.3	103	75-124
cis-1,3-Dichloropropene	ND	10.0	9.87	99	75-124
Trans-1,3-Dichloropropene	ND	10.0	9.83	98	73-127
TCE	ND	10.0	11.4	114	79-123
Trichlorofluoromethane	ND	10.0	11.5	115	65-141
Vinyl Chloride	ND	10.0	9.06	91	58-137
1,2-Dibromoethane	ND	10.0	10.8	108	77-121
Vinyl Acetate	ND	10.0	8.23	82	54-146
Trichlorotrifluoroethane	ND	10.0	5.76	58*	70-136
Methyl Acetate	ND	10.0	10.6	106	50-136

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	9.68	97	70-130
Bromofluorobenzene	10.0	9.80	98	70-130
Toluene-d8	10.0	10.3	103	70-130
Dibromofluoromethane	10.0	10.9	109	70-130

M8: Method 8lank sample LCS: Lab Control Sample
* Out of QC Limit

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV237.D Vial: 6
Acq On : 9 Oct 2024 6:34 pm Operator: DNguye/CLingl
Sample : VO01J11B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 16 15:36 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1218981	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	959786	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	480878	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	363119	9.80	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.00%			
41) 1,2-Dichloroethane-d4	7.98	65	295353	8.96	ug/l	0.00
Spiked Amount 10.000			Recovery = 89.60%			
54) Toluene-d8	11.02	98	1285399	10.96	ug/l	-0.02
Spiked Amount 10.000			Recovery = 109.60%			
76) 4-Bromofluorobenzene	16.01	95	567836	9.31	ug/l	0.00
Spiked Amount 10.000			Recovery = 93.10%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

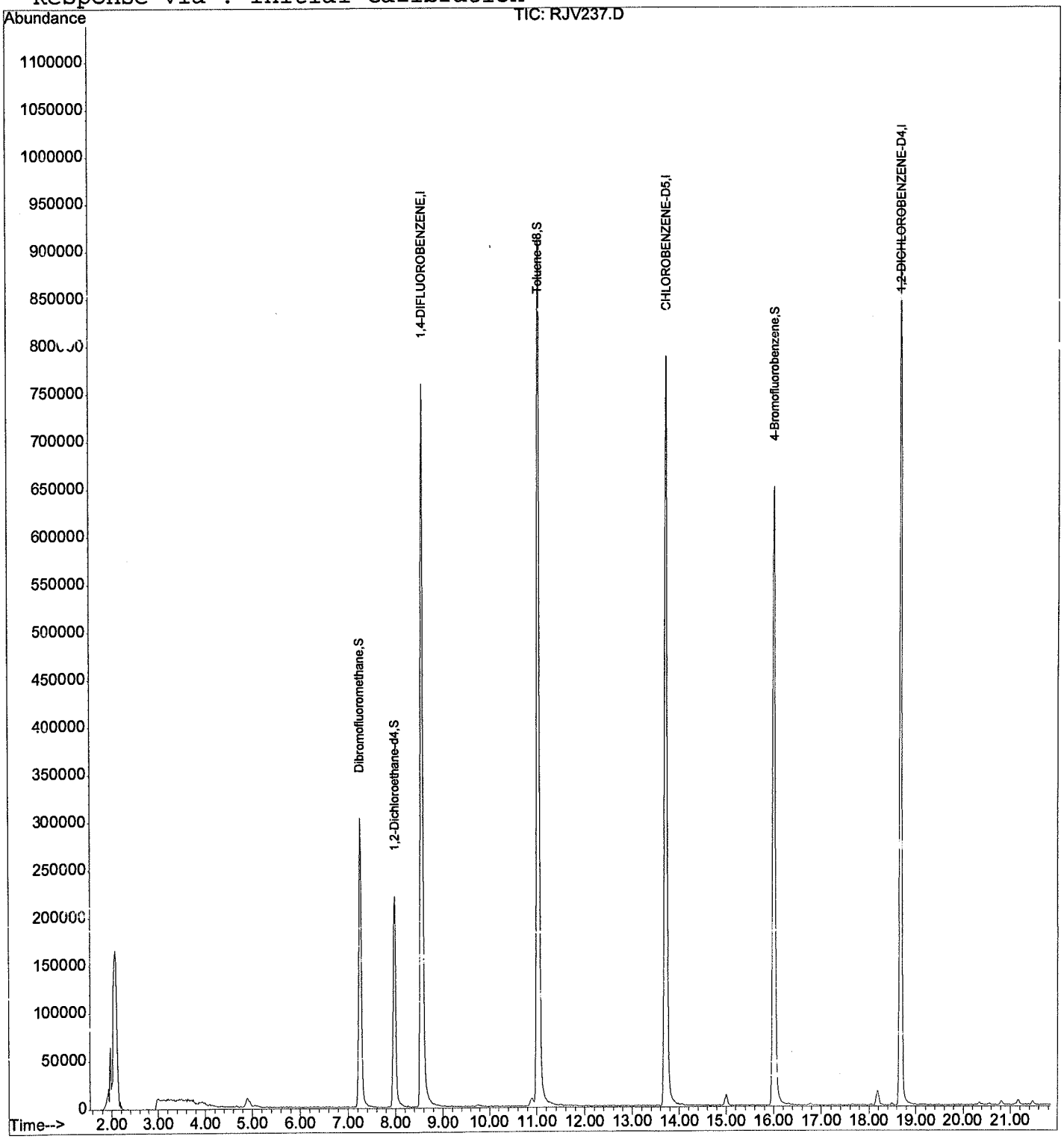
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV237.D
Acq On : 9 Oct 2024 6:34 pm
Sample : VO01J11B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 16 15:36 2024

Vial: 6
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV234.D Vial: 3
Acq On : 9 Oct 2024 5:05 pm Operator: DNguye/CLingl
Sample : VO01J11L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 17:27 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1100760	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	876192	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	513365	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	329608	9.85	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.50%			
41) 1,2-Dichloroethane-d4	7.98	65	267557	8.99	ug/l	0.00
Spiked Amount 10.000			Recovery = 89.90%			
54) Toluene-d8	11.03	98	1192815	11.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 111.40%			
76) 4-Bromofluorobenzene	15.99	95	613044	9.41	ug/l	-0.02
Spiked Amount 10.000			Recovery = 94.10%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	347312	9.59	ug/l	95
5) Chloromethane	2.54	50	311335	11.86	ug/l	100
6) Vinyl chloride	2.69	62	261759	11.30	ug/l	99
7) Bromomethane	3.23	94	198486	9.68	ug/l	97
8) Chloroethane	3.24	64	224357	12.48	ug/l	72
9) Dichlorofluoromethane	3.36	67	683717	17.24	ug/l	97
10) Trichlorofluoromethane	3.63	101	373212	7.09	ug/l	98
11) Acrolein	4.03	56	64569	58.21	ug/l	88
12) 1,1,2-Trichloro-1,2,2-trif	4.12	151	279752	12.97	ug/l	96
13) Acetone	4.10	43	269048	54.72	ug/l	82
14) 1,1-Dichloroethene	4.26	61	595973	11.19	ug/l	94
15) tert-Butyl alcohol	4.37	59	426372	287.88	ug/l	98
16) Iodomethane	4.71	142	577078	11.98	ug/l	80
17) Methyl acetate	4.69	43	132065	11.60	ug/l	97
18) Methylene chloride	4.89	49	461016	12.45	ug/l	93
19) Carbon disulfide	4.92	76	1022842	11.09	ug/l	100
20) Acrylonitrile	5.06	53	265201	60.62	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	828891	13.68	ug/l	89
22) trans-1,2-Dichloroethene	5.27	61	578284	11.92	ug/l	99
23) Isopropyl ether (DIPE)	5.69	45	1452562	15.00	ug/l	100
24) Vinyl acetate	5.85	43	323651	9.15	ug/l	95
25) 1,1-Dichloroethane	5.85	63	710963	11.96	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	1192304	13.31	ug/l	96
28) 2-Butanone	6.44	43	403440	55.67	ug/l	96
29) 2,2-Dichloropropane	6.65	77	584201	9.86	ug/l	97
30) cis-1,2-Dichloroethene	6.71	96	450089	12.03	ug/l	95
31) Chloroform	6.93	83	693208	10.36	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24J09\RJV234.D Vial: 3
Acq On : 9 Oct 2024 5:05 pm Operator: DNguye/CLingl
Sample : VO01J11L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 17:27 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	270469	11.90	ug/l	94
33)	Tetrahydrofuran	7.23	42	44060	10.89	ug/l	98
35)	1,1,1-Trichloroethane	7.51	97	597191	9.04	ug/l	97
36)	Cyclohexane	7.54	84	480945	10.11	ug/l	99
38)	1,1-Dichloropropene	7.73	110	196284	10.85	ug/l	100
39)	Carbon tetrachloride	7.88	119	456777	8.32	ug/l	100
40)	tert-Amyl methyl ether (TA	7.91	73	904069	13.74	ug/l	97
42)	Benzene	8.14	78	1538127	12.69	ug/l	98
43)	1,2-Dichloroethane	8.12	62	357485	9.43	ug/l	100
44)	Trichloroethene	9.08	130	399696	10.36	ug/l	97
45)	Methylcyclohexane	9.17	83	554642	10.45	ug/l	92
46)	1,2-Dichloropropane	9.36	63	355345	12.84	ug/l	81
47)	Bromodichloromethane	9.73	83	471342	9.76	ug/l	98
48)	1,4-Dioxane	9.77	88	29099	212.44	ug/l	91
49)	Dibromomethane	9.82	93	161881	10.51	ug/l	90
50)	2-Chloroethyl vinyl ether	10.23	63	77603	8.96	ug/l	96
51)	4-Methyl-2-pentanone	10.26	43	969194	58.57	ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	567832	11.62	ug/l	98
55)	Toluene	11.17	91	1659801	12.64	ug/l	99
56)	Ethyl methacrylate	11.45	69	299018	13.51	ug/l	91
57)	trans-1,3-Dichloropropene	11.48	75	434949	11.42	ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	232683	12.10	ug/l	96
59)	2-Hexanone	11.76	43	594878	56.27	ug/l	95
60)	1,3-Dichloropropane	12.19	76	425661	12.43	ug/l	99
61)	Tetrachloroethene	12.29	164	343269	11.51	ug/l	92
62)	Dibromochloromethane	12.66	129	265486	10.44	ug/l	99
63)	1,2-Dibromoethane	13.02	107	214073	11.06	ug/l	100
64)	1-Chlorohexane	13.30	91	793470	13.03	ug/l	100
65)	Chlorobenzene	13.77	112	988205	10.95	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	324078	10.75	ug/l	96
67)	Ethylbenzene	13.88	91	1912243	11.63	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2862787	22.06	ug/l	99
69)	o-Xylene	14.82	91	1617074	12.93	ug/l	99
70)	Styrene	14.90	104	1240017	13.54	ug/l	94
71)	Isopropylbenzene	15.52	105	2036472	11.88	ug/l	98
73)	Bromoform	15.55	173	135978	7.21	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.62	53	74664	6.51	ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.84	83	285384	9.31	ug/l	95
77)	1,2,3-Trichloropropane	16.14	110	80742	7.16	ug/l	88
78)	n-Propylbenzene	16.29	91	2728185	8.36	ug/l	98
79)	Bromobenzene	16.38	156	453223	9.17	ug/l	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV234.D Vial: 3
Acq On : 9 Oct 2024 5:05 pm Operator: DNguye/CLingl
Sample : VO01J11L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 17:27 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

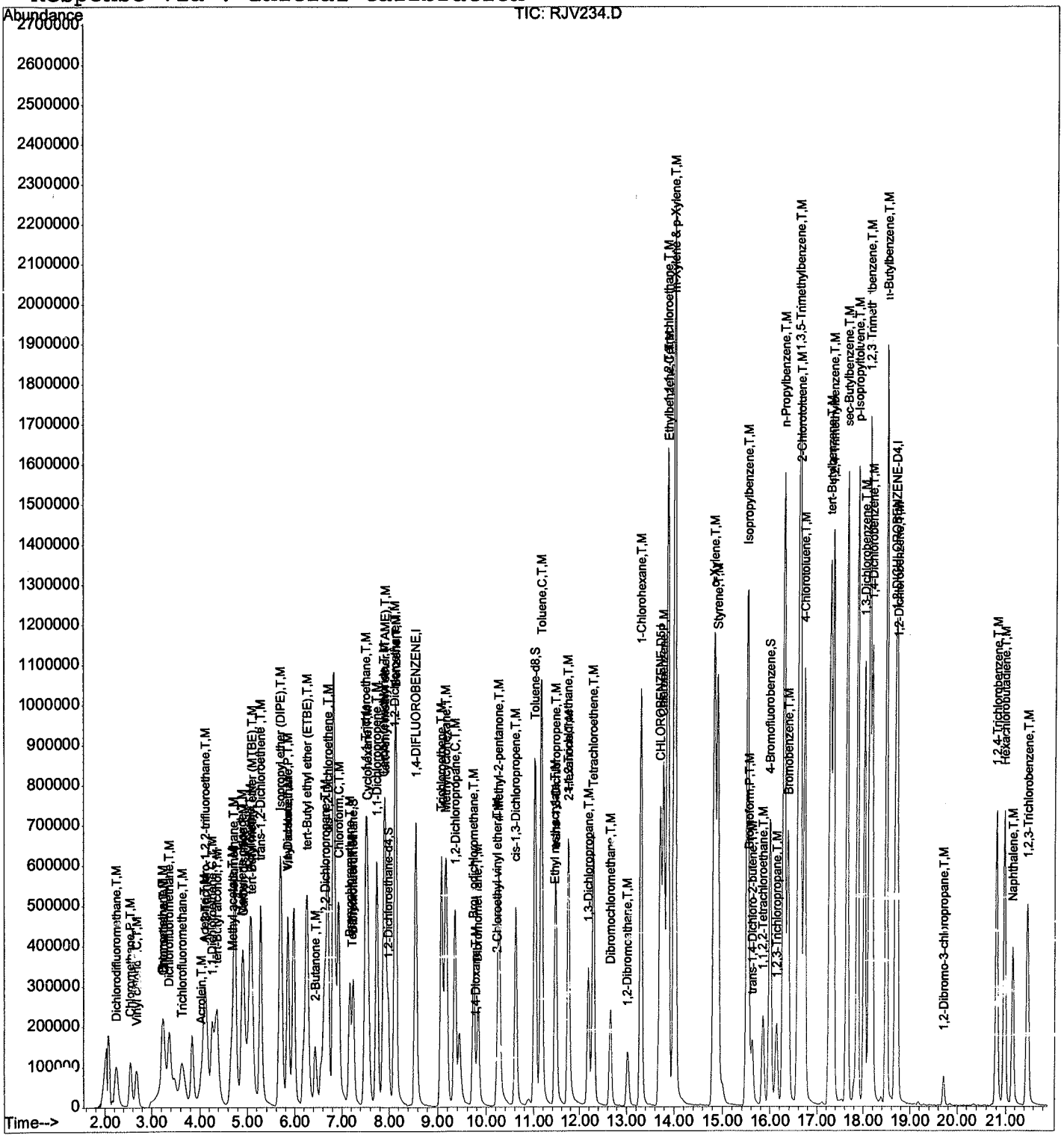
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1684202	7.82	ug/l	97
81)	2-Chlorotoluene	16.63	91	1642044	7.66	ug/l	96
82)	4-Chlorotoluene	16.72	91	1494176	8.16	ug/l	97
83)	tert-Butylbenzene	17.28	134	390301	8.19	ug/l	93
84)	1,2,4-Trimethylbenzene	17.34	105	1696189	8.24	ug/l	97
85)	sec-Butylbenzene	17.65	105	2334827	8.03	ug/l	98
86)	p-Isopropyltoluene	17.87	119	1854423	7.50	ug/l	95
87)	1,3-Dichlorobenzene	18.02	146	863140	8.43	ug/l	93
88)	1,2,3-Trimethylbenzene	18.13	105	1781472	8.92	ug/l	98
89)	1,4-Dichlorobenzene	18.18	146	852799	8.62	ug/l	93
90)	n-Butylbenzene	18.48	91	1876436	8.28	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	715294	8.49	ug/l	96
92)	1,2-Dibromo-3-chloropropan	19.71	157	40240	8.47	ug/l	95
93)	1,2,4-Trichlorobenzene	20.81	180	492806	8.60	ug/l	98
94)	Hexachlorobutadiene	20.97	225	288484	7.67	ug/l	99
95)	Naphthalene	21.15	128	665307	8.15	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	380934	8.70	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV234.D Vial: 3
Acq On : 9 Oct 2024 5:05 pm Operator: DNguye/CLing
Sample : VO01J11L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 17:27 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV235.D Vial: 4
Acq On : 9 Oct 2024 5:35 pm Operator: DNguye/CLingl
Sample : VO01J11C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 17:57 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1096362	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	877692	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	512003	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	332253	9.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.70%		
41) 1 2-Dichloroethane-d4	7.97	65	266280	8.98	ug/l	-0.02
Spiked Amount 10.000			Recovery =	89.80%		
54) Toluene-d8	11.02	98	1191538	11.11	ug/l	-0.02
Spiked Amount 10.000			Recovery =	111.10%		
76) 4-Bromofluorobenzene	15.99	95	608007	9.36	ug/l	-0.02
Spiked Amount 10.000			Recovery =	93.60%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	327261	9.07	ug/l	96
5) Chloromethane	2.54	50	288352	11.03	ug/l	100
6) Vinyl chloride	2.68	62	256514	11.12	ug/l	100
7) Bromomethane	3.23	94	195054	9.55	ug/l	95
8) Chloroethane	3.24	64	210379	11.75	ug/l	79
9) Dichlorofluoromethane	3.36	67	693123	17.55	ug/l	91
10) Trichlorofluoromethane	3.64	101	359418	6.85	ug/l	91
11) Acrolein	4.03	56	63949	57.88	ug/l	79
12) 1,1,2-Trichloro-1,2,2-trif	4.12	151	280296	13.05	ug/l	97
13) Acetone	4.10	43	267158	54.54	ug/l	80
14) 1,1-Dichloroethene	4.26	61	595014	11.22	ug/l	93
15) tert-Butyl alcohol	4.37	59	420070	284.76	ug/l	98
16) Iodomethane	4.71	142	587146	12.24	ug/l	81
17) Methyl acetate	4.69	43	123997	10.94	ug/l	95
18) Methylene chloride	4.89	49	468958	12.72	ug/l	93
19) Carbon disulfide	4.90	76	1039055	11.31	ug/l	100
20) Acrylonitrile	5.06	53	272100	62.45	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	843869	13.99	ug/l	91
22) trans-1,2-Dichloroethene	5.27	61	575912	11.92	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	1483449	15.38	ug/l	99
24) Vinyl acetate	5.85	43	301289	8.55	ug/l	94
25) 1,1-Dichloroethane	5.85	63	711727	12.02	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	1211676	13.59	ug/l	97
28) 2-Butanone	6.44	43	402596	55.77	ug/l	95
29) 2,2-Dichloropropane	6.63	77	590190	10.00	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	453923	12.18	ug/l	95
31) Chloroform	6.92	83	696005	10.44	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV235.D Vial: 4
Acq On : 9 Oct 2024 5:35 pm Operator: DNguye/CLingl
Sample : VO01J11C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 17:57 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	276848	12.23	ug/l	95
33)	Tetrahydrofuran	7.23	42	44413	11.02	ug/l	95
35)	1,1,1-Trichloroethane	7.51	97	610695	9.28	ug/l	96
36)	Cyclohexane	7.54	84	476388	10.05	ug/l	99
38)	1,1-Dichloropropene	7.73	110	199672	11.08	ug/l	100
39)	Carbon tetrachloride	7.88	119	466484	8.53	ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	913997	13.94	ug/l	98
42)	Benzene	8.13	78	1560071	12.92	ug/l	98
43)	1,2-Dichloroethane	8.12	62	359929	9.53	ug/l	98
44)	Trichloroethene	9.08	130	413425	10.76	ug/l	98
45)	Methylcyclohexane	9.17	83	531548	10.06	ug/l	93
46)	1,2-Dichloropropane	9.34	63	356545	12.94	ug/l	81
47)	Bromodichloromethane	9.73	83	480975	10.00	ug/l	95
48)	1,4-Dioxane	9.77	88	28761	210.81	ug/l	89
49)	Dibromomethane	9.82	93	163216	10.64	ug/l	92
50)	2-Chloroethyl vinyl ether	10.22	63	82247	9.53	ug/l	94
51)	4-Methyl-2-pentanone	10.26	43	991413	60.16	ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	558534	11.48	ug/l	100
55)	Toluene	11.17	91	1680454	12.78	ug/l	98
56)	Ethyl methacrylate	11.45	69	301189	13.58	ug/l	90
57)	trans-1,3-Dichloropropene	11.48	75	431411	11.31	ug/l	98
58)	1,1,2-Trichloroethane	11.74	97	237672	12.34	ug/l	96
59)	2-Hexanone	11.76	43	616514	58.13	ug/l	96
60)	1,3-Dichloropropane	12.19	76	431587	12.58	ug/l	99
61)	Tetrachloroethene	12.29	164	349753	11.71	ug/l	92
62)	Dibromochloromethane	12.66	129	274655	10.78	ug/l	99
63)	1,2-Dibromoethane	13.02	107	219820	11.33	ug/l	100
64)	1-Chlorohexane	13.30	91	809912	13.28	ug/l	100
65)	Chlorobenzene	13.77	112	1009165	11.16	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	332143	11.00	ug/l	98
67)	Ethylbenzene	13.88	91	1935518	11.76	ug/l	99
68)	m-Xylene & p-Xylene	14.01	91	2902321	22.33	ug/l	100
69)	o-Xylene	14.82	91	1709415	13.64	ug/l	99
70)	Styrene	14.90	104	1309531	14.28	ug/l	94
71)	Isopropylbenzene	15.51	105	2173663	12.66	ug/l	98
73)	Bromoform	15.55	173	146088	7.77	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.62	53	80191	7.01	ug/l	85
75)	1,1,2,2-Tetrachloroethane	15.85	83	297901	9.74	ug/l	95
77)	1,2,3-Trichloropropane	16.14	110	83512	7.42	ug/l	96
78)	n-Propylbenzene	16.29	91	2725397	8.37	ug/l	98
79)	Bromobenzene	16.38	156	456789	9.27	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV235.D Vial: 4
Acq On : 9 Oct 2024 5:35 pm Operator: DNguye/CLingl
Sample : VO01J11C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 17:57 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

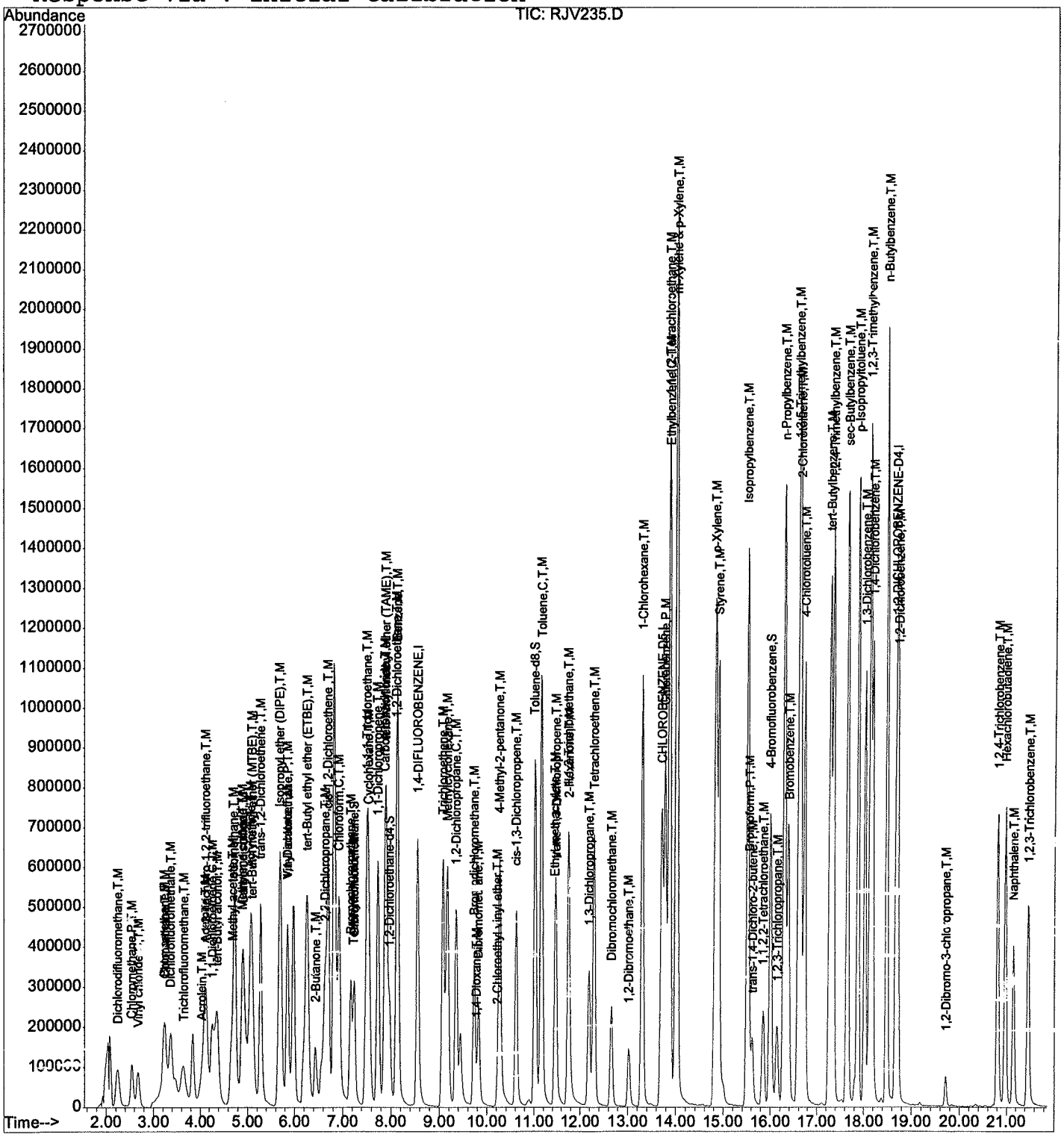
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.59	105	1706576	7.94	ug/l	97
81)	2-Chlorotoluene	16.63	91	1681312	7.87	ug/l	96
82)	4-Chlorotoluene	16.72	91	1505747	8.25	ug/l	96
83)	tert-Butylbenzene	17.28	134	393926	8.29	ug/l	93
84)	1,2,4-Trimethylbenzene	17.34	105	1729862	8.42	ug/l	98
85)	sec-Butylbenzene	17.65	105	2339786	8.07	ug/l	98
86)	p-Isopropyltoluene	17.87	119	1856326	7.52	ug/l	95
87)	1,3-Dichlorobenzene	18.02	146	884040	8.66	ug/l	93
88)	1,2,3-Trimethylbenzene	18.13	105	1771585	8.89	ug/l	98
89)	1,4-Dichlorobenzene	18.19	146	857975	8.69	ug/l	93
90)	n-Butylbenzene	18.48	91	1864234	8.25	ug/l	96
91)	1,2-Dichlorobenzene	18.72	146	725285	8.63	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.71	157	40839	8.62	ug/l	94
93)	1,2,4-Trichlorobenzene	20.81	180	500127	8.75	ug/l	98
94)	Hexachlorobutadiene	20.97	225	285961	7.62	ug/l	98
95)	Naphthalene	21.15	128	675298	8.29	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	383646	8.79	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV235.D Vial: 4
Acq On : 9 Oct 2024 5:35 pm Operator: DNguye/CLing
Sample : VO01J11C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 17:57 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J11\RJW260.D Vial: 5
Acq On : 11 Oct 2024 5:06 pm Operator: PMai
Sample : VO06J12B Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 16 10:39 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.94	114	3653908	10.00	ug/l	-0.02
54) CHLOROBENZENE-D5	15.42	117	2881529	10.00	ug/l	-0.01
74) 1,2-DICHLOROBENZENE-D4	19.33	152	1250629	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	7.91	111	1124781	10.86	ug/l	-0.06
Spiked Amount 10.000			Recovery = 108.60%			
42) 1,2-Dichloroethane-d4	9.04	65	792350	9.81	ug/l	-0.04
Spiked Amount 10.000			Recovery = 98.10%			
55) Toluene-d8	12.79	98	3846152	10.31	ug/l	-0.02
Spiked Amount 10.000			Recovery = 103.10%			
77) 4-Bromofluorobenzene	17.44	95	1366190	9.78	ug/l	-0.01
Spiked Amount 10.000			Recovery = 97.80%			

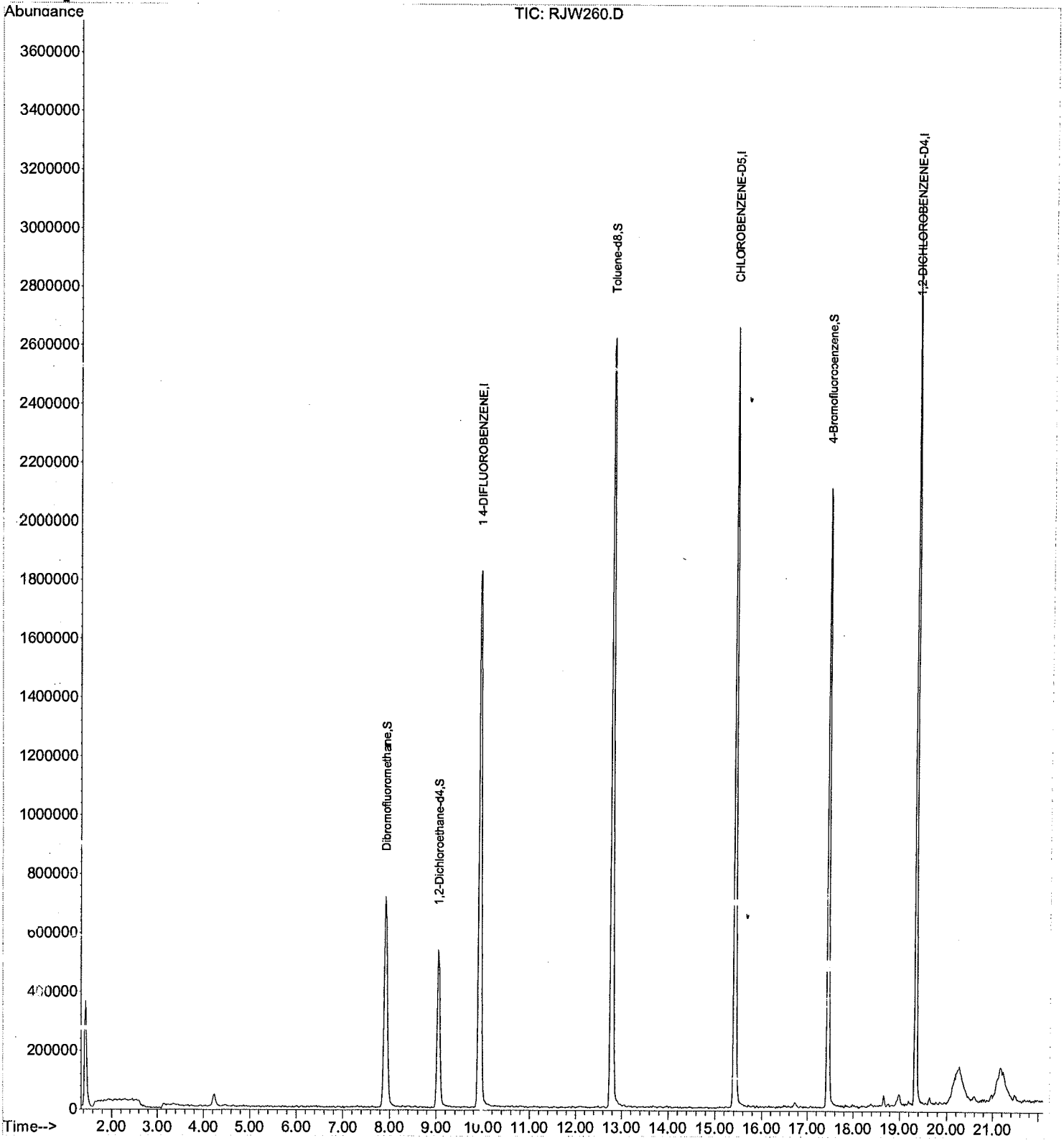
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RJW260.D VO06I19B.M Mon Nov 11 14:34:34 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J11\RJW260.D Vial: 5
Acq On : 11 Oct 2024 5:06 pm Operator: PMai
Sample : VO06J12B Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 16 10:39 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J11\RJW278.D Vial: 23
Acq On : 12 Oct 2024 12:57 am Operator: PMai
Sample : VO06J12C Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Nov 11 14:45 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.92	114	3238819	10.00	ug/l	-0.04
54) CHLOROBENZENE-D5	15.42	117	2579682	10.00	ug/l	-0.01
74) 1,2-DICHLOROBENZENE-D4	19.34	152	1114775	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	7.91	111	1003819	10.93	ug/l	-0.06
Spiked Amount 10.000			Recovery = 109.30%			
42) 1,2-Dichloroethane-d4	9.04	65	693392	9.68	ug/l	-0.04
Spiked Amount 10.000			Recovery = 96.80%			
55) Toluene-d8	12.77	98	3446852	10.32	ug/l	-0.04
Spiked Amount 10.000			Recovery = 103.20%			
77) 4-Bromofluorobenzene	17.44	95	1219848	9.80	ug/l	-0.01
Spiked Amount 10.000			Recovery = 98.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	1221527	8.93	ug/l	100
3) Chloromethane	1.82	50	1191027	9.50	ug/l	100
4) Vinyl chloride	1.93	62	889868	9.06	ug/l	98
5) Bromomethane	2.37	94	908658	11.21	ug/l	99
6) Chloroethane	2.45	64	671415	10.57	ug/l	87
7) Dichlorofluoromethane	2.49	67	1370255	5.90	ug/l	100
8) Trichlorofluoromethane	2.74	101	1481211	11.47	ug/l	98
9) Acrolein	3.26	56	358015	78.69	ug/l	96
10) 1,1,2-Trichloro-1,2,2-trif	3.30	151	623544	5.76	ug/l	99
11) Acetone	3.34	43	685864	52.43	ug/l	96
12) 1,1-Dichloroethene	3.49	61	1313957	7.67	ug/l	93
13) tert-Butyl alcohol	3.63	59	847011	209.31	ug/l	99
15) Methyl acetate	4.01	74	74206	10.62	ug/l	99
16) Iodomethane	3.93	142	1472409	9.17	ug/l	94
17) Allyl chloride	4.05	76	544423	9.93	ug/l	95
18) Methylene chloride	4.22	49	1134079	8.43	ug/l	87
19) Carbon disulfide	4.43	76	1013	0.15	ug/l #	1
20) Acrylonitrile	4.45	53	995399	61.25	ug/l	97
21) tert-Butyl methyl ether (M	4.49	73	2105998	12.82	ug/l	97
22) trans-1,2-Dichloroethene	4.72	96	1057955	10.34	ug/l	100
23) Isopropyl ether (DIPE)	5.40	45	3730477	11.02	ug/l	91
24) Vinyl acetate	5.65	43	1006622	8.23	ug/l	99
25) 1,1-Dichloroethane	5.56	63	1691960	9.89	ug/l	97
26) 2-Butanol	6.13	45	801124	176.48	ug/l	97
27) tert-Butyl ethyl ether (ET	6.30	59	2832940	11.54	ug/l	89
28) 2-Butanone	6.59	43	1292762	58.16	ug/l	94
29) 2,2-Dichloropropane	6.84	77	902192	8.45	ug/l	97
30) cis-1,2-Dichloroethene	6.97	96	1118753	10.58	ug/l	100
31) Chloroform	7.37	83	1800693	10.63	ug/l	98
32) Bromochloromethane	7.76	130	531768	11.61	ug/l	98
33) Tetrahydrofuran	7.87	42	94003	7.90	ug/l	97
36) 1,1,1-Trichloroethane	8.31	97	1347446	9.89	ug/l	97
37) Cyclohexane	8.29	84	1160768	6.65	ug/l	94
39) 1,1-Dichloropropene	8.66	110	447940	9.74	ug/l	99
40) Carbon tetrachloride	8.83	119	1121704	9.94	ug/l	98
41) tert-Amyl methyl ether (TA	9.02	73	2469211	12.30	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J11\RJW278.D Vial: 23
Acq On : 12 Oct 2024 12:57 am Operator: PMai
Sample : VO06J12C Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Nov 11 14:45 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	1,2-Dichloroethane	9.25	62	825066	9.68 ug/l	100
44)	Benzene	9.23	78	3981452	10.73 ug/l	97
45)	Trichloroethene	10.51	130	1102569	11.41 ug/l	97
46)	Methylcyclohexane	10.59	83	1414696	7.70 ug/l	91
47)	1,2-Dichloropropane	10.87	63	907256	9.88 ug/l	100
48)	1,4-Dioxane	11.41	88	58701	136.55 ug/l	95
49)	Bromodichloromethane	11.31	83	1241239	10.42 ug/l	100
50)	Dibromomethane	11.39	93	472982	10.87 ug/l	95
51)	2-Chloroethyl vinyl ether	12.02	63	267299	9.25 ug/l	97
52)	4-Methyl-2-pentanone	12.06	43	3713880	60.62 ug/l	93
53)	cis-1,3-Dichloropropene	12.37	75	1438901	9.87 ug/l	94
56)	Toluene	12.92	91	4344593	11.16 ug/l	100
57)	Ethyl methacrylate	13.36	69	800835	9.36 ug/l	89
58)	trans-1,3-Dichloropropene	13.30	75	1075044	9.83 ug/l	87
59)	1,1,2-Trichloroethane	13.55	97	623852	11.16 ug/l	99
60)	2-Hexanone	13.63	43	2352038	57.64 ug/l	96
61)	1,3-Dichloropropane	14.01	76	1063476	10.30 ug/l	100
62)	Tetrachloroethene	14.05	164	871427	10.88 ug/l	96
63)	Dibromochloromethane	14.41	129	764518	11.10 ug/l	98
65)	1,2-Dibromoethane	14.74	107	571414	10.76 ug/l	97
66)	1-Chlorohexane	15.10	91	1612773	9.73 ug/l	96
67)	Chlorobenzene	15.48	112	2631763	11.04 ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.57	131	921292	12.23 ug/l	98
69)	Ethylbenzene	15.59	91	4714298	9.83 ug/l	98
70)	m-Xylene & p-Xylene	15.72	91	7127572	19.45 ug/l	98
71)	o-Xylene	16.44	91	3715099	10.29 ug/l	98
72)	Styrene	16.51	104	2700108	10.01 ug/l	98
73)	Isopropylbenzene	17.05	105	4590141	9.80 ug/l	99
75)	Bromoform	17.05	173	348265	10.12 ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.35	83	650298	10.09 ug/l	98
78)	1,2,3-Trichloropropane	17.56	110	166925	9.39 ug/l	95
79)	trans-1,4-Dichloro-2-buten	17.66	53	134290	6.85 ug/l	95
80)	n-Propylbenzene	17.66	91	5698081	9.26 ug/l	98
81)	Bromobenzene	17.70	156	994420	11.29 ug/l	97
82)	1,3,5-Trimethylbenzene	17.88	105	3693563	9.85 ug/l	98
83)	2-Chlorotoluene	17.90	91	3591129	9.96 ug/l	96
84)	4-Chlorotoluene	17.96	91	3280127	9.93 ug/l	92
85)	tert-Butylbenzene	18.34	134	862364	10.87 ug/l	90
86)	1,2,4-Trimethylbenzene	18.38	105	3754326	9.65 ug/l	99
87)	sec-Butylbenzene	18.58	105	4945166	9.34 ug/l	100
88)	p-Isopropyltoluene	18.75	119	4135512	9.19 ug/l	97
89)	1,3-Dichlorobenzene	18.86	146	1964346	9.97 ug/l	98
90)	1,2,3-Trimethylbenzene	18.93	105	3917766	11.13 ug/l	98
91)	1,4-Dichlorobenzene	18.97	146	1934546	9.92 ug/l	98
92)	n-Butylbenzene	19.19	91	3846853	7.93 ug/l	97
93)	1,2-Dichlorobenzene	19.36	146	1674626	10.27 ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.13	157	93982	8.25 ug/l	91
95)	1,2,4-Trichlorobenzene	20.96	180	992075	7.75 ug/l	99
96)	Hexachlorobutadiene	21.09	225	551025	7.96 ug/l	98
97)	Naphthalene	21.23	128	1365195	7.91 ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J11\RJW278.D Vial: 23
Acq On : 12 Oct 2024 12:57 am Operator: PMai
Sample : VO06J12C Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Nov 11 14:45 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

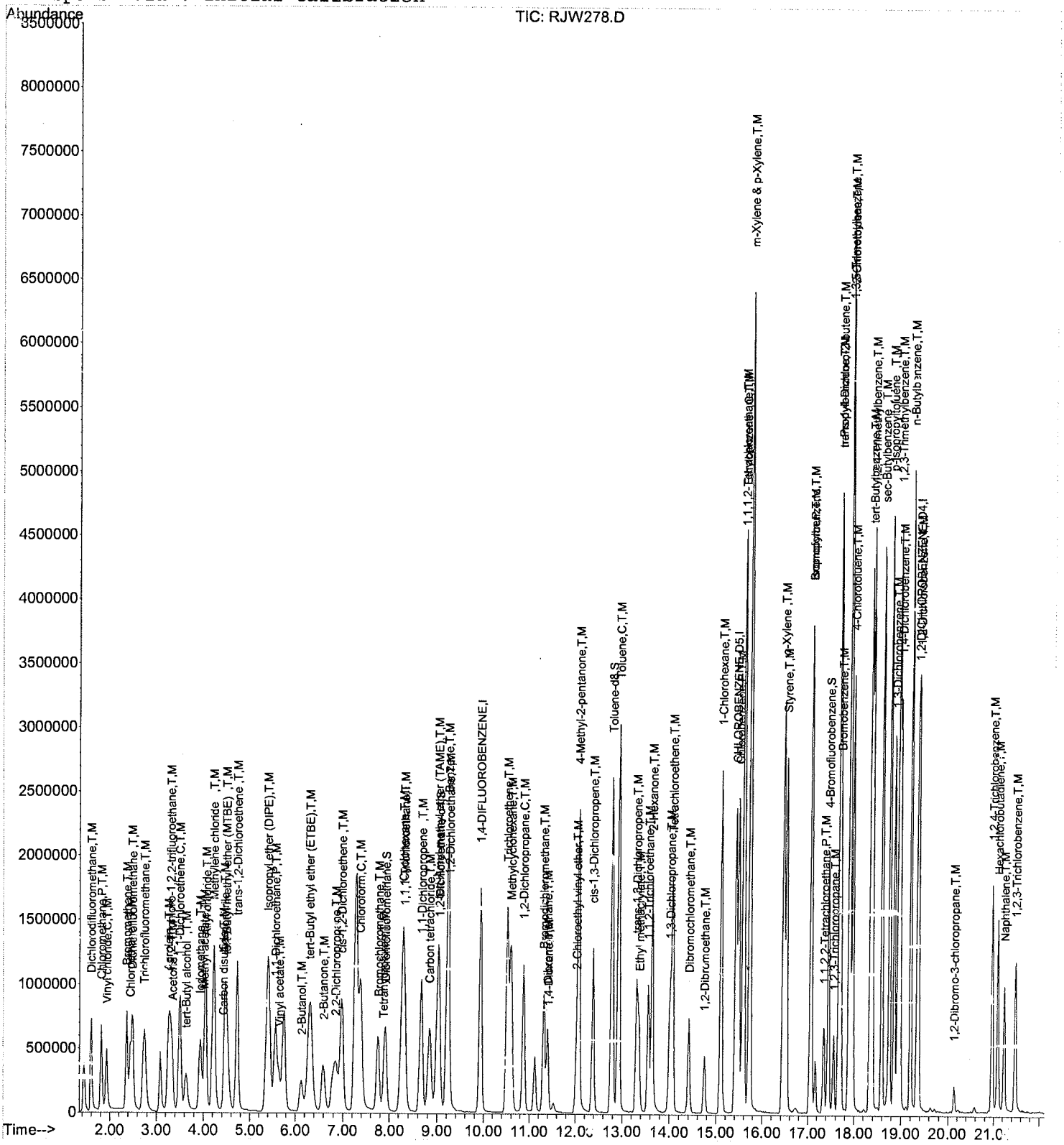
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.48	180	705644	7.30	ug/l	99

(#) = qualifier out of range (m) = manual integration
RJW278.D VO06I19B.M Mon Nov 11 14:47:17 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J11\RJW278.D Vial: 23
Acq On : 12 Oct 2024 12:57 am Operator: PMai
Sample : VO06J12C Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Nov 11 14:45 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



INITIAL CALIBRATION(S)

FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RHV128 BFB Injection Date: 08/09/24

Instrument ID: 01New BFB Injection Time: 08:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	22.371
75	30 - 60% of mass 95	48.380
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.009
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	63.433
175	5 - 9% of mass 174	4.766(7.51)1
176	95 - 101% % of mass 174	63.900(100.74)1
177	5 - 9% % of mass 176	3.518(5.51)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	VO01H091	RHV129	08/09/24	17:28
2	VSTD0.5	VO01H092	RHV130	08/09/24	18:14
3	VSTD1	VO01H093	RHV131	08/09/24	18:45
4	VSTD2	VO01H094	RHV132	08/09/24	19:15
5	VSTD5	VO01H095	RHV133	08/09/24	19:46
6	VSTD10	VO01H096	RHV134	08/09/24	20:17
7	VSTD20	VO01H097	RHV135	08/09/24	20:47
8	VSTD30	VO01H098	RHV136	08/09/24	21:17
9	VSTD50	VO01H099	RHV137	08/09/24	21:47
10	VSTD100	VO01H0910	RHV138	08/09/24	22:17
11	VSTD50	IVO01H0901	RHV141	08/09/24	23:47

SC 9/6/24

Instrument ID :01New
Beginning DateTime :08/09/24 17:28
Spike Units :PPB
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09

M	IDX	Parameters	.3 17:28 RHV129	.5 18:14 RHV130	1 18:45 RHV131	2 19:15 RHV132	5 19:46 RHV133	10 20:17 RHV134	20 20:47 RHV135	30 21:17 RHV136	50 21:47 RHV137	100 22:17 RHV138	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5598
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	0.294	0.267	0.306	0.355	0.373	0.382	0.341	0.302	0.303	0.367	0.329	12.04	2.2409
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	------	------	0.198	0.243	0.240	0.256	0.235	0.215	0.227	0.293	0.239	11.82	2.5406
	6	Vinyl chloride	------	0.156	0.190	0.208	0.226	0.239	0.223	0.215	0.226	------	0.210	12.57	2.6789
	7	Bromomethane	------	0.184	0.164	0.185	0.189	0.191	0.184	0.176	0.180	0.224	0.186	8.61	3.2215
	8	Chloroethane	------	------	0.130	0.152	0.155	0.167	0.164	0.160	0.172	0.207	0.163	13.37	3.2780
	9	Dichlorofluoromethane	0.318	0.396	0.330	0.390	0.368	0.364	0.359	0.325	0.333	0.419	0.360	9.43	3.3422
	10	Trichlorofluoromethane	0.445	0.411	0.467	0.538	0.487	0.548	0.458	0.439	0.451	0.539	0.478	9.99	3.5541
5	11	Acrolein	------	------	0.008	0.009	0.010	0.010	0.010	0.010	0.011	0.013	0.010	14.81	4.0169
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.177	0.172	0.193	0.214	0.204	0.203	0.196	0.188	0.185	0.227	0.196	8.61	4.1334
5	13	Acetone	------	------	0.064	0.060	0.047	0.045	0.044	0.040	0.038	0.046	0.048	19.26	4.0965
	14	1,1-Dichloroethene	0.488	0.489	0.449	0.487	0.508	0.496	0.473	0.450	0.449	0.550	0.484	6.44	4.2548
25	15	tert-Butyl alcohol	------	0.014	0.010	0.013	0.015	0.014	0.014	0.012	0.013	0.015	0.013	12.10	4.3721
	16	Iodomethane	------	------	0.377	0.458	0.445	0.458	0.447	0.437	0.441	------	0.437	6.31	4.6629
	17	Methyl acetate	------	------	0.099	0.113	0.100	0.102	0.099	0.097	0.099	0.118	0.103	7.37	4.6835
	18	Methylene chloride	------	------	0.313	0.346	0.348	0.331	0.330	0.318	0.316	0.388	0.336	7.35	4.8854
	19	Carbon disulfide	------	------	0.758	0.794	0.829	0.885	0.883	0.876	------	------	0.838	6.33	4.9044
5	20	Acrylonitrile	------	0.040	0.035	0.034	0.038	0.039	0.041	0.041	0.040	0.049	0.040	11.32	5.0586
	21	tert-Butyl methyl ether (MTBE)	0.484	0.584	0.504	0.567	0.597	0.569	0.561	0.524	0.503	0.609	0.550	7.89	5.0949
	22	trans-1,2-Dichloroethene	0.408	0.450	0.410	0.451	0.467	0.453	0.433	0.421	0.418	0.496	0.441	6.34	5.2756
	23	Isopropyl ether (DIPE)	0.747	0.914	0.786	0.930	0.929	0.892	0.899	0.876	0.850	0.974	0.880	7.83	5.6919
	24	Vinyl acetate	------	------	0.258	0.297	0.326	0.339	0.338	0.309	0.320	0.385	0.321	11.40	5.8521
	25	1,1-Dichloroethane	0.494	0.584	0.490	0.548	0.556	0.540	0.541	0.523	0.517	0.608	0.540	6.83	5.8534
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	0.693	0.887	0.762	0.890	0.871	0.841	0.824	0.770	0.732	0.864	0.813	8.56	6.2652
5	28	2-Butanone	------	0.078	0.064	0.059	0.064	0.064	0.068	0.063	0.061	0.073	0.066	9.12	6.4397
	29	2,2-Dichloropropane	0.523	0.593	0.540	0.575	0.569	0.560	0.533	0.475	0.460	0.554	0.538	7.93	6.6504
	30	cis-1,2-Dichloroethene	0.281	0.356	0.307	0.348	0.348	0.349	0.337	0.334	0.333	0.405	0.340	9.52	6.7052
	31	Chloroform	------	0.746	0.623	0.657	0.642	0.622	0.573	0.518	0.501	0.590	0.608	12.21	6.9302
	32	Bromochloromethane	0.170	0.219	0.191	0.214	0.210	0.209	0.214	0.201	0.199	0.239	0.206	8.79	7.1690
	33	Tetrahydrofuran	------	------	------	0.040	0.044	0.033	0.036	0.032	0.033	0.039	0.037	11.65	7.2154
	34	Dibromofluoromethane	------	------	0.228	0.300	0.331	0.330	0.333	0.303	------	------	0.304	13.19	7.2427
	35	1,1,1-Trichloroethane	0.567	0.600	0.589	0.677	0.668	0.643	0.598	0.534	0.514	0.612	0.600	8.89	7.5186
	36	Cyclohexane	------	0.377	0.404	0.405	0.431	0.451	0.422	0.448	0.435	0.518	0.432	9.21	7.5376
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	0.164	0.155	0.141	0.172	0.165	0.165	0.165	0.163	0.159	0.195	0.164	8.22	7.7393
	39	Carbon tetrachloride	0.455	0.526	0.473	0.559	0.547	0.537	0.502	0.445	0.428	0.517	0.499	9.16	7.8934
	40	tert-Amyl methyl ether (TAME)	0.537	0.641	0.550	0.622	0.638	0.616	0.625	0.569	0.542	0.638	0.598	7.20	7.9082
	41	1,2-Dichloroethane-d4	------	0.236	0.244	0.281	0.295	0.299	0.295	0.244	------	------	0.270	10.30	7.9794
	42	Benzene	1.010	1.115	1.033	1.169	1.166	1.150	1.146	1.089	1.041	1.093	1.101	5.25	8.1453
	43	1,2-Dichloroethane	0.260	0.363	0.331	0.403	0.390	0.380	0.358	0.310	0.296	0.353	0.344	13.08	8.1201
	44	Trichloroethene	0.357	0.373	0.311	0.361	0.353	0.358	0.348	0.331	0.321	0.389	0.350	6.77	9.0827
	45	Methylcyclohexane	0.332	0.439	0.466	0.481	0.513	0.508	0.482	0.520	0.505	0.576	0.482	13.31	9.1761
	46	1,2-Dichloropropane	0.236	0.244	0.212	0.250	0.260	0.259	0.261	0.248	0.248	0.295	0.251	8.42	9.3642
	47	Bromodichloromethane	0.496	0.542	0.423	0.460	0.442	0.440	0.420	0.374	0.359	0.431	0.439	12.12	9.7405
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	11.23	9.7789
	49	Dibromomethane	------	0.150	0.129	0.149	0.143	0.144	0.142	0.128	0.124	0.150	0.140	7.18	9.8339
	50	2-Chloroethyl vinyl ether	------	------	0.062	0.068	0.080	0.077	0.085	0.081	0.080	0.096	0.079	13.01	10.2376
5	51	4-Methyl-2-pentanone	------	0.131	0.117	0.143	0.166	0.164	0.171	0.154	0.145	0.162	0.150	11.85	10.2833
	52	cis-1,3-Dichloropropene	0.400	0.436	0.389	0.461	0.477	0.469	0.467	0.434	0.418	0.488	0.444	7.60	10.6294
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7258
	54	Toluene-d8	------	1.100	1.053	1.248	1.330	1.303	1.278	1.245	------	------	1.222	8.56	11.0382
	55	Toluene	1.555	1.555	1.437	1.605	1.638	1.573	1.453	1.455	1.346	1.369	1.498	6.69	11.1731
	56	Ethyl methacrylate	------	------	0.177	0.245	0.276	0.269	0.273	0.267	0.263	------	0.253	13.78	11.4743
	57	trans-1,3-Dichloropropene	0.363	0.427	0.376	0.459	0.489	0.467	0.444	0.420	0.413	0.488	0.435	10.00	11.4902
	58	1,1,2-Trichloroethane	0.194	0.236	0.189	0.205	0.244	0.222	0.220	0.215	0.212	0.258	0.219	9.84	11.7598
5	59	2-Hexanone	------	------	0.068	0.092	0.120	0.123	0.125	0.118	0.113	0.133	0.111	19.21	11.7765
	60	1,3-Dichloropropane	0.339	0.404	0.332	0.401	0.422	0.401	0.399	0.377	0.379	0.453	0.391	9.24	12.2013
	61	Tetrachloroethene	0.370	0.377	0.312	0.341	0.357	0.333	0.312	0.315	0.311	0.376	0.340	8.13	12.3080
	62	Dibromochloromethane	0.268	0.307	0.274	0.302	0.305	0.302	0.288	0.268	0.265	0.323	0.290	7.03	12.6754
	63	1,2-Dibromoethane	0.214	0.207	0.192	0.234	0.237	0.222	0.222	0.216	0.209	0.257	0.221	8.26	13.0428
	64	1-Chlorohexane	0.751	0.724	0.651	0.718	0.720	0.688	0.661	0.660	0.640	0.735	0.695	5.71	13.3198
	65	Chlorobenzene	1.082	1.040	0.928	1.089	1.115	1.066	1.014	0.972	0.937	1.054	1.030	6.31	13.7954
	66	1,1,1,2-Tetrachloroethane	0.290	0.328	0.314	0.370	0.376	0.366	0.345	0.332	0.323	0.397	0.344	9.54	13.8724
	67	Ethylbenzene	2.008	1.922	1.791	2.055	2.067	1.983	1.821	1.697	1.538	------	1.876	9.54	13.8900
2	68	m-Xylene & p-Xylene	1.528	1.571	1.410	1.591	1.626	1.518	1.367	1.237	------	------	1.481	8.93	14.0303
	69	o-Xylene	1.498	1.486	1.362	1.570	1.624	1.537	1.412	1.334	1.209	1.246	1.428	9.71	14.8487
	70	Styrene	0.963	1.019	0.935	1.109	1.170	1.098	1.067	1.033	0.983	1.072	1.045	6.93	14.9213
	71	Isopropylbenzene	1.985	1.917	1.830	2.078	2.181	2.057	1.872	1.728	------	------	1.956	7.56	15.5303
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6932
	73	Bromoform	------	0.376	0.269	0.348	0.402	0.377	0.377	0.379	0.410	------	0.367	11.93	15.5692
	74	trans-1,4-Dichloro-2-butene	------	------	------	0.191	0.231	0.224	0.232	0.225	0.238	------	0.223	7.51	15.6316
	75	1,1,2,2-Tetrachloroethane	0.460	0.561	0.535	0.610	0.661	0.606	0.639	0.639	0.664	------	0.597	11.29	15.8686
	76	4-Bromofluorobenzene	------	1.390	1.021	1.263	1.333	1.267	1.303	1.304	------	------	1.269	9.24	16.0203
	77	1,2,3-Trichloropropane	------	0.244	0.179	0.227	0.239	0.210	0.219	0.210	0.231	------	0.220	9.42	16.1618
	78	n-Propylbenzene	7.567	6.929	6.113	6.581	6.854	6.362	5.996	5.951	5.583	5.634	6.357	9.90	16.3050
	79	Bromobenzene	0.894	0.895	0.868	0.938	0.992	0.935	0.922	0.936	0.976	1.272	0.963	11.94	16.3939
	80	1,3,5-Trimethylbenzene	4.576	4.567	3.999	4.333	4.564	4.102	3.906	3.860	3.838	4.232	4.198	7.15	16.6132
	81	2-Chlorotoluene	4.564	4.597	3.970	4.164	4.382	4.089	3.890	3.789	3.894	4.392	4.173	7.05	16.6487
	82	4-Chlorotoluene	3.871	3.608	3.320	3.679	3.843	3.527	3.314	3.363	3.295	3.827	3.565	6.57	16.7421
	83	tert-Butylbenzene	0.948	0.959	0.791	0.928	0.917	0.882	0.875	0.886	0.933	1.164	0.928	10.33	17.3006
	84	1,2,4-Trimethylbenzene	4.447	4.090	3.741	4.254	4.366	4.041	3.776	3.749	3.634	4.005	4.010	7.06	17.3643
	85	sec-Butylbenzene	6.545	6.419	5.647	5.896	6.288	5.756	5.371	5.189	4.780	4.731	5.662	11.41	17.6621
	86	p-Isopropyltoluene	5.535	5.175	4.648	5.172	5.348	4.885	4.630	4.432	4.129	4.240	4.820	9.96	17.8887
	87	1,3-Dichlorobenzene	2.269	2.110	1.787	1.923	2.095	1.957	1.882	1.851	1.844	2.222	1.994	8.46	18.0384
	88	1,2,3-Trimethylbenzene	4.048	4.258	3.772	4.188	4.333	4.012	3.750	3.534	3.376	3.632	3.890	8.36	18.1451
	89	1,4-Dichlorobenzene	2.157	2.027	1.747	1.944	1.979	1.894	1.841	1.773	1.783	2.137	1.928	7.64	18.1999
	90	n-Butylbenzene	5.407	5.018	4.310	4.829	4.796	4.561	4.150	3.867	3.573	3.613	4.412	13.97	18.5006
	91	1,2-Dichlorobenzene	1.635	1.734	1.465	1.679	1.775	1.646	1.608	1.513	1.521	1.844	1.642	7.38	18.7273
	92	1,2-Dibromo-3-chloropropane	------	0.074	0.073	0.093	0.103	0.100	0.104	0.094	0.098	------	0.093	13.33	19.7229
	93	1,2,4-Trichlorobenzene	1.191	1.246	0.938	1.132	1.163	1.119	1.109	1.030	1.009	1.220	1.116	8.77	20.8162
	94	Hexachlorobutadiene	0.799	0.758	0.701	0.716	0.764	0.746	0.711	0.672	0.658	0.800	0.732	6.72	20.9895
	95	Naphthalene	1.491	1.639	1.286	1.575	1.681	1.652	1.661	1.527	1.541	1.852	1.591	9.31	21.1673
	96	1,2,3-Trichlorobenzene	0.847	0.845	0.759	0.897	0.903	0.875	0.850	0.800	0.789	0.960	0.853	7.02	21.4829

Spike Amount = Nominal Amount * M
Ave_%RSD : 9.5 Max_%RSD : 19.3

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
13	Acetone	0.01114	0.04263	0.9952
59	2-Hexanone	-0.03118	0.12619	0.9976

SW
9/6/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :01New
Beginning DateTime :08/09/24 17:28
Spike Units :PPB
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25
Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09

M	IDX	Parameters	.3 17:28 RHV129	.5 18:14 RHV130	1 18:45 RHV131	2 19:15 RHV132	5 19:46 RHV133	10 20:17 RHV134	20 20:47 RHV135	30 21:17 RHV136	50 21:47 RHV137	100 22:17 RHV138	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5598
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	89	81	93	108	113	116	104	92	92	112	10.5	12.04	2.2409
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	------	------	83	102	100	107	98	90	95	123	8.2	11.82	2.5406
	6	Vinyl chloride	------	74	90	99	108	114	106	102	108	------	9.2	12.57	2.6789
	7	Bromomethane	------	99	88	99	102	103	99	95	97	120	5.3	8.61	3.2215
	8	Chloroethane	------	------	80	93	95	102	101	98	106	127	8.7	13.37	3.2780
	9	Dichlorofluoromethane	88	110	92	108	102	101	100	90	92	116	7.6	9.43	3.3422
	10	Trichlorofluoromethane	93	86	98	113	102	115	96	92	94	113	8.3	9.99	3.5541
5	11	Acrolein	------	------	80	90	100	100	100	100	110	130	8.8	14.81	4.0169
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	90	88	98	109	104	104	100	96	94	116	6.6	8.61	4.1334
5	13	Acetone	------	------	97	115	101	100	101	91	88	109	14.6	19.26	4.0965
	14	1,1-Dichloroethene	101	101	93	101	105	102	98	93	93	114	4.7	6.44	4.2548
25	15	tert-Butyl alcohol	------	108	77	100	115	108	108	92	100	115	9.4	12.10	4.3721
	16	Iodomethane	------	------	86	105	102	105	102	100	101	------	4.1	6.31	4.6629
	17	Methyl acetate	------	------	96	110	97	99	96	94	96	115	5.7	7.37	4.6835
	18	Methylene chloride	------	------	93	103	104	99	98	95	94	115	5.4	7.35	4.8854
	19	Carbon disulfide	------	------	90	95	99	106	105	105	------	------	5.2	6.33	4.9044
5	20	Acrylonitrile	------	100	88	85	95	98	102	102	100	122	6.9	11.32	5.0586
	21	tert-Butyl methyl ether (MTBE)	88	106	92	103	109	103	102	95	91	111	6.8	7.89	5.0949
	22	trans-1,2-Dichloroethene	93	102	93	102	106	103	98	95	95	112	5.1	6.34	5.2756
	23	Isopropyl ether (DIPE)	85	104	89	106	106	101	102	100	97	111	5.9	7.83	5.6919
	24	Vinyl acetate	------	------	80	93	102	106	105	96	100	120	7.9	11.40	5.8521
	25	1,1-Dichloroethane	91	108	91	101	103	100	100	97	96	113	5.1	6.83	5.8534
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	85	109	94	109	107	103	101	95	90	106	7.3	8.56	6.2652
5	28	2-Butanone	------	118	97	89	97	97	103	95	92	111	7.1	9.12	6.4397
	29	2,2-Dichloropropane	97	110	100	107	106	104	99	88	86	103	6	7.93	6.6504
	30	cis-1,2-Dichloroethene	83	105	90	102	102	103	99	98	98	119	6.3	9.52	6.7052
	31	Chloroform	------	123	102	108	106	102	94	85	82	97	9.1	12.21	6.9302
	32	Bromochloromethane	83	106	93	104	102	101	104	98	97	116	6.4	8.79	7.1690
	33	Tetrahydrofuran	------	------	------	108	119	99	97	86	89	105	10	11.65	7.2154
	34	Dibromofluoromethane	------	------	75	99	109	99	110	100	------	------	8.9	13.19	7.2427
	35	1,1,1-Trichloroethane	94	100	98	113	111	107	100	89	86	102	6.6	8.89	7.5186
	36	Cyclohexane	------	87	94	94	100	104	98	104	101	120	6.3	9.21	7.5376
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	10^	95	86	105	101	101	101	99	97	119	4.9	8.22	7.7395
	39	Carbon tetrachloride	91	105	95	112	110	108	101	89	89	104	7.8	9.16	7.8934
	40	tert-Amyl methyl ether (TAME)	90	107	92	104	107	103	105	95	91	107	6.5	7.20	7.9082
	41	1,2-Dichloroethane-d4	------	87	90	104	109	111	109	90	------	------	9.3	10.30	7.9794
	42	Benzene	92	101	94	106	106	104	104	99	95	99	4.4	5.25	8.1453
	43	1,2-Dichloroethane	76	106	96	117	113	110	104	90	86	103	10.5	13.08	8.1201
	44	Trichloroethene	102	107	89	103	101	102	99	95	92	111	5.1	6.77	9.0827
	45	Methylcyclohexane	69	91	97	100	106	105	100	108	105	120	8.8	13.31	9.1761
	46	1,2-Dichloropropane	94	97	84	100	104	103	104	99	99	118	5.5	8.42	9.3642
	47	Bromodichloromethane	113	123	96	105	101	100	96	85	82	98	8.5	12.12	9.7405
20	48	1,4-Dioxane	------	------	------	85	93	102	104	93	103	120	0	11.23	9.7789
	49	Dibromomethane	------	107	92	106	102	103	101	91	89	107	6.1	7.18	9.8339
	50	2-Chloroethyl vinyl ether	------	------	78	86	101	97	108	103	101	122	9	13.01	10.2376
5	51	4-Methyl-2-pentanone	------	87	78	95	111	109	114	103	97	108	9.7	11.85	10.2833
	52	cis-1,3-Dichloropropene	90	98	88	104	107	106	105	98	94	110	6.4	7.60	10.6294
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7258
	54	Toluene-d8	------	90	86	102	109	107	105	102	------	------	6.8	8.56	11.0382
	55	Toluene	104	104	96	107	109	105	97	97	90	91	5.8	6.69	11.1731
	56	Ethyl methacrylate	------	------	70	97	109	106	108	106	104	------	9.4	13.78	11.4743
	57	trans-1,3-Dichloropropene	83	98	86	106	112	107	102	97	95	112	8	10.00	11.4902
	58	1,1,2-Trichloroethane	89	108	86	94	111	101	100	98	97	118	7.5	9.84	11.7598
5	59	2-Hexanone	------	------	103	97	105	102	102	95	90	106	14.4	19.21	11.7765
	60	1,3-Dichloropropane	87	103	85	103	108	103	102	96	97	116	6.9	9.24	12.2013
	61	Tetrachloroethene	109	111	92	100	105	98	92	93	91	111	7	8.13	12.3080
	62	Dibromochloromethane	92	106	94	104	105	104	99	92	91	111	6.1	7.03	12.6754
	63	1,2-Dibromoethane	97	94	87	106	107	100	100	98	95	116	6.1	8.26	13.0428
	64	1-Chlorohexane	108	104	94	103	104	99	95	95	92	106	5	5.71	13.3198
	65	Chlorobenzene	105	101	90	106	108	103	98	94	91	102	5.2	6.31	13.7954
	66	1,1,1,2-Tetrachloroethane	84	95	91	108	109	106	100	97	94	115	7.8	9.54	13.8724
	67	Ethylbenzene	107	102	95	110	110	106	97	90	82	------	7.8	9.54	13.8900
2	68	m-Xylene & p-Xylene	103	106	95	107	110	102	92	84	------	------	7.2	8.93	14.0303
	69	o-Xylene	105	104	95	110	114	108	99	93	85	87	8.1	9.71	14.8487
	70	Styrene	92	98	89	106	112	105	102	99	94	103	5.6	6.93	14.9213
	71	Isopropylbenzene	101	98	94	106	112	105	96	88	------	------	6.1	7.56	15.5303
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6932
	73	Bromoform	------	102	73	95	110	103	103	103	112	------	8	11.93	15.5692
	74	trans-1,4-Dichloro-2-butene	------	------	------	86	104	100	104	101	107	------	5	7.51	15.6316
	75	1,1,2,2-Tetrachloroethane	77	94	90	102	111	102	107	107	111	------	8.8	11.29	15.8686
	76	4-Bromofluorobenzene	------	110	80	100	105	100	103	103	------	------	5.7	9.24	16.0203
	77	1,2,3-Trichloropropane	------	111	81	103	109	95	100	95	105	------	7	9.42	16.1618
	78	n-Propylbenzene	119	109	96	104	108	100	94	94	88	89	7.9	9.90	16.3050
	79	Bromobenzene	93	93	90	97	103	97	96	97	101	132	7.3	11.94	16.3939
	80	1,3,5-Trimethylbenzene	109	109	95	103	109	98	93	92	91	101	6.1	7.15	16.6132
	81	2-Chlorotoluene	109	110	95	100	105	98	93	91	93	105	6	7.05	16.6487
	82	4-Chlorotoluene	109	101	93	103	108	99	93	94	92	107	5.6	6.57	16.7421
	83	tert-Butylbenzene	102	103	85	100	99	95	94	95	101	125	6.3	10.33	17.3006
	84	1,2,4-Trimethylbenzene	111	102	93	106	109	102	94	93	91	100	5.7	7.06	17.3643
	85	sec-Butylbenzene	116	113	100	104	111	102	95	92	84	84	9.2	11.41	17.6621
	86	p-Isopropyltoluene	115	107	96	107	111	101	96	92	86	88	8.4	9.96	17.8887
	87	1,3-Dichlorobenzene	114	106	90	96	105	98	94	93	92	111	7.2	8.46	18.0384
	88	1,2,3-Trimethylbenzene	104	109	97	108	111	103	96	91	87	93	7.1	8.36	18.1451
	89	1,4-Dichlorobenzene	112	105	91	101	103	98	95	92	92	111	6.3	7.64	18.1999
	90	n-Butylbenzene	12[illegible]	114	98	109	109	103	94	88	81	82	11.6	13.27	18.5006
	91	1,2-Dichlorobenzene	100	106	89	102	108	100	98	93	93	112	5.7	7.38	18.7273
	92	1,2-Dibromo-3-chloropropane	------	80	78	100	111	108	112	101	105	------	9.8	13.33	19.7229
	93	1,2,4-Trichlorobenzene	107	112	84	101	104	100	99	92	90	109	6.7	8.77	20.8162
	94	Hexachlorobutadiene	109	104	96	98	104	102	97	92	90	109	5.6	6.72	20.9895
	95	Naphthalene	94	103	81	99	106	104	104	96	97	116	6.7	9.31	21.1673
	96	1,2,3-Trichlorobenzene	99	99	89	105	106	103	100	94	92	113	5.3	7.02	21.4829

For 8260 C
See
916/25

Compound List Report 01New

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
Total Cpnds : 96

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-DIFLUOROBENZENE	114	8.56	1.000	A	1	A	B
2	T	Chlorotrifluoroethylene	116	2.08	0.242	A	2	A	B
3	T	Dichlorodifluoromethane	85	2.24	0.262	A	1	A	B
4	T	2-Chloro-1,1,1-trifluoroethane	118	2.53	0.296	A	2	A	B
5	T	Chloromethane	50	2.54	0.297	A	1	A	B
6	T	Vinyl chloride	62	2.68	0.313	A	1	A	B
7	T	Bromomethane	94	3.21	0.375	A	1	A	B
8	T	Chloroethane	64	3.27	0.382	A	1	A	B
9	T	Dichlorofluoromethane	67	3.35	0.391	A	1	A	B
10	T	Trichlorofluoromethane	101	3.48	0.406	A	1	A	B
11	T	Acrolein	56	4.01	0.469	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	4.15	0.484	A	1	A	B
13	T	Acetone	43	4.10	0.479	L	1	A	B
14	T	1,1-Dichloroethene	61	4.25	0.496	A	2	A	B
15	T	tert-Butyl alcohol	59	4.37	0.510	A	1	A	B
16	T	Iodomethane	142	4.66	0.545	A	1	A	B
17	T	Methyl acetate	43	4.68	0.547	A	1	A	B
18	T	Methylene chloride	49	4.89	0.571	A	2	A	B
19	T	Carbon disulfide	76	4.90	0.573	A	1	A	B
20	T	Acrylonitrile	53	5.05	0.590	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	5.09	0.595	A	1	A	B
22	T	trans-1,2-Dichloroethene	61	5.27	0.616	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	5.69	0.664	A	1	A	B
24	T	Vinyl acetate	43	5.85	0.683	A	1	A	B
25	T	1,1-Dichloroethane	63	5.85	0.683	A	2	A	B
26	T	2-Butanol	45	6.17	0.721	L	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.26	0.732	A	1	A	B
28	T	2-Butanone	43	6.44	0.753	A	1	A	B
29	T	2,2-Dichloropropane	77	6.65	0.777	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	6.71	0.784	A	2	A	B
31	T	Chloroform	83	6.93	0.810	A	2	A	B
32	T	Bromochloromethane	49	7.17	0.837	A	2	A	B
33	T	Tetrahydrofuran	42	7.21	0.843	A	2	A	B
34	S	Dibromofluoromethane	111	7.24	0.846	A	2	A	B
35	T	1,1,1-Trichloroethane	97	7.51	0.877	A	2	A	B
36	T	Cyclohexane	84	7.54	0.881	A	1	A	B
37	T	2,2,4-Trimethylpentane	57	7.55	0.882	A	1	A	B
38	T	1,1-Dichloropropene	110	7.73	0.903	A	1	A	B
39	T	Carbon tetrachloride	119	7.89	0.922	A	1	A	B
40	T	tert-Amyl methyl ether (TAME)	73	7.91	0.924	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	7.98	0.933	A	1	A	B
42	T	Benzene	78	8.15	0.952	A	2	A	B
43	T	1,2-Dichloroethane	62	8.12	0.948	A	1	A	B
44	T	Trichloroethene	130	9.08	1.061	A	3	A	B
45	T	Methylcyclohexane	83	9.18	1.073	A	2	A	B
46	T	1,2-Dichloropropane	63	9.36	1.093	A	1	A	B
47	T	Bromodichloromethane	83	9.74	1.138	A	1	A	B
48	T	1,4-Dioxane	88	9.78	1.142	A	1	A	B
49	T	Dibromomethane	93	9.83	1.149	A	2	A	B
50	T	2-Chloroethyl vinyl ether	63	10.23	1.196	A	2	A	B
51	T	4-Methyl-2-pentanone	43	10.28	1.201	A	3	A	B
52	T	cis-1,3-Dichloropropene	75	10.63	1.242	A	1	A	B

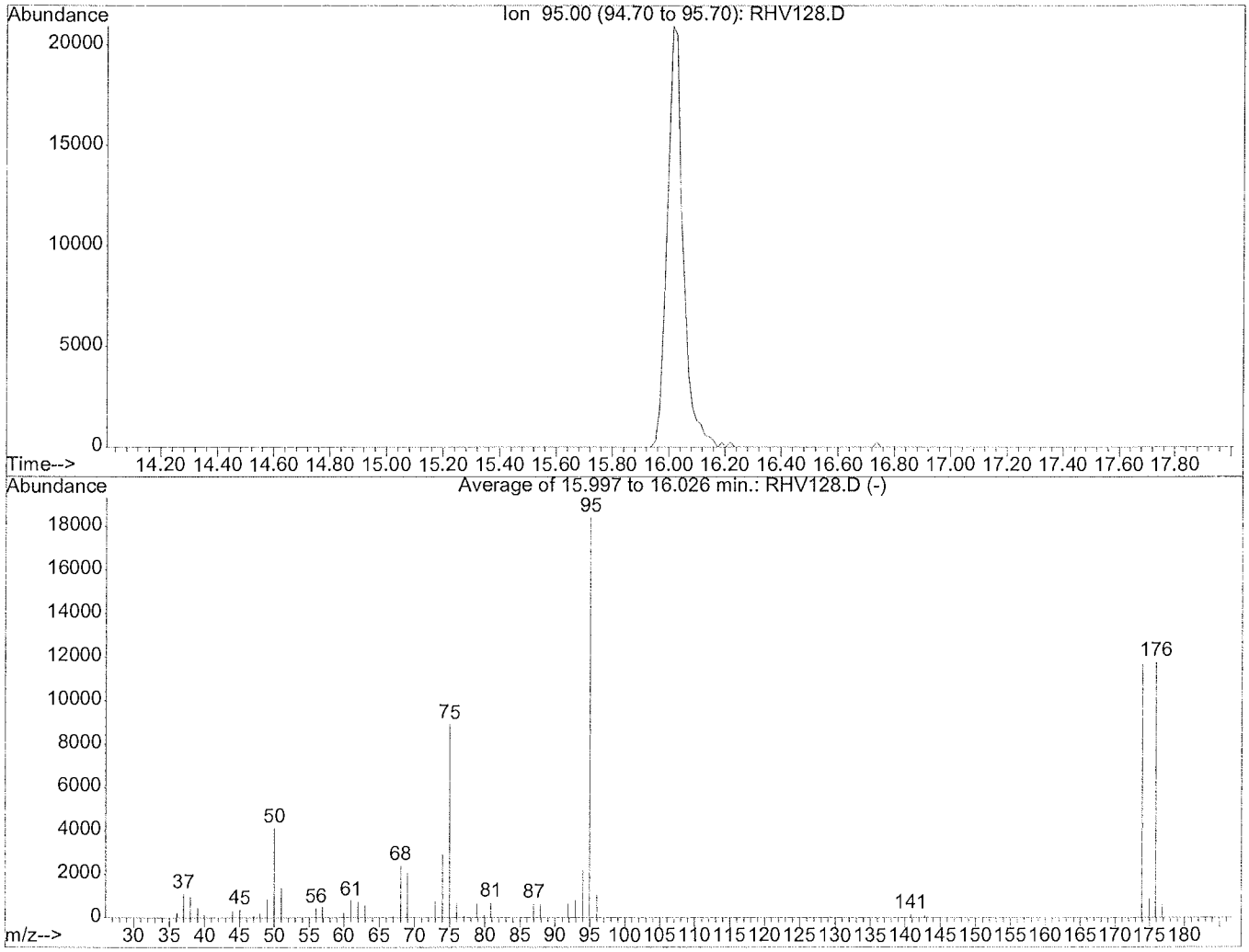
53	I	CHLOROBENZENE-D5	117	13.73	1.000	A	2	A	B
54	S	Toluene-d8	98	11.03	0.804	A	1	A	B
55	T	Toluene	91	11.17	0.813	A	1	A	B
56	T	Ethyl methacrylate	69	11.46	0.835	A	1	A	B
57	T	trans-1,3-Dichloropropene	75	11.48	0.836	A	1	A	B
58	T	1,1,2-Trichloroethane	97	11.76	0.856	A	2	A	B
59	T	2-Hexanone	43	11.76	0.856	L	1	A	B
60	T	1,3-Dichloropropane	76	12.20	0.889	A	1	A	B
61	T	Tetrachloroethene	164	12.31	0.896	A	3	A	B
62	T	Dibromochloromethane	129	12.68	0.923	A	1	A	B
63	T	1,2-Dibromoethane	107	13.03	0.949	A	1	A	B
64	T	1-Chlorohexane	91	13.32	0.970	A	1	A	B
65	P,M	Chlorobenzene	112	13.79	1.004	A	1	A	B
66	T	1,1,1,2-Tetrachloroethane	131	13.86	1.010	A	1	A	B
67	T	Ethylbenzene	91	13.89	1.012	A	1	A	B
68	T	m-Xylene & p-Xylene	91	14.03	1.022	A	1	A	B
69	T	o-Xylene	91	14.84	1.081	A	1	A	B
70	T	Styrene	104	14.92	1.086	A	2	A	B
71	T	Isopropylbenzene	105	15.52	1.131	A	3	A	B
72	I	1,2-DICHLOROBENZENE-D4	152	18.69	1.000	A	1	A	B
73	T	Bromoform	173	15.57	0.833	A	1	A	B
74	T	trans-1,4-Dichloro-2-butene	53	15.63	0.836	A	1	A	B
75	T	1,1,2,2-Tetrachloroethane	83	15.86	0.849	A	1	A	B
76	S	4-Bromofluorobenzene	95	16.01	0.857	A	2	A	B
77	T	1,2,3-Trichloropropane	110	16.16	0.864	A	1	A	B
78	T	n-Propylbenzene	91	16.31	0.872	A	2	A	B
79	T	Bromobenzene	156	16.40	0.877	A	1	A	B
80	T	1,3,5-Trimethylbenzene	105	16.60	0.888	A	2	A	B
81	T	2-Chlorotoluene	91	16.65	0.891	A	1	A	B
82	T	4-Chlorotoluene	91	16.74	0.895	A	1	A	B
83	T	tert-Butylbenzene	134	17.30	0.926	A	1	A	B
84	T	1,2,4-Trimethylbenzene	105	17.36	0.929	A	1	A	B
85	T	sec-Butylbenzene	105	17.66	0.945	A	1	A	B
86	T	p-Isopropyltoluene	119	17.88	0.956	A	2	A	B
87	T	1,3-Dichlorobenzene	146	18.04	0.965	A	2	A	B
88	T	1,2,3-Trimethylbenzene	105	18.15	0.971	A	2	A	B
89	T	1,4-Dichlorobenzene	146	18.19	0.973	A	2	A	B
90	T	n-Butylbenzene	91	18.50	0.990	A	2	A	B
91	T	1,2-Dichlorobenzene	146	18.72	1.002	A	1	A	B
92	T	1,2-Dibromo-3-chloropropane	157	19.72	1.055	A	1	A	B
93	T	1,2,4-Trichlorobenzene	180	20.81	1.113	A	2	A	B
94	T	Hexachlorobutadiene	225	20.99	1.123	A	1	A	B
95	T	Naphthalene	128	21.17	1.132	A	1	A	B
96	T	1,2,3-Trichlorobenzene	180	21.48	1.149	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO01H09.M Mon Aug 26 20:22:50 2024

SV
8/26/24

Data File : D:\HPCHEM\1\DATA\24H09\RHV128.D Vial: 1
Acq On : 9 Aug 2024 8:08 am Operator: DNguye
Sample : BFB01H09 Inst : 01New
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls



AutoFind: Scans 979, 980, 981; Background Corrected with Scan 973

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	4121	PASS
75	95	30	60	48.4	8912	PASS
95	95	100	100	100.0	18421	PASS
96	95	5	9	6.0	1107	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	63.4	11685	PASS
175	174	5	9	7.5	878	PASS
176	174	95	101	100.7	11771	PASS
177	176	5	9	5.5	648	PASS

RHV128.D VO01H09.M Tue Aug 27 13:41:53 2024 Su 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1105194	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	899301	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	307129	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	5367	0.16	ug/l	-0.01
Spiked Amount 10.000			Recovery = 1.60%			
41) 1,2-Dichloroethane-d4	7.98	65	4275	0.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 1.40%			
54) Toluene-d8	11.05	98	18909	0.17	ug/l	0.01
Spiked Amount 10.000			Recovery = 1.70%			
76) 4-Bromofluorobenzene	16.04	95	6868	0.18	ug/l	0.03
Spiked Amount 10.000			Recovery = 1.80%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.22	85	9737	0.27	ug/l	92
5) Chloromethane	2.55	50	7112	0.27	ug/l	76
6) Vinyl chloride	2.68	62	5866	0.25	ug/l	57
9) Dichlorofluoromethane	3.33	67	10549	0.26	ug/l	85
10) Trichlorofluoromethane	3.60	101	14770	0.28	ug/l	62
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	5882	0.27	ug/l	99
13) Acetone	4.09	43	20215	1.68	ug/l	93
14) 1,1-Dichloroethene	4.25	61	16192	0.30	ug/l	75
15) tert-Butyl alcohol	4.37	59	4486	3.02	ug/l	81
16) Iodomethane	4.67	142	12285	0.25	ug/l	93
18) Methylene chloride	4.87	49	12150	0.33	ug/l	91
20) Acrylonitrile	5.07	53	5456	1.24	ug/l	83
21) tert-Butyl methyl ether (M	5.10	73	16045	0.26	ug/l	99
22) trans-1,2-Dichloroethene	5.27	61	13527	0.28	ug/l	89
23) Isopropyl ether (DIPE)	5.69	45	24782	0.25	ug/l	94
25) 1,1-Dichloroethane	5.85	63	16379	0.27	ug/l	94
27) tert-Butyl ethyl ether (ET	6.27	59	22976	0.26	ug/l	97
28) 2-Butanone	6.47	43	9400	1.29	ug/l	70
29) 2,2-Dichloropropane	6.64	77	17336	0.29	ug/l	96
30) cis-1,2-Dichloroethene	6.70	96	9302	0.25	ug/l	92
31) Chloroform	6.92	83	27892	0.41	ug/l	95
32) Bromochloromethane	7.17	49	5648	0.25	ug/l	99
35) 1,1,1-Trichloroethane	7.53	97	18811	0.28	ug/l	93
36) Cyclohexane	7.54	84	8269	0.17	ug/l	89
38) 1,1-Dichloropropene	7.73	110	5427	0.30	ug/l	97
39) Carbon tetrachloride	7.88	119	15091	0.27	ug/l	89
40) tert-Amyl methyl ether (TA	7.90	73	17816	0.27	ug/l	92

(#) = qualifier out of range (m) = manual integration

SU 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42)	Benzene	8.15	78	33490	0.28 ug/l	96
43)	1,2-Dichloroethane	8.12	62	8604	0.23 ug/l	96
44)	Trichloroethene	9.09	130	11845	0.31 ug/l	92
45)	Methylcyclohexane	9.17	83	10995	0.21 ug/l	97
46)	1,2-Dichloropropane	9.36	63	7817	0.28 ug/l	93
47)	Bromodichloromethane	9.74	83	16439	0.34 ug/l	93
49)	Dibromomethane	9.83	93	3658	0.24 ug/l	87
51)	4-Methyl-2-pentanone	10.34	43	11071	0.67 ug/l	76
52)	cis-1,3-Dichloropropene	10.63	75	13250	0.27 ug/l	94
55)	Toluene	11.18	91	41950	0.31 ug/l	95
57)	trans-1,3-Dichloropropene	11.51	75	9783	0.25 ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	5233	0.27 ug/l	91
59)	2-Hexanone	11.94	43	3190	2.75 ug/l	67
60)	1,3-Dichloropropane	12.20	76	9156	0.26 ug/l	84
61)	Tetrachloroethene	12.31	164	9983	0.33 ug/l	98
62)	Dibromochloromethane	12.69	129	7234	0.28 ug/l	95
63)	1,2-Dibromoethane	13.05	107	5763	0.29 ug/l	81
64)	1-Chlorohexane	13.33	91	20274	0.32 ug/l	98
65)	Chlorobenzene	13.80	112	29198	0.32 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.88	131	7815	0.25 ug/l	90
67)	Ethylbenzene	13.89	91	54163	0.32 ug/l	99
68)	m-Xylene & p-Xylene	14.04	91	82438	0.62 ug/l	97
69)	o-Xylene	14.86	91	40424	0.31 ug/l	98
70)	Styrene	14.93	104	25970	0.28 ug/l	95
71)	Isopropylbenzene	15.54	105	53542	0.30 ug/l	97
73)	Bromoform	15.58	173	2273	0.20 ug/l	84
75)	1,1,2,2-Tetrachloroethane	15.88	83	4235	0.23 ug/l	100
78)	n-Propylbenzene	16.31	91	69725	0.36 ug/l	97
79)	Bromobenzene	16.40	156	8237	0.28 ug/l	96
80)	1,3,5-Trimethylbenzene	16.62	105	42163	0.33 ug/l	97
81)	2-Chlorotoluene	16.65	91	42056	0.33 ug/l	98
82)	4-Chlorotoluene	16.75	91	35667	0.33 ug/l	96
83)	tert-Butylbenzene	17.30	134	8739	0.31 ug/l	91
84)	1,2,4-Trimethylbenzene	17.37	105	40975	0.33 ug/l	98
85)	sec-Butylbenzene	17.67	105	60303	0.35 ug/l	97
86)	p-Isopropyltoluene	17.89	119	51002	0.34 ug/l	98
87)	1,3-Dichlorobenzene	18.04	146	20909	0.34 ug/l	95
88)	1,2,3-Trimethylbenzene	18.14	105	37294	0.31 ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	19871	0.34 ug/l	97
90)	n-Butylbenzene	18.50	91	49822	0.37 ug/l	98
91)	1,2-Dichlorobenzene	18.74	146	15061	0.30 ug/l	94

(#) = qualifier out of range (m) = manual integration
RHV129.D VO01H09.M Fri Aug 30 17:58:28 2024 Su 9/6/24 Page 2

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
93)	1,2,4-Trichlorobenzene	20.81	180	10971	0.32	ug/l	89
94)	Hexachlorobutadiene	20.99	225	7363	0.33	ug/l	97
95)	Naphthalene	21.17	128	13737	0.28	ug/l	95
96)	1,2,3-Trichlorobenzene	21.49	180	7807	0.30	ug/l	98

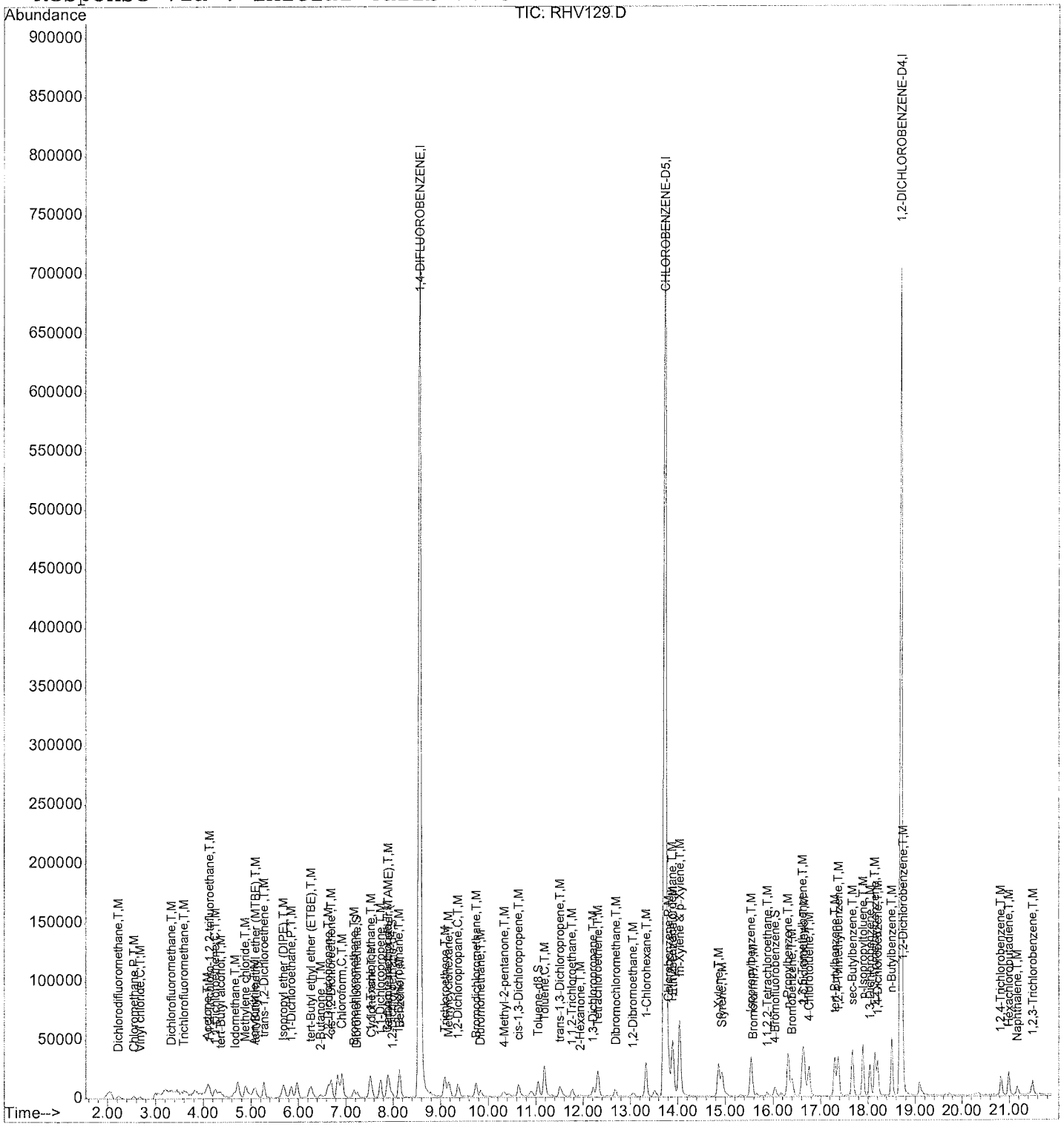
SV 9/6/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV129.D Vial: 2
Acq On : 9 Aug 2024 5:28 pm Operator: DNguye
Sample : VO01H091 0.03/0.15 Inst : 01New
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 17:58 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	926593	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	791295	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	271625	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	11707	0.42	ug/l	0.02
Spiked Amount 10.000			Recovery = 4.20%			
41) 1,2-Dichloroethane-d4	7.97	65	10946	0.44	ug/l	-0.01
Spiked Amount 10.000			Recovery = 4.40%			
54) Toluene-d8	11.05	98	43520	0.45	ug/l	0.01
Spiked Amount 10.000			Recovery = 4.50%			
76) 4-Bromofluorobenzene	16.04	95	18873	0.55	ug/l	0.03
Spiked Amount 10.000			Recovery = 5.50%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	12363	0.41	ug/l	66
5) Chloromethane	2.54	50	7558	0.34	ug/l	77
6) Vinyl chloride	2.67	62	7222	0.37	ug/l	54
7) Bromomethane	3.21	94	8517	0.49	ug/l	81
8) Chloroethane	3.29	64	4728	0.31	ug/l	70
9) Dichlorofluoromethane	3.33	67	18350	0.55	ug/l	92
10) Trichlorofluoromethane	3.60	101	19043	0.43	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	7946	0.44	ug/l	98
13) Acetone	4.09	43	26960	4.21	ug/l	88
14) 1,1-Dichloroethene	4.25	61	22648	0.51	ug/l	78
15) tert-Butyl alcohol	4.37	59	16148	12.95	ug/l	98
16) Iodomethane	4.65	142	12433	0.31	ug/l	61
18) Methylene chloride	4.89	49	16675	0.54	ug/l	95
20) Acrylonitrile	5.07	53	9172	2.49	ug/l	96
21) tert-Butyl methyl ether (M	5.10	73	27071	0.53	ug/l	95
22) trans-1,2-Dichloroethene	5.27	61	20852	0.51	ug/l	100
23) Isopropyl ether (DIPE)	5.69	45	42344	0.52	ug/l	91
25) 1,1-Dichloroethane	5.85	63	27035	0.54	ug/l	96
27) tert-Butyl ethyl ether (ET	6.27	59	41112	0.55	ug/l	99
28) 2-Butanone	6.46	43	17957	2.94	ug/l	73
29) 2,2-Dichloropropane	6.65	77	27492	0.55	ug/l	95
30) cis-1,2-Dichloroethene	6.70	96	16499	0.52	ug/l	95
31) Chloroform	6.93	83	34568	0.61	ug/l	99
32) Bromochloromethane	7.17	49	10138	0.53	ug/l	92
35) 1,1,1-Trichloroethane	7.53	97	27785	0.50	ug/l	96
36) Cyclohexane	7.53	84	17446	0.44	ug/l	97
38) 1,1-Dichloropropene	7.75	110	7189	0.47	ug/l	95

(#) = qualifier out of range (m) = manual integration

SC 9/6/24

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Carbon tetrachloride	7.90	119	24352	0.53 ug/l	97
40)	tert-Amyl methyl ether (TA	7.91	73	29675	0.54 ug/l	100
42)	Benzene	8.15	78	51640	0.51 ug/l	96
43)	1,2-Dichloroethane	8.12	62	16819	0.53 ug/l	98
44)	Trichloroethene	9.09	130	17293	0.53 ug/l	94
45)	Methylcyclohexane	9.18	83	20321	0.45 ug/l	97
46)	1,2-Dichloropropane	9.37	63	11309	0.49 ug/l	92
47)	Bromodichloromethane	9.74	83	25096	0.62 ug/l	88
49)	Dibromomethane	9.85	93	6954	0.54 ug/l	93
51)	4-Methyl-2-pentanone	10.32	43	30397	2.18 ug/l	86
52)	cis-1,3-Dichloropropene	10.63	75	20197	0.49 ug/l	100
55)	Toluene	11.18	91	61515	0.52 ug/l	97
56)	Ethyl methacrylate	11.55	69	7690	0.38 ug/l	100
57)	trans-1,3-Dichloropropene	11.51	75	16890	0.49 ug/l	93
58)	1,1,2-Trichloroethane	11.77	97	9327	0.54 ug/l	94
59)	2-Hexanone	11.86	43	12268	3.70 ug/l	93
60)	1,3-Dichloropropane	12.20	76	15985	0.52 ug/l	97
61)	Tetrachloroethene	12.31	164	14906	0.55 ug/l	95
62)	Dibromochloromethane	12.68	129	12139	0.53 ug/l	89
63)	1,2-Dibromoethane	13.06	107	8192	0.47 ug/l	86
64)	1-Chlorohexane	13.33	91	28655	0.52 ug/l	97
65)	Chlorobenzene	13.80	112	41164	0.51 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	12966	0.48 ug/l	92
67)	Ethylbenzene	13.89	91	76034	0.51 ug/l	100
68)	m-Xylene & p-Xylene	14.04	91	124345	1.06 ug/l	95
69)	o-Xylene	14.86	91	58801	0.52 ug/l	98
70)	Styrene	14.93	104	40335	0.49 ug/l	99
71)	Isopropylbenzene	15.54	105	75865	0.49 ug/l	98
73)	Bromoform	15.58	173	5106	0.51 ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.67	53	2227	0.37 ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.88	83	7625	0.47 ug/l	100
77)	1,2,3-Trichloropropane	16.19	110	3311	0.55 ug/l	80
78)	n-Propylbenzene	16.31	91	94099	0.54 ug/l	98
79)	Bromobenzene	16.40	156	12161	0.47 ug/l	95
80)	1,3,5-Trimethylbenzene	16.62	105	62021	0.54 ug/l	99
81)	2-Chlorotoluene	16.65	91	62439	0.55 ug/l	99
82)	4-Chlorotoluene	16.75	91	49002	0.51 ug/l	94
83)	tert-Butylbenzene	17.30	134	13024	0.52 ug/l	95
84)	1,2,4-Trimethylbenzene	17.37	105	55543	0.51 ug/l	100
85)	sec-Butylbenzene	17.67	105	87172	0.57 ug/l	98
86)	p-Isopropyltoluene	17.89	119	70281	0.54 ug/l	98

(#) = qualifier out of range (m) = manual integration

SC 9/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
87)	1,3-Dichlorobenzene	18.04	146	28650	0.53	ug/l	95
88)	1,2,3-Trimethylbenzene	18.14	105	57835	0.55	ug/l	96
89)	1,4-Dichlorobenzene	18.20	146	27530	0.53	ug/l	96
90)	n-Butylbenzene	18.50	91	68146	0.57	ug/l	95
91)	1,2-Dichlorobenzene	18.74	146	23552	0.53	ug/l	95
92)	1,2-Dibromo-3-chloropropan	19.73	157	1003	0.40	ug/l	93
93)	1,2,4-Trichlorobenzene	20.83	180	16918	0.56	ug/l	96
94)	Hexachlorobutadiene	20.99	225	10289	0.52	ug/l	97
95)	Naphthalene	21.18	128	22266	0.52	ug/l	100
96)	1,2,3-Trichlorobenzene	21.49	180	11480	0.50	ug/l	94

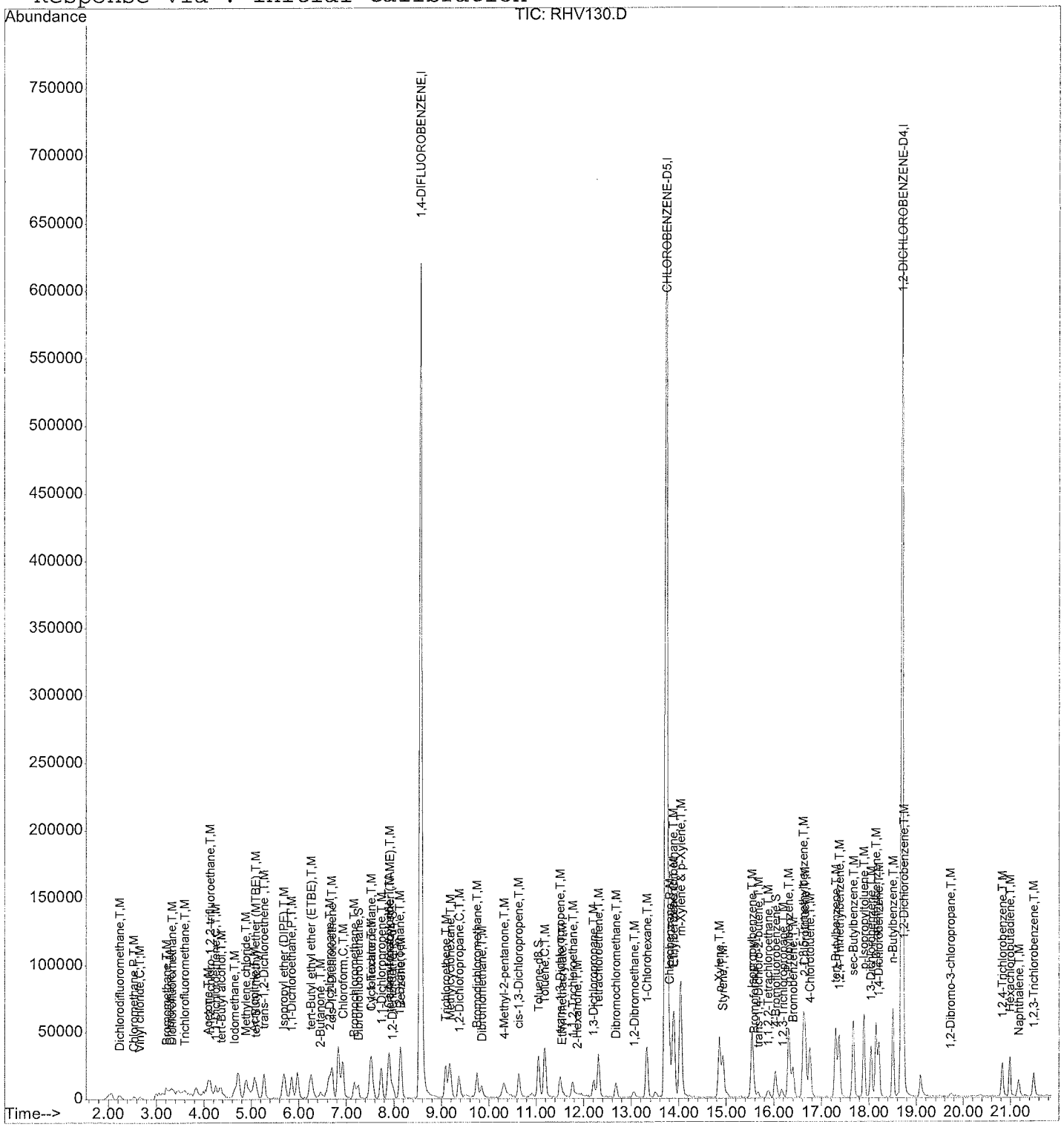
9/16/24

(#) = qualifier out of range (m) = manual integration
RHV130.D VO01H09.M Fri Aug 30 18:00:22 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV130.D Vial: 3
Acq On : 9 Aug 2024 6:14 pm Operator: DNguye
Sample : VO01H092 0.05/0.25 Inst : 01New
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Sa 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D Vial: 4
Acq On : 9 Aug 2024 6:45 pm Operator: DNguye
Sample : VO01H093 0.1/0.5 Inst : 01New
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	995321	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	821998	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	293785	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	22673	0.75	ug/l	0.00
Spiked Amount 10.000			Recovery =	7.50%		
41) 1,2-Dichloroethane-d4	7.98	65	24240	0.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.00%		
54) Toluene-d8	11.05	98	86586	0.86	ug/l	0.01
Spiked Amount 10.000			Recovery =	8.60%		
76) 4-Bromofluorobenzene	16.03	95	30002	0.80	ug/l	0.01
Spiked Amount 10.000			Recovery =	8.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	30466	0.93	ug/l	98
5) Chloromethane	2.56	50	19736	0.83	ug/l	91
6) Vinyl chloride	2.69	62	18921	0.90	ug/l	81
7) Bromomethane	3.23	94	16363	0.88	ug/l	90
8) Chloroethane	3.27	64	12940	0.80	ug/l	54
9) Dichlorofluoromethane	3.35	67	32855	0.92	ug/l	93
10) Trichlorofluoromethane	3.48	101	46525	0.98	ug/l	97
11) Acrolein	4.01	56	4025	4.01	ug/l	83
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	19202	0.98	ug/l	94
13) Acetone	4.10	43	31614	4.84	ug/l	92
14) 1,1-Dichloroethene	4.26	61	44721	0.93	ug/l	98
15) tert-Butyl alcohol	4.40	59	24804	18.52	ug/l	72
16) Iodomethane	4.66	142	37572	0.86	ug/l	96
17) Methyl acetate	4.69	43	9826	0.95	ug/l	74
18) Methylene chloride	4.89	49	31152	0.93	ug/l	96
19) Carbon disulfide	4.90	76	75491	0.91	ug/l	93
20) Acrylonitrile	5.06	53	17253	4.36	ug/l	94
21) tert-Butyl methyl ether (M	5.11	73	50189	0.92	ug/l	97
22) trans-1,2-Dichloroethene	5.29	61	40795	0.93	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	78248	0.89	ug/l	95
24) Vinyl acetate	5.86	43	25648	0.80	ug/l	92
25) 1,1-Dichloroethane	5.86	63	48765	0.91	ug/l	97
27) tert-Butyl ethyl ether (ET	6.28	59	75845	0.94	ug/l	99
28) 2-Butanone	6.46	43	31758	4.85	ug/l	83
29) 2,2-Dichloropropane	6.65	77	53766	1.00	ug/l	94
30) cis-1,2-Dichloroethene	6.71	96	30582	0.90	ug/l	97
31) Chloroform	6.93	83	61990	1.02	ug/l	99

(#) = qualifier out of range (m) = manual integration

SV 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D Vial: 4
Acq On : 9 Aug 2024 6:45 pm Operator: DNguye
Sample : VO01H093 0.1/0.5 Inst : 01New
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	18968	0.92 ug/l	91
35)	1,1,1-Trichloroethane	7.52	97	58634	0.98 ug/l	99
36)	Cyclohexane	7.54	84	40214	0.93 ug/l	95
38)	1,1-Dichloropropene	7.75	110	14068	0.86 ug/l	93
39)	Carbon tetrachloride	7.89	119	47111	0.95 ug/l	94
40)	tert-Amyl methyl ether (TA	7.91	73	54707	0.92 ug/l	97
42)	Benzene	8.15	78	102789	0.94 ug/l	98
43)	1,2-Dichloroethane	8.13	62	32983	0.96 ug/l	97
44)	Trichloroethene	9.09	130	30949	0.89 ug/l	97
45)	Methylcyclohexane	9.17	83	46423	0.97 ug/l	97
46)	1,2-Dichloropropane	9.37	63	21104	0.84 ug/l	98
47)	Bromodichloromethane	9.74	83	42128	0.96 ug/l	91
49)	Dibromomethane	9.85	93	12851	0.92 ug/l	96
50)	2-Chloroethyl vinyl ether	10.26	63	6191	0.79 ug/l	90
51)	4-Methyl-2-pentanone	10.31	43	58311	3.90 ug/l	96
52)	cis-1,3-Dichloropropene	10.63	75	38746	0.88 ug/l	95
55)	Toluene	11.18	91	118137	0.96 ug/l	99
56)	Ethyl methacrylate	11.52	69	14561	0.70 ug/l	90
57)	trans-1,3-Dichloropropene	11.51	75	30877	0.86 ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	15565	0.86 ug/l	96
59)	2-Hexanone	11.83	43	27746	5.15 ug/l	98
60)	1,3-Dichloropropane	12.22	76	27325	0.85 ug/l	99
61)	Tetrachloroethene	12.31	164	25662	0.92 ug/l	95
62)	Dibromochloromethane	12.68	129	22491	0.94 ug/l	99
63)	1,2-Dibromoethane	13.05	107	15774	0.87 ug/l	91
64)	1-Chlorohexane	13.33	91	53523	0.94 ug/l	97
65)	Chlorobenzene	13.80	112	76255	0.90 ug/l	97
66)	1,1,1,2-Tetrachloroethane	13.88	131	25787	0.91 ug/l	94
67)	Ethylbenzene	13.89	91	147217	0.95 ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	231851	1.90 ug/l	99
69)	o-Xylene	14.86	91	111932	0.95 ug/l	99
70)	Styrene	14.93	104	76846	0.89 ug/l	99
71)	Isopropylbenzene	15.54	105	150424	0.94 ug/l	99
73)	Bromoform	15.57	173	7909	0.73 ug/l	94
74)	trans-1,4-Dichloro-2-buten	15.66	53	3855	0.59 ug/l	75
75)	1,1,2,2-Tetrachloroethane	15.86	83	15709	0.90 ug/l	95
77)	1,2,3-Trichloropropane	16.17	110	5246	0.81 ug/l	100
78)	n-Propylbenzene	16.31	91	179592	0.96 ug/l	99
79)	Bromobenzene	16.41	156	25486	0.90 ug/l	96
80)	1,3,5-Trimethylbenzene	16.62	105	117474	0.95 ug/l	98
81)	2-Chlorotoluene	16.65	91	116646	0.95 ug/l	98

(#) = qualifier out of range (m) = manual integration

SW 8/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D
Acq On : 9 Aug 2024 6:45 pm
Sample : VO01H093 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024

Vial: 4
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	4-Chlorotoluene	16.75	91	97550	0.93	ug/l	97
83)	tert-Butylbenzene	17.30	134	23224	0.85	ug/l	97
84)	1,2,4-Trimethylbenzene	17.37	105	109893	0.93	ug/l	97
85)	sec-Butylbenzene	17.67	105	165895	1.00	ug/l	98
86)	p-Isopropyltoluene	17.89	119	136562	0.96	ug/l	100
87)	1,3-Dichlorobenzene	18.04	146	52499	0.90	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	110813	0.97	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	51315	0.91	ug/l	95
90)	n-Butylbenzene	18.50	91	126614	0.98	ug/l	98
91)	1,2-Dichlorobenzene	18.74	146	43042	0.89	ug/l	96
92)	1,2-Dibromo-3-chloropropan	19.72	157	2154	0.79	ug/l	89
93)	1,2,4-Trichlorobenzene	20.83	180	27564	0.84	ug/l	94
94)	Hexachlorobutadiene	20.99	225	20598	0.96	ug/l	95
95)	Naphthalene	21.17	128	37775	0.81	ug/l	97
96)	1,2,3-Trichlorobenzene	21.49	180	22299	0.89	ug/l	98

(#) = qualifier out of range (m) = manual integration

SM 9/6/24

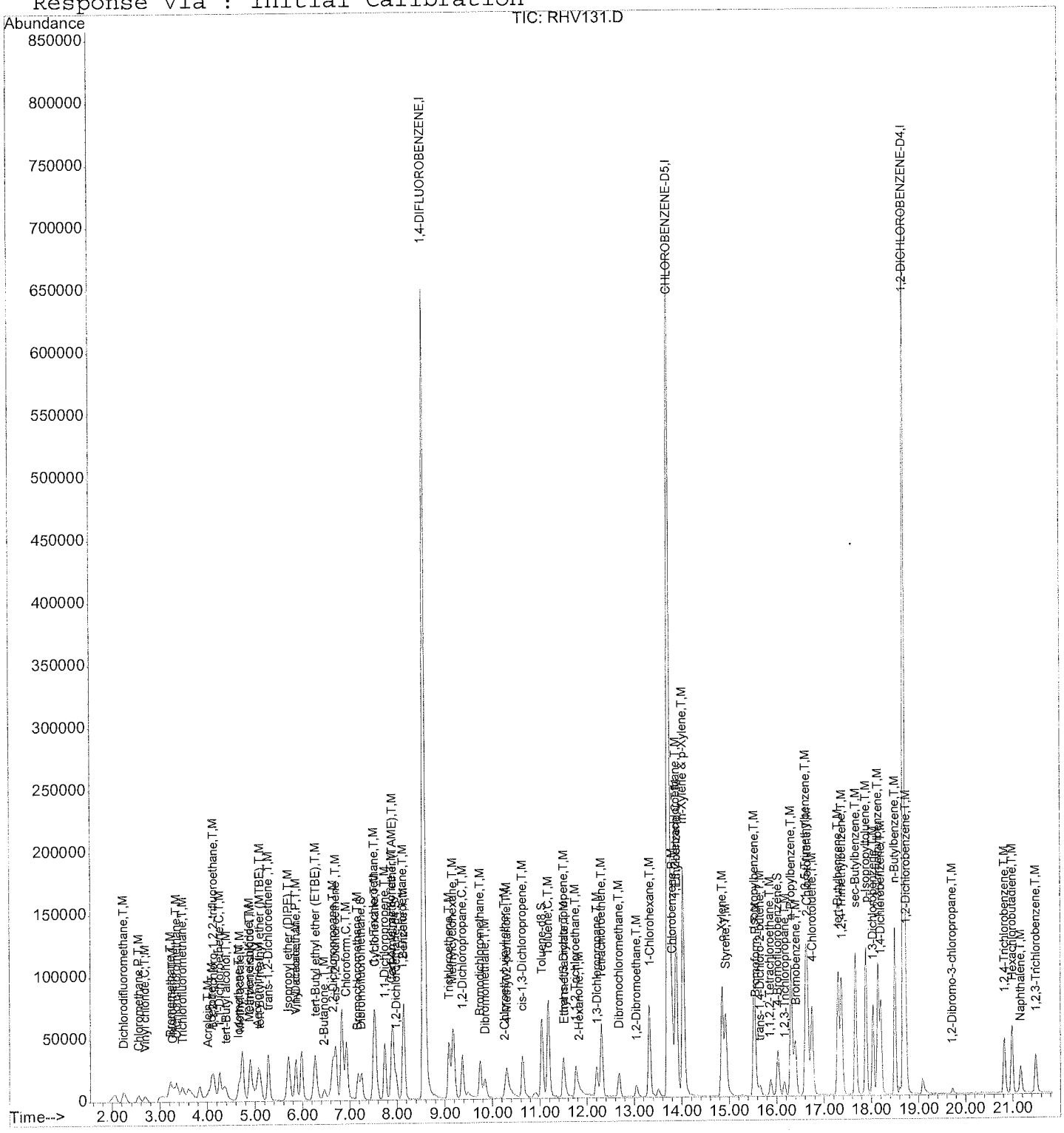
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV131.D
Acq On : 9 Aug 2024 6:45 pm
Sample : VO01H093 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:00 2024

Vial: 4
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SM 9/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D Vial: 5
Acq On : 9 Aug 2024 7:15 pm Operator: DNguye
Sample : VO01H094 0.2/1.0 Inst : 01New
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	929341	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	773979	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	292349	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	55807	1.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	19.70%		
41) 1,2-Dichloroethane-d4	7.98	65	52153	2.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.80%		
54) Toluene-d8	11.03	98	193146	2.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.40%		
76) 4-Bromofluorobenzene	16.03	95	73870	1.99	ug/l	0.02
Spiked Amount 10.000			Recovery =	19.90%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	65972	2.16	ug/l	100
5) Chloromethane	2.54	50	45109	2.03	ug/l	88
6) Vinyl chloride	2.68	62	38629	1.98	ug/l	97
7) Bromomethane	3.23	94	34323	1.98	ug/l	92
8) Chloroethane	3.29	64	28277	1.86	ug/l	95
9) Dichlorofluoromethane	3.35	67	72578	2.17	ug/l	93
10) Trichlorofluoromethane	3.61	101	99914	2.25	ug/l	95
11) Acrolein	4.03	56	8713	9.30	ug/l	80
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	39758	2.18	ug/l	99
13) Acetone	4.10	43	56023	11.53	ug/l	94
14) 1,1-Dichloroethene	4.27	61	90464	2.01	ug/l	97
15) tert-Butyl alcohol	4.38	59	61420	49.12	ug/l	89
16) Iodomethane	4.67	142	85074	2.09	ug/l	100
17) Methyl acetate	4.71	43	21017	2.19	ug/l	88
18) Methylene chloride	4.89	49	64331	2.06	ug/l	98
19) Carbon disulfide	4.90	76	147578	1.90	ug/l	99
20) Acrylonitrile	5.08	53	31410	8.50	ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	105459	2.06	ug/l	93
22) trans-1,2-Dichloroethene	5.27	61	83911	2.05	ug/l	96
23) Isopropyl ether (DIPE)	5.69	45	172878	2.11	ug/l	95
24) Vinyl acetate	5.87	43	55134	1.85	ug/l	93
25) 1,1-Dichloroethane	5.85	63	101890	2.03	ug/l	98
27) tert-Butyl ethyl ether (ET	6.27	59	165369	2.19	ug/l	96
28) 2-Butanone	6.44	43	54809	8.96	ug/l	97
29) 2,2-Dichloropropane	6.65	77	106854	2.14	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	64694	2.05	ug/l	97
31) Chloroform	6.93	83	122203	2.16	ug/l	99

(#) = qualifier out of range (m) = manual integration

SC 9/4/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D Vial: 5
Acq On : 9 Aug 2024 7:15 pm Operator: DNguye
Sample : VO01H094 0.2/1.0 Inst : 01New
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	39762	2.07 ug/l	95
33)	Tetrahydrofuran	7.23	42	7343	2.15 ug/l	76
35)	1,1,1-Trichloroethane	7.52	97	125916	2.26 ug/l	97
36)	Cyclohexane	7.55	84	75239	1.87 ug/l	97
38)	1,1-Dichloropropene	7.75	110	32014	2.10 ug/l	97
39)	Carbon tetrachloride	7.89	119	103890	2.24 ug/l	98
40)	tert-Amyl methyl ether (TA	7.91	73	115634	2.08 ug/l	99
42)	Benzene	8.15	78	217291	2.12 ug/l	98
43)	1,2-Dichloroethane	8.13	62	74934	2.34 ug/l	94
44)	Trichloroethene	9.08	130	67124	2.06 ug/l	98
45)	Methylcyclohexane	9.18	83	89414	2.00 ug/l	99
46)	1,2-Dichloropropane	9.38	63	46427	1.99 ug/l	89
47)	Bromodichloromethane	9.75	83	85439	2.10 ug/l	97
48)	1,4-Dioxane	9.82	88	3945	34.11 ug/l	99
49)	Dibromomethane	9.82	93	27628	2.13 ug/l	97
50)	2-Chloroethyl vinyl ether	10.25	63	12684	1.73 ug/l	94
51)	4-Methyl-2-pentanone	10.29	43	132706	9.50 ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	85667	2.08 ug/l	100
55)	Toluene	11.18	91	248416	2.14 ug/l	100
56)	Ethyl methacrylate	11.49	69	37895	1.94 ug/l	94
57)	trans-1,3-Dichloropropene	11.49	75	71080	2.11 ug/l	99
58)	1,1,2-Trichloroethane	11.78	97	31742	1.87 ug/l	90
59)	2-Hexanone	11.81	43	70967	9.74 ug/l	95
60)	1,3-Dichloropropane	12.21	76	62124	2.05 ug/l	97
61)	Tetrachloroethene	12.31	164	52731	2.00 ug/l	98
62)	Dibromochloromethane	12.68	129	46698	2.08 ug/l	94
63)	1,2-Dibromoethane	13.05	107	36203	2.12 ug/l	98
64)	1-Chlorohexane	13.32	91	111167	2.07 ug/l	97
65)	Chlorobenzene	13.81	112	168518	2.11 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	57260	2.15 ug/l	96
67)	Ethylbenzene	13.89	91	318134	2.19 ug/l	100
68)	m-Xylene & p-Xylene	14.03	91	492634	4.30 ug/l	98
69)	o-Xylene	14.86	91	243021	2.20 ug/l	100
70)	Styrene	14.93	104	171716	2.12 ug/l	97
71)	Isopropylbenzene	15.54	105	321702	2.12 ug/l	100
73)	Bromoform	15.57	173	20333	1.89 ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.64	53	11156	1.71 ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.88	83	35677	2.04 ug/l	95
77)	1,2,3-Trichloropropane	16.16	110	13275	2.07 ug/l	93
78)	n-Propylbenzene	16.31	91	384796	2.07 ug/l	100
79)	Bromobenzene	16.40	156	54854	1.95 ug/l	98

(#) = qualifier out of range (m) = manual integration

SV 8260 46

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D
Acq On : 9 Aug 2024 7:15 pm
Sample : VO01H094 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 5
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	253323	2.06	ug/l	98
81)	2-Chlorotoluene	16.65	91	243448	2.00	ug/l	99
82)	4-Chlorotoluene	16.74	91	215125	2.06	ug/l	100
83)	tert-Butylbenzene	17.30	134	54261	2.00	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	248740	2.12	ug/l	98
85)	sec-Butylbenzene	17.67	105	344731	2.08	ug/l	99
86)	p-Isopropyltoluene	17.89	119	302431	2.15	ug/l	99
87)	1,3-Dichlorobenzene	18.04	146	112458	1.93	ug/l	95
88)	1,2,3-Trimethylbenzene	18.15	105	244867	2.15	ug/l	98
89)	1,4-Dichlorobenzene	18.21	146	113654	2.02	ug/l	98
90)	n-Butylbenzene	18.50	91	282361	2.19	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	98168	2.05	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.73	157	5426	2.01	ug/l	80
93)	1,2,4-Trichlorobenzene	20.83	180	66203	2.03	ug/l	97
94)	Hexachlorobutadiene	20.99	225	41854	1.95	ug/l	94
95)	Naphthalene	21.17	128	92074	1.98	ug/l	94
96)	1,2,3-Trichlorobenzene	21.48	180	52448	2.10	ug/l	92

(#) = qualifier out of range (m) = manual integration

Sm 9/16/24

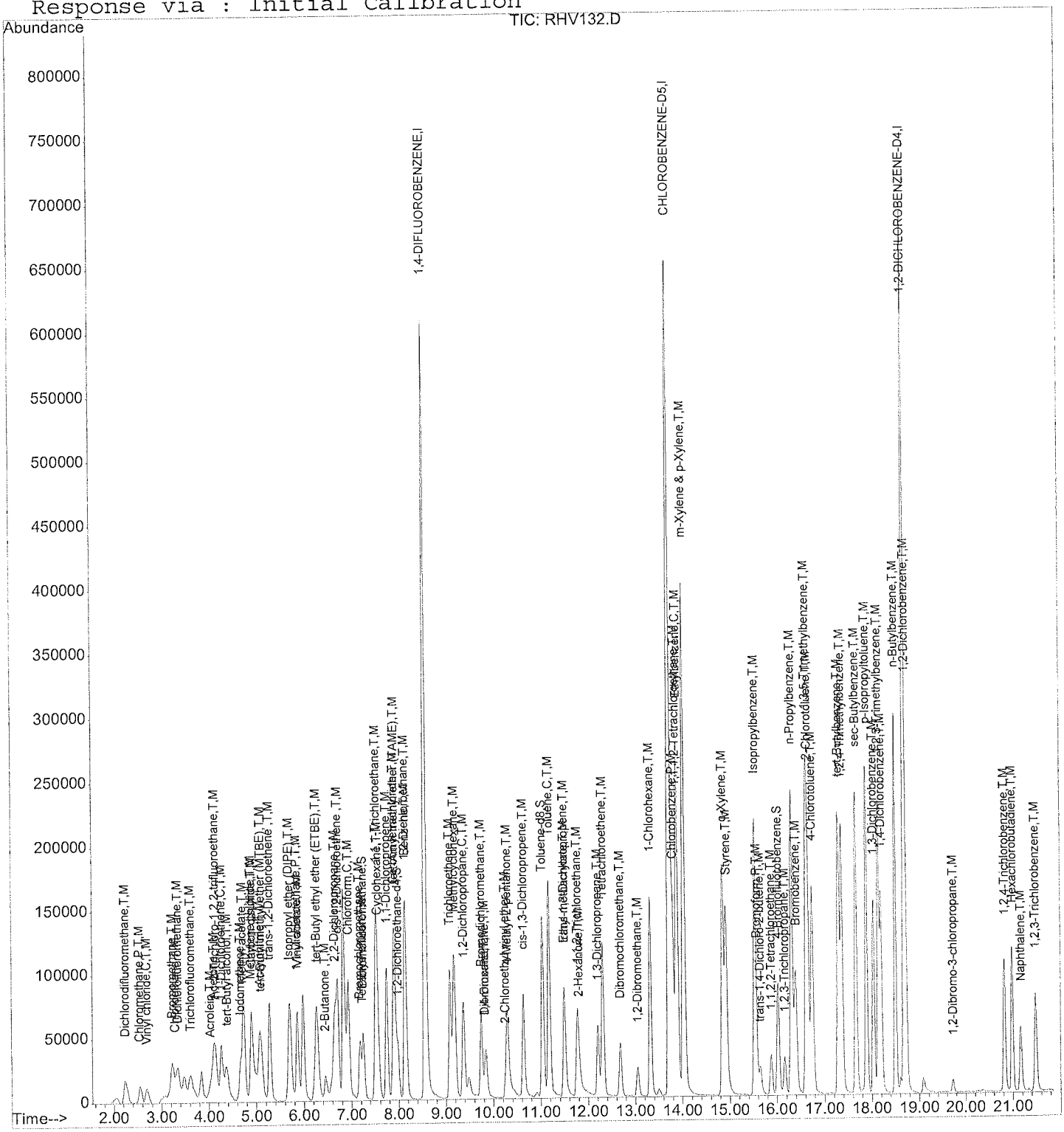
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV132.D
Acq On : 9 Aug 2024 7:15 pm
Sample : VO01H094 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 5
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



sa 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D
Acq On : 9 Aug 2024 7:46 pm
Sample : VO01H095 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 6
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	944867	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	782335	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	297857	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	156156	5.43	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.30%		
41) 1,2-Dichloroethane-d4	7.98	65	139228	5.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.50%		
54) Toluene-d8	11.03	98	520164	5.44	ug/l	0.00
Spiked Amount 10.000			Recovery =	54.40%		
76) 4-Bromofluorobenzene	16.01	95	198471	5.25	ug/l	0.00
Spiked Amount 10.000			Recovery =	52.50%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	176344	5.67	ug/l	97
5) Chloromethane	2.55	50	113480	5.03	ug/l	96
6) Vinyl chloride	2.68	62	106845	5.37	ug/l	95
7) Bromomethane	3.23	94	89457	5.08	ug/l	93
8) Chloroethane	3.29	64	73010	4.73	ug/l	99
9) Dichlorofluoromethane	3.35	67	173930	5.11	ug/l	97
10) Trichlorofluoromethane	3.48	101	229883	5.09	ug/l	99
11) Acrolein	4.01	56	23263	24.43	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	96485	5.21	ug/l	100
13) Acetone	4.10	43	111900	25.17	ug/l	97
14) 1,1-Dichloroethene	4.26	61	240030	5.25	ug/l	99
15) tert-Butyl alcohol	4.37	59	179705	141.35	ug/l	99
16) Iodomethane	4.66	142	210193	5.09	ug/l	96
17) Methyl acetate	4.68	43	47344	4.85	ug/l	94
18) Methylene chloride	4.89	49	164275	5.17	ug/l	96
19) Carbon disulfide	4.92	76	391595	4.95	ug/l	98
20) Acrylonitrile	5.06	53	90738	24.16	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	282100	5.43	ug/l	100
22) trans-1,2-Dichloroethene	5.29	61	220434	5.29	ug/l	98
23) Isopropyl ether (DIPE)	5.70	45	438709	5.28	ug/l	99
24) Vinyl acetate	5.85	43	153880	5.07	ug/l	99
25) 1,1-Dichloroethane	5.86	63	262745	5.15	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	411440	5.35	ug/l	100
28) 2-Butanone	6.44	43	150643	24.22	ug/l	99
29) 2,2-Dichloropropane	6.66	77	268946	5.29	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	164584	5.12	ug/l	98
31) Chloroform	6.93	83	303402	5.28	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D
Acq On : 9 Aug 2024 7:46 pm
Sample : VO01H095 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 6
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	99406	5.10	ug/l	100
33)	Tetrahydrofuran	7.21	42	20729	5.97	ug/l	82
35)	1,1,1-Trichloroethane	7.52	97	315591	5.57	ug/l	99
36)	Cyclohexane	7.54	84	203812	4.99	ug/l	97
38)	1,1-Dichloropropene	7.75	110	77861	5.01	ug/l	98
39)	Carbon tetrachloride	7.89	119	258209	5.48	ug/l	98
40)	tert-Amyl methyl ether (TA	7.91	73	301526	5.34	ug/l	99
42)	Benzene	8.15	78	550624	5.29	ug/l	99
43)	1,2-Dichloroethane	8.12	62	184098	5.66	ug/l	100
44)	Trichloroethene	9.08	130	166925	5.04	ug/l	97
45)	Methylcyclohexane	9.18	83	242377	5.32	ug/l	99
46)	1,2-Dichloropropane	9.36	63	122908	5.17	ug/l	97
47)	Bromodichloromethane	9.74	83	208845	5.04	ug/l	99
48)	1,4-Dioxane	9.79	88	10959	93.21	ug/l	95
49)	Dibromomethane	9.83	93	67341	5.09	ug/l	92
50)	2-Chloroethyl vinyl ether	10.25	63	37832	5.09	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	392237	27.62	ug/l	99
52)	cis-1,3-Dichloropropene	10.63	75	225216	5.37	ug/l	100
55)	Toluene	11.17	91	640556	5.46	ug/l	99
56)	Ethyl methacrylate	11.48	69	108013	5.46	ug/l	99
57)	trans-1,3-Dichloropropene	11.49	75	191369	5.63	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	95428	5.56	ug/l	97
59)	2-Hexanone	11.77	43	234467	26.22	ug/l	97
60)	1,3-Dichloropropane	12.20	76	165246	5.40	ug/l	99
61)	Tetrachloroethene	12.31	164	139666	5.25	ug/l	98
62)	Dibromochloromethane	12.68	129	119480	5.26	ug/l	99
63)	1,2-Dibromoethane	13.05	107	92674	5.36	ug/l	100
64)	1-Chlorohexane	13.32	91	281821	5.18	ug/l	99
65)	Chlorobenzene	13.79	112	436346	5.42	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.88	131	146983	5.46	ug/l	99
67)	Ethylbenzene	13.89	91	808736	5.51	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	1271852	10.98	ug/l	100
69)	o-Xylene	14.86	91	635102	5.69	ug/l	97
70)	Styrene	14.92	104	457496	5.60	ug/l	100
71)	Isopropylbenzene	15.52	105	853174	5.58	ug/l	100
73)	Bromoform	15.57	173	59824	5.47	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	34382	5.17	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	98436	5.53	ug/l	98
77)	1,2,3-Trichloropropane	16.16	110	35532	5.43	ug/l	92
78)	n-Propylbenzene	16.31	91	1020830	5.39	ug/l	100
79)	Bromobenzene	16.40	156	147713	5.15	ug/l	99

(#) = qualifier out of range (m) = manual integration

SC 09/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D Vial: 6
Acq On : 9 Aug 2024 7:46 pm Operator: DNguye
Sample : VO01H095 0.5/2.5 Inst : 01New
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

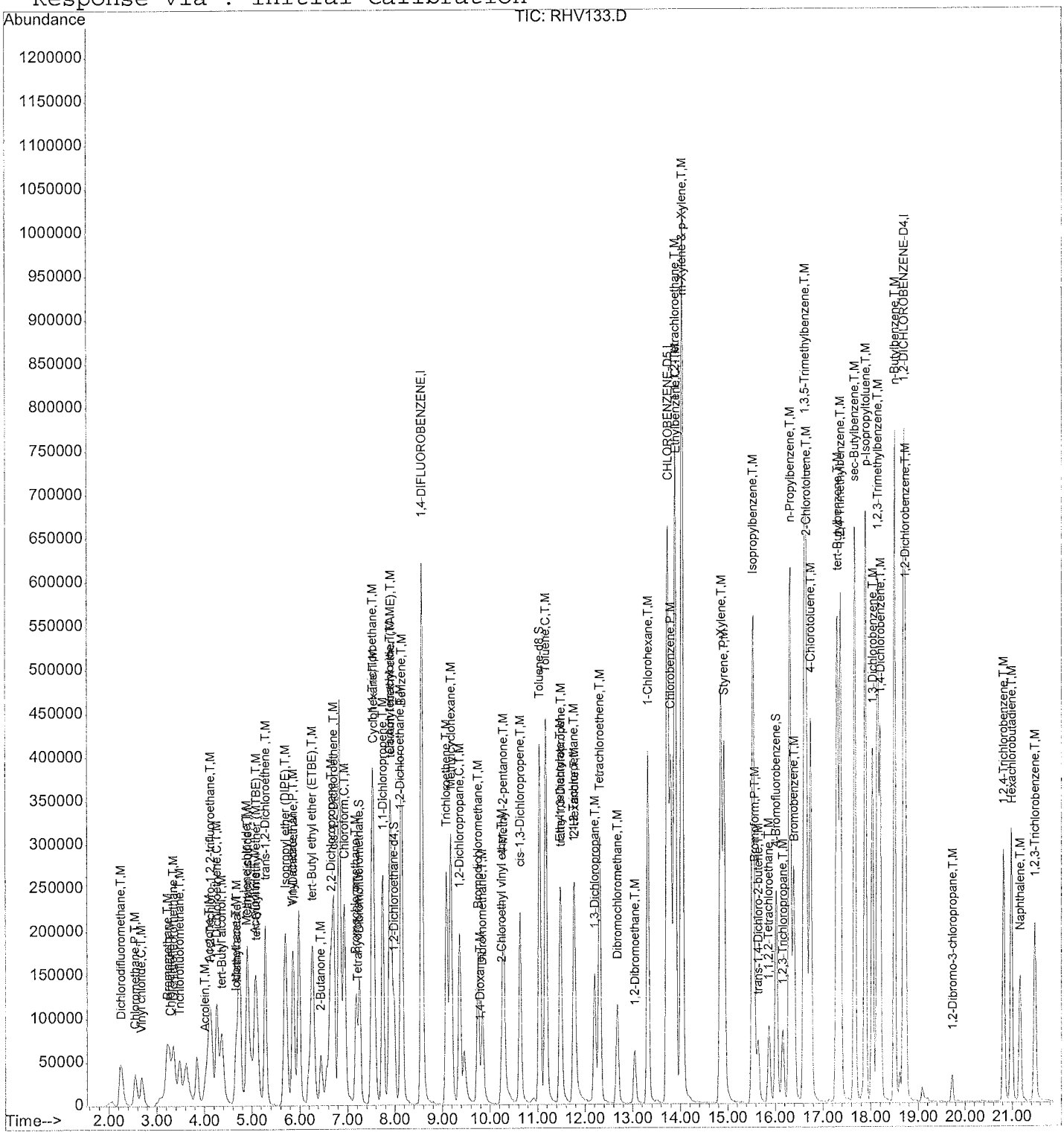
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	679737	5.44	ug/l	98
81)	2-Chlorotoluene	16.65	91	652654	5.25	ug/l	100
82)	4-Chlorotoluene	16.74	91	572332	5.39	ug/l	98
83)	tert-Butylbenzene	17.30	134	136532	4.94	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	650237	5.44	ug/l	100
85)	sec-Butylbenzene	17.66	105	936507	5.55	ug/l	100
86)	p-Isopropyltoluene	17.89	119	796468	5.55	ug/l	99
87)	1,3-Dichlorobenzene	18.04	146	312015	5.25	ug/l	99
88)	1,2,3-Trimethylbenzene	18.15	105	645332	5.57	ug/l	100
89)	1,4-Dichlorobenzene	18.20	146	294724	5.13	ug/l	97
90)	n-Butylbenzene	18.50	91	714305	5.43	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	264324	5.40	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.73	157	15407	5.59	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	173273	5.21	ug/l	99
94)	Hexachlorobutadiene	20.99	225	113734	5.21	ug/l	99
95)	Naphthalene	21.17	128	250291	5.28	ug/l	97
96)	1,2,3-Trichlorobenzene	21.48	180	134434	5.29	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV133.D Vial: 6
Acq On : 9 Aug 2024 7:46 pm Operator: DNguye
Sample : VO01H095 0.5/2.5 Inst : 01New
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SM 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D Vial: 7
Acq On : 9 Aug 2024 8:17 pm Operator: DNguye
Sample : VO01H096 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	962079	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	831588	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	320498	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	317917	10.87	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.70%		
41) 1,2-Dichloroethane-d4	7.98	65	287348	11.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.50%		
54) Toluene-d8	11.03	98	1083309	10.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.60%		
76) 4-Bromofluorobenzene	16.01	95	405953	9.98	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.80%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	367558	11.61	ug/l	100
5) Chloromethane	2.54	50	246286	10.73	ug/l	100
6) Vinyl chloride	2.68	62	230246	11.37	ug/l	100
7) Bromomethane	3.21	94	183985	10.26	ug/l	100
8) Chloroethane	3.27	64	161113	10.25	ug/l	100
9) Dichlorofluoromethane	3.35	67	350297	10.11	ug/l	100
10) Trichlorofluoromethane	3.48	101	526820	11.45	ug/l	100
11) Acrolein	4.01	56	46359	47.82	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	195663	10.38	ug/l	100
13) Acetone	4.10	43	215012	49.81	ug/l	100
14) 1,1-Dichloroethene	4.25	61	476924	10.24	ug/l	100
15) tert-Butyl alcohol	4.37	59	335001	258.79	ug/l	100
16) Iodomethane	4.66	142	440198	10.46	ug/l	100
17) Methyl acetate	4.68	43	98398	9.89	ug/l	100
18) Methylene chloride	4.89	49	318119	9.83	ug/l	100
19) Carbon disulfide	4.90	76	851870	10.57	ug/l	100
20) Acrylonitrile	5.05	53	187795	49.11	ug/l	100
21) tert-Butyl methyl ether (M	5.09	73	547466	10.34	ug/l	100
22) trans-1,2-Dichloroethene	5.27	61	435508	10.27	ug/l	100
23) Isopropyl ether (DIPE)	5.69	45	857937	10.14	ug/l	100
24) Vinyl acetate	5.85	43	325682	10.54	ug/l	100
25) 1,1-Dichloroethane	5.85	63	519607	10.00	ug/l	100
27) tert-Butyl ethyl ether (ET	6.26	59	808757	10.33	ug/l	100
28) 2-Butanone	6.44	43	305798	48.28	ug/l	100
29) 2,2-Dichloropropane	6.65	77	538863	10.40	ug/l	100
30) cis-1,2-Dichloroethene	6.71	96	335591	10.26	ug/l	100
31) Chloroform	6.93	83	598324	10.23	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D Vial: 7
Acq On : 9 Aug 2024 8:17 pm Operator: DNguye
Sample : VO01H096 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.17	49	200895	10.11 ug/l	100
33) Tetrahydrofuran	7.21	42	32034	9.06 ug/l	100
35) 1,1,1-Trichloroethane	7.51	97	618367	10.71 ug/l	100
36) Cyclohexane	7.54	84	433940	10.44 ug/l	100
38) 1,1-Dichloropropene	7.73	110	158741	10.04 ug/l	100
39) Carbon tetrachloride	7.89	119	516332	10.76 ug/l	100
40) tert-Amyl methyl ether (TA	7.91	73	592996	10.31 ug/l	100
42) Benzene	8.15	78	1106697	10.45 ug/l	100
43) 1,2-Dichloroethane	8.12	62	365537	11.03 ug/l	100
44) Trichloroethene	9.08	130	344897	10.23 ug/l	100
45) Methylcyclohexane	9.18	83	488415	10.53 ug/l	100
46) 1,2-Dichloropropane	9.36	63	249523	10.32 ug/l	100
47) Bromodichloromethane	9.75	83	423474	10.03 ug/l	100
48) 1,4-Dioxane	9.78	88	24332	203.24 ug/l	100
49) Dibromomethane	9.83	93	138344	10.28 ug/l	100
50) 2-Chloroethyl vinyl ether	10.23	63	73857	9.76 ug/l	100
51) 4-Methyl-2-pentanone	10.28	43	788348	54.51 ug/l	100
52) cis-1,3-Dichloropropene	10.63	75	451018	10.56 ug/l	100
55) Toluene	11.17	91	1307968	10.50 ug/l	100
56) Ethyl methacrylate	11.46	69	223328	10.63 ug/l	100
57) trans-1,3-Dichloropropene	11.48	75	388371	10.75 ug/l	100
58) 1,1,2-Trichloroethane	11.76	97	184365	10.10 ug/l	100
59) 2-Hexanone	11.76	43	509587	51.03 ug/l	100
60) 1,3-Dichloropropane	12.20	76	333447	10.26 ug/l	100
61) Tetrachloroethene	12.31	164	277290	9.80 ug/l	100
62) Dibromochloromethane	12.68	129	250854	10.39 ug/l	100
63) 1,2-Dibromoethane	13.03	107	184590	10.04 ug/l	100
64) 1-Chlorohexane	13.32	91	572517	9.91 ug/l	100
65) Chlorobenzene	13.79	112	886613	10.35 ug/l	100
66) 1,1,1,2-Tetrachloroethane	13.86	131	304261	10.64 ug/l	100
67) Ethylbenzene	13.89	91	1648829	10.57 ug/l	100
68) m-Xylene & p-Xylene	14.03	91	2525052	20.50 ug/l	100
69) o-Xylene	14.84	91	1277808	10.76 ug/l	100
70) Styrene	14.92	104	912792	10.50 ug/l	100
71) Isopropylbenzene	15.52	105	1710871	10.52 ug/l	100
73) Bromoform	15.57	173	120818	10.26 ug/l	100
74) trans-1,4-Dichloro-2-buten	15.63	53	71724	10.02 ug/l	100
75) 1,1,2,2-Tetrachloroethane	15.86	83	194330	10.15 ug/l	100
77) 1,2,3-Trichloropropane	16.16	110	67329	9.56 ug/l	100
78) n-Propylbenzene	16.31	91	2038997	10.01 ug/l	100
79) Bromobenzene	16.40	156	299740	9.71 ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D Vial: 7
Acq On : 9 Aug 2024 8:17 pm Operator: DNguye
Sample : VO01H096 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1314569	9.77 ug/l	100
81)	2-Chlorotoluene	16.65	91	1310655	9.80 ug/l	100
82)	4-Chlorotoluene	16.74	91	1130456	9.89 ug/l	100
83)	tert-Butylbenzene	17.30	134	282803	9.51 ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	1295259	10.08 ug/l	100
85)	sec-Butylbenzene	17.66	105	1844631	10.16 ug/l	100
86)	p-Isopropyltoluene	17.88	119	1565765	10.14 ug/l	100
87)	1,3-Dichlorobenzene	18.04	146	627224	9.81 ug/l	100
88)	1,2,3-Trimethylbenzene	18.15	105	1285939	10.31 ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	607095	9.82 ug/l	100
90)	n-Butylbenzene	18.50	91	1461921	10.34 ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	527594	10.03 ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	32206	10.86 ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	358763	10.03 ug/l	100
94)	Hexachlorobutadiene	20.99	225	239251	10.19 ug/l	100
95)	Naphthalene	21.17	128	529576	10.39 ug/l	100
96)	1,2,3-Trichlorobenzene	21.48	180	280464	10.26 ug/l	100

SC 09/16/24

(#) = qualifier out of range (m) = manual integration

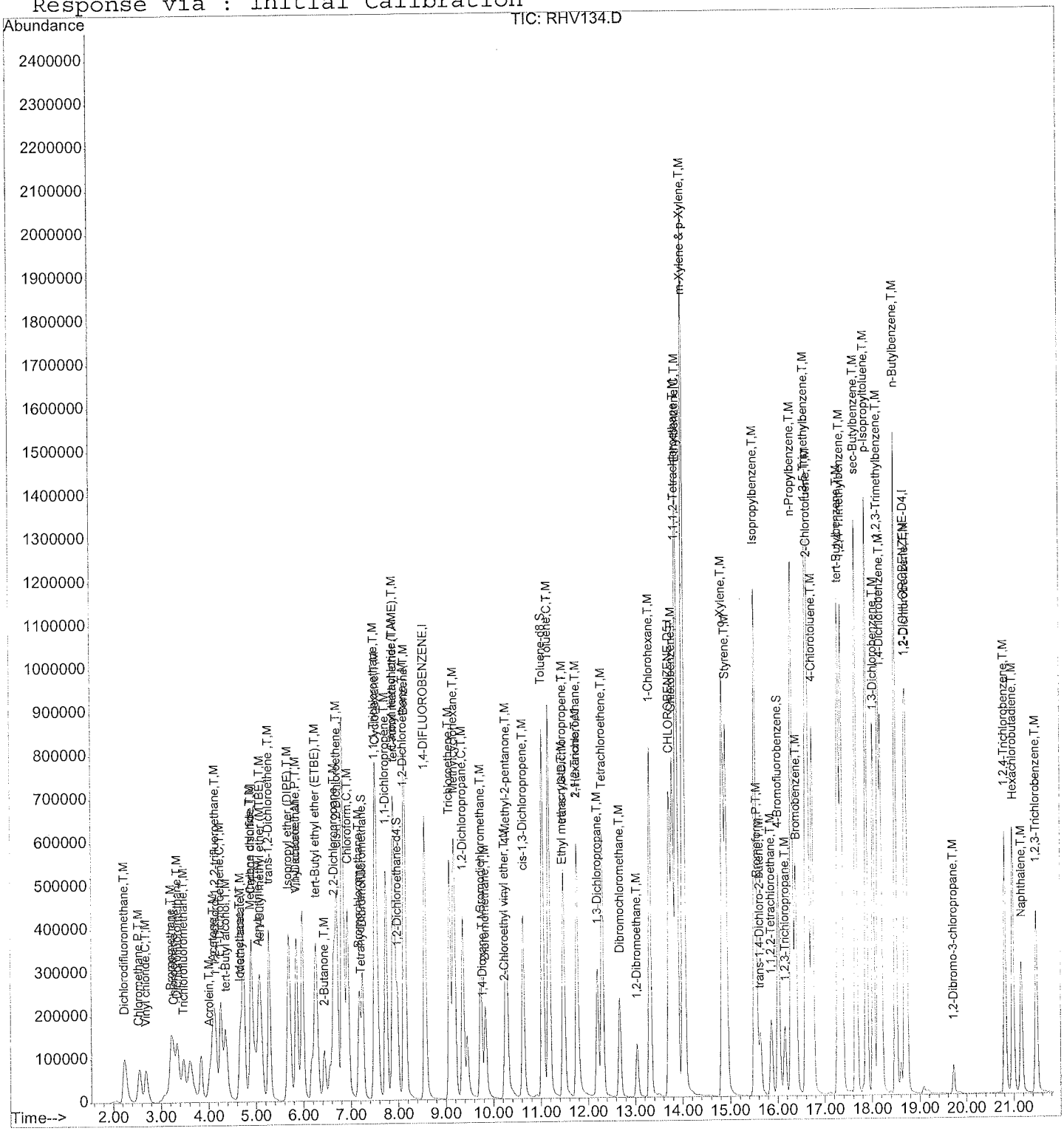
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV134.D
Acq On : 9 Aug 2024 8:17 pm
Sample : VO01H096 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024

Vial: 7
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SW 9/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1150883	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1018537	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	384694	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	765356	21.87	ug/l	0.00
Spiked Amount 10.000			Recovery = 218.70%			
41) 1,2-Dichloroethane-d4	7.97	65	677959	21.79	ug/l	-0.01
Spiked Amount 10.000			Recovery = 217.90%			
54) Toluene-d8	11.03	98	2602667	20.91	ug/l	0.00
Spiked Amount 10.000			Recovery = 209.10%			
76) 4-Bromofluorobenzene	16.01	95	1002851	20.55	ug/l	0.00
Spiked Amount 10.000			Recovery = 205.50%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	785678	20.75	ug/l	97
5) Chloromethane	2.54	50	541646	19.73	ug/l	98
6) Vinyl chloride	2.67	62	513628	21.21	ug/l	94
7) Bromomethane	3.23	94	422952	19.72	ug/l	97
8) Chloroethane	3.27	64	377247	20.07	ug/l	97
9) Dichlorofluoromethane	3.35	67	827118	19.95	ug/l	99
10) Trichlorofluoromethane	3.60	101	1055028	19.17	ug/l	94
11) Acrolein	4.01	56	111080	95.77	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	450807	20.00	ug/l	98
13) Acetone	4.09	43	506208	100.56	ug/l	96
14) 1,1-Dichloroethene	4.25	61	1089229	19.56	ug/l	97
15) tert-Butyl alcohol	4.37	59	830279	536.18	ug/l	97
16) Iodomethane	4.67	142	1029215	20.44	ug/l	96
17) Methyl acetate	4.68	43	228998	19.24	ug/l	99
18) Methylene chloride	4.89	49	759786	19.63	ug/l	98
19) Carbon disulfide	4.90	76	2032344	21.08	ug/l	100
20) Acrylonitrile	5.05	53	476585	104.20	ug/l	99
21) tert-Butyl methyl ether (M	5.08	73	1291834	20.40	ug/l	98
22) trans-1,2-Dichloroethene	5.27	61	997435	19.67	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	2069096	20.44	ug/l	98
24) Vinyl acetate	5.85	43	777719	21.03	ug/l	97
25) 1,1-Dichloroethane	5.85	63	1245038	20.03	ug/l	99
27) tert-Butyl ethyl ether (ET	6.27	59	1896011	20.25	ug/l	99
28) 2-Butanone	6.43	43	776970	102.54	ug/l	100
29) 2,2-Dichloropropane	6.65	77	1227491	19.81	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	776590	19.85	ug/l	97
31) Chloroform	6.93	83	1319238	18.85	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.17	49	491878	20.70 ug/l	98
33)	Tetrahydrofuran	7.21	42	81729	19.32 ug/l	94
35)	1,1,1-Trichloroethane	7.51	97	1375586	19.92 ug/l	99
36)	Cyclohexane	7.54	84	970280	19.51 ug/l	99
38)	1,1-Dichloropropene	7.73	110	379669	20.07 ug/l	100
39)	Carbon tetrachloride	7.90	119	1155219	20.12 ug/l	100
40)	tert-Amyl methyl ether (TA	7.91	73	1437980	20.90 ug/l	100
42)	Benzene	8.15	78	2636933	20.81 ug/l	100
43)	1,2-Dichloroethane	8.12	62	823275	20.77 ug/l	97
44)	Trichloroethene	9.08	130	802073	19.89 ug/l	99
45)	Methylcyclohexane	9.17	83	1109057	19.99 ug/l	98
46)	1,2-Dichloropropane	9.36	63	601312	20.78 ug/l	97
47)	Bromodichloromethane	9.73	83	966732	19.15 ug/l	99
48)	1,4-Dioxane	9.77	88	59642	416.46 ug/l	88
49)	Dibromomethane	9.83	93	326433	20.27 ug/l	98
50)	2-Chloroethyl vinyl ether	10.23	63	196401	21.69 ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	1965955	113.64 ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	1075089	21.05 ug/l	99
55)	Toluene	11.17	91	2960512	19.40 ug/l	99
56)	Ethyl methacrylate	11.46	69	556104	21.61 ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	903478	20.41 ug/l	99
58)	1,1,2-Trichloroethane	11.76	97	448543	20.06 ug/l	99
59)	2-Hexanone	11.76	43	1275894	101.74 ug/l	97
60)	1,3-Dichloropropane	12.19	76	812582	20.41 ug/l	99
61)	Tetrachloroethene	12.31	164	635772	18.34 ug/l	99
62)	Dibromochloromethane	12.66	129	586615	19.85 ug/l	100
63)	1,2-Dibromoethane	13.03	107	453234	20.14 ug/l	99
64)	1-Chlorohexane	13.32	91	1346564	19.02 ug/l	99
65)	Chlorobenzene	13.79	112	2065952	19.69 ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	703194	20.07 ug/l	99
67)	Ethylbenzene	13.88	91	3709861	19.42 ug/l	97
68)	m-Xylene & p-Xylene	14.03	91	5569365	36.92 ug/l	97
69)	o-Xylene	14.84	91	2875405	19.77 ug/l	100
70)	Styrene	14.92	104	2174056	20.43 ug/l	97
71)	Isopropylbenzene	15.52	105	3813167	19.14 ug/l	99
73)	Bromoform	15.57	173	289936	20.52 ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	178121	20.73 ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	491863	21.41 ug/l	96
77)	1,2,3-Trichloropropane	16.14	110	168364	19.91 ug/l	96
78)	n-Propylbenzene	16.29	91	4613231	18.86 ug/l	99
79)	Bromobenzene	16.38	156	709263	19.15 ug/l	99

(#) = qualifier out of range (m) = manual integration

08/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

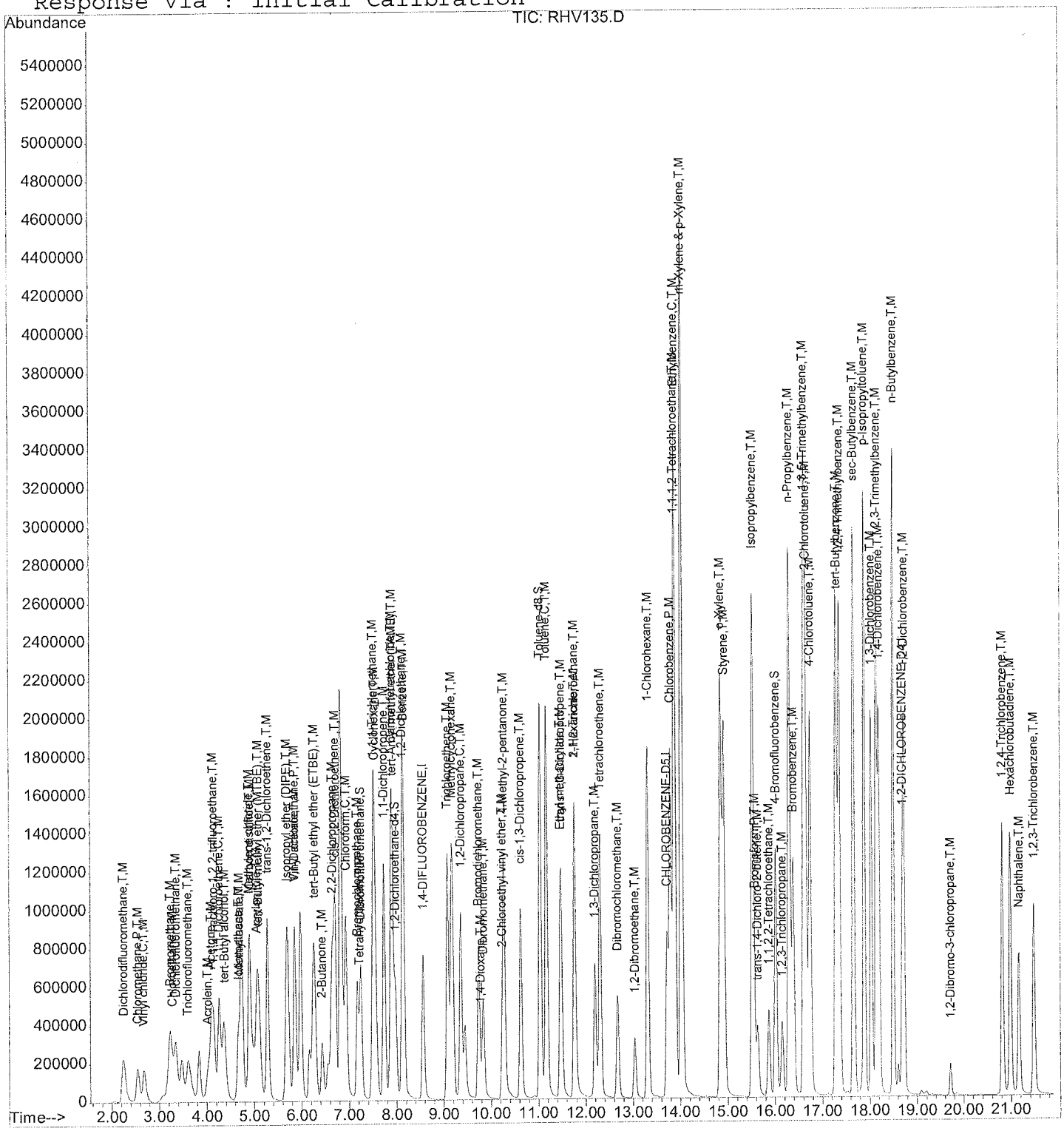
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	3005426	18.61	ug/l	97
81)	2-Chlorotoluene	16.65	91	2992664	18.64	ug/l	98
82)	4-Chlorotoluene	16.74	91	2549486	18.59	ug/l	98
83)	tert-Butylbenzene	17.30	134	673296	18.85	ug/l	99
84)	1,2,4-Trimethylbenzene	17.36	105	2904957	18.83	ug/l	97
85)	sec-Butylbenzene	17.66	105	4132246	18.97	ug/l	99
86)	p-Isopropyltoluene	17.88	119	3562034	19.21	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	1447912	18.88	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	2885446	19.28	ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	1416710	19.10	ug/l	99
90)	n-Butylbenzene	18.50	91	3192652	18.81	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	1237082	19.58	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	79839	22.44	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	853446	19.88	ug/l	100
94)	Hexachlorobutadiene	20.99	225	547118	19.42	ug/l	100
95)	Naphthalene	21.17	128	1278083	20.89	ug/l	98
96)	1,2,3-Trichlorobenzene	21.48	180	653907	19.94	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV135.D Vial: 8
Acq On : 9 Aug 2024 8:47 pm Operator: DNguye
Sample : VO01H097 2.0/10 Inst : 01New
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1461385	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.73	117	1212032	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	417210	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	1328233	29.89	ug/l	0.00
Spiked Amount 10.000			Recovery =	298.90%		
41) 1,2-Dichloroethane-d4	7.98	65	1070237	27.09	ug/l	0.00
Spiked Amount 10.000			Recovery =	270.90%		
54) Toluene-d8	11.03	98	4525292	30.55	ug/l	0.00
Spiked Amount 10.000			Recovery =	305.50%		
76) 4-Bromofluorobenzene	16.01	95	1632018	30.83	ug/l	0.00
Spiked Amount 10.000			Recovery =	308.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	1325069	27.55	ug/l	99
5) Chloromethane	2.54	50	944572	27.10	ug/l	98
6) Vinyl chloride	2.69	62	942460	30.65	ug/l	99
7) Bromomethane	3.23	94	770930	28.31	ug/l	94
8) Chloroethane	3.29	64	700835	29.36	ug/l	92
9) Dichlorofluoromethane	3.35	67	1425385	27.07	ug/l	99
10) Trichlorofluoromethane	3.48	101	1922790	27.51	ug/l	99
11) Acrolein	4.03	56	217539	147.71	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	822034	28.72	ug/l	98
13) Acetone	4.10	43	866792	136.51	ug/l	94
14) 1,1-Dichloroethene	4.25	61	1973543	27.91	ug/l	95
15) tert-Butyl alcohol	4.37	59	1338284	680.61	ug/l	99
16) Iodomethane	4.66	142	1915115	29.96	ug/l	91
17) Methyl acetate	4.68	43	425400	28.15	ug/l	98
18) Methylene chloride	4.89	49	1394981	28.38	ug/l	97
19) Carbon disulfide	4.90	76	3839603	31.37	ug/l	100
20) Acrylonitrile	5.05	53	901212	155.17	ug/l	96
21) tert-Butyl methyl ether (M	5.09	73	2295214	28.54	ug/l	94
22) trans-1,2-Dichloroethene	5.27	61	1846052	28.66	ug/l	96
23) Isopropyl ether (DIPE)	5.70	45	3839771	29.87	ug/l	99
24) Vinyl acetate	5.85	43	1354892	28.85	ug/l	96
25) 1,1-Dichloroethane	5.85	63	2294729	29.08	ug/l	99
27) tert-Butyl ethyl ether (ET	6.26	59	3377877	28.42	ug/l	99
28) 2-Butanone	6.43	43	1385103	143.96	ug/l	99
29) 2,2-Dichloropropane	6.65	77	2083192	26.48	ug/l	98
30) cis-1,2-Dichloroethene	6.71	96	1462643	29.45	ug/l	94
31) Chloroform	6.93	83	2272439	25.57	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	881140	29.20	ug/l	99
33)	Tetrahydrofuran	7.21	42	141560	26.35	ug/l	93
35)	1,1,1-Trichloroethane	7.52	97	2341349	26.70	ug/l	99
36)	Cyclohexane	7.54	84	1962879	31.08	ug/l	100
38)	1,1-Dichloropropene	7.75	110	712914	29.67	ug/l	99
39)	Carbon tetrachloride	7.89	119	1951070	26.76	ug/l	99
40)	tert-Amyl methyl ether (TA	7.91	73	2495207	28.56	ug/l	100
42)	Benzene	8.15	78	4773208	29.66	ug/l	99
43)	1,2-Dichloroethane	8.12	62	1359635	27.02	ug/l	99
44)	Trichloroethene	9.08	130	1450073	28.32	ug/l	98
45)	Methylcyclohexane	9.18	83	2278446	32.34	ug/l	97
46)	1,2-Dichloropropane	9.36	63	1087666	29.61	ug/l	92
47)	Bromodichloromethane	9.75	83	1641626	25.61	ug/l	100
48)	1,4-Dioxane	9.77	88	101171	556.34	ug/l	88
49)	Dibromomethane	9.83	93	563077	27.54	ug/l	97
50)	2-Chloroethyl vinyl ether	10.23	63	353243	30.72	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	3374776	153.63	ug/l	97
52)	cis-1,3-Dichloropropene	10.63	75	1903847	29.35	ug/l	97
55)	Toluene	11.17	91	5289587	29.13	ug/l	97
56)	Ethyl methacrylate	11.45	69	969178	31.64	ug/l	93
57)	trans-1,3-Dichloropropene	11.48	75	1528669	29.02	ug/l	97
58)	1,1,2-Trichloroethane	11.76	97	782516	29.41	ug/l	98
59)	2-Hexanone	11.76	43	2150018	143.04	ug/l	96
60)	1,3-Dichloropropane	12.20	76	1372065	28.96	ug/l	99
61)	Tetrachloroethene	12.31	164	1145792	27.78	ug/l	97
62)	Dibromochloromethane	12.68	129	974891	27.72	ug/l	99
63)	1,2-Dibromoethane	13.03	107	784356	29.28	ug/l	98
64)	1-Chlorohexane	13.32	91	2398148	28.47	ug/l	99
65)	Chlorobenzene	13.79	112	3536039	28.33	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	1207456	28.97	ug/l	99
67)	Ethylbenzene	13.89	91	6169157	27.14	ug/l	95
68)	m-Xylene & p-Xylene	14.03	91	8994205	50.10	ug/l	91
69)	o-Xylene	14.84	91	4849057	28.02	ug/l	97
70)	Styrene	14.92	104	3756223	29.66	ug/l	96
71)	Isopropylbenzene	15.52	105	6282009	26.50	ug/l	98
73)	Bromoform	15.57	173	474486	30.97	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	281511	30.21	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	799846	32.10	ug/l	97
77)	1,2,3-Trichloropropane	16.16	110	263192	28.70	ug/l	97
78)	n-Propylbenzene	16.31	91	7448579	28.08	ug/l	97
79)	Bromobenzene	16.40	156	1170949	29.15	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	4831297	27.59	ug/l	95
81)	2-Chlorotoluene	16.65	91	4742897	27.24	ug/l	97
82)	4-Chlorotoluene	16.74	91	4208682	28.30	ug/l	96
83)	tert-Butylbenzene	17.30	134	1108973	28.63	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	4692017	28.04	ug/l	95
85)	sec-Butylbenzene	17.66	105	6494824	27.49	ug/l	98
86)	p-Isopropyltoluene	17.89	119	5547663	27.59	ug/l	98
87)	1,3-Dichlorobenzene	18.04	146	2316340	27.84	ug/l	99
88)	1,2,3-Trimethylbenzene	18.15	105	4423835	27.26	ug/l	95
89)	1,4-Dichlorobenzene	18.20	146	2218767	27.58	ug/l	99
90)	n-Butylbenzene	18.50	91	4839886	26.29	ug/l	96
91)	1,2-Dichlorobenzene	18.72	146	1893356	27.64	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.73	157	117545	30.46	ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	1289347	27.70	ug/l	99
94)	Hexachlorobutadiene	20.99	225	840674	27.51	ug/l	99
95)	Naphthalene	21.17	128	1911419	28.80	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	1000796	28.14	ug/l	98

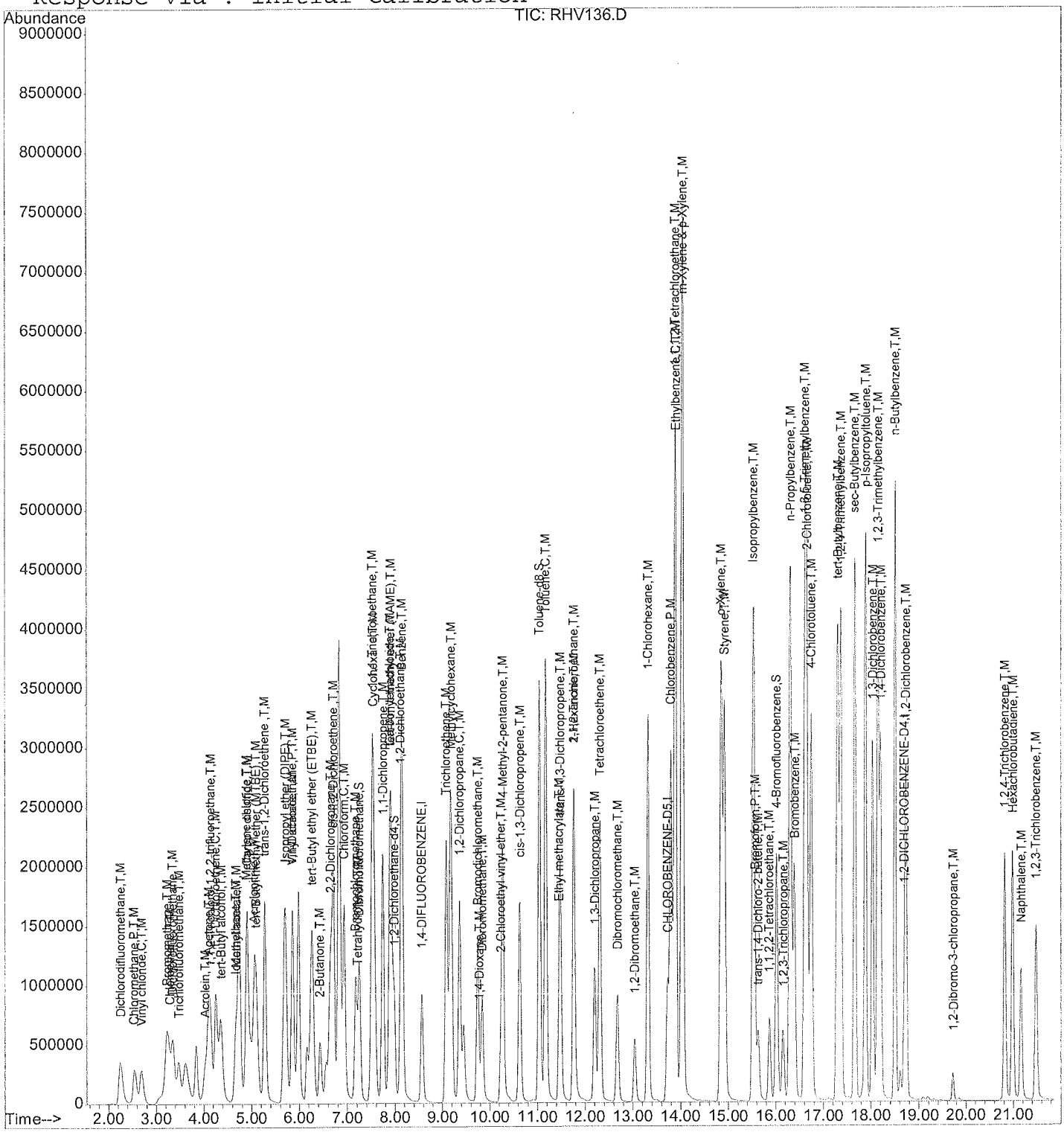
SC

(#) = qualifier out of range (m) = manual integration
RHV136.D VO01H09.M Fri Aug 30 18:37:29 2024 9/6/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV136.D Vial: 9
Acq On : 9 Aug 2024 9:17 pm Operator: DNguye
Sample : VO01H098 3.0/15 Inst : 01New
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:47 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



8/26/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1550082	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1272626	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	398203	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	551	0.01	ug/l	-0.01
Spiked Amount 10.000			Recovery =	0.10%		
41) 1,2-Dichloroethane-d4	0.00	65	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
54) Toluene-d8	11.03	98	13898	0.09	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.90%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.23	85	2346897	46.01	ug/l	95
5) Chloromethane	2.53	50	1762845	47.68	ug/l	98
6) Vinyl chloride	2.67	62	1751063	53.69	ug/l	97
7) Bromomethane	3.21	94	1398868	48.43	ug/l	95
8) Chloroethane	3.27	64	1331488	52.58	ug/l	90
9) Dichlorofluoromethane	3.33	67	2577952	46.16	ug/l	99
10) Trichlorofluoromethane	3.60	101	3493896	47.13	ug/l	98
11) Acrolein	4.01	56	420047	268.90	ug/l	90
12) 1,1,2-Trichloro-1,2,2-trif	4.12	151	1433660	47.22	ug/l	100
13) Acetone	4.09	43	1465054	219.08	ug/l	93
14) 1,1-Dichloroethene	4.25	61	3480047	46.40	ug/l	94
15) tert-Butyl alcohol	4.35	59	2530967	1213.52	ug/l	97
16) Iodomethane	4.65	142	3415106	50.36	ug/l	89
17) Methyl acetate	4.67	43	765906	47.78	ug/l	96
18) Methylene chloride	4.87	49	2452149	47.04	ug/l	96
20) Acrylonitrile	5.05	53	1559155	253.09	ug/l	98
21) tert-Butyl methyl ether (M	5.10	73	3901741	45.74	ug/l	93
22) trans-1,2-Dichloroethene	5.27	61	3241205	47.45	ug/l	93
23) Isopropyl ether (DIPE)	5.69	45	6590087	48.33	ug/l	100
24) Vinyl acetate	5.84	43	2483809	49.87	ug/l	96
25) 1,1-Dichloroethane	5.85	63	4004425	47.83	ug/l	99
27) tert-Butyl ethyl ether (ET	6.25	59	5674608	45.01	ug/l	98
28) 2-Butanone	6.43	43	2357347	230.99	ug/l	99
29) 2,2-Dichloropropane	6.65	77	3567287	42.75	ug/l	98
30) cis-1,2-Dichloroethene	6.70	96	2584295	49.05	ug/l	92
31) Chloroform	6.92	83	3884727	41.21	ug/l	97
32) Bromochloromethane	7.17	49	1538605	48.08	ug/l	99

(#) = qualifier out of range (m) = manual integration

RHV137.D VO01H09.M Fri Aug 30 18:39:11 2024 Page 1

SL 09/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D
Acq On : 9 Aug 2024 9:47 pm
Sample : VO01H099 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024

Vial: 10
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) Tetrahydrofuran	7.21	42	258978	45.45 ug/l	93
35) 1,1,1-Trichloroethane	7.51	97	3980715	42.79 ug/l	98
36) Cyclohexane	7.52	84	3368126	50.28 ug/l	99
38) 1,1-Dichloropropene	7.73	110	1234976	48.46 ug/l	99
39) Carbon tetrachloride	7.90	119	3320517	42.94 ug/l	98
40) tert-Amyl methyl ether (TA	7.91	73	4201292	45.33 ug/l	99
42) Benzene	8.13	78	8069673	47.28 ug/l	98
43) 1,2-Dichloroethane	8.12	62	2294253	42.98 ug/l	98
44) Trichloroethene	9.08	130	2486450	45.79 ug/l	97
45) Methylcyclohexane	9.17	83	3912492	52.36 ug/l	97
46) 1,2-Dichloropropane	9.36	63	1922116	49.33 ug/l	89
47) Bromodichloromethane	9.73	83	2782210	40.92 ug/l	99
48) 1,4-Dioxane	9.76	88	198113	1027.09 ug/l	93
49) Dibromomethane	9.82	93	963297	44.42 ug/l	95
50) 2-Chloroethyl vinyl ether	10.22	63	623578	51.12 ug/l	98
51) 4-Methyl-2-pentanone	10.26	43	5634001	241.80 ug/l	96
52) cis-1,3-Dichloropropene	10.62	75	3238872	47.08 ug/l	97
55) Toluene	11.17	91	8563343	44.91 ug/l	93
56) Ethyl methacrylate	11.45	69	1671329	51.97 ug/l	94
57) trans-1,3-Dichloropropene	11.48	75	2629177	47.54 ug/l	96
58) 1,1,2-Trichloroethane	11.74	97	1347520	48.24 ug/l	99
59) 2-Hexanone	11.76	43	3580157	225.40 ug/l	94
60) 1,3-Dichloropropane	12.19	76	2409049	48.43 ug/l	100
61) Tetrachloroethene	12.31	164	1975797	45.62 ug/l	97
62) Dibromochloromethane	12.66	129	1687823	45.70 ug/l	99
63) 1,2-Dibromoethane	13.03	107	1330569	47.31 ug/l	96
64) 1-Chlorohexane	13.32	91	4073611	46.06 ug/l	98
65) Chlorobenzene	13.79	112	5965334	45.51 ug/l	97
66) 1,1,1,2-Tetrachloroethane	13.86	131	2052970	46.90 ug/l	100
67) Ethylbenzene	13.88	91	9788973	41.01 ug/l	90
69) o-Xylene	14.84	91	7695449	42.35 ug/l	94
70) Styrene	14.92	104	6256463	47.05 ug/l	97
73) Bromoform	15.57	173	817115	55.88 ug/l	98
74) trans-1,4-Dichloro-2-buten	15.63	53	474241	53.32 ug/l	98
75) 1,1,2,2-Tetrachloroethane	15.86	83	1321811	55.58 ug/l	98
77) 1,2,3-Trichloropropane	16.14	110	460433	52.61 ug/l	94
78) n-Propylbenzene	16.29	91	11115890	43.91 ug/l	93
79) Bromobenzene	16.38	156	1942250	50.66 ug/l	100
80) 1,3,5-Trimethylbenzene	16.60	105	7640705	45.71 ug/l	92
81) 2-Chlorotoluene	16.65	91	7752421	46.65 ug/l	94
82) 4-Chlorotoluene	16.74	91	6559965	46.21 ug/l	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

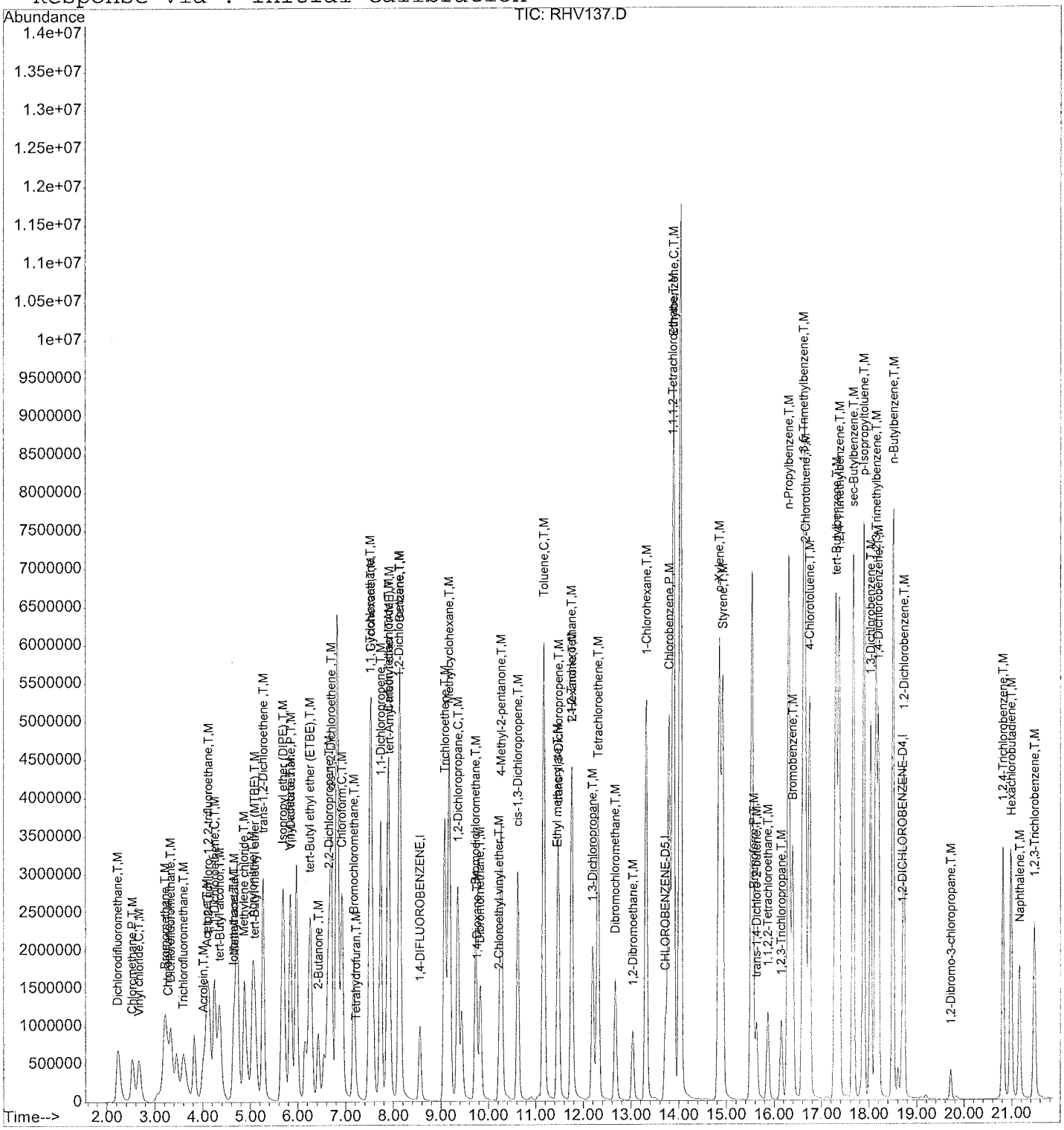
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83)	tert-Butylbenzene	17.30	134	1857054	50.24	ug/l	97
84)	1,2,4-Trimethylbenzene	17.36	105	7235456	45.31	ug/l	90
85)	sec-Butylbenzene	17.66	105	9517579	42.21	ug/l	93
86)	p-Isopropyltoluene	17.88	119	8220752	42.84	ug/l	95
87)	1,3-Dichlorobenzene	18.03	146	3672185	46.25	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	6721285	43.39	ug/l	93
89)	1,4-Dichlorobenzene	18.19	146	3550594	46.24	ug/l	99
90)	n-Butylbenzene	18.50	91	7113798	40.49	ug/l	91
91)	1,2-Dichlorobenzene	18.72	146	3029323	46.33	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	196035	53.22	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	2009206	45.22	ug/l	100
94)	Hexachlorobutadiene	20.99	225	1310067	44.92	ug/l	99
95)	Naphthalene	21.17	128	3067753	48.44	ug/l	98
96)	1,2,3-Trichlorobenzene	21.48	180	1571867	46.30	ug/l	97

(#) = qualifier out of range (m) = manual integration
RHV137.D VO01H09.M Fri Aug 30 18:39:12 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV137.D Vial: 10
Acq On : 9 Aug 2024 9:47 pm Operator: DNguye
Sample : VO01H099 5.0/25 Inst : 01New
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:39 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1270873	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	1026209	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	289170	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	0.00	111	0	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
41) 1,2-Dichloroethane-d4	0.00	65	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
54) Toluene-d8	11.05	98	4989	0.04	ug/l	0.01
Spiked Amount 10.000			Recovery =	0.40%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	4670381	111.67	ug/l	96
5) Chloromethane	2.53	50	3722515	122.79	ug/l	98
7) Bromomethane	3.21	94	2840980	119.96	ug/l	97
8) Chloroethane	3.27	64	2633367	126.84	ug/l	91
9) Dichlorofluoromethane	3.35	67	5323040	116.25	ug/l	100
10) Trichlorofluoromethane	3.61	101	6852447	112.74	ug/l	98
11) Acrolein	4.01	56	842414	657.76	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	2886728	115.96	ug/l	99
13) Acetone	4.09	43	2953626	542.52	ug/l	92
14) 1,1-Dichloroethene	4.25	61	6983489	113.56	ug/l	94
15) tert-Butyl alcohol	4.37	59	4804777	2809.87	ug/l	99
17) Methyl acetate	4.68	43	1495299	113.78	ug/l	95
18) Methylene chloride	4.89	49	4936369	115.49	ug/l	95
20) Acrylonitrile	5.05	53	3140183	621.71	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	7734124	110.59	ug/l	94
22) trans-1,2-Dichloroethene	5.27	61	6301340	112.51	ug/l	91
23) Isopropyl ether (DIPE)	5.69	45	12384481	110.77	ug/l	95
24) Vinyl acetate	5.85	43	4887040	119.68	ug/l	95
25) 1,1-Dichloroethane	5.85	63	7723208	112.53	ug/l	98
27) tert-Butyl ethyl ether (ET	6.27	59	10982001	106.24	ug/l	96
28) 2-Butanone	6.43	43	4661661	557.14	ug/l	99
29) 2,2-Dichloropropane	6.65	77	7038809	102.88	ug/l	97
30) cis-1,2-Dichloroethene	6.71	96	5150285	119.23	ug/l	90
31) Chloroform	6.93	83	7500896	97.05	ug/l	94
32) Bromochloromethane	7.17	49	3031909	115.55	ug/l	99
33) Tetrahydrofuran	7.21	42	500929	107.23	ug/l	95
35) 1,1,1-Trichloroethane	7.51	97	7775386	101.94	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
36)	Cyclohexane	7.54	84	6580294	119.81	ug/l		99
38)	1,1-Dichloropropene	7.73	110	2477702	118.58	ug/l		98
39)	Carbon tetrachloride	7.89	119	6568334	103.61	ug/l		99
40)	tert-Amyl methyl ether (TA	7.91	73	8112654	106.77	ug/l		98
42)	Benzene	8.15	78	13888654	99.25	ug/l		93
43)	1,2-Dichloroethane	8.12	62	4483500	102.46	ug/l		97
44)	Trichloroethene	9.08	130	4941326	110.99	ug/l		97
45)	Methylcyclohexane	9.18	83	7314408	119.40	ug/l		96
46)	1,2-Dichloropropane	9.36	63	3752082	117.45	ug/l		92
47)	Bromodichloromethane	9.73	83	5473913	98.19	ug/l		99
48)	1,4-Dioxane	9.76	88	380626	2406.83	ug/l		90
49)	Dibromomethane	9.83	93	1910399	107.45	ug/l		96
50)	2-Chloroethyl vinyl ether	10.22	63	1218626	121.85	ug/l		99
51)	4-Methyl-2-pentanone	10.26	43	10267105	537.45	ug/l		92
52)	cis-1,3-Dichloropropene	10.62	75	6202577	109.96	ug/l		94
55)	Toluene	11.17	91	14043908	91.33	ug/l		84
57)	trans-1,3-Dichloropropene	11.48	75	5011355	112.36	ug/l		94
58)	1,1,2-Trichloroethane	11.74	97	2647712	117.55	ug/l		99
59)	2-Hexanone	11.76	43	6801833	527.70	ug/l		92
60)	1,3-Dichloropropane	12.19	76	4651210	115.96	ug/l		98
61)	Tetrachloroethene	12.31	164	3854409	110.36	ug/l		97
62)	Dibromochloromethane	12.66	129	3318617	111.43	ug/l		97
63)	1,2-Dibromoethane	13.03	107	2639320	116.39	ug/l		97
64)	1-Chlorohexane	13.31	91	7538336	105.71	ug/l		95
65)	Chlorobenzene	13.79	112	10817556	102.35	ug/l		91
66)	1,1,1,2-Tetrachloroethane	13.88	131	4072316	115.38	ug/l		100
69)	o-Xylene	14.84	91	12785500	87.27	ug/l		83
70)	Styrene	14.91	104	10999980	102.59	ug/l		97
78)	n-Propylbenzene	16.31	91	16291269	88.62	ug/l		80
79)	Bromobenzene	16.38	156	3679164	132.16	ug/l		98
80)	1,3,5-Trimethylbenzene	16.62	105	12237227	100.82	ug/l		84
81)	2-Chlorotoluene	16.65	91	12699107	105.23	ug/l		87
82)	4-Chlorotoluene	16.74	91	11067133	107.36	ug/l		85
83)	tert-Butylbenzene	17.30	134	3365411	125.37	ug/l		94
84)	1,2,4-Trimethylbenzene	17.36	105	11581107	99.87	ug/l		79
85)	sec-Butylbenzene	17.66	105	13681920	83.56	ug/l		80
86)	p-Isopropyltoluene	17.89	119	12260360	87.97	ug/l		85
87)	1,3-Dichlorobenzene	18.04	146	6425754	111.44	ug/l		96
88)	1,2,3-Trimethylbenzene	18.14	105	10502610	93.36	ug/l	#	84
89)	1,4-Dichlorobenzene	18.20	146	6178768	110.82	ug/l		95
90)	n-Butylbenzene	18.50	91	10448826	81.89	ug/l		82

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D Vial: 11
Acq On : 9 Aug 2024 10:17 pm Operator: DNguye
Sample : VO01H0910 10/50 Inst : 01New
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
91)	1,2-Dichlorobenzene	18.72	146	5331830	112.29	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	3527937	109.34	ug/l	99
94)	Hexachlorobutadiene	20.99	225	2314021	109.25	ug/l	99
95)	Naphthalene	21.15	128	5355694	116.45	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	2776515	112.62	ug/l	98

(#) = qualifier out of range (m) = manual integration

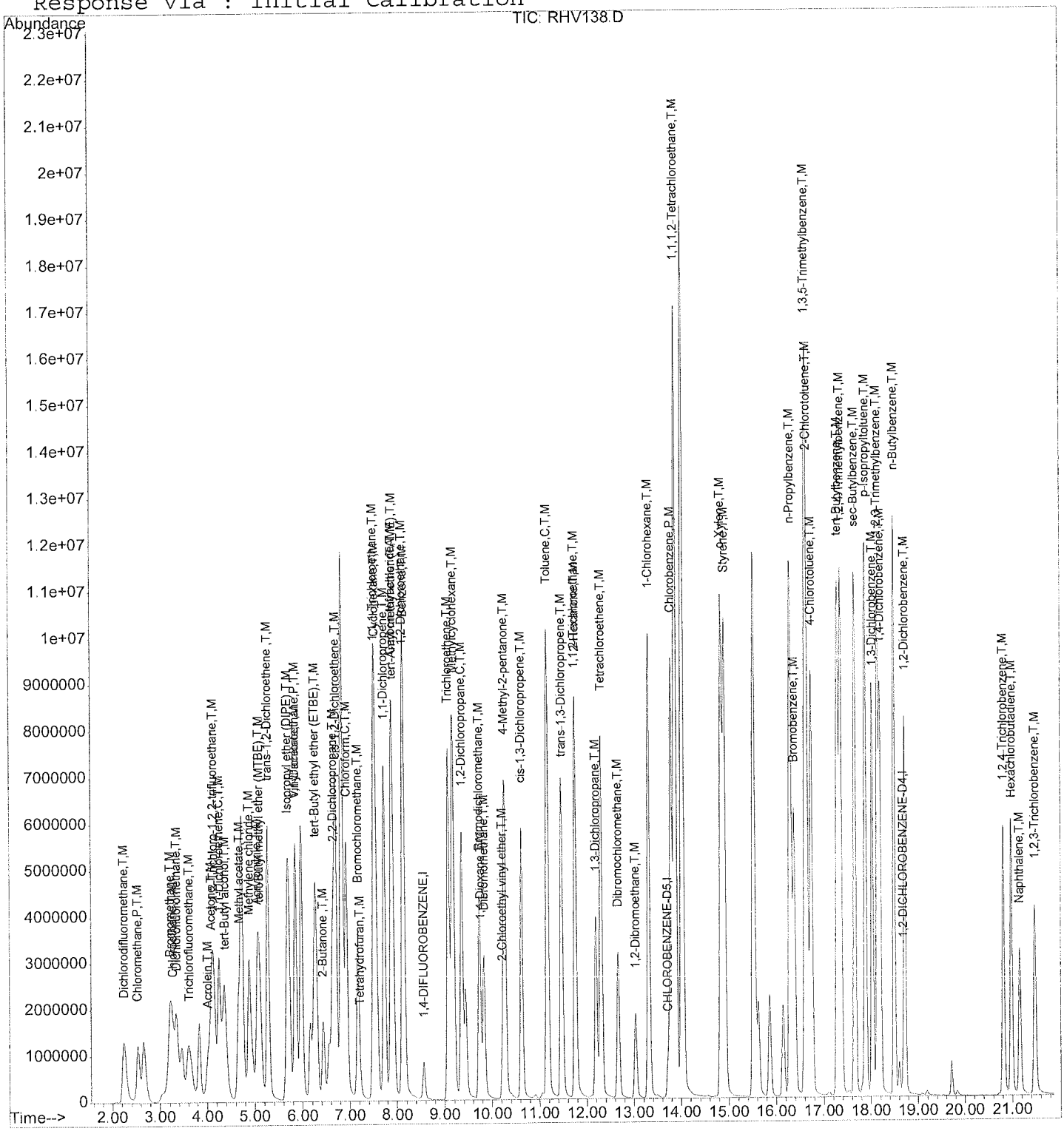
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV138.D
Acq On : 9 Aug 2024 10:17 pm
Sample : VO01H0910 10/50
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA
MS Integration Params: RTE.P
Quant Time: Aug 30 18:41 2024

Vial: 11
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01New
IC_Beginning DateTime :08/09/24 17:28
Spike Amount :10 PPB
CC/CV File :RHV141
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09
Date_Time :08/09/24 23:47

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1458016	1	1	8.561	8.560	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane	8.562	-14.4	410825	0.282	0.329	2.239	2.241	12.04				
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane	11.811	18.1	410805	0.282	0.239	2.553	2.541	11.82				
	6	Vinyl chloride	11.830	18.3	362949	0.249	0.210	2.695	2.679	12.57				
	7	Bromomethane	11.618	16.2	315660	0.216	0.186	3.227	3.221	8.61				
	8	Chloroethane	12.384	23.8	294990	0.202	0.163	3.272	3.278	13.37				
	9	Dichlorofluoromethane	9.814	-1.9	515590	0.354	0.360	3.346	3.342	9.43				
	10	Trichlorofluoromethane	9.253	-7.5	645259	0.443	0.478	3.613	3.554	9.99				
5	11	Acrolein	56.857	13.7	83543	0.011	0.010	4.027	4.017	14.81				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	8.849	-11.5	252752	0.173	0.196	4.131	4.133	8.61				
5	13	Acetone	45.730	-8.5	300505	0.041	0.048	4.102	4.096	19.26	0.0111	0.0426		0.9952
	14	1,1-Dichloroethene	9.776	-2.2	689726	0.473	0.484	4.264	4.255	6.44				
25	15	tert-Butyl alcohol	222.068	-11.2	435647	0.012	0.013	4.368	4.372	12.10				
	16	Iodomethane	11.013	10.1	702444	0.482	0.437	4.664	4.663	6.31				
	17	Methyl acetate	10.258	2.6	154672	0.106	0.103	4.679	4.683	7.37				
	18	Methylene chloride	10.356	3.6	507851	0.348	0.336	4.887	4.885	7.35				
	19	Carbon disulfide	10.975	9.8	1340359	0.919	0.838	4.902	4.904	6.33				
5	20	Acrylonitrile	53.508	7.0	310061	0.043	0.040	5.050	5.059	11.32				
	21	tert-Butyl methyl ether (MTBE)	9.805	-1.9	786741	0.540	0.550	5.094	5.095	7.89				
	22	trans-1,2-Dichloroethene	10.226	2.3	657080	0.451	0.441	5.272	5.276	6.34				
	23	Isopropyl ether (DIPE)	10.918	9.2	1400453	0.961	0.880	5.687	5.692	7.83				
	24	Vinyl acetate	10.710	7.1	501747	0.344	0.321	5.850	5.852	11.40				
	25	1,1-Dichloroethane	10.517	5.2	828152	0.568	0.540	5.850	5.853	6.83				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	9.977	-0.2	1183255	0.812	0.813	6.265	6.265	8.56				
5	28	2-Butanone	45.670	-8.7	438405	0.060	0.066	6.442	6.440	9.12				
	29	2,2-Dichloropropane	8.837	-11.6	693615	0.476	0.538	6.650	6.650	7.93				
	30	cis-1,2-Dichloroethene	10.682	6.8	529401	0.363	0.340	6.709	6.705	9.52				
	31	Chloroform	9.141	-8.6	810614	0.556	0.608	6.931	6.930	12.21				
	32	Bromochloromethane	10.320	3.2	310687	0.213	0.206	7.168	7.169	8.79				
	33	Tetrahydrofuran	8.018	-19.8	42975	0.029	0.037	7.213	7.215	11.65				
	34	Dibromofluoromethane	10.058	0.6	445940	0.306	0.304	7.242	7.243	13.19				
	35	1,1,1-Trichloroethane	8.951	-10.5	783252	0.537	0.600	7.509	7.519	8.89				
	36	Cyclohexane	9.904	-1.0	624073	0.428	0.432	7.538	7.538	9.21				
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene	9.832	-1.7	235706	0.162	0.164	7.731	7.739	8.22				
	39	Carbon tetrachloride	8.793	-12.1	639597	0.439	0.499	7.894	7.893	9.16				
	40	tert-Amyl methyl ether (TAME)	10.160	1.6	885635	0.607	0.598	7.894	7.908	7.20				
	41	1,2-Dichloroethane-d4	8.954	-10.5	352943	0.242	0.270	7.968	7.979	10.30				
	42	Benzene	11.047	10.5	1773569	1.216	1.101	8.146	8.145	5.25				
	43	1,2-Dichloroethane	9.025	-9.8	453115	0.311	0.344	8.116	8.120	13.08				
	44	Trichloroethene	10.012	0.1	511419	0.351	0.350	9.079	9.083	6.77				
	45	Methylcyclohexane	9.800	-2.0	688803	0.472	0.482	9.168	9.176	13.31				
	46	1,2-Dichloropropane	10.763	7.6	394503	0.271	0.251	9.361	9.364	8.42				
	47	Bromodichloromethane	8.826	-11.7	564519	0.387	0.439	9.731	9.741	12.12				
20	48	1,4-Dioxane	188.765	-5.6	34248	0.001	0.001	9.790	9.779	11.23				
	49	Dibromomethane	9.554	-4.5	194884	0.134	0.140	9.820	9.834	7.18				
	50	2-Chloroethyl vinyl ether	10.125	1.3	116170	0.080	0.079	10.235	10.238	13.01				
5	51	4-Methyl-2-pentanone	50.701	1.4	1111189	0.152	0.150	10.264	10.283	11.85				
	52	cis-1,3-Dichloropropene	9.896	-1.0	640446	0.439	0.444	10.620	10.629	7.60				
	53	CHLOROBENZENE-D5	10.000	0	1207297	1	1	13.716	13.726	0				
	54	Toluene-d8	10.351	3.5	1527415	1.265	1.222	11.035	11.038	8.56				
	55	Toluene	10.603	6.0	1918259	1.589	1.498	11.168	11.173	6.69				
	56	Ethyl methacrylate	10.127	1.3	308968	0.256	0.253	11.464	11.474	13.78				
	57	trans-1,3-Dichloropropene	9.640	-3.6	505830	0.419	0.435	11.479	11.490	10.00				
	58	1,1,2-Trichloroethane	9.957	-0.4	263881	0.219	0.219	11.746	11.760	9.84				
5	59	2-Hexanone	45.591	-8.8	656965	0.109	0.111	11.761	11.776	19.21	-0.0312	0.1262		0.9976
	60	1,3-Dichloropropane	9.946	-0.5	469386	0.389	0.391	12.190	12.201	9.24				
	61	Tetrachloroethene	9.317	-6.8	382862	0.317	0.340	12.294	12.308	8.13				
	62	Dibromochloromethane	9.227	-7.7	323283	0.268	0.290	12.664	12.675	7.03				
	63	1,2-Dibromoethane	9.750	-2.5	260128	0.215	0.221	13.035	13.043	8.26				
	64	1-Chlorohexane	9.480	-5.2	795389	0.659	0.695	13.316	13.320	5.71				
	65	Chlorobenzene	10.174	1.7	1265090	1.048	1.030	13.790	13.795	6.31				
	66	1,1,1,2-Tetrachloroethane	9.822	-1.8	407851	0.338	0.344	13.864	13.872	9.54				
	67	Ethylbenzene	9.808	-1.9	2221146	1.840	1.876	13.879	13.890	9.54				
2	68	m-Xylene & p-Xylene	18.778	-6.1	3357661	1.391	1.481	14.027	14.030	8.93				
	69	o-Xylene	9.874	-1.3	1702007	1.410	1.428	14.842	14.849	9.71				
	70	Styrene	10.081	0.8	1271745	1.053	1.045	14.916	14.921	6.93				
	71	Isopropylbenzene	9.475	-5.2	2237530	1.853	1.956	15.524	15.530	7.56				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	390071	1	1	18.679	18.693	0				
	73	Bromoform	10.403	4.0	149023	0.382	0.367	15.568	15.569	11.93				
	74	trans-1,4-Dichloro-2-butene	9.266	-7.3	80729	0.207	0.223	15.627	15.632	7.51				
	75	1,1,2,2-Tetrachloroethane	11.077	10.8	258076	0.662	0.597	15.864	15.869	11.29				
	76	4-Bromofluorobenzene	10.193	1.9	504433	1.293	1.269	16.013	16.020	9.24				
	77	1,2,3-Trichloropropane	10.112	1.1	86704	0.222	0.220	16.146	16.162	9.42				
	78	n-Propylbenzene	10.643	6.4	2639309	6.766	6.357	16.294	16.305	9.90				
	79	Bromobenzene	10.386	3.9	390060	1.000	0.963	16.383	16.394	11.94				
	80	1,3,5-Trimethylbenzene	10.378	3.8	1699332	4.356	4.198	16.605	16.613	7.15				
	81	2-Chlorotoluene	10.446	4.5	1700484	4.359	4.173	16.635	16.649	7.05				
	82	4-Chlorotoluene	9.973	-0.3	1386824	3.555	3.565	16.738	16.742	6.57				
	83	tert-Butylbenzene	10.467	4.7	379037	0.972	0.928	17.287	17.301	10.33				
	84	1,2,4-Trimethylbenzene	10.417	4.2	1629540	4.178	4.010	17.361	17.364	7.06				
	85	sec-Butylbenzene	10.482	4.8	2315214	5.935	5.662	17.657	17.662	11.41				
	86	p-Isopropyltoluene	10.350	3.5	1945839	4.988	4.820	17.879	17.889	9.96				
	87	1,3-Dichlorobenzene	10.149	1.5	789417	2.024	1.994	18.027	18.038	8.46				
	88	1,2,3-Trimethylbenzene	10.267	2.7	1558138	3.994	3.890	18.131	18.145	8.36				
	89	1,4-Dichlorobenzene	10.222	2.2	768840	1.971	1.928	18.190	18.200	7.64				
	90	n-Butylbenzene	10.013	0.1	1723405	4.418	4.412	18.487	18.501	13.97				
	91	1,2-Dichlorobenzene	10.110	1.1	647540	1.660	1.642	18.724	18.727	7.38				
	92	1,2-Dibromo-3-chloropropane	10.513	5.1	37937	0.097	0.093	19.716	19.723	13.33				
	93	1,2,4-Trichlorobenzene	9.794	-2.1	426286	1.093	1.116	20.813	20.816	8.77				
	94	Hexachlorobutadiene	9.724	-2.8	277847	0.712	0.732	20.976	20.990	6.72				
	95	Naphthalene	9.749	-2.5	604845	1.551	1.591	21.153	21.167	9.31				
	96	1,2,3-Trichlorobenzene	9.676	-3.2	321802	0.825	0.853	21.479	21.483	7.02				

Spike Amount = Nominal Amount * M

SC 24/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	152	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	8.562	14.4	112	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	11.812	-18.1	167	0.01
6	C,T,M	Vinyl chloride	10.000	11.830	-18.3	158	0.01
7	T,M	Bromomethane	10.000	11.618	-16.2	172	0.02
8	T,M	Chloroethane	10.000	12.385	-23.8#	183	0.00
9	T,M	Dichlorofluoromethane	10.000	9.815	1.9	147	0.00
10	T,M	Trichlorofluoromethane	10.000	9.254	7.5	122	0.13
11	T,M	Acrolein	50.000	56.858	-13.7	180	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	8.850	11.5	129	-0.02
13	T,M	Acetone	50.000	45.731	8.5	140	0.00
14	C,T,M	1,1-Dichloroethene	10.000	9.776	2.2	145	0.01
15	T,M	tert-Butyl alcohol	250.000	222.069	11.2	130	0.00
16	T,M	Iodomethane	10.000	11.013	-10.1	160	0.00
17	T,M	Methyl acetate	10.000	10.258	-2.6	157	0.00
18	T,M	Methylene chloride	10.000	10.357	-3.6	160	0.00
19	T,M	Carbon disulfide	10.000	10.976	-9.8	157	0.00
20	T,M	Acrylonitrile	50.000	53.509	-7.0	165	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	9.806	1.9	144	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.226	-2.3	151	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.918	-9.2	163	0.00
24	T,M	Vinyl acetate	10.000	10.710	-7.1	154	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.517	-5.2	159	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.01
27	T,M	tert-Butyl ethyl ether (ETB	10.000	9.977	0.2	146	0.00
28	T,M	2-Butanone	50.000	45.670	8.7	143	0.00
29	T,M	2,2-Dichloropropane	10.000	8.837	11.6	129	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.683	-6.8	158	0.00
31	C,T,M	Chloroform	10.000	9.142	8.6	135	0.00
32	T,M	Bromochloromethane	10.000	10.321	-3.2	155	0.00
33	T,M	Tetrahydrofuran	10.000	8.019	19.8	134	0.00
34	S	Dibromofluoromethane	10.000	10.058	-0.6	140	0.00
35	T,M	1,1,1-Trichloroethane	10.000	8.951	10.5	127	0.00
36	T,M	Cyclohexane	10.000	9.904	1.0	144	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.01
38	T,M	1,1-Dichloropropene	10.000	9.833	1.7	148	0.00
39	T,M	Carbon tetrachloride	10.000	8.794	12.1	124	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.160	-1.6	149	-0.02
41	S	1,2-Dichloroethane-d4	10.000	8.954	10.5	123	-0.01

(#) = Out of Range

SA 8/16/24

Evaluated From ICV (IVO01H0902) File ID: RHV147

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M Benzene	10.000	11.048	-10.5	160	0.00
43	T,M 1,2-Dichloroethane	10.000	9.026	9.7	124	0.00
44	T,M Trichloroethene	10.000	10.012	-0.1	148	0.00
45	T,M Methylcyclohexane	10.000	9.801	2.0	141	-0.01
46	C,T,M 1,2-Dichloropropane	10.000	10.764	-7.6	158	0.00
47	T,M Bromodichloromethane	10.000	8.826	11.7	133	-0.01
48	T,M 1,4-Dioxane	200.000	188.765	5.6	141	0.02
49	T,M Dibromomethane	10.000	9.555	4.5	141	-0.01
50	T,M 2-Chloroethyl vinyl ether	10.000	10.125	-1.3	157	0.00
51	T,M 4-Methyl-2-pentanone	50.000	50.701	-1.4	141	-0.01
52	T,M cis-1,3-Dichloropropene	10.000	9.896	1.0	142	-0.01
53	I CHLOROBENZENE-D5	10.000	10.000	0.0	145	-0.01
54	S Toluene-d8	10.000	10.351	-3.5	141	0.00
55	C,T,M Toluene	10.000	10.604	-6.0	147	0.00
56	T,M Ethyl methacrylate	10.000	10.128	-1.3	138	0.00
57	T,M trans-1,3-Dichloropropene	10.000	9.640	3.6	130	0.00
58	T,M 1,1,2-Trichloroethane	10.000	9.958	0.4	143	-0.01
59	T,M 2-Hexanone	50.000	45.591	8.8	129	0.00
60	T,M 1,3-Dichloropropane	10.000	9.947	0.5	141	-0.01
61	T,M Tetrachloroethene	10.000	9.318	6.8	138	-0.01
62	T,M Dibromochloromethane	10.000	9.227	7.7	129	-0.01
63	T,M 1,2-Dibromoethane	10.000	9.750	2.5	141	0.00
64	T,M 1-Chlorohexane	10.000	9.480	5.2	139	0.00
65	P,M Chlorobenzene	10.000	10.175	-1.8	143	0.00
66	T,M 1,1,1,2-Tetrachloroethane	10.000	9.822	1.8	134	0.00
67	C,T,M Ethylbenzene	10.000	9.808	1.9	135	-0.01
68	T,M m-Xylene & p-Xylene	20.000	18.778	6.1	133	0.00
69	T,M o-Xylene	10.000	9.875	1.3	133	0.00
70	T,M Styrene	10.000	10.081	-0.8	139	0.00
71	T,M Isopropylbenzene	10.000	9.475	5.3	131	0.00
72	I 1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	122	-0.01
73	P,T,M Bromoform	10.000	10.403	-4.0	123	0.00
74	T,M trans-1,4-Dichloro-2-butene	10.000	9.266	7.3	113	0.00
75	T,M 1,1,2,2-Tetrachloroethane	10.000	11.077	-10.8	133	0.00
76	S 4-Bromofluorobenzene	10.000	10.193	-1.9	124	0.00
77	T,M 1,2,3-Trichloropropane	10.000	10.113	-1.1	129	-0.01
78	T,M n-Propylbenzene	10.000	10.644	-6.4	129	-0.01
79	T,M Bromobenzene	10.000	10.387	-3.9	130	-0.01
80	T,M 1,3,5-Trimethylbenzene	10.000	10.379	-3.8	129	0.00

(#) = Out of Range

SC 9/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	10.446	-4.5	130	-0.01
82	T,M	4-Chlorotoluene	10.000	9.974	0.3	123	0.00
83	T,M	tert-Butylbenzene	10.000	10.468	-4.7	134	-0.01
84	T,M	1,2,4-Trimethylbenzene	10.000	10.417	-4.2	126	0.00
85	T,M	sec-Butylbenzene	10.000	10.483	-4.8	126	0.00
86	T,M	p-Isopropyltoluene	10.000	10.350	-3.5	124	0.00
87	T,M	1,3-Dichlorobenzene	10.000	10.149	-1.5	126	-0.01
88	T,M	1,2,3-Trimethylbenzene	10.000	10.268	-2.7	121	-0.01
89	T,M	1,4-Dichlorobenzene	10.000	10.222	-2.2	127	0.00
90	T,M	n-Butylbenzene	10.000	10.013	-0.1	118	-0.01
91	T,M	1,2-Dichlorobenzene	10.000	10.110	-1.1	123	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.513	-5.1	118	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	9.794	2.1	119	0.00
94	T,M	Hexachlorobutadiene	10.000	9.724	2.8	116	-0.01
95	T,M	Naphthalene	10.000	9.749	2.5	114	-0.01
96	T,M	1,2,3-Trichlorobenzene	10.000	9.677	3.2	115	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	152	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.282	14.3	112	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.282	-18.0	167	0.01
6	C,T,M	Vinyl chloride	0.210	0.249	-18.6	158	0.01
7	T,M	Bromomethane	0.186	0.216	-16.1	172	0.02
8	T,M	Chloroethane	0.163	0.202	-23.9#	183	0.00
9	T,M	Dichlorofluoromethane	0.360	0.354	1.7	147	0.00
10	T,M	Trichlorofluoromethane	0.478	0.443	7.3	122	0.13
11	T,M	Acrolein	0.010	0.011	-10.0	180	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.173	11.7	129	-0.02
13	T,M	Acetone	0.048	0.041	14.6	140	0.00
14	C,T,M	1,1-Dichloroethene	0.484	0.473	2.3	145	0.01
15	T,M	tert-Butyl alcohol	0.013	0.012	7.7	130	0.00
16	T,M	Iodomethane	0.437	0.482	-10.3	160	0.00
17	T,M	Methyl acetate	0.103	0.106	-2.9	157	0.00
18	T,M	Methylene chloride	0.336	0.348	-3.6	160	0.00
19	T,M	Carbon disulfide	0.838	0.919	-9.7	157	0.00
20	T,M	Acrylonitrile	0.040	0.043	-7.5	165	0.00
21	T,M	tert-Butyl methyl ether (MT	0.550	0.540	1.8	144	0.00
22	T,M	trans-1,2-Dichloroethene	0.441	0.451	-2.3	151	0.00
23	T,M	Isopropyl ether (DIPE)	0.880	0.961	-9.2	163	0.00
24	T,M	Vinyl acetate	0.321	0.344	-7.2	154	0.00
25	P,T,M	1,1-Dichloroethane	0.540	0.568	-5.2	159	0.00
26	T,M	2-Butanol	0.000	0.010	0.0	0#	-0.01
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.812	0.1	146	0.00
28	T,M	2-Butanone	0.066	0.060	9.1	143	0.00
29	T,M	2,2-Dichloropropane	0.538	0.476	11.5	129	0.00
30	T,M	cis-1,2-Dichloroethene	0.340	0.363	-6.8	158	0.00
31	C,T,M	Chloroform	0.608	0.556	8.6	135	0.00
32	T,M	Bromochloromethane	0.206	0.213	-3.4	155	0.00
33	T,M	Tetrahydrofuran	0.037	0.029	21.6#	134	0.00
34	S	Dibromofluoromethane	0.304	0.306	-0.7	140	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.537	10.5	127	0.00
36	T,M	Cyclohexane	0.432	0.428	0.9	144	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.021	0.0	0#	-0.01
38	T,M	1,1-Dichloropropene	0.164	0.162	1.2	148	0.00
39	T,M	Carbon tetrachloride	0.499	0.439	12.0	124	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.607	-1.5	149	-0.02
41	S	1,2-Dichloroethane-d4	0.270	0.242	10.4	123	-0.01

(#) = Out of Range

sm 8/26/24

* Re-evaluated From ICV (IV001H0902) File ID: RHV141

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D
Acq On : 9 Aug 2024 11:47 pm
Sample : IVO01H0901 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M Benzene	1.101	1.216	-10.4	160	0.00
43	T,M 1,2-Dichloroethane	0.344	0.311	9.6	124	0.00
44	T,M Trichloroethene	0.350	0.351	-0.3	148	0.00
45	T,M Methylcyclohexane	0.482	0.472	2.1	141	-0.01
46	C,T,M 1,2-Dichloropropane	0.251	0.271	-8.0	158	0.00
47	T,M Bromodichloromethane	0.439	0.387	11.8	133	-0.01
48	T,M 1,4-Dioxane	0.001	0.001	0.0	141	0.02
49	T,M Dibromomethane	0.140	0.134	4.3	141	-0.01
50	T,M 2-Chloroethyl vinyl ether	0.079	0.080	-1.3	157	0.00
51	T,M 4-Methyl-2-pentanone	0.150	0.152	-1.3	141	-0.01
52	T,M cis-1,3-Dichloropropene	0.444	0.439	1.1	142	-0.01
53	I CHLOROBENZENE-D5	1.000	1.000	0.0	145	-0.01
54	S Toluene-d8	1.222	1.265	-3.5	141	0.00
55	C,T,M Toluene	1.498	1.589	-6.1	147	0.00
56	T,M Ethyl methacrylate	0.253	0.256	-1.2	138	0.00
57	T,M trans-1,3-Dichloropropene	0.435	0.419	3.7	130	0.00
58	T,M 1,1,2-Trichloroethane	0.219	0.219	0.0	143	-0.01
59	T,M 2-Hexanone	0.111	0.109	1.8	129	0.00
60	T,M 1,3-Dichloropropane	0.391	0.389	0.5	141	-0.01
61	T,M Tetrachloroethene	0.340	0.317	6.8	138	-0.01
62	T,M Dibromochloromethane	0.290	0.268	7.6	129	-0.01
63	T,M 1,2-Dibromoethane	0.221	0.215	2.7	141	0.00
64	T,M 1-Chlorohexane	0.695	0.659	5.2	139	0.00
65	P,M Chlorobenzene	1.030	1.048	-1.7	143	0.00
66	T,M 1,1,1,2-Tetrachloroethane	0.344	0.338	1.7	134	0.00
67	C,T,M Ethylbenzene	1.876	1.840	1.9	135	-0.01
68	T,M m-Xylene & p-Xylene	1.481	1.391	6.1	133	0.00
69	T,M o-Xylene	1.428	1.410	1.3	133	0.00
70	T,M Styrene	1.045	1.053	-0.8	139	0.00
71	T,M Isopropylbenzene	1.956	1.853	5.3	131	0.00
72	I 1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	122	-0.01
73	P,T,M Bromoform	0.367	0.382	-4.1	123	0.00
74	T,M trans-1,4-Dichloro-2-butene	0.223	0.207	7.2	113	0.00
75	T,M 1,1,2,2-Tetrachloroethane	0.597	0.662	-10.9	133	0.00
76	S 4-Bromofluorobenzene	1.269	1.293	-1.9	124	0.00
77	T,M 1,2,3-Trichloropropane	0.220	0.222	-0.9	129	-0.01
78	T,M n-Propylbenzene	6.357	6.766	-6.4	129	-0.01
79	T,M Bromobenzene	0.963	1.000	-3.8	130	-0.01
80	T,M 1,3,5-Trimethylbenzene	4.198	4.356	-3.8	129	0.00

(#) = Out of Range

9/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	4.359	-4.5	130	-0.01
82	T,M	4-Chlorotoluene	3.565	3.555	0.3	123	0.00
83	T,M	tert-Butylbenzene	0.928	0.972	-4.7	134	-0.01
84	T,M	1,2,4-Trimethylbenzene	4.010	4.178	-4.2	126	0.00
85	T,M	sec-Butylbenzene	5.662	5.935	-4.8	126	0.00
86	T,M	p-Isopropyltoluene	4.820	4.988	-3.5	124	0.00
87	T,M	1,3-Dichlorobenzene	1.994	2.024	-1.5	126	-0.01
88	T,M	1,2,3-Trimethylbenzene	3.890	3.994	-2.7	121	-0.01
89	T,M	1,4-Dichlorobenzene	1.928	1.971	-2.2	127	0.00
90	T,M	n-Butylbenzene	4.412	4.418	-0.1	118	-0.01
91	T,M	1,2-Dichlorobenzene	1.642	1.660	-1.1	123	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.097	-4.3	118	0.00
93	T,M	1,2,4-Trichlorobenzene	1.116	1.093	2.1	119	0.00
94	T,M	Hexachlorobutadiene	0.732	0.712	2.7	116	-0.01
95	T,M	Naphthalene	1.591	1.551	2.5	114	-0.01
96	T,M	1,2,3-Trichlorobenzene	0.853	0.825	3.3	115	0.00

Sm 9/6/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1458016	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1207297	10.00	ug/l	-0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	390071	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	445940	10.06	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.60%			
41) 1,2-Dichloroethane-d4	7.97	65	352943	8.95	ug/l	-0.01
Spiked Amount 10.000			Recovery = 89.50%			
54) Toluene-d8	11.03	98	1527415	10.35	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.50%			
76) 4-Bromofluorobenzene	16.01	95	504433	10.19	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.90%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	410825	8.56	ug/l	96
5) Chloromethane	2.55	50	410805	11.81	ug/l	98
6) Vinyl chloride	2.69	62	362949	11.83	ug/l	97
7) Bromomethane	3.23	94	315660	11.62	ug/l	96
8) Chloroethane	3.27	64	294990	12.38	ug/l	87
9) Dichlorofluoromethane	3.35	67	515590	9.81	ug/l	99
10) Trichlorofluoromethane	3.61	101	645259	9.25	ug/l	99
11) Acrolein	4.03	56	83543	56.86	ug/l	88
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	252752	8.85	ug/l	100
13) Acetone	4.10	43	300505	45.73	ug/l	87
14) 1,1-Dichloroethene	4.26	61	689726	9.78	ug/l	93
15) tert-Butyl alcohol	4.37	59	435647	222.07	ug/l	100
16) Iodomethane	4.66	142	702444	11.01	ug/l	88
17) Methyl acetate	4.68	43	154672	10.26	ug/l	94
18) Methylene chloride	4.89	49	507851	10.36	ug/l	96
19) Carbon disulfide	4.90	76	1340359	10.98	ug/l	100
20) Acrylonitrile	5.05	53	310061	53.51	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	786741	9.81	ug/l	92
22) trans-1,2-Dichloroethene	5.27	61	657080	10.23	ug/l	94
23) Isopropyl ether (DIPE)	5.69	45	1400453	10.92	ug/l	99
24) Vinyl acetate	5.85	43	501747	10.71	ug/l	96
25) 1,1-Dichloroethane	5.85	63	828152	10.52	ug/l	98
27) tert-Butyl ethyl ether (ET	6.26	59	1183255	9.98	ug/l	99
28) 2-Butanone	6.44	43	438405	45.67	ug/l	98
29) 2,2-Dichloropropane	6.65	77	693615	8.84	ug/l	96
30) cis-1,2-Dichloroethene	6.71	96	529401	10.68	ug/l	93
31) Chloroform	6.93	83	810614	9.14	ug/l	97

(#) = qualifier out of range (m) = manual integration

09/6/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.17	49	310687	10.32	ug/l	99
33)	Tetrahydrofuran	7.21	42	42975	8.02	ug/l	90
35)	1,1,1-Trichloroethane	7.51	97	783252	8.95	ug/l	99
36)	Cyclohexane	7.54	84	624073	9.90	ug/l	99
38)	1,1-Dichloropropene	7.73	110	235706	9.83	ug/l	99
39)	Carbon tetrachloride	7.89	119	639597	8.79	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	885635	10.16	ug/l	99
42)	Benzene	8.15	78	1773569	11.05	ug/l	98
43)	1,2-Dichloroethane	8.12	62	453115	9.03	ug/l	98
44)	Trichloroethene	9.08	130	511419	10.01	ug/l	97
45)	Methylcyclohexane	9.17	83	688803	9.80	ug/l	97
46)	1,2-Dichloropropane	9.36	63	394503	10.76	ug/l	86
47)	Bromodichloromethane	9.73	83	564519	8.83	ug/l	100
48)	1,4-Dioxane	9.79	88	34248	188.77	ug/l	94
49)	Dibromomethane	9.82	93	194884	9.55	ug/l	98
50)	2-Chloroethyl vinyl ether	10.23	63	116170	10.13	ug/l	97
51)	4-Methyl-2-pentanone	10.26	43	1111189	50.70	ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	640446	9.90	ug/l	99
55)	Toluene	11.17	91	1918259	10.60	ug/l	99
56)	Ethyl methacrylate	11.46	69	308968	10.13	ug/l	93
57)	trans-1,3-Dichloropropene	11.48	75	505830	9.64	ug/l	98
58)	1,1,2-Trichloroethane	11.75	97	263881	9.96	ug/l	98
59)	2-Hexanone	11.76	43	656965	45.59	ug/l	94
60)	1,3-Dichloropropane	12.19	76	469386	9.95	ug/l	99
61)	Tetrachloroethene	12.29	164	382862	9.32	ug/l	97
62)	Dibromochloromethane	12.66	129	323283	9.23	ug/l	100
63)	1,2-Dibromoethane	13.03	107	260128	9.75	ug/l	99
64)	1-Chlorohexane	13.32	91	795389	9.48	ug/l	99
65)	Chlorobenzene	13.79	112	1265090	10.17	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	407851	9.82	ug/l	98
67)	Ethylbenzene	13.88	91	2221146	9.81	ug/l	97
68)	m-Xylene & p-Xylene	14.03	91	3357661	18.78	ug/l	96
69)	o-Xylene	14.84	91	1702007	9.87	ug/l	98
70)	Styrene	14.92	104	1271745	10.08	ug/l	96
71)	Isopropylbenzene	15.52	105	2237530	9.47	ug/l	98
73)	Bromoform	15.57	173	149023	10.40	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	80729	9.27	ug/l	97
75)	1,1,2,2-Tetrachloroethane	15.86	83	258076	11.08	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	86704	10.11	ug/l	99
78)	n-Propylbenzene	16.29	91	2639309	10.64	ug/l	98
79)	Bromobenzene	16.38	156	390060	10.39	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

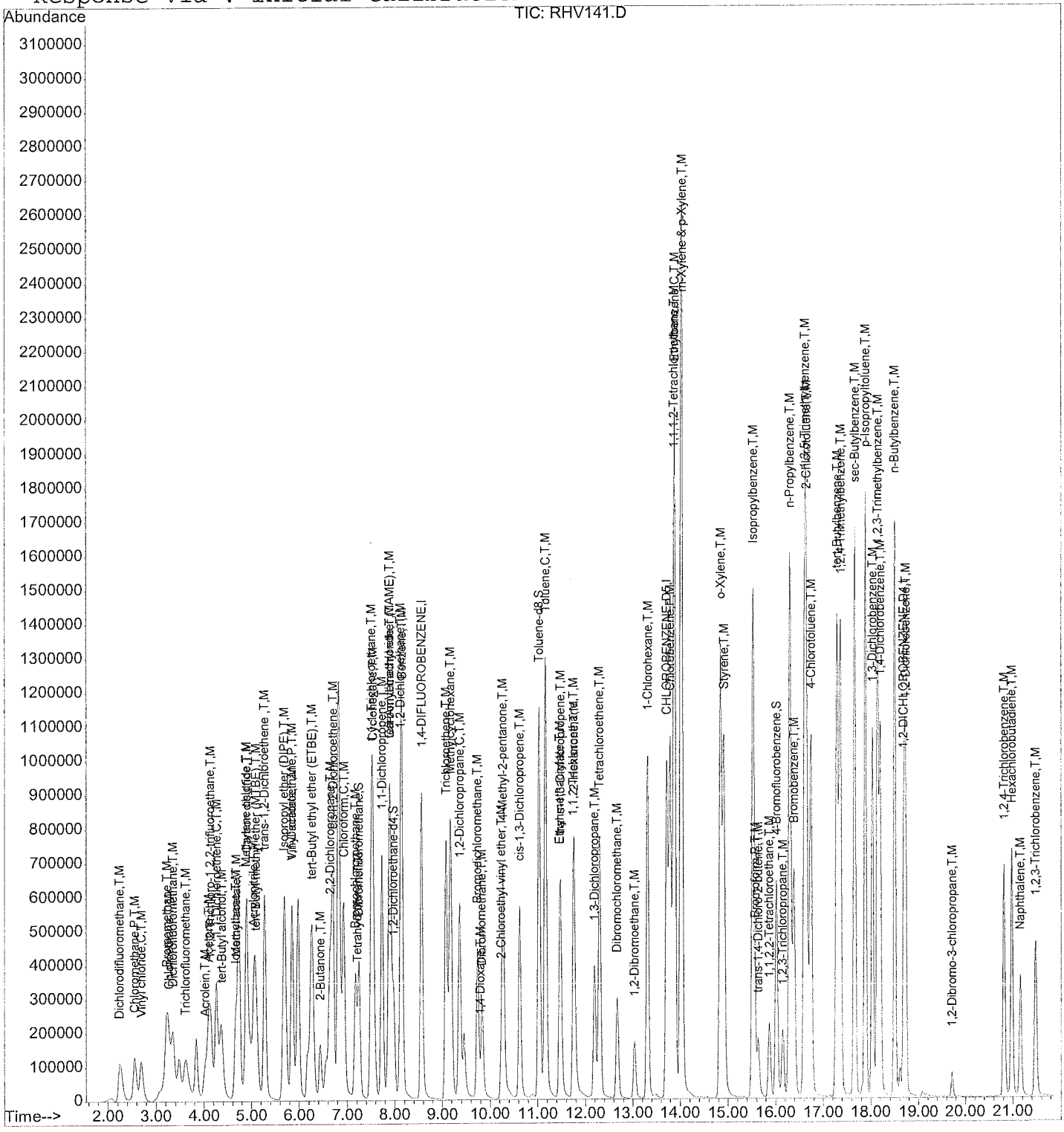
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.61	105	1699332	10.38	ug/l	96
81)	2-Chlorotoluene	16.63	91	1700484	10.45	ug/l	96
82)	4-Chlorotoluene	16.74	91	1386824	9.97	ug/l	97
83)	tert-Butylbenzene	17.29	134	379037	10.47	ug/l	89
84)	1,2,4-Trimethylbenzene	17.36	105	1629540	10.42	ug/l	95
85)	sec-Butylbenzene	17.66	105	2315214	10.48	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1945839	10.35	ug/l	98
87)	1,3-Dichlorobenzene	18.03	146	789417	10.15	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	1558138	10.27	ug/l	98
89)	1,4-Dichlorobenzene	18.19	146	768840	10.22	ug/l	99
90)	n-Butylbenzene	18.49	91	1723405	10.01	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	647540	10.11	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.72	157	37937	10.51	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	426286	9.79	ug/l	97
94)	Hexachlorobutadiene	20.98	225	277847	9.72	ug/l	97
95)	Naphthalene	21.15	128	604845	9.75	ug/l	100
96)	1,2,3-Trichlorobenzene	21.48	180	321802	9.68	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H09\RHV141.D Vial: 14
Acq On : 9 Aug 2024 11:47 pm Operator: DNguye
Sample : IVO01H0901 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Aug 27 9:48 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RHV145 BFB Injection Date: 08/13/24

Instrument ID: 01New BFB Injection Time: 15:24

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.567
75	30 - 60% of mass 95	48.649
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.418
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	72.564
175	5 - 9% of mass 174	4.820(6.64)1
176	95 - 101% % of mass 174	71.637(98.72)1
177	5 - 9% % of mass 176	4.061(5.67)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD50	IVO01H0902	RHV147	08/13/24	16:44

SC
8/16/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01New
IC_Beginning DateTime :08/09/24 17:28
Spike Amount :10 PPB
CC/CV File :RHV147
IC File :RHV134

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :08/09/24 22:17
HPChem Method :VO01H09
Date_Time :08/13/24 16:44

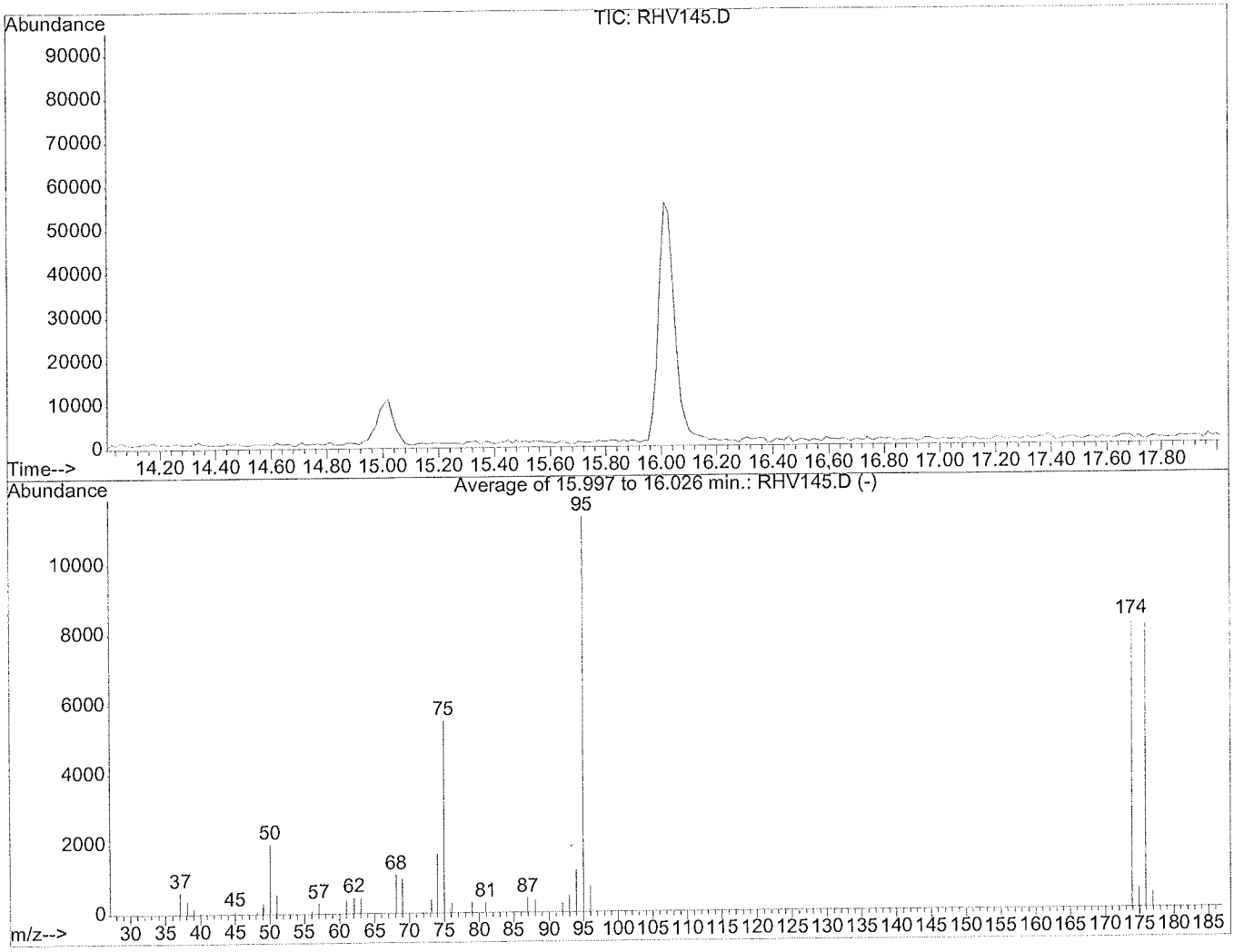
M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1270191	1	1	8.561	8.560	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane												
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane												
	6	Vinyl chloride												
	7	Bromomethane												
	8	Chloroethane	9.018	-9.8	187127	0.147	0.163	3.273	3.278	13.37				
	9	Dichlorofluoromethane												
	10	Trichlorofluoromethane												
5	11	Acrolein												
	12	1,1,2-Trichloro-1,2,2-trifluoroethane												
5	13	Acetone												
	14	1,1-Dichloroethene												
25	15	tert-Butyl alcohol												
	16	Iodomethane												
	17	Methyl acetate												
	18	Methylene chloride												
	19	Carbon disulfide												
5	20	Acrylonitrile												
	21	tert-Butyl methyl ether (MTBE)												
	22	trans-1,2-Dichloroethene												
	23	Isopropyl ether (DIPE)												
	24	Vinyl acetate												
	25	1,1-Dichloroethane												
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)												
5	28	2-Butanone												
	29	2,2-Dichloropropane												
	30	cis-1,2-Dichloroethene												
	31	Chloroform												
	32	Bromochloromethane												
	33	Tetrahydrofuran												
	34	Dibromofluoromethane	10.429	4.3	402823	0.317	0.304	7.243	7.243	13.19				
	35	1,1,1-Trichloroethane												
	36	Cyclohexane												
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene												
	39	Carbon tetrachloride												
	40	tert-Amyl methyl ether (TAME)												
	41	1,2-Dichloroethane-d4	9.454	-5.5	324659	0.256	0.270	7.969	7.979	10.30				
	42	Benzene												
	43	1,2-Dichloroethane												
	44	Trichloroethene												
	45	Methylcyclohexane												
	46	1,2-Dichloropropane												
	47	Bromodichloromethane												
20	48	1,4-Dioxane												
	49	Dibromomethane												
	50	2-Chloroethyl vinyl ether												
5	51	4-Methyl-2-pentanone												
	52	cis-1,3-Dichloropropene												
	53	CHLOROBENZENE-D5	10.000	0	1068412	1	1	13.716	13.726	0				
	54	Toluene-d8	10.902	9.0	1423776	1.333	1.222	11.035	11.038	8.56				
	55	Toluene												
	56	Ethyl methacrylate												
	57	trans-1,3-Dichloropropene												
	58	1,1,2-Trichloroethane												
5	59	2-Hexanone												
	60	1,3-Dichloropropane												
	61	Tetrachloroethene												
	62	Dibromochloromethane												
	63	1,2-Dibromoethane												
	64	1-Chlorohexane												
	65	Chlorobenzene												
	66	1,1,1,2-Tetrachloroethane												
	67	Ethylbenzene												
2	68	m-Xylene & p-Xylene												
	69	o-Xylene												
	70	Styrene												
	71	Isopropylbenzene												
	72	1,2-DICHLOROBENZENE-D4	10.000	0	439346	1	1	18.679	18.693	0				
	73	Bromoform												
	74	trans-1,4-Dichloro-2-butene												
	75	1,1,2,2-Tetrachloroethane												
	76	4-Bromofluorobenzene	9.531	-4.7	531274	1.209	1.269	16.013	16.020	9.24				
	77	1,2,3-Trichloropropane												
	78	n-Propylbenzene												
	79	Bromobenzene												
	80	1,3,5-Trimethylbenzene												
	81	2-Chlorotoluene												
	82	4-Chlorotoluene												
	83	tert-Butylbenzene												
	84	1,2,4-Trimethylbenzene												
	85	sec-Butylbenzene												
	86	p-Isopropyltoluene												
	87	1,3-Dichlorobenzene												
	88	1,2,3-Trimethylbenzene												
	89	1,4-Dichlorobenzene												
	90	n-Butylbenzene												
	91	1,2-Dichlorobenzene												
	92	1,2-Dibromo-3-chloropropane												
	93	1,2,4-Trichlorobenzene												
	94	Hexachlorobutadiene												
	95	Naphthalene												
	96	1,2,3-Trichlorobenzene												

Spike Amount = Nominal Amount * M

SW
9/16/24

Data File : D:\HPCHEM\1\DATA\24H13\RHV145.D
Acq On : 13 Aug 2024 3:24 pm
Sample : BFB01H10
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye
Inst : 01New
Multiplr: 1.00



AutoFind: Scans 979, 980, 981; Background Corrected with Scan 973

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	1990	PASS
75	95	30	60	48.6	5511	PASS
95	95	100	100	100.0	11328	PASS
96	95	5	9	6.4	727	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	72.6	8220	PASS
175	174	5	9	6.6	546	PASS
176	174	95	101	98.7	8115	PASS
177	176	5	9	5.7	460	PASS

RHV145.D VO01H09.M Fri Sep 06 16:25:53 2024 SV 9/6/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	132	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	0.000	100.0#	0	-2.24#
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	0.000	100.0#	0	-2.54#
6	C,T,M	Vinyl chloride	10.000	0.000	100.0#	0	-2.68#
7	T,M	Bromomethane	10.000	0.000	100.0#	0	-3.21#
8	T,M	Chloroethane	10.000	9.018	9.8	116	0.00
9	T,M	Dichlorofluoromethane	10.000	0.000	100.0#	0	-3.35#
10	T,M	Trichlorofluoromethane	10.000	0.000	100.0#	0	-3.48#
11	T,M	Acrolein	50.000	0.000	100.0#	0	-4.01#
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	0.000	100.0#	0	-4.15#
13	T,M	Acetone	50.000	-2.613	105.2#	0	-4.10#
14	C,T,M	1,1-Dichloroethene	10.000	0.000	100.0#	0	-4.25#
15	T,M	tert-Butyl alcohol	250.000	0.000	100.0#	0	-4.37#
16	T,M	Iodomethane	10.000	0.000	100.0#	0	-4.66#
17	T,M	Methyl acetate	10.000	0.000	100.0#	0	-4.68#
18	T,M	Methylene chloride	10.000	0.000	100.0#	0	-4.89#
19	T,M	Carbon disulfide	10.000	0.000	100.0#	0	-4.90#
20	T,M	Acrylonitrile	50.000	0.000	100.0#	0	-5.05#
21	T,M	tert-Butyl methyl ether (MT	10.000	0.000	100.0#	0	-5.09#
22	T,M	trans-1,2-Dichloroethene	10.000	0.000	100.0#	0	-5.27#
23	T,M	Isopropyl ether (DIPE)	10.000	0.000	100.0#	0	-5.69#
24	T,M	Vinyl acetate	10.000	0.000	100.0#	0	-5.85#
25	P,T,M	1,1-Dichloroethane	10.000	0.000	100.0#	0	-5.85#
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-6.17#
27	T,M	tert-Butyl ethyl ether (ETB	10.000	0.000	100.0#	0	-6.26#
28	T,M	2-Butanone	50.000	0.000	100.0#	0	-6.44#
29	T,M	2,2-Dichloropropane	10.000	0.000	100.0#	0	-6.65#
30	T,M	cis-1,2-Dichloroethene	10.000	0.000	100.0#	0	-6.71#
31	C,T,M	Chloroform	10.000	0.000	100.0#	0	-6.93#
32	T,M	Bromochloromethane	10.000	0.000	100.0#	0	-7.17#
33	T,M	Tetrahydrofuran	10.000	0.000	100.0#	0	-7.21#
34	S	Dibromofluoromethane	10.000	10.429	-4.3	127	0.00
35	T,M	1,1,1-Trichloroethane	10.000	0.000	100.0#	0	-7.51#
36	T,M	Cyclohexane	10.000	0.000	100.0#	0	-7.54#
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-7.55#
38	T,M	1,1-Dichloropropene	10.000	0.000	100.0#	0	-7.73#
39	T,M	Carbon tetrachloride	10.000	0.000	100.0#	0	-7.89#
40	T,M	tert-Amyl methyl ether (TAM	10.000	0.000	100.0#	0	-7.91#
41	S	1,2-Dichloroethane-d4	10.000	9.454	5.5	113	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	0.000	100.0#	0	-8.15#
43	T,M	1,2-Dichloroethane	10.000	0.000	100.0#	0	-8.12#
44	T,M	Trichloroethene	10.000	0.000	100.0#	0	-9.08#
45	T,M	Methylcyclohexane	10.000	0.000	100.0#	0	-9.18#
46	C,T,M	1,2-Dichloropropane	10.000	0.000	100.0#	0	-9.36#
47	T,M	Bromodichloromethane	10.000	0.000	100.0#	0	-9.74#
48	T,M	1,4-Dioxane	200.000	0.000	100.0#	0	-9.78#
49	T,M	Dibromomethane	10.000	0.000	100.0#	0	-9.83#
50	T,M	2-Chloroethyl vinyl ether	10.000	0.000	100.0#	0	-10.23#
51	T,M	4-Methyl-2-pentanone	50.000	0.000	100.0#	0	-10.28#
52	T,M	cis-1,3-Dichloropropene	10.000	0.000	100.0#	0	-10.63#
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	128	-0.01
54	S	Toluene-d8	10.000	10.903	-9.0	131	0.00
55	C,T,M	Toluene	10.000	0.000	100.0#	0	-11.17#
56	T,M	Ethyl methacrylate	10.000	0.000	100.0#	0	-11.46#
57	T,M	trans-1,3-Dichloropropene	10.000	0.000	100.0#	0	-11.48#
58	T,M	1,1,2-Trichloroethane	10.000	0.000	100.0#	0	-11.76#
59	T,M	2-Hexanone	50.000	2.471	95.1#	0	-11.76#
60	T,M	1,3-Dichloropropane	10.000	0.000	100.0#	0	-12.20#
61	T,M	Tetrachloroethene	10.000	0.000	100.0#	0	-12.31#
62	T,M	Dibromochloromethane	10.000	0.000	100.0#	0	-12.68#
63	T,M	1,2-Dibromoethane	10.000	0.000	100.0#	0	-13.03#
64	T,M	1-Chlorohexane	10.000	0.000	100.0#	0	-13.32#
65	P,M	Chlorobenzene	10.000	0.000	100.0#	0	-13.79#
66	T,M	1,1,1,2-Tetrachloroethane	10.000	0.000	100.0#	0	-13.86#
67	C,T,M	Ethylbenzene	10.000	0.000	100.0#	0	-13.89#
68	T,M	m-Xylene & p-Xylene	20.000	0.000	100.0#	0	-14.03#
69	T,M	o-Xylene	10.000	0.000	100.0#	0	-14.84#
70	T,M	Styrene	10.000	0.000	100.0#	0	-14.92#
71	T,M	Isopropylbenzene	10.000	0.000	100.0#	0	-15.52#
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	137	-0.01
73	P,T,M	Bromoform	10.000	0.000	100.0#	0	-15.57#
74	T,M	trans-1,4-Dichloro-2-butene	10.000	0.000	100.0#	0	-15.63#
75	T,M	1,1,2,2-Tetrachloroethane	10.000	0.000	100.0#	0	-15.86#
76	S	4-Bromofluorobenzene	10.000	9.531	4.7	131	0.00
77	T,M	1,2,3-Trichloropropane	10.000	0.000	100.0#	0	-16.16#
78	T,M	n-Propylbenzene	10.000	0.000	100.0#	0	-16.31#
79	T,M	Bromobenzene	10.000	0.000	100.0#	0	-16.40#
80	T,M	1,3,5-Trimethylbenzene	10.000	0.000	100.0#	0	-16.60#

(#) = Out of Range

9/16/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D
Acq On : 13 Aug 2024 4:44 pm
Sample : IVO01H0902 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 3
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	0.000	100.0#	0	-16.65#
82	T,M	4-Chlorotoluene	10.000	0.000	100.0#	0	-16.74#
83	T,M	tert-Butylbenzene	10.000	0.000	100.0#	0	-17.30#
84	T,M	1,2,4-Trimethylbenzene	10.000	0.000	100.0#	0	-17.36#
85	T,M	sec-Butylbenzene	10.000	0.000	100.0#	0	-17.66#
86	T,M	p-Isopropyltoluene	10.000	0.000	100.0#	0	-17.88#
87	T,M	1,3-Dichlorobenzene	10.000	0.000	100.0#	0	-18.04#
88	T,M	1,2,3-Trimethylbenzene	10.000	0.000	100.0#	0	-18.15#
89	T,M	1,4-Dichlorobenzene	10.000	0.000	100.0#	0	-18.19#
90	T,M	n-Butylbenzene	10.000	0.000	100.0#	0	-18.50#
91	T,M	1,2-Dichlorobenzene	10.000	0.000	100.0#	0	-18.72#
92	T,M	1,2-Dibromo-3-chloropropane	10.000	0.000	100.0#	0	-19.72#
93	T,M	1,2,4-Trichlorobenzene	10.000	0.000	100.0#	0	-20.81#
94	T,M	Hexachlorobutadiene	10.000	0.000	100.0#	0	-20.99#
95	T,M	Naphthalene	10.000	0.000	100.0#	0	-21.17#
96	T,M	1,2,3-Trichlorobenzene	10.000	0.000	100.0#	0	-21.48#

S 9/6/24

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	132	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.000	100.0#	0#	-2.24#
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.000#	100.0#	0#	-2.54#
6	C,T,M	Vinyl chloride	0.210	0.000	100.0#	0#	-2.68#
7	T,M	Bromomethane	0.186	0.000	100.0#	0#	-3.21#
8	T,M	Chloroethane	0.163	0.147	9.8	116	0.00
9	T,M	Dichlorofluoromethane	0.360	0.000	100.0#	0#	-3.35#
10	T,M	Trichlorofluoromethane	0.478	0.000	100.0#	0#	-3.48#
11	T,M	Acrolein	0.010	0.000	100.0#	0#	-4.01#
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.000	100.0#	0#	-4.15#
13	T,M	Acetone	0.048	0.000	100.0#	0#	-4.10#
14	C,T,M	1,1-Dichloroethene	0.484	0.000	100.0#	0#	-4.25#
15	T,M	tert-Butyl alcohol	0.013	0.000	100.0#	0#	-4.37#
16	T,M	Iodomethane	0.437	0.000	100.0#	0#	-4.66#
17	T,M	Methyl acetate	0.103	0.000	100.0#	0#	-4.68#
18	T,M	Methylene chloride	0.336	0.000	100.0#	0#	-4.89#
19	T,M	Carbon disulfide	0.838	0.000	100.0#	0#	-4.90#
20	T,M	Acrylonitrile	0.040	0.000	100.0#	0#	-5.05#
21	T,M	tert-Butyl methyl ether (MT	0.550	0.000	100.0#	0#	-5.09#
22	T,M	trans-1,2-Dichloroethene	0.441	0.000	100.0#	0#	-5.27#
23	T,M	Isopropyl ether (DIPE)	0.880	0.000	100.0#	0#	-5.69#
24	T,M	Vinyl acetate	0.321	0.000	100.0#	0#	-5.85#
25	P,T,M	1,1-Dichloroethane	0.540	0.000#	100.0#	0#	-5.85#
26	T,M	2-Butanol	0.000	0.000	0.0	0#	-6.17#
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.000	100.0#	0#	-6.26#
28	T,M	2-Butanone	0.066	0.000	100.0#	0#	-6.44#
29	T,M	2,2-Dichloropropane	0.538	0.000	100.0#	0#	-6.65#
30	T,M	cis-1,2-Dichloroethene	0.340	0.000	100.0#	0#	-6.71#
31	C,T,M	Chloroform	0.608	0.000	100.0#	0#	-6.93#
32	T,M	Bromochloromethane	0.206	0.000	100.0#	0#	-7.17#
33	T,M	Tetrahydrofuran	0.037	0.000	100.0#	0#	-7.21#
34	S	Dibromofluoromethane	0.304	0.317	-4.3	127	0.00
35	T,M	1,1,1-Trichloroethane	0.600	0.000	100.0#	0#	-7.51#
36	T,M	Cyclohexane	0.432	0.000	100.0#	0#	-7.54#
37	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	-7.55#
38	T,M	1,1-Dichloropropene	0.164	0.000	100.0#	0#	-7.73#
39	T,M	Carbon tetrachloride	0.499	0.000	100.0#	0#	-7.89#
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.000	100.0#	0#	-7.91#
41	S	1,2-Dichloroethane-d4	0.270	0.256	5.2	113	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	0.000	100.0#	0#	-8.15#
43	T,M	1,2-Dichloroethane	0.344	0.000	100.0#	0#	-8.12#
44	T,M	Trichloroethene	0.350	0.000	100.0#	0#	-9.08#
45	T,M	Methylcyclohexane	0.482	0.000	100.0#	0#	-9.18#
46	C,T,M	1,2-Dichloropropane	0.251	0.000	100.0#	0#	-9.36#
47	T,M	Bromodichloromethane	0.439	0.000	100.0#	0#	-9.74#
48	T,M	1,4-Dioxane	0.001	0.000	100.0#	0#	-9.78#
49	T,M	Dibromomethane	0.140	0.000	100.0#	0#	-9.83#
50	T,M	2-Chloroethyl vinyl ether	0.079	0.000	100.0#	0#	-10.23#
51	T,M	4-Methyl-2-pentanone	0.150	0.000	100.0#	0#	-10.28#
52	T,M	cis-1,3-Dichloropropene	0.444	0.000	100.0#	0#	-10.63#
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	128	-0.01
54	S	Toluene-d8	1.222	1.333	-9.1	131	0.00
55	C,T,M	Toluene	1.498	0.000	100.0#	0#	-11.17#
56	T,M	Ethyl methacrylate	0.253	0.000	100.0#	0#	-11.46#
57	T,M	trans-1,3-Dichloropropene	0.435	0.000	100.0#	0#	-11.48#
58	T,M	1,1,2-Trichloroethane	0.219	0.000	100.0#	0#	-11.76#
59	T,M	2-Hexanone	0.111	0.000	100.0#	0#	-11.76#
60	T,M	1,3-Dichloropropane	0.391	0.000	100.0#	0#	-12.20#
61	T,M	Tetrachloroethene	0.340	0.000	100.0#	0#	-12.31#
62	T,M	Dibromochloromethane	0.290	0.000	100.0#	0#	-12.68#
63	T,M	1,2-Dibromoethane	0.221	0.000	100.0#	0#	-13.03#
64	T,M	1-Chlorohexane	0.695	0.000	100.0#	0#	-13.32#
65	P,M	Chlorobenzene	1.030	0.000#	100.0#	0#	-13.79#
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.000	100.0#	0#	-13.86#
67	C,T,M	Ethylbenzene	1.876	0.000	100.0#	0#	-13.89#
68	T,M	m-Xylene & p-Xylene	1.481	0.000	100.0#	0#	-14.03#
69	T,M	o-Xylene	1.428	0.000	100.0#	0#	-14.84#
70	T,M	Styrene	1.045	0.000	100.0#	0#	-14.92#
71	T,M	Isopropylbenzene	1.956	0.000	100.0#	0#	-15.52#
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	137	-0.01
73	P,T,M	Bromoform	0.367	0.000#	100.0#	0#	-15.57#
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.000	100.0#	0#	-15.63#
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.000	100.0#	0#	-15.86#
76	S	4-Bromofluorobenzene	1.269	1.209	4.7	131	0.00
77	T,M	1,2,3-Trichloropropane	0.220	0.000	100.0#	0#	-16.16#
78	T,M	n-Propylbenzene	6.357	0.000	100.0#	0#	-16.31#
79	T,M	Bromobenzene	0.963	0.000	100.0#	0#	-16.40#
80	T,M	1,3,5-Trimethylbenzene	4.198	0.000	100.0#	0#	-16.60#

(#) = Out of Range

09/6/24

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	0.000	100.0#	0#	-16.65#
82	T,M	4-Chlorotoluene	3.565	0.000	100.0#	0#	-16.74#
83	T,M	tert-Butylbenzene	0.928	0.000	100.0#	0#	-17.30#
84	T,M	1,2,4-Trimethylbenzene	4.010	0.000	100.0#	0#	-17.36#
85	T,M	sec-Butylbenzene	5.662	0.000	100.0#	0#	-17.66#
86	T,M	p-Isopropyltoluene	4.820	0.000	100.0#	0#	-17.88#
87	T,M	1,3-Dichlorobenzene	1.994	0.000	100.0#	0#	-18.04#
88	T,M	1,2,3-Trimethylbenzene	3.890	0.000	100.0#	0#	-18.15#
89	T,M	1,4-Dichlorobenzene	1.928	0.000	100.0#	0#	-18.19#
90	T,M	n-Butylbenzene	4.412	0.000	100.0#	0#	-18.50#
91	T,M	1,2-Dichlorobenzene	1.642	0.000	100.0#	0#	-18.72#
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.000	100.0#	0#	-19.72#
93	T,M	1,2,4-Trichlorobenzene	1.116	0.000	100.0#	0#	-20.81#
94	T,M	Hexachlorobutadiene	0.732	0.000	100.0#	0#	-20.99#
95	T,M	Naphthalene	1.591	0.000	100.0#	0#	-21.17#
96	T,M	1,2,3-Trichlorobenzene	0.853	0.000	100.0#	0#	-21.48#

SC 09/6/24

(#) = Out of Range SPCC's out = 4 CCC's out = 6

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 6 16:06 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

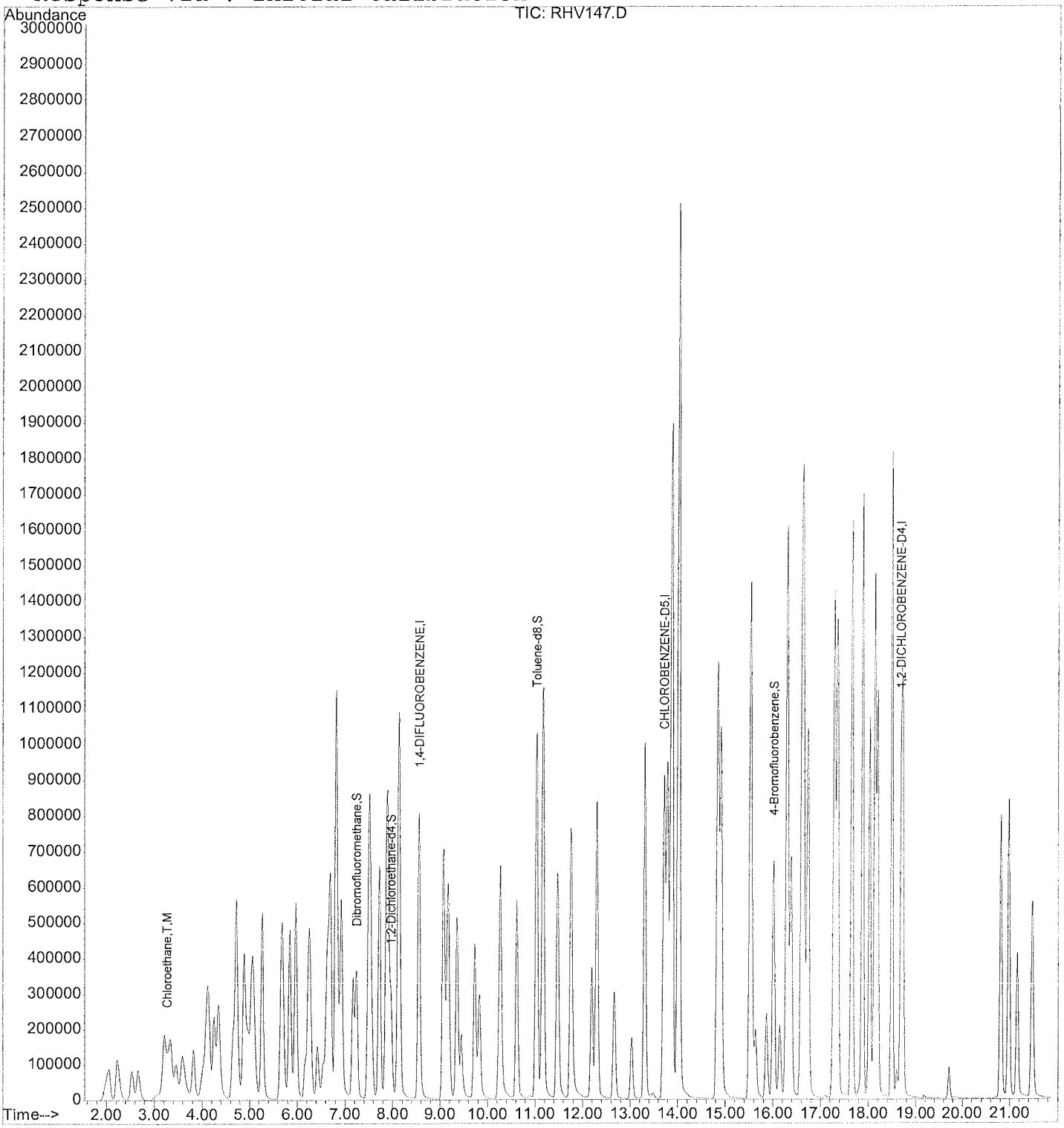
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	1270191	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	1068412	10.00	ug/l	-0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	439346	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	402823	10.43	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.30%			
41) 1,2-Dichloroethane-d4	7.97	65	324659	9.45	ug/l	-0.01
Spiked Amount 10.000			Recovery = 94.50%			
54) Toluene-d8	11.03	98	1423776	10.90	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.00%			
76) 4-Bromofluorobenzene	16.01	95	531274	9.53	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.30%			
Target Compounds						Qvalue
8) Chloroethane	3.27	64	187127	9.02	ug/l	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24H13\RHV147.D Vial: 3
Acq On : 13 Aug 2024 4:44 pm Operator: DNguye
Sample : IVO01H0902 1.0/5.0 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Sep 6 16:06 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



INITIAL CALIBRATION(S)

FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RIW074 BFB Injection Date: 09/19/24

Instrument ID: 06 BFB Injection Time: 09:28

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	16.136
75	30 - 60% of mass 95	44.663
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.924
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	71.255
175	5 - 9% of mass 174	4.438(6.23)1
176	95 - 101% % of mass 174	71.759(100.71)1
177	5 - 9% % of mass 176	3.986(5.55)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	VO06I191	RIW075	09/19/24	11:07
2	VSTD0.5	VO06I192	RIW076	09/19/24	11:33
3	VSTD1	VO06I193	RIW077	09/19/24	11:59
4	VSTD2	VO06I194	RIW078	09/19/24	12:25
5	VSTD5	VO06I195	RIW079	09/19/24	12:51
6	VSTD10	VO06I196	RIW080	09/19/24	13:18
7	VSTD20	VO06I197	RIW081	09/19/24	13:44
8	VSTD30	VO06I198	RIW082	09/19/24	14:10
9	VSTD50	VO06I199	RIW083	09/19/24	14:36
10	VSTD100	VO06I1910	RIW084	09/19/24	15:02
11	VSTD10	IVO06I1901	RIW087	09/19/24	16:20
12	VSTD10	IVO06I1902	RIW093	09/19/24	19:59

SC 10/14/24

Instrument ID :06
Beginning DateTime :09/19/24 11:07
Spike Units :PPB
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B

M	IDX	Parameters	.3 11:07 RIW075	.5 11:33 RIW076	1 11:59 RIW077	2 12:25 RIW078	5 12:51 RIW079	10 13:18 RIW080	20 13:44 RIW081	30 14:10 RIW082	50 14:36 RIW083	100 15:02 RIW084	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	9.9664
	2	Dichlorodifluoromethane	------	0.407	0.465	0.489	0.405	0.358	0.432	0.483	0.321	0.444	0.422	13.33	1.6611
	3	Chloromethane	------	0.343	0.422	0.430	0.370	0.346	0.397	0.469	0.306	0.402	0.387	13.07	1.8826
	4	Vinyl chloride	------	0.297	0.362	0.351	0.308	0.242	0.266	0.297	------	------	0.303	14.03	1.9928
	5	Bromomethane	------	0.174	0.263	0.284	0.225	0.212	0.251	0.264	------	------	0.239	15.81	2.4327
	6	Chloroethane	0.285	0.157	0.180	0.258	0.171	0.173	0.198	0.204	------	------	0.203	22.40	2.5109
	7	Dichlorofluoromethane	------	0.646	0.696	1.049	0.692	0.664	0.672	0.660	------	------	0.725	19.79	2.5568
	8	Trichlorofluoromethane	0.421	0.306	0.381	0.455	0.387	0.355	0.442	0.452	0.339	0.450	0.399	13.35	2.8035
5	9	Acrolein	------	------	0.017	0.016	0.012	0.012	0.015	0.014	0.013	0.013	0.014	13.03	3.3178
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.303	0.273	0.288	0.469	0.299	0.289	0.304	0.296	0.222	------	0.305	21.85	3.3599
5	11	Acetone	------	------	0.044	0.040	0.040	0.039	0.043	0.041	0.040	0.036	0.040	5.70	3.4121
	12	1,1-Dichloroethene	0.504	0.424	0.481	0.681	0.548	0.535	0.569	0.529	0.463	0.555	0.529	13.18	3.5593
25	13	tert-Butyl alcohol	0.013	0.010	0.011	0.012	0.012	0.014	0.015	0.014	0.013	0.011	0.012	12.15	3.7081
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	------	0.018	0.022	0.021	0.024	0.023	0.022	------	------	0.022	9.28	4.0924
	16	Iodomethane	0.485	0.408	0.483	0.580	0.513	0.494	0.529	0.503	0.443	0.518	0.496	9.49	3.9973
	17	Allyl chloride	0.189	0.146	0.149	0.171	0.167	0.175	0.188	0.167	0.170	0.170	0.169	8.27	4.1126
	18	Methylene chloride	------	------	0.569	0.524	0.433	0.403	0.420	0.387	------	------	0.456	16.08	4.2915
	19	Carbon disulfide	0.434	0.392	0.401	0.685	0.578	0.637	0.672	0.604	------	------	0.550	22.27	4.2609
5	20	Acrylonitrile	0.052	0.037	0.044	0.050	0.051	0.051	0.057	0.055	0.054	0.051	0.050	11.25	4.5318
	21	tert-Butyl methyl ether (MTBE)	0.526	0.412	0.470	0.523	0.526	0.550	0.576	0.529	0.500	0.458	0.507	9.55	4.5779
	22	trans-1,2-Dichloroethene	0.366	0.263	0.304	0.333	0.327	0.320	0.343	0.308	0.297	0.300	0.316	9.01	4.7958
	23	Isopropyl ether (DIPE)	1.045	0.834	0.958	1.105	1.135	1.115	1.181	1.072	1.029	0.976	1.045	9.74	5.4728
	24	Vinyl acetate	------	------	0.301	0.335	0.373	0.361	0.438	0.414	0.407	0.392	0.377	11.84	5.7071
	25	1,1-Dichloroethane	0.535	0.417	0.512	0.568	0.565	0.544	0.587	0.524	0.518	0.514	0.528	8.85	5.6321
25	26	2-Butanol	0.009	0.006	0.007	0.009	0.011	0.015	0.015	0.015	------	------	0.011	34.89	6.2179
	27	tert-Butyl ethyl ether (ETBE)	0.724	0.599	0.744	0.803	0.839	0.814	0.856	0.764	0.751	0.683	0.758	10.20	6.3866
5	28	2-Butanone	------	------	0.059	0.063	0.067	0.069	0.077	0.074	0.073	0.067	0.069	8.30	6.6712
	29	2,2-Dichloropropane	0.362	0.290	0.318	0.363	0.343	0.346	0.381	0.321	0.302	0.271	0.330	10.70	6.9211
	30	cis-1,2-Dichloroethene	0.344	0.297	0.313	0.342	0.339	0.329	0.352	0.317	0.317	0.314	0.326	5.38	7.0405
	31	Chloroform	0.591	0.445	0.529	0.550	0.547	0.525	0.561	0.498	0.498	0.485	0.523	8.09	7.4387
	32	Bromochloromethane	0.136	0.114	0.129	0.137	0.149	0.149	0.157	0.148	0.150	0.147	0.141	8.96	7.8160
	33	Tetrahydrofuran	------	------	0.032	0.041	0.037	0.035	0.038	0.035	0.039	0.037	0.037	7.29	7.9287
5	34	tert-Amyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	35	Dibromofluoromethane	0.143	0.182	0.161	0.232	0.259	0.287	0.311	0.275	------	------	0.231	27.01	7.9680
	36	1,1,1-Trichloroethane	0.436	0.364	0.395	0.442	0.446	0.437	0.469	0.426	0.400	0.391	0.421	7.56	8.3546
	37	Cyclohexane	------	------	0.435	0.556	0.517	0.572	0.602	0.552	------	------	0.539	10.75	8.3366
	38	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	39	1,1-Dichloropropene	0.137	0.128	0.136	0.153	0.147	0.144	0.155	0.141	0.140	0.140	0.142	5.75	8.7130
	40	Carbon tetrachloride	0.321	0.289	0.315	0.368	0.370	0.367	0.395	0.366	0.338	0.357	0.349	9.23	8.8912
	41	tert-Amyl methyl ether (TAME)	0.601	0.532	0.602	0.647	0.659	0.669	0.704	0.638	0.603	0.544	0.620	8.76	9.0672
	42	1,2-Dichloroethane-d4	------	------	------	0.183	0.214	0.236	0.247	0.226	------	------	0.221	11.06	9.0842
	43	1,2-Dichloroethane	0.221	0.205	0.259	0.277	0.287	0.281	0.300	0.272	0.269	0.262	0.263	11.07	9.2873
	44	Benzene	1.107	0.949	1.163	1.265	1.275	1.220	1.273	1.150	1.095	0.965	1.146	10.43	9.2705
	45	Trichloroethene	0.267	0.254	0.286	0.304	0.324	0.318	0.340	0.304	0.296	0.291	0.298	8.68	10.5511
	46	Methylcyclohexane	------	------	0.438	0.550	0.549	0.629	0.656	0.585	------	------	0.568	13.50	10.6211
	47	1,2-Dichloropropane	0.292	0.229	0.270	0.294	0.302	0.292	0.320	0.287	0.277	0.272	0.284	8.52	10.9074
20	48	1,4-Dioxane	------	------	0.001	0.001	0.001	0.002	0.002	0.001	0.001	------	0.001	11.21	11.4583
	49	Bromodichloromethane	0.407	0.320	0.333	0.378	0.386	0.375	0.401	0.370	0.358	0.349	0.368	7.61	11.3476
	50	Dibromomethane	0.126	0.106	0.128	0.135	0.143	0.139	0.152	0.143	0.138	0.134	0.134	9.25	11.4167
	51	2-Chloroethyl vinyl ether	------	0.078	0.082	0.077	0.087	0.090	0.100	0.096	0.098	0.095	0.089	9.82	12.0415
5	52	4-Methyl-2-pentanone	0.177	0.149	0.184	0.208	0.202	0.205	0.215	0.203	0.193	0.157	0.189	11.78	12.0874
	53	cis-1,3-Dichloropropene	0.457	0.352	0.435	0.471	0.484	0.475	0.499	0.462	0.445	0.421	0.450	9.21	12.3976
	54	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.4323
	55	Toluene-d8	------	------	------	1.190	1.327	1.342	1.395	1.218	------	------	1.294	6.71	12.8023
	56	Toluene	1.381	1.344	1.595	1.769	1.757	1.605	1.671	1.462	1.381	1.119	1.509	13.73	12.9404
	57	Ethyl methacrylate	0.361	0.297	0.317	0.338	0.345	0.334	0.355	0.318	0.334	0.317	0.332	5.91	13.3805
	58	trans-1,3-Dichloropropene	0.391	0.346	0.378	0.440	0.469	0.435	0.477	0.427	0.434	0.440	0.424	9.58	13.3261
	59	1,1,2-Trichloroethane	0.213	0.164	0.197	0.229	0.238	0.224	0.240	0.215	0.224	0.222	0.217	10.21	13.5797
5	60	2-Hexanone	------	0.136	0.147	0.173	0.169	0.163	0.169	0.160	0.163	0.144	0.158	8.03	13.6576
	61	1,3-Dichloropropane	0.346	0.350	0.383	0.421	0.459	0.413	0.443	0.392	0.402	0.394	0.400	9.06	14 0303
	62	Tetrachloroethene	0.276	0.281	0.308	0.347	0.340	0.320	0.342	0.300	0.296	0.293	0.310	8.33	14.0827
	63	Dibromochloromethane	0.268	0.234	0.234	0.269	0.280	0.271	0.292	0.268	0.278	0.275	0.267	7.03	14.4285
	64	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	65	1,2-Dibromoethane	0.176	0.170	0.186	0.219	0.222	0.214	0.229	0.212	0.218	0.213	0.206	10.05	14.7659
	66	1-Chlorohexane	------	0.641	0.620	0.760	0.633	0.592	0.610	------	------	------	0.643	9.33	15.1201
	67	Chlorobenzene	0.849	0.820	0.923	1.040	1.038	0.964	1.006	0.922	0.874	0.801	0.924	9.47	15.4972
	68	1,1,1,2-Tetrachloroethane	0.257	0.241	0.271	0.321	0.327	0.322	0.334	0.301	0.281	0.266	0.292	11.30	15.5893
	69	Ethylbenzene	1.650	1.724	1.902	2.066	2.033	1.874	1.925	1.699	------	------	1.859	8.30	15.6082
2	70	m-Xylene & p-Xylene	1.341	1.292	1.463	1.590	1.567	1.409	1.452	1.251	------	------	1.421	8.61	15.7412
	71	o-Xylene	1.413	1.286	1.373	1.581	1.515	1.453	1.500	1.315	1.154	------	1.399	9.46	16.4663
	72	Styrene	0.984	1.005	1.075	1.175	1.158	1.095	1.136	1.026	0.952	0.847	1.045	9.82	16.5326
	73	Isopropylbenzene	1.881	1.582	1.794	2.049	1.926	1.838	1.865	1.584	------	------	1.815	8.91	17.0776
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.3480
	75	Bromoform	0.254	0.192	0.263	0.307	0.299	0.297	0.339	0.316	0.353	0.285	0.290	15.86	17.0684
	76	1,1,2,2-Tetrachloroethane	------	0.441	0.544	0.582	0.643	0.604	0.643	0.598	0.624	0.527	0.578	11.29	17.3601
	77	4-Bromofluorobenzene	------	------	------	1.005	1.120	1.130	1.233	1.094	------	------	1.116	7.32	17.4541
	78	1,2,3-Trichloropropane	0.157	0.132	0.144	0.156	0.164	0.160	0.185	0.160	0.183	0.154	0.159	9.99	17.5731
	79	trans-1,4-Dichloro-2-butene	------	0.163	0.191	0.180	0.175	0.167	0.178	0.176	0.193	0.160	0.176	6.51	17.6830
	80	n-Propylbenzene	4.844	5.107	5.823	6.285	6.097	5.416	5.776	4.788	------	------	5.517	10.27	17.6761
	81	Bromobenzene	0.689	0.605	0.743	0.887	0.902	0.827	0.915	0.816	0.838	0.681	0.790	13.37	17.7223
	82	1,3,5-Trimethylbenzene	3.012	2.925	3.549	3.847	3.670	3.417	3.559	2.944	------	------	3.365	10.62	17.8950
	83	2-Chlorotoluene	2.806	2.762	3.264	3.620	3.604	3.215	3.719	3.205	2.902	------	3.233	11.15	17.9080
	84	4-Chlorotoluene	2.324	2.689	3.095	3.530	3.458	3.137	3.139	2.711	2.582	------	2.963	13.81	17.9728
	85	tert-Butylbenzene	0.651	0.708	0.718	0.824	0.798	0.753	0.810	0.650	0.620	0.584	0.711	11.84	18.3503
	86	1,2,4-Trimethylbenzene	3.338	3.123	3.575	3.960	3.789	3.472	3.637	3.019	------	------	3.489	9.18	18.3880
	87	sec-Butylbenzene	4.627	4.566	4.864	5.399	5.107	4.702	4.857	3.885	------	------	4.751	9.32	18.6005
	88	p-Isopropyltoluene	4.040	3.859	4.153	4.530	4.264	4.045	4.116	3.293	------	------	4.038	8.88	18.7643
	89	1,3-Dichlorobenzene	1.448	1.517	1.841	1.997	1.962	1.838	1.943	1.696	1.656	------	1.767	11.22	18.8666
	90	1,2,3-Trimethylbenzene	3.034	2.834	3.239	3.600	3.383	3.200	3.276	2.696	------	------	3.158	9.29	18.9459
	91	1,4-Dichlorobenzene	1.550	1.444	1.777	2.069	1.922	1.793	1.888	1.670	1.636	------	1.750	11.18	18.9848
	92	n-Butylbenzene	4.540	4.326	4.418	4.956	4.527	4.231	4.271	3.536	------	------	4.351	9.21	19.2054
	93	1,2-Dichlorobenzene	1.364	1.245	1.472	1.700	1.615	1.551	1.619	1.440	1.365	1.252	1.462	10.78	19.3740
	94	1,2-Dibromo-3-chloropropane	------	------	0.096	0.102	0.098	0.102	0.107	0.101	0.105	0.107	0.102	3.78	20.1412
	95	1,2,4-Trichlorobenzene	1.423	1.073	1.099	1.268	1.198	1.192	1.165	1.062	0.998	1.013	1.149	11.27	20.9699
	96	Hexachlorobutadiene	0.721	0.589	0.605	0.710	0.621	0.677	0.652	0.566	0.513	0.554	0.621	11.09	21.0996
	97	Naphthalene	------	1.343	1.452	1.731	1.639	1.649	1.625	1.502	1.464	1.523	1.548	7.87	21.2424
	98	1,2,3-Trichlorobenzene	1.147	0.750	0.832	0.983	0.876	0.901	0.855	0.785	0.743	0.799	0.867	14.10	21.4888

Spike Amount = Nominal Amount * M
Ave_%RSD : 11 Max_%RSD : 34.9

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
5	Bromomethane	-0.00236	0.25228	0.9963
6	Chloroethane	0.00085	0.19539	0.9954

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7	Dichlorofluoromethane	0.01051	0.66716	0.9949*
10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00499	0.26465	0.9850*
18	Methylene chloride	0.02079	0.39077	0.9991
19	Carbon disulfide	-0.00935	0.63461	0.9977
26	2-Butanol	-0.01079	0.01463	0.9959
35	Dibromofluoromethane	-0.00646	0.28948	0.9975
75	Bromoform	-0.00294	0.31161	0.9955

Use Quadratic Regression of inv conc w.f. for comps of linear reg of inv conc w.f. with CCF < .995
Resp_Ratio = xo + x1 * Amt_Ratio + x2 * Amt_Ratio * Amt_Ratio

IDX	Parameter	x0	x1	x2	CCF2
7	Dichlorofluoromethane	0.00466	0.72295	-0.02386	0.9954
10	1,1,2-Trichloro-1,2,2-trifluoroethane	-0.00177	0.35171	-0.02477	0.9955

SM
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PROGRAM: ICALMAX

Input: R:\cal\8260\2024\vo06i19b\riw080.ICL Output: R:\cal\8260\2024\vo06i19b\riw080.MAX

IDX	Parameter	x0	x1	x2	CCF2	MaxMinAmtRatio	MaxMinRespRatio	MaxMinRRF	MaxMinConc
7	Dichlorofluoromethane	0.00466	0.72295	-0.02386	0.9954	15.14983	5.48095	0.36178	151.5
10	1,1,2-Trichloro-1,2,2-trifluoroethane	-0.00177	0.35171	-0.02477	0.9955	7.09952	1.24672	0.17561	71.0

SG
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Instrument ID :06
Beginning DateTime :09/19/24 11:07
Spike Units :PPB
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B

M	IDX	Parameters	.3 11:07 RIW075	.5 11:33 RIW076	1 11:59 RIW077	2 12:25 RIW078	5 12:51 RIW079	10 13:18 RIW080	20 13:44 RIW081	30 14:10 RIW082	50 14:36 RIW083	100 15:02 RIW084	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	9.9664
	2	Dichlorodifluoromethane	------	96	110	116	96	85	102	114	76	105	10.5	13.33	1.6611
	3	Chloromethane	------	89	109	111	96	89	103	121	79	104	10.6	13.07	1.8826
	4	Vinyl chloride	------	98	119	116	102	80	88	98	------	------	10.5	14.03	1.9928
	5	Bromomethane	------	88	114	118	91	85	100	105	------	------	12.7	15.81	2.4327
	6	Chloroethane	130	72	88	130	86	88	101	104	------	------	16.9	22.40	2.5109
	7	Dichlorofluoromethane	------	76	90	143	96	94	99	101	------	------	12.7	19.79	2.5568
	8	Trichlorofluoromethane	106	77	95	114	97	89	111	113	85	113	11.3	13.35	2.8035
5	9	Acrolein	------	------	121	114	86	86	107	100	93	93	10.7	13.03	3.3178
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	99	90	94	154	98	95	100	97	73	------	12	21.85	3.3599
5	11	Acetone	------	------	110	100	100	98	108	102	100	90	4.1	5.70	3.4121
	12	1,1-Dichloroethene	95	80	91	129	104	101	108	100	88	105	9.2	13.18	3.5593
25	13	tert-Butyl alcohol	108	83	92	100	100	117	125	117	108	92	10.8	12.15	3.7081
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	------	82	100	95	109	105	100	------	------	6.1	9.28	4.0924
	16	Iodomethane	98	82	97	117	103	100	107	101	89	104	6.7	9.49	3.9973
	17	Allyl chloride	112	86	88	101	99	104	111	99	101	101	5.7	8.27	4.1126
	18	Methylene chloride	------	------	93	108	100	98	105	97	------	------	13.2	16.08	4.2915
	19	Carbon disulfide	117	92	76	116	94	102	107	96	------	------	19.3	22.27	4.2609
5	20	Acrylonitrile	104	74	88	100	102	102	114	110	108	102	8	11.25	4.5318
	21	tert-Butyl methyl ether (MTBE)	104	81	93	103	104	108	114	104	99	90	7.4	9.55	4.5779
	22	trans-1,2-Dichloroethene	116	83	96	105	103	101	109	97	94	95	6.9	9.01	4.7958
	23	Isopropyl ether (DIPE)	100	80	92	106	109	107	113	103	98	93	7.3	9.74	5.4728
	24	Vinyl acetate	------	------	80	89	99	96	116	110	108	104	9.3	11.84	5.7071
	25	1,1-Dichloroethane	101	79	97	108	107	103	111	99	98	97	5.9	8.85	5.6321
25	26	2-Butanol	158	97	76	79	81	104	105	100	------	------	28.4	34.89	6.2179
	27	tert-Butyl ethyl ether (ETBE)	96	79	98	106	111	107	113	101	99	90	7.6	10.20	6.3866
5	28	2-Butanone	------	------	86	91	97	100	112	107	106	97	6.7	8.30	6.6712
	29	2,2-Dichloropropane	110	88	96	110	104	105	115	97	92	82	8.9	10.70	6.9211
	30	cis-1,2-Dichloroethene	106	91	96	105	104	101	108	97	97	96	4.5	5.38	7.0405
	31	Chloroform	113	85	101	105	105	100	107	95	95	93	6.3	8.09	7.4387
	32	Bromochloromethane	96	81	91	97	106	106	111	105	106	104	7.2	8.96	7.8160
	33	Tetrahydrofuran	------	------	86	111	100	95	103	95	105	100	5.4	7.29	7.9287
5	34	tert-Amyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	35	Dibromofluoromethane	123	108	78	92	94	101	109	96	------	------	22.5	27.01	7.9680
	36	1,1,1-Trichloroethane	104	86	94	105	106	104	111	101	95	93	6.3	7.56	8.3546
	37	Cyclohexane	------	------	81	103	96	106	112	102	------	------	7.8	10.75	8.3366
	38	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	39	1,1-Dichloropropene	96	90	96	108	104	101	109	99	99	99	4.3	5.75	8.7130
	40	Carbon tetrachloride	92	83	90	105	106	105	113	105	97	102	7.5	9.23	8.8912
	41	tert-Amyl methyl ether (TAME)	97	86	97	104	106	108	114	103	97	88	7	8.76	9.0672
	42	1,2-Dichloroethane-d4	------	------	------	83	97	107	112	102	------	------	8.2	11.06	9.0842
	43	1,2-Dichloroethane	84	78	98	105	109	107	114	103	102	100	8.1	11.07	9.2873
	44	Benzene	97	83	101	110	111	106	111	100	96	84	8.2	10.43	9.2705
	45	Trichloroethene	90	85	96	102	109	107	114	102	99	98	6.6	8.68	10.5511
	46	Methylcyclohexane	------	------	77	97	97	111	115	103	------	------	9.8	13.50	10.6211
	47	1,2-Dichloropropane	103	81	95	104	106	103	113	101	98	96	6	8.52	10.9074
20	48	1,4-Dioxane	------	------	83	92	101	114	113	95	101	------	28.6	11.21	11.4583
	49	Bromodichloromethane	111	87	90	103	105	102	109	101	97	95	6	7.61	11.3476
	50	Dibromomethane	94	79	96	101	107	104	113	107	103	100	6.6	9.25	11.4167
	51	2-Chloroethyl vinyl ether	------	88	92	87	98	101	112	108	110	107	8.2	9.82	12.0415
5	52	4-Methyl-2-pentanone	94	79	97	110	107	108	114	107	102	83	9.6	11.78	12.0874
	53	cis-1,3-Dichloropropene	102	78	97	105	108	106	111	103	99	94	6.6	9.21	12.3976
	54	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.4323
	55	Toluene-d8	------	------	------	92	103	104	108	94	------	------	5.6	6.71	12.8023
	56	Toluene	92	89	106	117	116	106	111	97	92	74	11.3	13.73	12.9404
	57	Ethyl methacrylate	109	89	95	102	104	101	107	96	101	95	4.6	5.91	13.3805
	58	trans-1,3-Dichloropropene	92	82	89	104	111	103	112	101	102	104	7.3	9.58	13.3261
	59	1,1,2-Trichloroethane	98	76	91	106	110	103	111	99	103	102	7.1	10.21	13.5797
5	60	2-Hexanone	------	86	93	109	107	103	107	101	103	91	6.8	8.03	13.6576
	61	1,3-Dichloropropane	86	88	96	105	115	103	111	98	100	98	6.8	9.06	14.0303
	62	Tetrachloroethene	89	91	99	112	110	103	110	97	95	95	6.9	8.33	14.0827
	63	Dibromochloromethane	100	88	88	101	105	101	109	100	104	103	4.9	7.03	14.4285
	64	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	65	1,2-Dibromoethane	85	83	90	106	108	104	111	103	106	103	8.3	10.05	14.7659
	66	1-Chlorohexane	------	100	96	118	98	92	95	------	------	------	6.1	9.33	15.1201
	67	Chlorobenzene	92	89	100	113	112	104	109	100	95	87	7.7	9.47	15.4972
	68	1,1,1,2-Tetrachloroethane	88	83	93	110	112	110	114	103	96	91	9.9	11.30	15.5893
	69	Ethylbenzene	89	93	102	111	109	101	104	91	------	------	6.8	8.30	15.6082
2	70	m-Xylene & p-Xylene	94	91	103	112	110	99	102	88	------	------	6.9	8.61	15.7412
	71	o-Xylene	101	92	98	113	108	104	107	94	82	------	7.4	9.46	16.4663
	72	Styrene	94	96	103	112	111	105	109	98	91	81	7.9	9.82	16.5326
	73	Isopropylbenzene	104	87	99	113	106	101	103	87	------	------	6.7	8.91	17.0776
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.3480
	75	Bromoform	113	80	94	103	98	96	109	102	113	92	11.6	15.86	17.0684
	76	1,1,2,2-Tetrachloroethane	------	76	94	101	111	104	111	103	108	91	8.6	11.29	17.3601
	77	4-Bromofluorobenzene	------	------	------	90	100	101	110	98	------	------	4.8	7.32	17.4541
	78	1,2,3-Trichloropropane	99	83	91	98	103	101	116	101	115	97	6.9	9.99	17.5731
	79	trans-1,4-Dichloro-2-butene	------	93	109	102	99	95	101	100	110	91	4.9	6.51	17.6830
	80	n-Propylbenzene	88	93	106	114	111	98	105	87	------	------	8.7	10.27	17.6761
	81	Bromobenzene	87	77	94	112	114	105	116	103	106	86	11.2	13.37	17.7223
	82	1,3,5-Trimethylbenzene	90	87	105	114	109	102	106	87	------	------	9	10.62	17.8950
	83	2-Chlorotoluene	87	85	101	112	111	99	115	99	90	------	8.8	11.15	17.9080
	84	4-Chlorotoluene	78	91	104	119	117	106	106	91	87	------	11.6	13.81	17.9728
	85	tert-Butylbenzene	92	100	101	116	112	106	114	91	87	82	9.7	11.84	18.3503
	86	1,2,4-Trimethylbenzene	96	90	102	113	109	100	104	87	------	------	7.2	9.18	18.3880
	87	sec-Butylbenzene	97	96	102	114	107	99	102	82	------	------	6.4	9.32	18.6005
	88	p-Isopropyltoluene	100	96	103	112	106	100	102	82	------	------	5.7	8.88	18.7643
	89	1,3-Dichlorobenzene	82	86	104	113	111	104	110	96	94	------	9.4	11.22	18.8666
	90	1,2,3-Trimethylbenzene	96	90	103	114	107	101	104	85	------	------	7.2	9.29	18.9459
	91	1,4-Dichlorobenzene	89	83	102	118	110	102	108	95	93	------	8.9	11.18	18.9848
	92	n-Butylbenzene	104	99	102	114	104	97	98	81	------	------	6	9.21	19.2054
	93	1,2-Dichlorobenzene	93	85	101	116	110	106	111	98	93	86	8.8	10.78	19.3740
	94	1,2-Dibromo-3-chloropropane	------	------	94	100	96	100	105	99	103	105	2.9	3.78	20.1412
	95	1,2,4-Trichlorobenzene	124	93	96	110	104	104	101	92	87	88	8.7	11.27	20.9699
	96	Hexachlorobutadiene	116	95	97	114	100	109	105	91	83	89	8.9	11.09	21.0996
	97	Naphthalene	------	87	94	112	106	107	105	97	95	98	6.5	7.87	21.2424
	98	1,2,3-Trichlorobenzene	132	87	96	113	101	104	99	91	86	92	10.1	14.10	21.4888

For 8260 C
SW 10/14/24

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
Total Cpnds : 98

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-DIFLUOROBENZENE	114	9.96	1.000	A	1	A	B
2	T	Dichlorodifluoromethane	85	1.68	0.168	A	1	A	B
3	T	Chloromethane	50	1.89	0.190	A	1	A	B
4	T	Vinyl chloride	62	2.01	0.202	A	1	A	B
5	T	Bromomethane	94	2.45	0.245	L	1	A	B
6	T	Chloroethane	64	2.52	0.253	L	1	A	B
7	T	Dichlorofluoromethane	67	2.56	0.257	Q	1	A	B
8	T	Trichlorofluoromethane	101	2.82	0.283	A	1	A	B
9	T	Acrolein	56	3.32	0.333	A	1	A	B
10	T	1,1,2-Trichloro-1,2,2-trifluor	151	3.36	0.337	Q	1	A	B
11	T	Acetone	43	3.43	0.344	A	1	A	B
12	T	1,1-Dichloroethene	61	3.57	0.358	A	2	A	B
13	T	tert-Butyl alcohol	59	3.72	0.373	A	1	A	B
14	T	Acetonitrile	41	0.00	0.000	A	2	A	B
15	T	Methyl acetate	74	4.10	0.411	A	1	A	B
16	T	Iodomethane	142	4.01	0.403	A	1	A	B
17	T	Allyl chloride	76	4.12	0.413	A	1	A	B
18	T	Methylene chloride	49	4.31	0.432	L	2	A	B
19	T	Carbon disulfide	76	4.26	0.428	L	1	A	B
20	T	Acrylonitrile	53	4.54	0.455	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	4.58	0.459	A	1	A	B
22	T	trans-1,2-Dichloroethene	96	4.81	0.483	A	1	A	B
23	T	Isopropyl ether (DIPE)	45	5.48	0.550	A	1	A	B
24	T	Vinyl acetate	43	5.71	0.573	A	1	A	B
25	T	1,1-Dichloroethane	63	5.65	0.567	A	2	A	B
26	T	2-Butanol	45	6.21	0.624	L	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.38	0.640	A	1	A	B
28	T	2-Butanone	43	6.67	0.670	A	1	A	B
29	T	2,2-Dichloropropane	77	6.93	0.695	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	7.05	0.708	A	1	A	B
31	T	Chloroform	83	7.45	0.748	A	2	A	B
32	T	Bromochloromethane	130	7.83	0.785	A	1	A	B
33	T	Tetrahydrofuran	42	7.93	0.796	A	2	A	B
34	T	tert-Amyl alcohol	59	8.12	0.815	A	1	A	B
35	S	Dibromofluoromethane	111	7.97	0.800	L	1	A	B
36	T	1,1,1-Trichloroethane	97	8.35	0.838	A	2	A	B
37	T	Cyclohexane	84	8.35	0.838	A	1	A	B
38	T	2,2,4-Trimethylpentane	57	8.69	0.872	A	1	A	B
39	T	1,1-Dichloropropene	110	8.73	0.876	A	1	A	B
40	T	Carbon tetrachloride	119	8.90	0.893	A	1	A	B
41	T	tert-Amyl methyl ether (TAME)	73	9.06	0.910	A	2	A	B
42	S	1,2-Dichloroethane-d4	65	9.08	0.912	A	1	A	B
43	T	1,2-Dichloroethane	62	9.29	0.933	A	1	A	B
44	T	Benzene	78	9.27	0.931	A	2	A	B
45	T	Trichloroethene	130	10.55	1.059	A	3	A	B
46	T	Methylcyclohexane	83	10.64	1.067	A	2	A	B
47	T	1,2-Dichloropropane	63	10.91	1.095	A	1	A	B
48	T	1,4-Dioxane	88	11.45	1.149	A	1	A	B
49	T	Bromodichloromethane	83	11.35	1.139	A	1	A	B
50	T	Dibromomethane	93	11.41	1.145	A	2	A	B
51	T	2-Chloroethyl vinyl ether	63	12.04	1.208	A	1	A	B
52	T	4-Methyl-2-pentanone	43	12.08	1.212	A	3	A	B
53	T	cis-1,3-Dichloropropene	75	12.40	1.244	A	3	A	B
54	I	CHLOROBENZENE-D5	117	15.43	1.000	A	2	A	B
55	S	Toluene-d8	98	12.82	0.831	A	1	A	B
56	T	Toluene	91	12.94	0.839	A	1	A	B
57	T	Ethyl methacrylate	69	13.38	0.867	A	1	A	B
58	T	trans-1,3-Dichloropropene	75	13.32	0.863	A	1	A	B
59	T	1,1,2-Trichloroethane	97	13.57	0.879	A	2	A	B
60	T	2-Hexanone	43	13.65	0.885	A	1	A	B
61	T	1,3-Dichloropropane	76	14.03	0.909	A	1	A	B

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62	T	Tetrachloroethene	164	14.07	0.912	A	3	A	B
63	T	Dibromochloromethane	129	14.43	0.935	A	1	A	B
64	T	2-Ethyl-1-butanol	43	0.00	0.000	A	3	A	B
65	T	1,2-Dibromoethane	107	14.76	0.957	A	1	A	B
66	T	1-Chlorohexane	91	15.12	0.980	A	1	A	B
67	T	Chlorobenzene	112	15.50	1.004	A	1	A	B
68	T	1,1,1,2-Tetrachloroethane	131	15.59	1.010	A	1	A	B
69	T	Ethylbenzene	91	15.60	1.011	A	1	A	B
70	T	m-Xylene & p-Xylene	91	15.74	1.020	A	1	A	B
71	T	o-Xylene	91	16.47	1.067	A	1	A	B
72	T	Styrene	104	16.53	1.071	A	2	A	B
73	T	Isopropylbenzene	105	17.08	1.107	A	3	A	B
74	I	1,2-DICHLOROBENZENE-D4	152	19.35	1.000	A	1	A	B
75	T	Bromoform	173	17.07	0.882	L	2	A	B
76	T	1,1,2,2-Tetrachloroethane	83	17.36	0.897	A	1	A	B
77	S	4-Bromofluorobenzene	95	17.45	0.902	A	2	A	B
78	T	1,2,3-Trichloropropane	110	17.57	0.908	A	1	A	B
79	T	trans-1,4-Dichloro-2-butene	53	17.68	0.913	A	1	A	B
80	T	n-Propylbenzene	91	17.68	0.913	A	2	A	B
81	T	Bromobenzene	156	17.71	0.916	A	1	A	B
82	T	1,3,5-Trimethylbenzene	105	17.90	0.925	A	2	A	B
83	T	2-Chlorotoluene	91	17.91	0.926	A	1	A	B
84	T	4-Chlorotoluene	91	17.97	0.929	A	1	A	B
85	T	tert-Butylbenzene	134	18.35	0.948	A	1	A	B
86	T	1,2,4-Trimethylbenzene	105	18.39	0.950	A	1	A	B
87	T	sec-Butylbenzene	105	18.60	0.961	A	1	A	B
88	T	p-Isopropyltoluene	119	18.76	0.970	A	2	A	B
89	T	1,3-Dichlorobenzene	146	18.87	0.975	A	2	A	B
90	T	1,2,3-Trimethylbenzene	105	18.95	0.979	A	2	A	B
91	T	1,4-Dichlorobenzene	146	18.99	0.981	A	2	A	B
92	T	n-Butylbenzene	91	19.21	0.993	A	2	A	B
93	T	1,2-Dichlorobenzene	146	19.37	1.001	A	1	A	B
94	T	1,2-Dibromo-3-chloropropane	157	20.14	1.041	A	1	A	B
95	T	1,2,4-Trichlorobenzene	180	20.97	1.084	A	2	A	B
96	T	Hexachlorobutadiene	225	21.10	1.091	A	2	A	B
97	T	Naphthalene	128	21.24	1.098	A	1	A	B
98	T	1,2,3-Trichlorobenzene	180	21.49	1.111	A	2	A	B

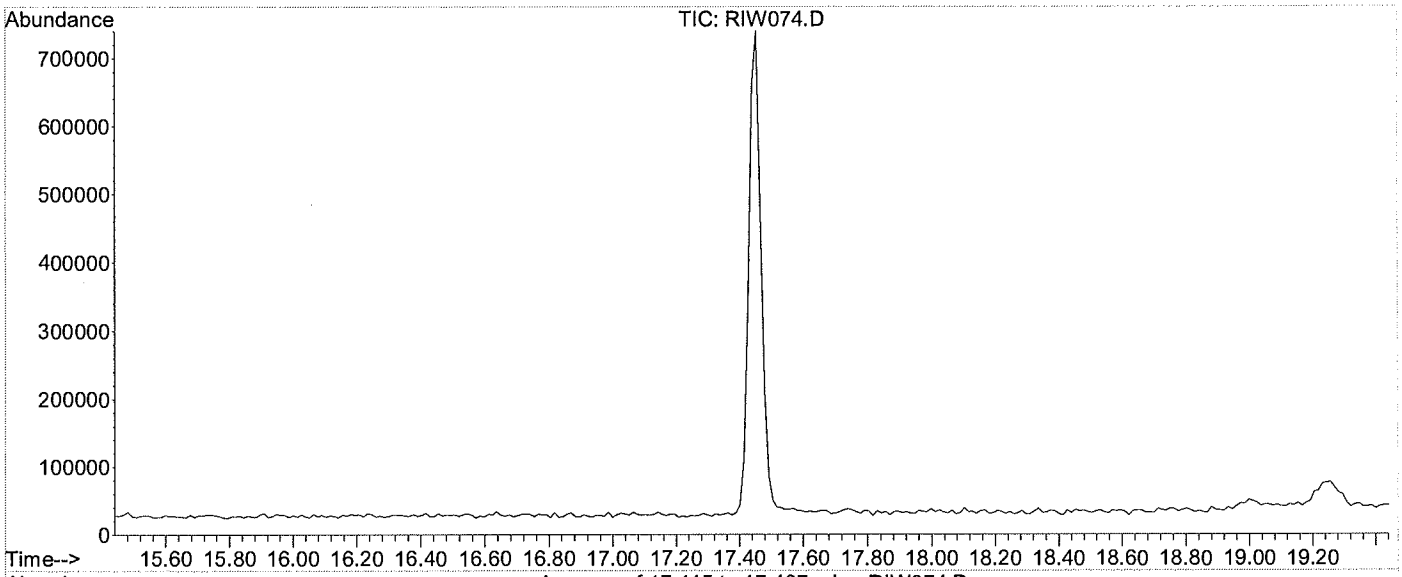
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

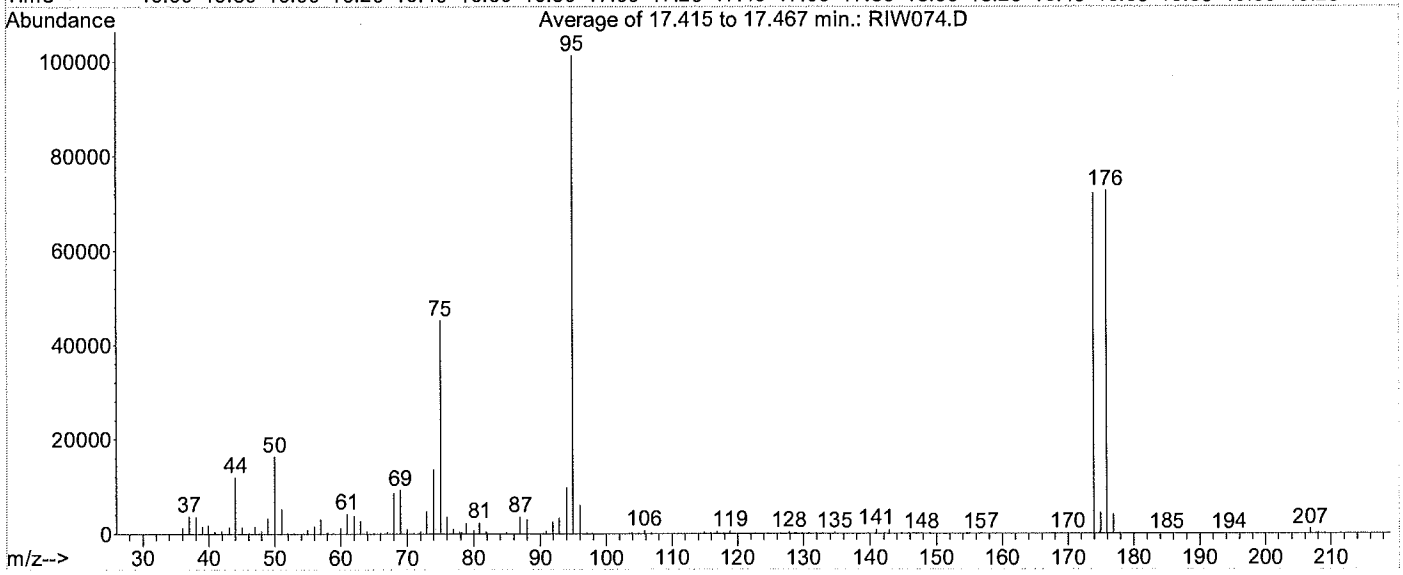
VO06I19B.M Fri Oct 11 17:22:24 2024

SC 10/19/24

BFB

Data File : D:\HPCHEM\1\DATA\24I19\RIW074.D Vial: 1
Acq On : 19 Sep 2024 9:28 am Operator: PMai
Sample : BFB06I04 Inst : 06
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260





Spectrum Information: Average of 17.415 to 17.467 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.1	16345	PASS
75	95	30	60	44.7	45243	PASS
95	95	100	100	100.0	101298	PASS
96	95	5	9	5.9	6001	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	71.3	72180	PASS
175	174	5	9	6.2	4496	PASS
176	174	95	101	100.7	72690	PASS
177	176	5	9	5.6	4038	PASS

SV 10/14/24

RIW074.D VO06I19B.M Mon Oct 14 12:30:43 2024

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW075.D Vial: 2
Acq On : 19 Sep 2024 11:07 am Operator: PMai
Sample : VO06I191 0.03/0.15uL Inst : 06
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:38 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2702801	10.00	ug/l		0.00
54) CHLOROBENZENE-D5	15.43	117	2093254	10.00	ug/l		0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1084478	10.00	ug/l		0.00
System Monitoring Compounds							
35) Dibromofluoromethane	7.97	111	11581	0.37	ug/l		0.00
Spiked Amount 10.000			Recovery = 3.70%				
42) 1,2-Dichloroethane-d4	9.08	65	10878	0.18	ug/l		0.00
Spiked Amount 10.000			Recovery = 1.80%				
55) Toluene-d8	12.82	98	43813	0.16	ug/l		0.00
Spiked Amount 10.000			Recovery = 1.60%				
77) 4-Bromofluorobenzene	17.47	95	18275	0.15	ug/l		0.01
Spiked Amount 10.000			Recovery = 1.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.66	85	47039	0.41	ug/l		88
3) Chloromethane	1.89	50	43921	0.42	ug/l		97
4) Vinyl chloride	1.99	62	34689	0.42	ug/l		99
5) Bromomethane	2.45	94	42067	0.71	ug/l	#	49
6) Chloroethane	2.51	64	23145	0.39	ug/l		94
7) Dichlorofluoromethane	2.56	67	55363	0.22	ug/l		64
8) Trichlorofluoromethane	2.80	101	34141	0.32	ug/l		97
9) Acrolein	3.32	56	10132	2.67	ug/l		87
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	24584	0.31	ug/l		97
11) Acetone	3.43	43	72895	6.68	ug/l	#	1
12) 1,1-Dichloroethene	3.57	61	40889	0.29	ug/l		88
13) tert-Butyl alcohol	3.72	59	27238	8.07	ug/l		83
15) Methyl acetate	4.12	74	1643	0.28	ug/l	#	41
16) Iodomethane	3.99	142	39307	0.29	ug/l		98
17) Allyl chloride	4.12	76	15359	0.34	ug/l		74
19) Carbon disulfide	4.26	76	35181	0.35	ug/l		82
20) Acrylonitrile	4.56	53	20968	1.55	ug/l		95
21) tert-Butyl methyl ether (M	4.60	73	42665	0.31	ug/l		90
22) trans-1,2-Dichloroethene	4.81	96	29653	0.35	ug/l		86
23) Isopropyl ether (DIPE)	5.48	45	84725	0.30	ug/l		97
24) Vinyl acetate	5.75	43	18073	0.18	ug/l		88
25) 1,1-Dichloroethane	5.65	63	43369	0.30	ug/l		87
26) 2-Butanol	6.26	45	17738	11.86	ug/l	#	62
27) tert-Butyl ethyl ether (ET	6.40	59	58690	0.29	ug/l		86
28) 2-Butanone	6.70	43	47417	2.56	ug/l		100
29) 2,2-Dichloropropane	6.93	77	29376	0.33	ug/l		74
30) cis-1,2-Dichloroethene	7.07	96	27910	0.32	ug/l		90
31) Chloroform	7.45	83	47910	0.34	ug/l		99
32) Bromochloromethane	7.83	130	10992	0.29	ug/l		78
33) Tetrahydrofuran	7.97	42	8124	0.82	ug/l		63
36) 1,1,1-Trichloroethane	8.37	97	35378	0.31	ug/l		97
37) Cyclohexane	8.35	84	32156	0.22	ug/l		68
39) 1,1-Dichloropropene	8.71	110	11101	0.29	ug/l		100
40) Carbon tetrachloride	8.90	119	25992	0.28	ug/l		96
41) tert-Amyl methyl ether (TA	9.08	73	48708	0.29	ug/l		92
43) 1,2-Dichloroethane	9.29	62	17895	0.25	ug/l		72

(#) = qualifier out of range (m) = manual integration

SV 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW075.D Vial: 2
Acq On : 19 Sep 2024 11:07 am Operator: PMai
Sample : VO06I191 0.03/0.15uL Inst : 06
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:38 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44)	Benzene	9.27	78	89786	0.29	ug/l	98
45)	Trichloroethene	10.55	130	21639	0.27	ug/l	86
46)	Methylcyclohexane	10.64	83	35601	0.23	ug/l	94
47)	1,2-Dichloropropane	10.91	63	23664	0.31	ug/l	90
48)	1,4-Dioxane	11.47	88	3700	10.31	ug/l	93
49)	Bromodichloromethane	11.35	83	33039	0.33	ug/l	91
50)	Dibromomethane	11.41	93	10206	0.28	ug/l	91
52)	4-Methyl-2-pentanone	12.10	43	71762	1.40	ug/l	94
53)	cis-1,3-Dichloropropene	12.40	75	37064	0.30	ug/l	89
56)	Toluene	12.94	91	86740	0.27	ug/l	98
57)	Ethyl methacrylate	13.38	69	22660	0.33	ug/l	87
58)	trans-1,3-Dichloropropene	13.34	75	24584	0.28	ug/l	83
59)	1,1,2-Trichloroethane	13.57	97	13356	0.29	ug/l	97
60)	2-Hexanone	13.67	43	72192	2.18	ug/l	99
61)	1,3-Dichloropropane	14.03	76	21698	0.26	ug/l	71
62)	Tetrachloroethene	14.07	164	17314	0.27	ug/l	94
63)	Dibromochloromethane	14.43	129	16812	0.30	ug/l	96
65)	1,2-Dibromoethane	14.76	107	11034	0.26	ug/l	95
66)	1-Chlorohexane	15.12	91	58798	0.44	ug/l	92
67)	Chlorobenzene	15.49	112	53305	0.28	ug/l	98
68)	1,1,1,2-Tetrachloroethane	15.60	131	16152	0.26	ug/l	74
69)	Ethylbenzene	15.61	91	103629	0.27	ug/l	99
70)	m-Xylene & p-Xylene	15.74	91	168443	0.57	ug/l	94
71)	o-Xylene	16.47	91	88715	0.30	ug/l	98
72)	Styrene	16.53	104	61796	0.28	ug/l	88
73)	Isopropylbenzene	17.08	105	118148	0.31	ug/l	97
75)	Bromoform	17.06	173	8255	0.34	ug/l	79
76)	1,1,2,2-Tetrachloroethane	17.36	83	16690	0.27	ug/l	91
78)	1,2,3-Trichloropropane	17.58	110	5121	0.30	ug/l	81
79)	trans-1,4-Dichloro-2-buten	17.67	53	8361	0.44	ug/l	70
80)	n-Propylbenzene	17.69	91	157605	0.26	ug/l	96
81)	Bromobenzene	17.73	156	22415	0.26	ug/l	86
82)	1,3,5-Trimethylbenzene	17.89	105	98000	0.27	ug/l	99
83)	2-Chlorotoluene	17.91	91	91285	0.26	ug/l	92
84)	4-Chlorotoluene	17.97	91	75596	0.24	ug/l	96
85)	tert-Butylbenzene	18.35	134	21167	0.27	ug/l	76
86)	1,2,4-Trimethylbenzene	18.39	105	108593	0.29	ug/l	96
87)	sec-Butylbenzene	18.61	105	150523	0.29	ug/l	94
88)	p-Isopropyltoluene	18.76	119	131428	0.30	ug/l	97
89)	1,3-Dichlorobenzene	18.87	146	47096	0.25	ug/l	90
90)	1,2,3-Trimethylbenzene	18.95	105	98697	0.29	ug/l	95
91)	1,4-Dichlorobenzene	18.98	146	50419	0.27	ug/l	90
92)	n-Butylbenzene	19.20	91	147712	0.31	ug/l	98
93)	1,2-Dichlorobenzene	19.37	146	44367	0.28	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	4806	0.43	ug/l	74
95)	1,2,4-Trichlorobenzene	20.97	180	46289	0.37	ug/l	98
96)	Hexachlorobutadiene	21.10	225	23464	0.35	ug/l	87
97)	Naphthalene	21.24	128	70434	0.42	ug/l	96
98)	1,2,3-Trichlorobenzene	21.49	180	37303	0.40	ug/l	97

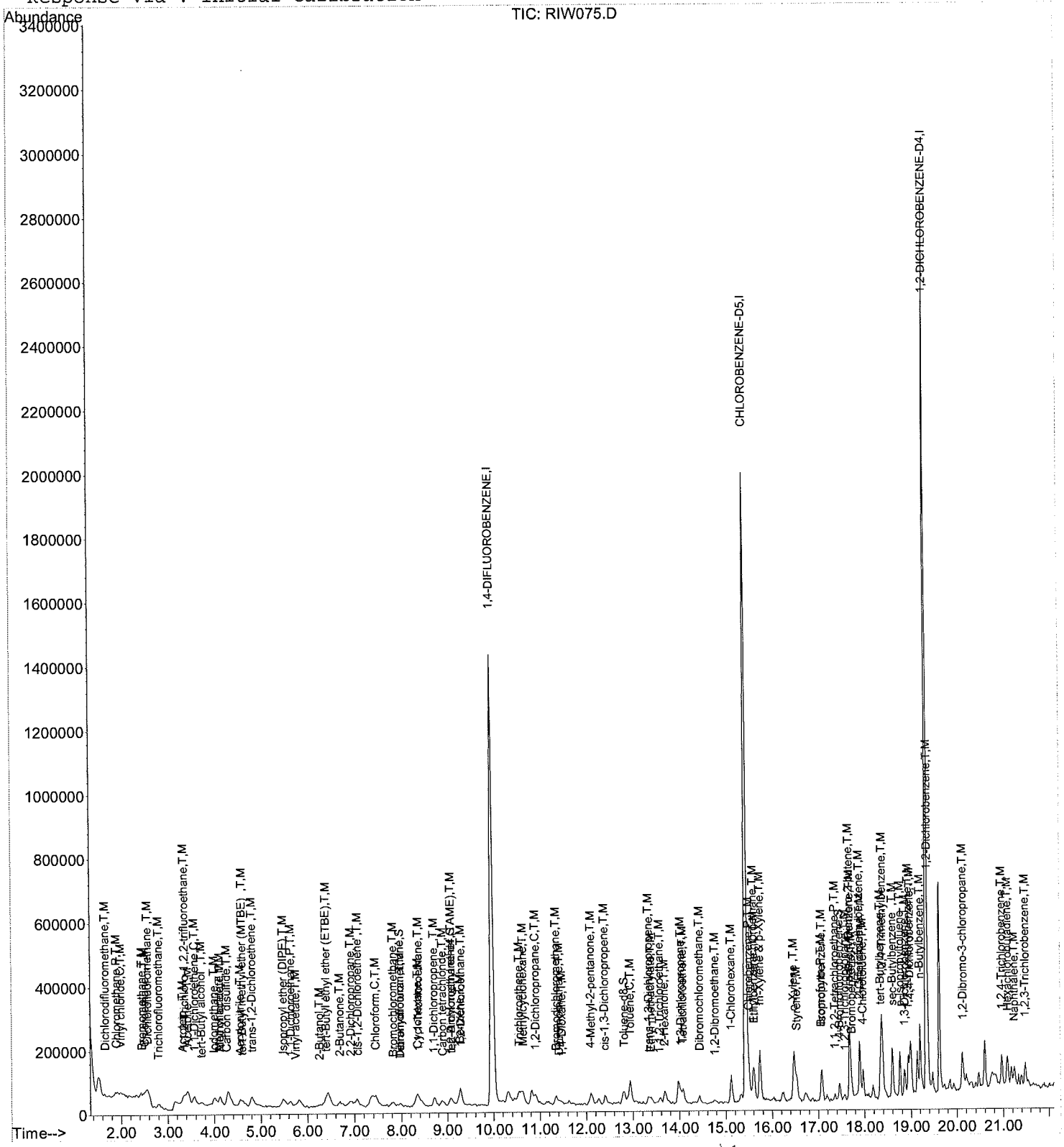
SC 10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW075.D Vial: 2
Acq On : 19 Sep 2024 11:07 am Operator: PMai
Sample : VO06I191 0.03/0.15uL Inst : 06
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:38 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SM 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3602052	10.00	ug/l		0.00
54) CHLOROBENZENE-D5	15.43	117	2932021	10.00	ug/l		0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1368492	10.00	ug/l		0.00
System Monitoring Compounds							
35) Dibromofluoromethane	7.97	111	32709	0.54	ug/l		0.00
Spiked Amount 10.000			Recovery =	5.40%			
42) 1,2-Dichloroethane-d4	9.08	65	27417	0.34	ug/l		0.00
Spiked Amount 10.000			Recovery =	3.40%			
55) Toluene-d8	12.81	98	130588	0.34	ug/l		0.00
Spiked Amount 10.000			Recovery =	3.40%			
77) 4-Bromofluorobenzene	17.45	95	52440	0.34	ug/l		0.00
Spiked Amount 10.000			Recovery =	3.40%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.66	85	73258	0.48	ug/l		96
3) Chloromethane	1.87	50	61771	0.44	ug/l		80
4) Vinyl chloride	1.99	62	53540	0.49	ug/l		89
5) Bromomethane	2.43	94	31280	0.44	ug/l		100
6) Chloroethane	2.50	64	28196	0.36	ug/l		95
7) Dichlorofluoromethane	2.56	67	116363	0.38	ug/l		93
8) Trichlorofluoromethane	2.80	101	55054	0.38	ug/l		99
9) Acrolein	3.32	56	12175	2.41	ug/l		70
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	49153	0.44	ug/l		98
11) Acetone	3.40	43	52946	3.64	ug/l		75
12) 1,1-Dichloroethene	3.55	61	76442	0.40	ug/l		90
13) tert-Butyl alcohol	3.72	59	45320	10.07	ug/l		84
15) Methyl acetate	4.09	74	1425	0.18	ug/l	#	1
16) Iodomethane	3.99	142	73427	0.41	ug/l		94
17) Allyl chloride	4.09	76	26224	0.43	ug/l		92
18) Methylene chloride	4.28	49	104262	0.21	ug/l		99
19) Carbon disulfide	4.26	76	70559	0.46	ug/l		95
20) Acrylonitrile	4.54	53	33642	1.86	ug/l		96
21) tert-Butyl methyl ether (M	4.58	73	74136	0.41	ug/l		99
22) trans-1,2-Dichloroethene	4.79	96	47316	0.42	ug/l		97
23) Isopropyl ether (DIPE)	5.48	45	150121	0.40	ug/l		95
24) Vinyl acetate	5.73	43	35113	0.26	ug/l		92
25) 1,1-Dichloroethane	5.62	63	75099	0.39	ug/l		87
26) 2-Butanol	6.23	45	25013	12.12	ug/l	#	62
27) tert-Butyl ethyl ether (ET	6.40	59	107914	0.40	ug/l		94
28) 2-Butanone	6.69	43	52378	2.12	ug/l		94
29) 2,2-Dichloropropane	6.92	77	52180	0.44	ug/l		94
30) cis-1,2-Dichloroethene	7.03	96	53525	0.46	ug/l		92
31) Chloroform	7.43	83	80220	0.43	ug/l		97
32) Bromochloromethane	7.80	130	20585	0.40	ug/l		89
33) Tetrahydrofuran	7.95	42	6668	0.50	ug/l		79
36) 1,1,1-Trichloroethane	8.35	97	65591	0.43	ug/l		96
37) Cyclohexane	8.33	84	53943	0.28	ug/l		85
39) 1,1-Dichloropropene	8.71	110	22965	0.45	ug/l		95
40) Carbon tetrachloride	8.87	119	52082	0.41	ug/l		99
41) tert-Amyl methyl ether (TA	9.08	73	95840	0.43	ug/l		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	1,2-Dichloroethane	9.27	62	36987	0.39 ug/l	77
44)	Benzene	9.27	78	170834	0.41 ug/l	95
45)	Trichloroethene	10.55	130	45725	0.43 ug/l	97
46)	Methylcyclohexane	10.61	83	51792	0.25 ug/l	97
47)	1,2-Dichloropropane	10.91	63	41267	0.40 ug/l	91
48)	1,4-Dioxane	11.45	88	5989	12.53 ug/l	99
49)	Bromodichloromethane	11.35	83	57691	0.44 ug/l	93
50)	Dibromomethane	11.41	93	19132	0.40 ug/l	97
51)	2-Chloroethyl vinyl ether	12.06	63	13987	0.44 ug/l	96
52)	4-Methyl-2-pentanone	12.10	43	133804	1.96 ug/l	97
53)	cis-1,3-Dichloropropene	12.39	75	63396	0.39 ug/l	93
56)	Toluene	12.94	91	197036	0.45 ug/l	98
57)	Ethyl methacrylate	13.38	69	43487	0.45 ug/l	98
58)	trans-1,3-Dichloropropene	13.34	75	50744	0.41 ug/l	100
59)	1,1,2-Trichloroethane	13.57	97	24112	0.38 ug/l	94
60)	2-Hexanone	13.67	43	99771	2.15 ug/l	97
61)	1,3-Dichloropropane	14.03	76	51286	0.44 ug/l	85
62)	Tetrachloroethene	14.09	164	41220	0.45 ug/l	93
63)	Dibromochloromethane	14.43	129	34335	0.44 ug/l	94
65)	1,2-Dibromoethane	14.76	107	24902	0.41 ug/l	94
66)	1-Chlorohexane	15.12	91	93959	0.50 ug/l	100
67)	Chlorobenzene	15.49	112	120143	0.44 ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.59	131	35392	0.41 ug/l	98
69)	Ethylbenzene	15.61	91	252802	0.46 ug/l	94
70)	m-Xylene & p-Xylene	15.74	91	378852	0.91 ug/l	96
71)	o-Xylene	16.47	91	188549	0.46 ug/l	99
72)	Styrene	16.53	104	147292	0.48 ug/l	92
73)	Isopropylbenzene	17.08	105	231853	0.44 ug/l	97
75)	Bromoform	17.08	173	13128	0.40 ug/l	97
76)	1,1,2,2-Tetrachloroethane	17.36	83	30166	0.38 ug/l	98
78)	1,2,3-Trichloropropane	17.57	110	9018	0.41 ug/l	91
79)	trans-1,4-Dichloro-2-buten	17.69	53	11147	0.46 ug/l	91
80)	n-Propylbenzene	17.67	91	349467	0.46 ug/l	95
81)	Bromobenzene	17.73	156	41407	0.38 ug/l	96
82)	1,3,5-Trimethylbenzene	17.89	105	200111	0.43 ug/l	99
83)	2-Chlorotoluene	17.91	91	188970	0.43 ug/l	91
84)	4-Chlorotoluene	17.97	91	184018	0.45 ug/l	97
85)	tert-Butylbenzene	18.35	134	48411	0.50 ug/l	96
86)	1,2,4-Trimethylbenzene	18.39	105	213722	0.45 ug/l	98
87)	sec-Butylbenzene	18.60	105	312446	0.48 ug/l	93
88)	p-Isopropyltoluene	18.76	119	264036	0.48 ug/l	95
89)	1,3-Dichlorobenzene	18.87	146	103794	0.43 ug/l	93
90)	1,2,3-Trimethylbenzene	18.95	105	193889	0.45 ug/l	97
91)	1,4-Dichlorobenzene	18.98	146	98791	0.41 ug/l	94
92)	n-Butylbenzene	19.21	91	296003	0.50 ug/l	93
93)	1,2-Dichlorobenzene	19.37	146	85207	0.43 ug/l	94
94)	1,2-Dibromo-3-chloropropan	20.14	157	7430	0.53 ug/l	96
95)	1,2,4-Trichlorobenzene	20.97	180	73400	0.47 ug/l	93
96)	Hexachlorobutadiene	21.10	225	40297	0.47 ug/l	99
97)	Naphthalene	21.24	128	91896	0.43 ug/l	82

(#) = qualifier out of range (m) = manual integration SA 10/14/24
RIW076.D VO06I19B.M Fri Oct 11 17:36:14 2024

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	51351	0.43	ug/l	89

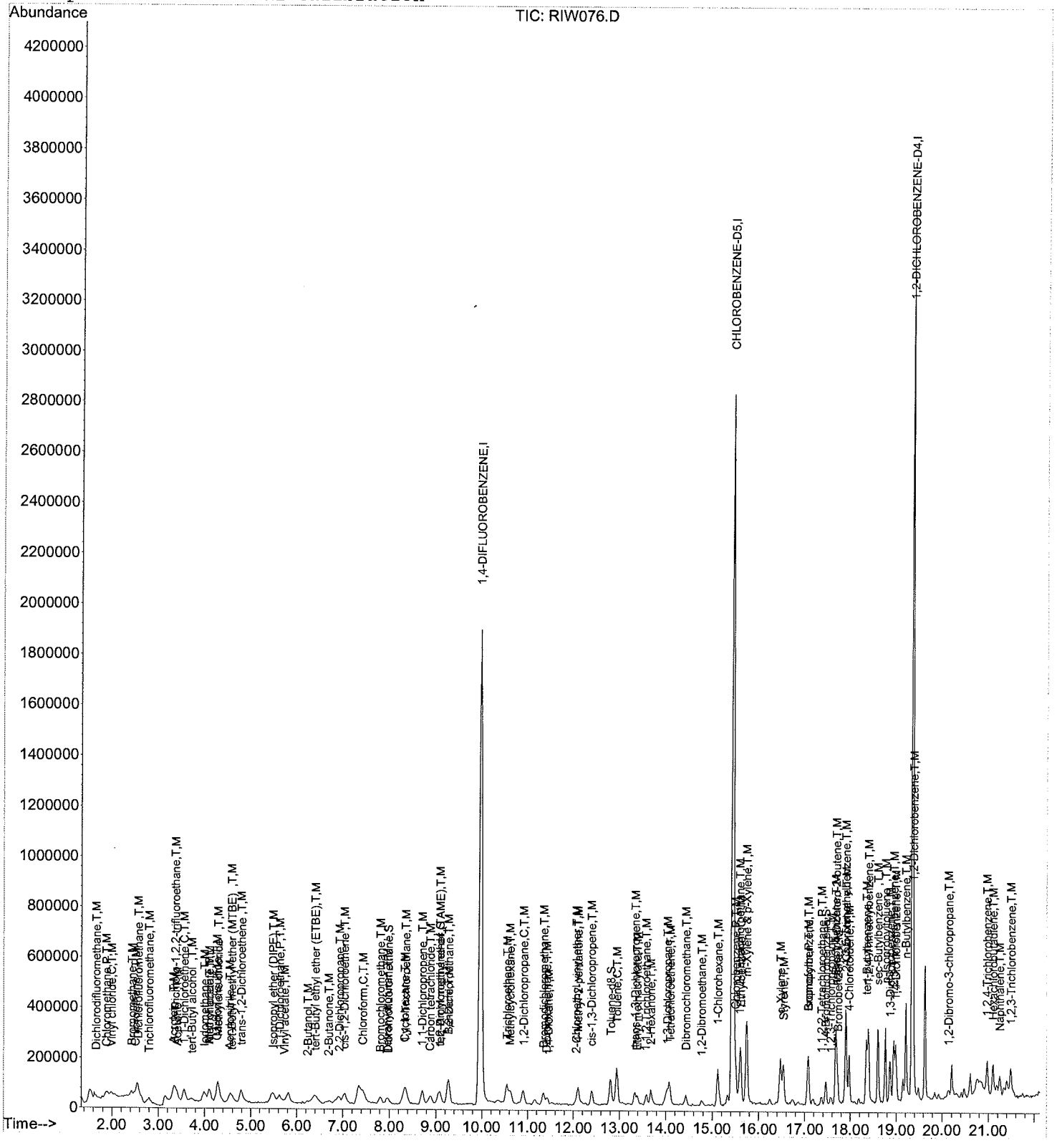
SA 10/14/24

(#) = qualifier out of range (m) = manual integration
RIW076.D VO06I19B.M Fri Oct 11 17:36:15 2024

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW076.D Vial: 3
Acq On : 19 Sep 2024 11:33 am Operator: PMai
Sample : VO06I192 0.05/0.25uL Inst : 06
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:34 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3122913	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2588859	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1139628	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	50378	0.78	ug/l	0.00
Spiked Amount 10.000			Recovery =	7.80%		
42) 1,2-Dichloroethane-d4	9.08	65	45903	0.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	6.60%		
55) Toluene-d8	12.79	98	213396	0.64	ug/l	-0.02
Spiked Amount 10.000			Recovery =	6.40%		
77) 4-Bromofluorobenzene	17.45	95	83199	0.65	ug/l	0.00
Spiked Amount 10.000			Recovery =	6.50%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	145071	1.10	ug/l	99
3) Chloromethane	1.87	50	131927	1.09	ug/l	84
4) Vinyl chloride	1.99	62	113028	1.19	ug/l	96
5) Bromomethane	2.43	94	82236	1.14	ug/l	76
6) Chloroethane	2.50	64	56065	0.88	ug/l	98
7) Dichlorofluoromethane	2.54	67	217462	0.90	ug/l	99
8) Trichlorofluoromethane	2.80	101	119139	0.96	ug/l	98
9) Acrolein	3.32	56	26374	6.01	ug/l	84
10) 1,1,2-Trichloro-1,2,2-trif	3.34	151	90044	0.88	ug/l	94
11) Acetone	3.40	43	68261	5.41	ug/l	71
12) 1,1-Dichloroethene	3.55	61	150316	0.91	ug/l	93
13) tert-Butyl alcohol	3.70	59	87780	22.50	ug/l	89
15) Methyl acetate	4.12	74	5582	0.83	ug/l	73
16) Iodomethane	3.99	142	150918	0.97	ug/l	96
17) Allyl chloride	4.12	76	46620	0.88	ug/l	79
18) Methylene chloride	4.28	49	177833	0.93	ug/l	97
19) Carbon disulfide	4.24	76	125207	0.78	ug/l	98
20) Acrylonitrile	4.54	53	68440	4.37	ug/l	93
21) tert-Butyl methyl ether (M	4.58	73	146668	0.93	ug/l	97
22) trans-1,2-Dichloroethene	4.79	96	95056	0.96	ug/l	97
23) Isopropyl ether (DIPE)	5.46	45	299087	0.92	ug/l	97
24) Vinyl acetate	5.71	43	93894	0.80	ug/l	99
25) 1,1-Dichloroethane	5.63	63	159907	0.97	ug/l	92
26) 2-Butanol	6.21	45	52791	18.93	ug/l	99
27) tert-Butyl ethyl ether (ET	6.38	59	232212	0.98	ug/l	99
28) 2-Butanone	6.69	43	92234	4.30	ug/l	98
29) 2,2-Dichloropropane	6.90	77	99220	0.96	ug/l	89
30) cis-1,2-Dichloroethene	7.03	96	97646	0.96	ug/l	92
31) Chloroform	7.43	83	165058	1.01	ug/l	95
32) Bromochloromethane	7.80	130	40199	0.91	ug/l	97
33) Tetrahydrofuran	7.93	42	10008	0.87	ug/l	79
36) 1,1,1-Trichloroethane	8.35	97	123421	0.94	ug/l	98
37) Cyclohexane	8.33	84	135999	0.81	ug/l	91
39) 1,1-Dichloropropene	8.71	110	42529	0.96	ug/l	94
40) Carbon tetrachloride	8.89	119	98289	0.90	ug/l	96
41) tert-Amyl methyl ether (TA	9.06	73	188039	0.97	ug/l	94

(#) = qualifier out of range (m) = manual integration
RIW077.D VO06I19B.M Fri Oct 11 17:40:16 2024 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloroethane	9.27	62	80979	0.99 ug/l	93
44) Benzene	9.27	78	363157	1.01 ug/l	98
45) Trichloroethene	10.55	130	89264	0.96 ug/l	98
46) Methylcyclohexane	10.61	83	136668	0.77 ug/l	96
47) 1,2-Dichloropropane	10.91	63	84382	0.95 ug/l	99
48) 1,4-Dioxane	11.47	88	6883	16.61 ug/l	80
49) Bromodichloromethane	11.35	83	104110	0.91 ug/l	90
50) Dibromomethane	11.43	93	39826	0.95 ug/l	99
51) 2-Chloroethyl vinyl ether	12.04	63	25675	0.92 ug/l	90
52) 4-Methyl-2-pentanone	12.10	43	287486	4.87 ug/l	98
53) cis-1,3-Dichloropropene	12.39	75	135990	0.97 ug/l	98
56) Toluene	12.94	91	412836	1.06 ug/l	98
57) Ethyl methacrylate	13.38	69	82013	0.96 ug/l	99
58) trans-1,3-Dichloropropene	13.34	75	97979	0.89 ug/l	97
59) 1,1,2-Trichloroethane	13.59	97	51122	0.91 ug/l	97
60) 2-Hexanone	13.67	43	190175	4.64 ug/l	97
61) 1,3-Dichloropropane	14.03	76	99252	0.96 ug/l	96
62) Tetrachloroethene	14.07	164	79681	0.99 ug/l	98
63) Dibromochloromethane	14.43	129	60557	0.88 ug/l	99
65) 1,2-Dibromoethane	14.76	107	48235	0.90 ug/l	98
66) 1-Chlorohexane	15.12	91	160457	0.96 ug/l	96
67) Chlorobenzene	15.49	112	239026	1.00 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.59	131	70104	0.93 ug/l	94
69) Ethylbenzene	15.61	91	492334	1.02 ug/l	97
70) m-Xylene & p-Xylene	15.74	91	757677	2.06 ug/l	97
71) o-Xylene	16.45	91	355552	0.98 ug/l	99
72) Styrene	16.53	104	278207	1.03 ug/l	98
73) Isopropylbenzene	17.08	105	464469	0.99 ug/l	97
75) Bromoform	17.06	173	29978	0.94 ug/l	96
76) 1,1,2,2-Tetrachloroethane	17.35	83	61947	0.94 ug/l	98
78) 1,2,3-Trichloropropane	17.57	110	16378	0.90 ug/l	75
79) trans-1,4-Dichloro-2-buten	17.69	53	21718	1.08 ug/l	94
80) n-Propylbenzene	17.67	91	663586	1.06 ug/l	98
81) Bromobenzene	17.73	156	84669	0.94 ug/l	95
82) 1,3,5-Trimethylbenzene	17.89	105	404481	1.05 ug/l	96
83) 2-Chlorotoluene	17.91	91	371994	1.01 ug/l	94
84) 4-Chlorotoluene	17.97	91	352700	1.04 ug/l	100
85) tert-Butylbenzene	18.35	134	81866	1.01 ug/l	99
86) 1,2,4-Trimethylbenzene	18.39	105	407450	1.02 ug/l	94
87) sec-Butylbenzene	18.60	105	554309	1.02 ug/l	96
88) p-Isopropyltoluene	18.76	119	473312	1.03 ug/l	99
89) 1,3-Dichlorobenzene	18.87	146	209858	1.04 ug/l	99
90) 1,2,3-Trimethylbenzene	18.95	105	369080	1.03 ug/l	98
91) 1,4-Dichlorobenzene	18.98	146	202545	1.02 ug/l	100
92) n-Butylbenzene	19.21	91	503441	1.02 ug/l	99
93) 1,2-Dichlorobenzene	19.37	146	167764	1.01 ug/l	100
94) 1,2-Dibromo-3-chloropropan	20.14	157	10992	0.94 ug/l	100
95) 1,2,4-Trichlorobenzene	20.97	180	125247	0.96 ug/l	98
96) Hexachlorobutadiene	21.10	225	68906	0.97 ug/l	96
97) Naphthalene	21.24	128	165484	0.94 ug/l	93

(#) = qualifier out of range (m) = manual integration
RIW077.D VO06I19B.M Fri Oct 11 17:40:17 2024 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.49	180	94769	0.96	ug/l	99

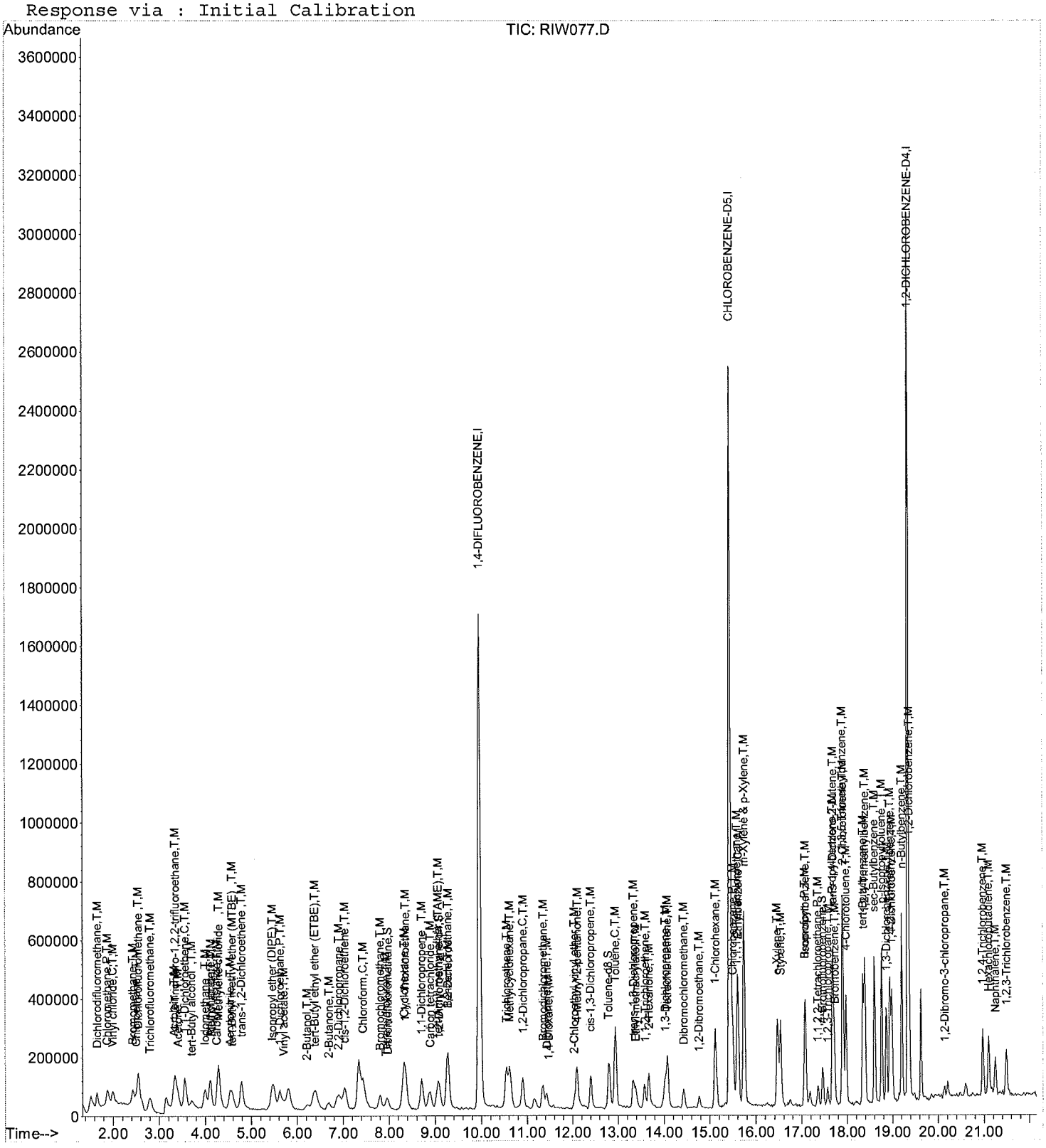
SG 10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW077.D Vial: 4
Acq On : 19 Sep 2024 11:59 am Operator: PMai
Sample : VO06I193 0.10/0.50uL Inst : 06
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:40 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



RIW077.D VO06I19B.M Fri Oct 11 17:40:20 2024 Page 4

SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D Vial: 5
Acq On : 19 Sep 2024 12:25 pm Operator: PMai
Sample : VO06I194 0.20/1.00uL Inst : 06
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2977226	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2452751	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1072692	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	138141	1.83	ug/l	-0.02
Spiked Amount 10.000			Recovery = 18.30%			
42) 1,2-Dichloroethane-d4	9.08	65	109084	1.66	ug/l	0.00
Spiked Amount 10.000			Recovery = 16.60%			
55) Toluene-d8	12.79	98	583826	1.84	ug/l	-0.02
Spiked Amount 10.000			Recovery = 18.40%			
77) 4-Bromofluorobenzene	17.45	95	215651	1.80	ug/l	0.00
Spiked Amount 10.000			Recovery = 18.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	290951	2.31	ug/l	97
3) Chloromethane	1.89	50	255930	2.22	ug/l	91
4) Vinyl chloride	1.99	62	208812	2.31	ug/l	94
5) Bromomethane	2.43	94	169214	2.35	ug/l	93
6) Chloroethane	2.50	64	153383	2.59	ug/l	97
7) Dichlorofluoromethane	2.56	67	624367	2.86	ug/l	97
8) Trichlorofluoromethane	2.80	101	270779	2.28	ug/l	98
9) Acrolein	3.32	56	48203	11.53	ug/l	73
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	279180	2.77	ug/l	94
11) Acetone	3.40	43	119311	9.92	ug/l	85
12) 1,1-Dichloroethene	3.55	61	405243	2.57	ug/l	99
13) tert-Butyl alcohol	3.70	59	176997	47.58	ug/l	86
15) Methyl acetate	4.07	74	12895	2.01	ug/l	87
16) Iodomethane	3.99	142	345559	2.34	ug/l	99
17) Allyl chloride	4.12	76	102068	2.02	ug/l	94
18) Methylene chloride	4.28	49	311940	2.15	ug/l	98
19) Carbon disulfide	4.26	76	407778	2.31	ug/l	99
20) Acrylonitrile	4.51	53	149523	10.01	ug/l	98
21) tert-Butyl methyl ether (M	4.56	73	311390	2.06	ug/l	99
22) trans-1,2-Dichloroethene	4.79	96	198170	2.11	ug/l	99
23) Isopropyl ether (DIPE)	5.48	45	658163	2.12	ug/l	100
24) Vinyl acetate	5.71	43	199658	1.78	ug/l	99
25) 1,1-Dichloroethane	5.63	63	338005	2.15	ug/l	98
26) 2-Butanol	6.21	45	140481	39.63	ug/l #	62
27) tert-Butyl ethyl ether (ET	6.38	59	478439	2.12	ug/l	98
28) 2-Butanone	6.67	43	188844	9.24	ug/l	91
29) 2,2-Dichloropropane	6.90	77	216431	2.20	ug/l	98
30) cis-1,2-Dichloroethene	7.03	96	203848	2.10	ug/l	95
31) Chloroform	7.43	83	327346	2.10	ug/l	99
32) Bromochloromethane	7.80	130	81369	1.93	ug/l	93
33) Tetrahydrofuran	7.93	42	24208	2.21	ug/l	91
36) 1,1,1-Trichloroethane	8.35	97	263274	2.10	ug/l	99
37) Cyclohexane	8.33	84	331183	2.06	ug/l	99
39) 1,1-Dichloropropene	8.71	110	91016	2.15	ug/l	93
40) Carbon tetrachloride	8.87	119	219297	2.11	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	385225	2.09	ug/l	98

(#) = qualifier out of range (m) = manual integration

Sa 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D
Acq On : 19 Sep 2024 12:25 pm
Sample : VO06I194 0.20/1.00uL
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024

Vial: 5
Operator: PMai
Inst : 06
Multiplr: 1.00

Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloroethane	9.27	62	164764	2.10 ug/l	92
44) Benzene	9.25	78	753488	2.21 ug/l	100
45) Trichloroethene	10.55	130	181232	2.04 ug/l	92
46) Methylcyclohexane	10.61	83	327215	1.94 ug/l	98
47) 1,2-Dichloropropane	10.91	63	174985	2.07 ug/l	99
48) 1,4-Dioxane	11.47	88	14536	36.79 ug/l	84
49) Bromodichloromethane	11.35	83	224915	2.05 ug/l	98
50) Dibromomethane	11.41	93	80523	2.01 ug/l	96
51) 2-Chloroethyl vinyl ether	12.04	63	45681	1.72 ug/l	78
52) 4-Methyl-2-pentanone	12.08	43	618458	10.98 ug/l	99
53) cis-1,3-Dichloropropene	12.39	75	280174	2.09 ug/l	98
56) Toluene	12.94	91	867931	2.35 ug/l	98
57) Ethyl methacrylate	13.38	69	165988	2.04 ug/l	93
58) trans-1,3-Dichloropropene	13.32	75	215945	2.08 ug/l	98
59) 1,1,2-Trichloroethane	13.57	97	112160	2.11 ug/l	97
60) 2-Hexanone	13.65	43	423881	10.93 ug/l	96
61) 1,3-Dichloropropane	14.03	76	206334	2.10 ug/l	98
62) Tetrachloroethene	14.07	164	170395	2.24 ug/l	98
63) Dibromochloromethane	14.43	129	132138	2.02 ug/l	96
65) 1,2-Dibromoethane	14.76	107	107636	2.13 ug/l	96
66) 1-Chlorohexane	15.12	91	372758	2.37 ug/l	95
67) Chlorobenzene	15.50	112	510278	2.25 ug/l	100
68) 1,1,1,2-Tetrachloroethane	15.59	131	157371	2.20 ug/l	97
69) Ethylbenzene	15.60	91	1013329	2.22 ug/l	96
70) m-Xylene & p-Xylene	15.74	91	1559495	4.48 ug/l	98
71) o-Xylene	16.47	91	775527	2.26 ug/l	96
72) Styrene	16.53	104	576362	2.25 ug/l	90
73) Isopropylbenzene	17.08	105	1005342	2.26 ug/l	96
75) Bromoform	17.06	173	65813	2.06 ug/l	91
76) 1,1,2,2-Tetrachloroethane	17.35	83	124870	2.01 ug/l	93
78) 1,2,3-Trichloropropane	17.57	110	33433	1.96 ug/l	87
79) trans-1,4-Dichloro-2-buten	17.67	53	38690	2.05 ug/l	95
80) n-Propylbenzene	17.67	91	1348423	2.28 ug/l	98
81) Bromobenzene	17.71	156	190356	2.25 ug/l	97
82) 1,3,5-Trimethylbenzene	17.90	105	825276	2.29 ug/l	98
83) 2-Chlorotoluene	17.91	91	776573	2.24 ug/l	97
84) 4-Chlorotoluene	17.97	91	757409	2.38 ug/l	99
85) tert-Butylbenzene	18.35	134	176756	2.32 ug/l	97
86) 1,2,4-Trimethylbenzene	18.39	105	849501	2.27 ug/l	96
87) sec-Butylbenzene	18.60	105	1158259	2.27 ug/l	95
88) p-Isopropyltoluene	18.76	119	971849	2.24 ug/l	99
89) 1,3-Dichlorobenzene	18.86	146	428370	2.26 ug/l	97
90) 1,2,3-Trimethylbenzene	18.95	105	772297	2.28 ug/l	99
91) 1,4-Dichlorobenzene	18.99	146	443854	2.36 ug/l	97
92) n-Butylbenzene	19.21	91	1063245	2.28 ug/l	98
93) 1,2-Dichlorobenzene	19.37	146	364780	2.33 ug/l	96
94) 1,2-Dibromo-3-chloropropan	20.14	157	21865	1.99 ug/l	89
95) 1,2,4-Trichlorobenzene	20.97	180	271937	2.21 ug/l	99
96) Hexachlorobutadiene	21.10	225	152423	2.29 ug/l	96
97) Naphthalene	21.24	128	371339	2.24 ug/l	100

(#) = qualifier out of range (m) = manual integration
RIW078.D VO06I19B.M Fri Oct 11 17:41:17 2024

SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D Vial: 5
Acq On : 19 Sep 2024 12:25 pm Operator: PMai
Sample : VO06I194 0.20/1.00uL Inst : 06
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	210803	2.27	ug/l	99

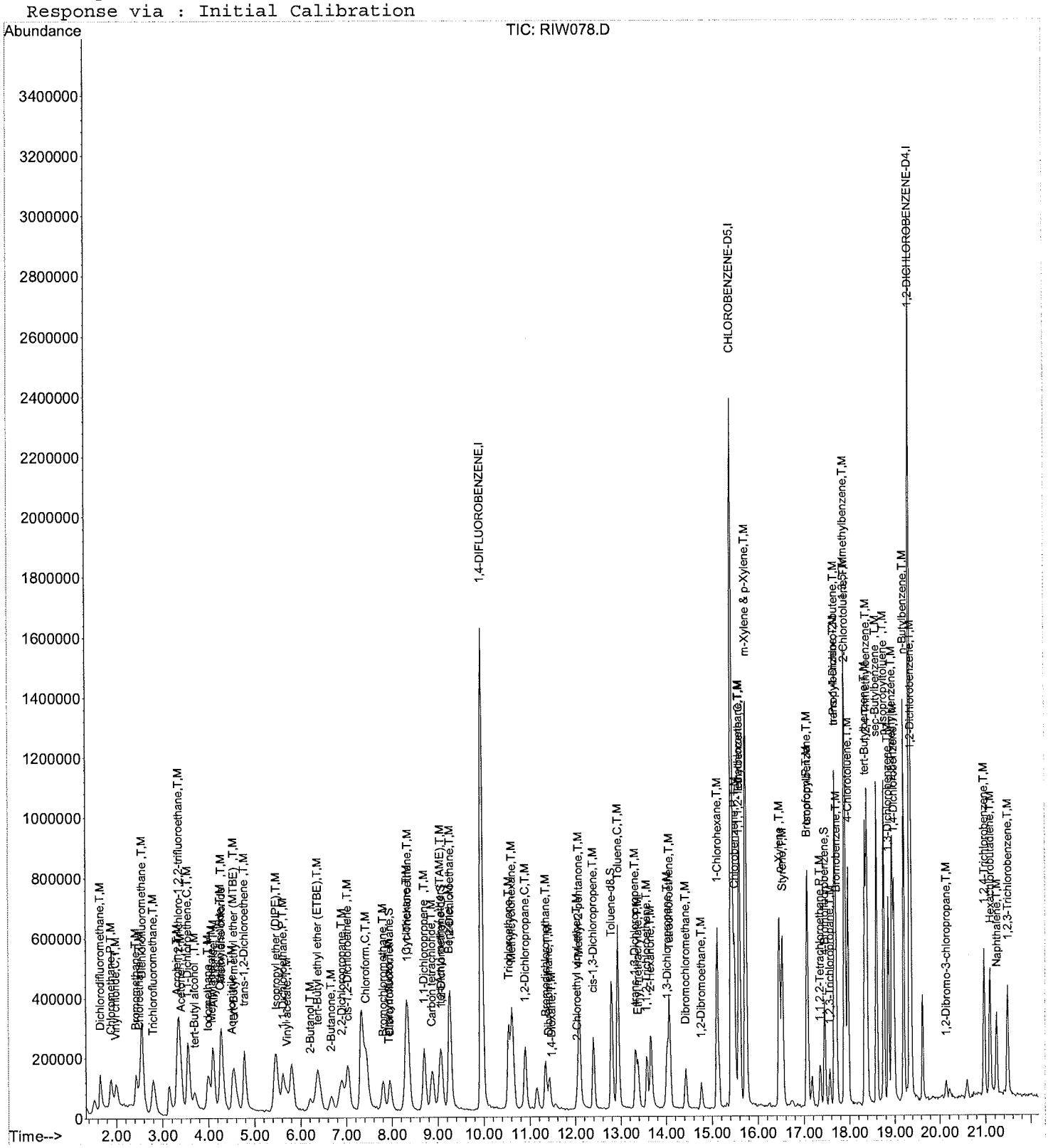
SL
10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW078.D Vial: 5
Acq On : 19 Sep 2024 12:25 pm Operator: PMai
Sample : VO06I194 0.20/1.00uL Inst : 06
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:41 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.97	114	3487068	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2802782	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1201206	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	452215	4.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	47.00%		
42) 1,2-Dichloroethane-d4	9.08	65	372812	4.84	ug/l	0.00
Spiked Amount 10.000			Recovery =	48.40%		
55) Toluene-d8	12.79	98	1860263	5.13	ug/l	-0.02
Spiked Amount 10.000			Recovery =	51.30%		
77) 4-Bromofluorobenzene	17.45	95	672635	5.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	50.20%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	705323	4.79	ug/l	98
3) Chloromethane	1.88	50	645720	4.78	ug/l	99
4) Vinyl chloride	2.00	62	536336	5.07	ug/l	96
5) Bromomethane	2.43	94	392664	4.56	ug/l	99
6) Chloroethane	2.51	64	297391	4.32	ug/l	98
7) Dichlorofluoromethane	2.55	67	1206364	4.80	ug/l	100
8) Trichlorofluoromethane	2.81	101	674943	4.85	ug/l	98
9) Acrolein	3.32	56	105766	21.59	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	520488	4.43	ug/l	97
11) Acetone	3.41	43	344671	24.47	ug/l	97
12) 1,1-Dichloroethene	3.55	61	955223	5.18	ug/l	99
13) tert-Butyl alcohol	3.70	59	527311	121.03	ug/l	92
15) Methyl acetate	4.10	74	37300	4.96	ug/l	90
16) Iodomethane	3.99	142	893864	5.17	ug/l	100
17) Allyl chloride	4.12	76	291842	4.94	ug/l	94
18) Methylene chloride	4.29	49	754258	5.00	ug/l	99
19) Carbon disulfide	4.26	76	1006892	4.70	ug/l	98
20) Acrylonitrile	4.54	53	447157	25.56	ug/l	98
21) tert-Butyl methyl ether (M	4.58	73	917670	5.19	ug/l	100
22) trans-1,2-Dichloroethene	4.79	96	569783	5.17	ug/l	99
23) Isopropyl ether (DIPE)	5.48	45	1978503	5.43	ug/l	99
24) Vinyl acetate	5.71	43	650720	4.94	ug/l	99
25) 1,1-Dichloroethane	5.63	63	985792	5.35	ug/l	99
26) 2-Butanol	6.21	45	477745	101.04	ug/l	93
27) tert-Butyl ethyl ether (ET	6.38	59	1463594	5.54	ug/l	98
28) 2-Butanone	6.67	43	586459	24.51	ug/l	99
29) 2,2-Dichloropropane	6.93	77	597793	5.20	ug/l	98
30) cis-1,2-Dichloroethene	7.03	96	590518	5.19	ug/l	99
31) Chloroform	7.43	83	954073	5.23	ug/l	100
32) Bromochloromethane	7.83	130	259616	5.27	ug/l	98
33) Tetrahydrofuran	7.93	42	63795	4.98	ug/l	97
36) 1,1,1-Trichloroethane	8.35	97	777033	5.30	ug/l	99
37) Cyclohexane	8.33	84	900707	4.79	ug/l	99
39) 1,1-Dichloropropene	8.71	110	255523	5.16	ug/l	99
40) Carbon tetrachloride	8.90	119	645340	5.31	ug/l	98
41) tert-Amyl methyl ether (TA	9.06	73	1149031	5.32	ug/l	99

(#) = qualifier out of range (m) = manual integration

RIW079.D VO06I19B.M Fri Oct 11 17:42:10 2024

SR 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	499694	5.45 ug/l	98
44)	Benzene	9.27	78	2222758	5.56 ug/l	99
45)	Trichloroethene	10.55	130	565474	5.43 ug/l	97
46)	Methylcyclohexane	10.61	83	957335	4.84 ug/l	98
47)	1,2-Dichloropropane	10.91	63	526844	5.33 ug/l	96
48)	1,4-Dioxane	11.45	88	46867	101.26 ug/l	97
49)	Bromodichloromethane	11.35	83	672807	5.25 ug/l	100
50)	Dibromomethane	11.41	93	248905	5.32 ug/l	97
51)	2-Chloroethyl vinyl ether	12.04	63	152451	4.90 ug/l	97
52)	4-Methyl-2-pentanone	12.08	43	1759557	26.68 ug/l	99
53)	cis-1,3-Dichloropropene	12.40	75	844563	5.38 ug/l	99
56)	Toluene	12.94	91	2462675	5.82 ug/l	99
57)	Ethyl methacrylate	13.38	69	482886	5.20 ug/l	99
58)	trans-1,3-Dichloropropene	13.32	75	657703	5.53 ug/l	99
59)	1,1,2-Trichloroethane	13.57	97	333735	5.50 ug/l	99
60)	2-Hexanone	13.65	43	1182712	26.68 ug/l	100
61)	1,3-Dichloropropane	14.03	76	643788	5.74 ug/l	98
62)	Tetrachloroethene	14.07	164	476520	5.48 ug/l	99
63)	Dibromochloromethane	14.43	129	392171	5.24 ug/l	99
65)	1,2-Dibromoethane	14.76	107	311792	5.40 ug/l	98
66)	1-Chlorohexane	15.12	91	886729	4.92 ug/l	100
67)	Chlorobenzene	15.50	112	1454079	5.62 ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.59	131	457578	5.59 ug/l	96
69)	Ethylbenzene	15.61	91	2848987	5.47 ug/l	100
70)	m-Xylene & p-Xylene	15.74	91	4392415	11.03 ug/l	99
71)	o-Xylene	16.47	91	2123490	5.42 ug/l	99
72)	Styrene	16.53	104	1623289	5.54 ug/l	98
73)	Isopropylbenzene	17.08	105	2699729	5.31 ug/l	98
75)	Bromoform	17.07	173	179345	4.89 ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.36	83	385919	5.56 ug/l	100
78)	1,2,3-Trichloropropane	17.57	110	98375	5.14 ug/l	94
79)	trans-1,4-Dichloro-2-buten	17.68	53	105050	4.97 ug/l	96
80)	n-Propylbenzene	17.68	91	3661988	5.53 ug/l	99
81)	Bromobenzene	17.71	156	541620	5.71 ug/l	97
82)	1,3,5-Trimethylbenzene	17.90	105	2204256	5.45 ug/l	99
83)	2-Chlorotoluene	17.91	91	2164604	5.57 ug/l	97
84)	4-Chlorotoluene	17.97	91	2077155	5.84 ug/l	99
85)	tert-Butylbenzene	18.35	134	479046	5.61 ug/l	98
86)	1,2,4-Trimethylbenzene	18.39	105	2275431	5.43 ug/l	98
87)	sec-Butylbenzene	18.60	105	3067129	5.37 ug/l	96
88)	p-Isopropyltoluene	18.77	119	2561125	5.28 ug/l	98
89)	1,3-Dichlorobenzene	18.87	146	1178641	5.55 ug/l	96
90)	1,2,3-Trimethylbenzene	18.95	105	2031695	5.36 ug/l	99
91)	1,4-Dichlorobenzene	18.99	146	1154468	5.49 ug/l	99
92)	n-Butylbenzene	19.21	91	2719202	5.20 ug/l	98
93)	1,2-Dichlorobenzene	19.37	146	970120	5.52 ug/l	97
94)	1,2-Dibromo-3-chloropropan	20.14	157	58638	4.78 ug/l	89
95)	1,2,4-Trichlorobenzene	20.97	180	719485	5.21 ug/l	98
96)	Hexachlorobutadiene	21.10	225	373228	5.00 ug/l	98
97)	Naphthalene	21.24	128	984317	5.29 ug/l	99

(#) = qualifier out of range (m) = manual integration SA 10/14/24
RIW079.D VO06I19B.M Fri Oct 11 17:42:11 2024

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	526222	5.05	ug/l	98

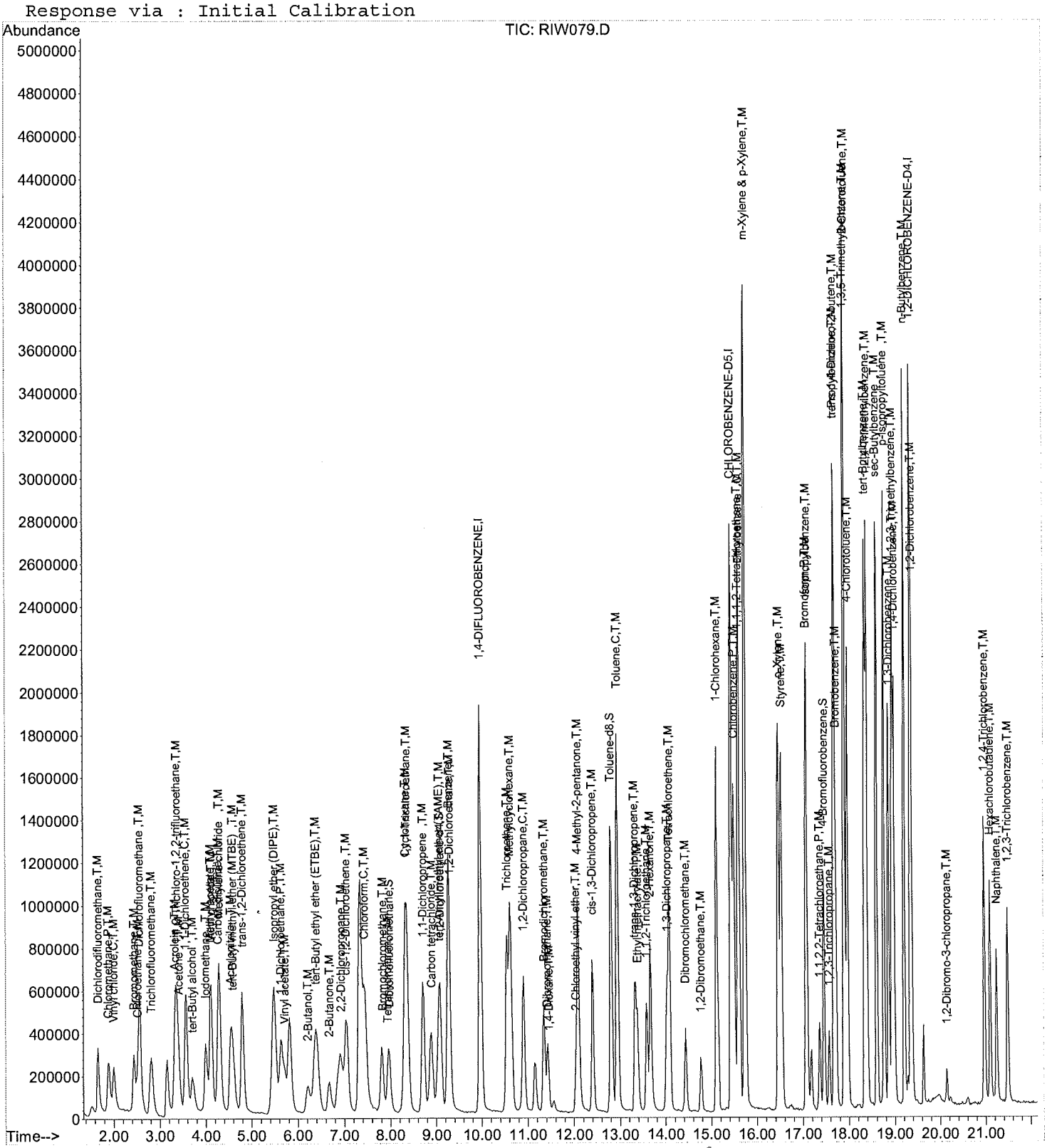
(#) = qualifier out of range (m) = manual integration
RIW079.D VO06I19B.M Fri Oct 11 17:42:11 2024 Page 3

SU 10/14/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW079.D Vial: 6
Acq On : 19 Sep 2024 12:51 pm Operator: PMai
Sample : VO06I195 0.50/2.50uL Inst : 06
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3477436	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2910329	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1285376	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	996942	10.13	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.30%			
42) 1,2-Dichloroethane-d4	9.08	65	820553	10.67	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.70%			
55) Toluene-d8	12.82	98	3904240	10.37	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.70%			
77) 4-Bromofluorobenzene	17.45	95	1452227	10.12	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.68	85	1244191	8.47	ug/l	100
3) Chloromethane	1.89	50	1201881	8.93	ug/l	100
4) Vinyl chloride	2.01	62	842844	7.99	ug/l	100
5) Bromomethane	2.45	94	738453	8.51	ug/l	100
6) Chloroethane	2.52	64	600895	8.80	ug/l	100
7) Dichlorofluoromethane	2.56	67	2309931	9.42	ug/l	100
8) Trichlorofluoromethane	2.82	101	1234378	8.90	ug/l	100
9) Acrolein	3.32	56	208289	42.64	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	1005367	8.82	ug/l	100
11) Acetone	3.43	43	685177	48.78	ug/l	100
12) 1,1-Dichloroethene	3.57	61	1860392	10.11	ug/l	100
13) tert-Butyl alcohol	3.72	59	1210429	278.60	ug/l	100
15) Methyl acetate	4.10	74	81794	10.90	ug/l	100
16) Iodomethane	4.01	142	1717915	9.97	ug/l	100
17) Allyl chloride	4.12	76	609108	10.34	ug/l	100
18) Methylene chloride	4.31	49	1402141	9.79	ug/l	100
19) Carbon disulfide	4.26	76	2215273	10.19	ug/l	100
20) Acrylonitrile	4.54	53	894199	51.25	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	1914184	10.86	ug/l	100
22) trans-1,2-Dichloroethene	4.81	96	1113536	10.13	ug/l	100
23) Isopropyl ether (DIPE)	5.48	45	3878239	10.67	ug/l	100
24) Vinyl acetate	5.71	43	1253638	9.55	ug/l	100
25) 1,1-Dichloroethane	5.65	63	1890375	10.29	ug/l	100
26) 2-Butanol	6.21	45	1282863	259.58	ug/l	100
27) tert-Butyl ethyl ether (ET	6.38	59	2830606	10.74	ug/l	100
28) 2-Butanone	6.67	43	1196383	50.13	ug/l	100
29) 2,2-Dichloropropane	6.93	77	1204191	10.50	ug/l	100
30) cis-1,2-Dichloroethene	7.05	96	1144335	10.08	ug/l	100
31) Chloroform	7.45	83	1825674	10.04	ug/l	100
32) Bromochloromethane	7.83	130	516536	10.51	ug/l	100
33) Tetrahydrofuran	7.93	42	121438	9.50	ug/l	100
36) 1,1,1-Trichloroethane	8.35	97	1518593	10.38	ug/l	100
37) Cyclohexane	8.35	84	1990061	10.61	ug/l	100
39) 1,1-Dichloropropene	8.73	110	500876	10.14	ug/l	100
40) Carbon tetrachloride	8.90	119	1275832	10.52	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	2324869	10.79	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	975945	10.66	ug/l	100
44)	Benzene	9.27	78	4242252	10.64	ug/l	100
45)	Trichloroethene	10.55	130	1107094	10.67	ug/l	100
46)	Methylcyclohexane	10.64	83	2187565	11.08	ug/l	100
47)	1,2-Dichloropropane	10.91	63	1016617	10.31	ug/l	100
48)	1,4-Dioxane	11.45	88	105136	227.79	ug/l	100
49)	Bromodichloromethane	11.35	83	1304302	10.20	ug/l	100
50)	Dibromomethane	11.41	93	483310	10.35	ug/l	100
51)	2-Chloroethyl vinyl ether	12.04	63	312874	10.09	ug/l	100
52)	4-Methyl-2-pentanone	12.08	43	3562279	54.16	ug/l	100
53)	cis-1,3-Dichloropropene	12.40	75	1651593	10.55	ug/l	100
56)	Toluene	12.94	91	4671479	10.64	ug/l	100
57)	Ethyl methacrylate	13.38	69	971870	10.07	ug/l	100
58)	trans-1,3-Dichloropropene	13.32	75	1266634	10.27	ug/l	100
59)	1,1,2-Trichloroethane	13.57	97	650537	10.32	ug/l	100
60)	2-Hexanone	13.65	43	2373340	51.56	ug/l	100
61)	1,3-Dichloropropane	14.03	76	1202925	10.33	ug/l	100
62)	Tetrachloroethene	14.07	164	932030	10.32	ug/l	100
63)	Dibromochloromethane	14.43	129	787869	10.14	ug/l	100
65)	1,2-Dibromoethane	14.76	107	621498	10.37	ug/l	100
66)	1-Chlorohexane	15.12	91	1723656	9.22	ug/l	100
67)	Chlorobenzene	15.50	112	2806780	10.44	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.59	131	938184	11.04	ug/l	100
69)	Ethylbenzene	15.60	91	5454069	10.08	ug/l	100
70)	m-Xylene & p-Xylene	15.74	91	8198654	19.83	ug/l	100
71)	o-Xylene	16.47	91	4227945	10.38	ug/l	100
72)	Styrene	16.53	104	3186076	10.47	ug/l	100
73)	Isopropylbenzene	17.08	105	5348931	10.13	ug/l	100
75)	Bromoform	17.07	173	381371	9.62	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.36	83	775935	10.44	ug/l	100
78)	1,2,3-Trichloropropane	17.57	110	205069	10.01	ug/l	100
79)	trans-1,4-Dichloro-2-buten	17.68	53	214711	9.50	ug/l	100
80)	n-Propylbenzene	17.68	91	6962101	9.82	ug/l	100
81)	Bromobenzene	17.71	156	1062944	10.46	ug/l	100
82)	1,3,5-Trimethylbenzene	17.90	105	4392289	10.15	ug/l	100
83)	2-Chlorotoluene	17.91	91	4132029	9.94	ug/l	100
84)	4-Chlorotoluene	17.97	91	4032123	10.59	ug/l	100
85)	tert-Butylbenzene	18.35	134	967924	10.58	ug/l	100
86)	1,2,4-Trimethylbenzene	18.39	105	4463438	9.95	ug/l	100
87)	sec-Butylbenzene	18.60	105	6044348	9.90	ug/l	100
88)	p-Isopropyltoluene	18.76	119	5199036	10.02	ug/l	100
89)	1,3-Dichlorobenzene	18.87	146	2363059	10.41	ug/l	97
90)	1,2,3-Trimethylbenzene	18.95	105	4113818	10.14	ug/l	100
91)	1,4-Dichlorobenzene	18.99	146	2305203	10.25	ug/l	100
92)	n-Butylbenzene	19.21	91	5438391	9.72	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	1993209	10.61	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.14	157	130796	9.95	ug/l	100
95)	1,2,4-Trichlorobenzene	20.97	180	1532298	10.38	ug/l	100
96)	Hexachlorobutadiene	21.10	225	869897	10.90	ug/l	100
97)	Naphthalene	21.24	128	2119779	10.66	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1157581	10.39	ug/l	100

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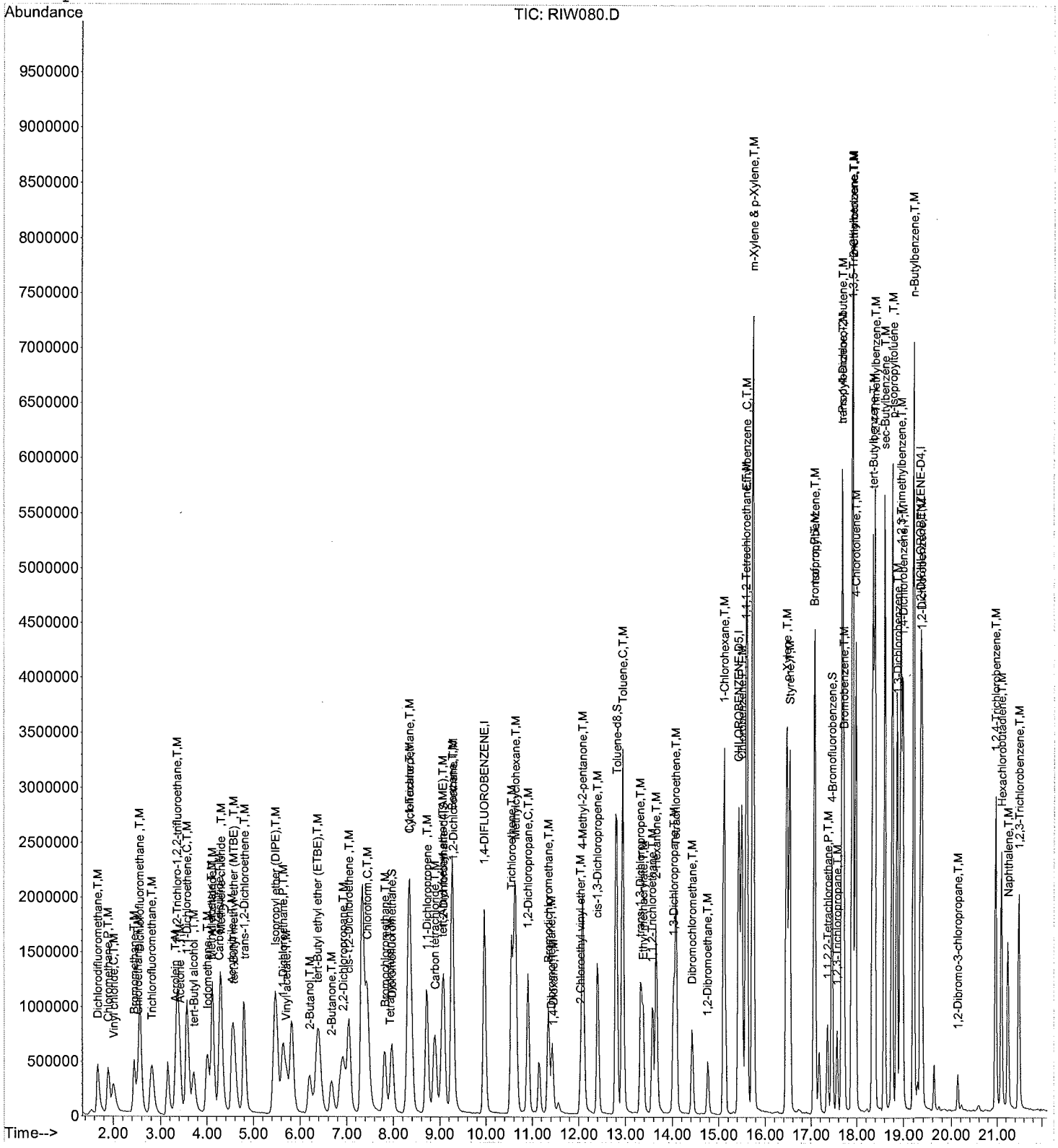
(#) = qualifier out of range (m) = manual integration
RIW080.D VO06I19B.M Fri Oct 11 17:42:30 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW080.D Vial: 7
Acq On : 19 Sep 2024 1:18 pm Operator: PMai
Sample : VO06I196 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:42 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3259946	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2727598	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1145684	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	2026440	21.70	ug/l	0.00
Spiked Amount 10.000			Recovery = 217.00%			
42) 1,2-Dichloroethane-d4	9.08	65	1608726	22.32	ug/l	0.00
Spiked Amount 10.000			Recovery = 223.20%			
55) Toluene-d8	12.82	98	7608294	21.55	ug/l	0.00
Spiked Amount 10.000			Recovery = 215.50%			
77) 4-Bromofluorobenzene	17.45	95	2825717	22.09	ug/l	0.00
Spiked Amount 10.000			Recovery = 220.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.68	85	2814273	20.43	ug/l	100
3) Chloromethane	1.89	50	2586862	20.49	ug/l	100
4) Vinyl chloride	1.99	62	1735839	17.55	ug/l	98
5) Bromomethane	2.45	94	1639634	20.03	ug/l	99
6) Chloroethane	2.52	64	1291787	20.24	ug/l	95
7) Dichlorofluoromethane	2.56	67	4378680	19.81	ug/l	100
8) Trichlorofluoromethane	2.80	101	2882610	22.17	ug/l	97
9) Acrolein	3.32	56	481504	105.15	ug/l	89
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	1980661	20.20	ug/l	100
11) Acetone	3.43	43	1410991	107.16	ug/l	94
12) 1,1-Dichloroethene	3.57	61	3710554	21.52	ug/l	100
13) tert-Butyl alcohol	3.72	59	2397266	588.57	ug/l	99
15) Methyl acetate	4.10	74	150749	21.43	ug/l	87
16) Iodomethane	4.01	142	3450750	21.36	ug/l	98
17) Allyl chloride	4.12	76	1225111	22.19	ug/l	98
18) Methylene chloride	4.31	49	2740308	20.98	ug/l	99
19) Carbon disulfide	4.26	76	4382421	21.33	ug/l	99
20) Acrylonitrile	4.54	53	1852792	113.27	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	3757839	22.73	ug/l	99
22) trans-1,2-Dichloroethene	4.81	96	2236452	21.71	ug/l	97
23) Isopropyl ether (DIPE)	5.48	45	7699041	22.60	ug/l	99
24) Vinyl acetate	5.71	43	2853220	23.19	ug/l	97
25) 1,1-Dichloroethane	5.63	63	3829282	22.23	ug/l	98
26) 2-Butanol	6.21	45	2467800	524.91	ug/l	98
27) tert-Butyl ethyl ether (ET	6.38	59	5583711	22.60	ug/l	99
28) 2-Butanone	6.67	43	2494992	111.52	ug/l	99
29) 2,2-Dichloropropane	6.93	77	2480859	23.08	ug/l	98
30) cis-1,2-Dichloroethene	7.05	96	2296690	21.58	ug/l	99
31) Chloroform	7.45	83	3655957	21.45	ug/l	99
32) Bromochloromethane	7.83	130	1025107	22.24	ug/l	99
33) Tetrahydrofuran	7.93	42	247680	20.68	ug/l	95
36) 1,1,1-Trichloroethane	8.35	97	3057587	22.30	ug/l	99
37) Cyclohexane	8.35	84	3927189	22.34	ug/l	100
39) 1,1-Dichloropropene	8.73	110	1012955	21.87	ug/l	100
40) Carbon tetrachloride	8.90	119	2576962	22.68	ug/l	98
41) tert-Amyl methyl ether (TA	9.06	73	4590846	22.72	ug/l	98

(#) = qualifier out of range (m) = manual integration
RIW081.D VO06I19B.M Fri Oct 11 17:43:41 2024 Su 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	1953475	22.77	ug/l	98
44)	Benzene	9.27	78	8297255	22.21	ug/l	99
45)	Trichloroethene	10.55	130	2214903	22.77	ug/l	98
46)	Methylcyclohexane	10.64	83	4274185	23.10	ug/l	99
47)	1,2-Dichloropropane	10.91	63	2085605	22.57	ug/l	100
48)	1,4-Dioxane	11.45	88	196251	453.57	ug/l	100
49)	Bromodichloromethane	11.35	83	2616755	21.82	ug/l	99
50)	Dibromomethane	11.43	93	989518	22.60	ug/l	99
51)	2-Chloroethyl vinyl ether	12.04	63	653430	22.47	ug/l	100
52)	4-Methyl-2-pentanone	12.08	43	6996398	113.46	ug/l	99
53)	cis-1,3-Dichloropropene	12.40	75	3252609	22.16	ug/l	98
56)	Toluene	12.94	91	9114710	22.15	ug/l	98
57)	Ethyl methacrylate	13.38	69	1936324	21.41	ug/l	99
58)	trans-1,3-Dichloropropene	13.32	75	2603367	22.51	ug/l	98
59)	1,1,2-Trichloroethane	13.59	97	1309355	22.16	ug/l	98
60)	2-Hexanone	13.65	43	4598630	106.59	ug/l	99
61)	1,3-Dichloropropane	14.03	76	2415904	22.13	ug/l	98
62)	Tetrachloroethene	14.09	164	1867253	22.05	ug/l	99
63)	Dibromochloromethane	14.43	129	1594038	21.90	ug/l	98
65)	1,2-Dibromoethane	14.76	107	1246516	22.19	ug/l	98
66)	1-Chlorohexane	15.12	91	3327490	18.98	ug/l	98
67)	Chlorobenzene	15.49	112	5487858	21.78	ug/l	98
68)	1,1,1,2-Tetrachloroethane	15.58	131	1819533	22.84	ug/l	97
69)	Ethylbenzene	15.61	91	10498672	20.70	ug/l	99
70)	m-Xylene & p-Xylene	15.74	91	15843624	40.89	ug/l	99
71)	o-Xylene	16.47	91	8180389	21.44	ug/l	100
72)	Styrene	16.53	104	6197208	21.74	ug/l	98
73)	Isopropylbenzene	17.08	105	10172431	20.55	ug/l	99
75)	Bromoform	17.06	173	775699	21.82	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.36	83	1472547	22.22	ug/l	97
78)	1,2,3-Trichloropropane	17.57	110	423916	23.21	ug/l	95
79)	trans-1,4-Dichloro-2-buten	17.69	53	408435	20.27	ug/l	96
80)	n-Propylbenzene	17.67	91	13234493	20.94	ug/l	99
81)	Bromobenzene	17.73	156	2096833	23.16	ug/l	99
82)	1,3,5-Trimethylbenzene	17.89	105	8155548	21.15	ug/l	99
83)	2-Chlorotoluene	17.91	91	8521424	23.01	ug/l	95
84)	4-Chlorotoluene	17.97	91	7193174	21.19	ug/l	94
85)	tert-Butylbenzene	18.35	134	1856605	22.78	ug/l	98
86)	1,2,4-Trimethylbenzene	18.39	105	8332998	20.85	ug/l	100
87)	sec-Butylbenzene	18.61	105	11128130	20.45	ug/l	99
88)	p-Isopropyltoluene	18.76	119	9432368	20.39	ug/l	99
89)	1,3-Dichlorobenzene	18.87	146	4452930	22.00	ug/l	95
90)	1,2,3-Trimethylbenzene	18.94	105	7506191	20.75	ug/l	99
91)	1,4-Dichlorobenzene	18.98	146	4325382	21.57	ug/l	98
92)	n-Butylbenzene	19.20	91	9786813	19.63	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	3708693	22.14	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.14	157	244382	20.87	ug/l	94
95)	1,2,4-Trichlorobenzene	20.97	180	2669858	20.28	ug/l	99
96)	Hexachlorobutadiene	21.10	225	1494990	21.02	ug/l	99
97)	Naphthalene	21.24	128	3722562	20.99	ug/l	100

(#) = qualifier out of range (m) = manual integration

SA 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1960125	19.73	ug/l	100

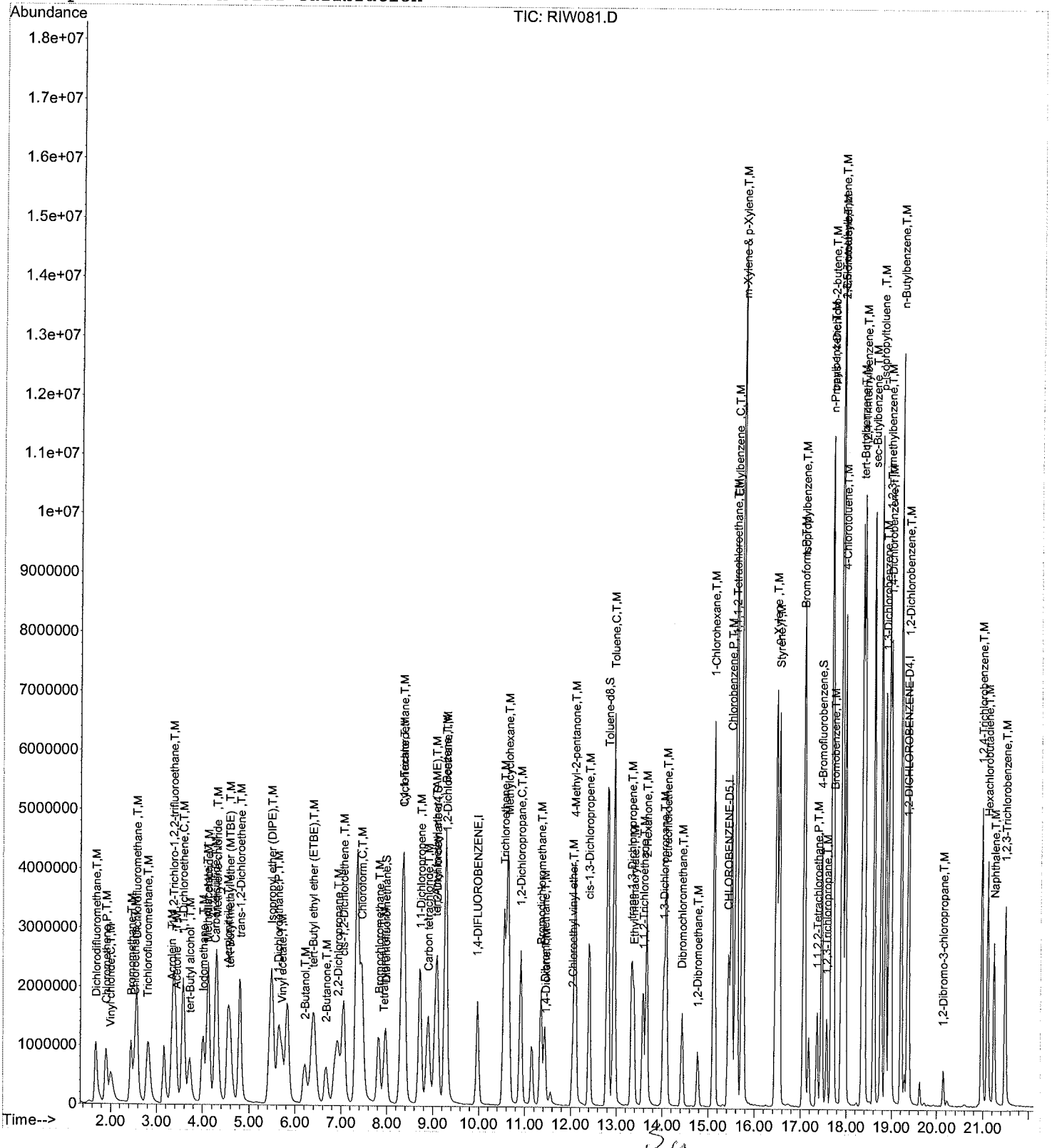
(#) = qualifier out of range (m) = manual integration

SL 10/14/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW081.D Vial: 8
Acq On : 19 Sep 2024 1:44 pm Operator: PMai
Sample : VO06I197 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



RIW081.D VO06I19B.M Fri Oct 11 17:43:45 2024 Page 4

10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	2996590	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.43	117	2593955	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1106357	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.95	111	2475444	28.76	ug/l	-0.02
Spiked Amount 10.000			Recovery = 287.60%			
42) 1,2-Dichloroethane-d4	9.08	65	2029791	30.64	ug/l	0.00
Spiked Amount 10.000			Recovery = 306.40%			
55) Toluene-d8	12.79	98	9474484	28.22	ug/l	-0.02
Spiked Amount 10.000			Recovery = 282.20%			
77) 4-Bromofluorobenzene	17.45	95	3632219	29.40	ug/l	0.00
Spiked Amount 10.000			Recovery = 294.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.64	85	4343299	34.31	ug/l	100
3) Chloromethane	1.88	50	4213115	36.31	ug/l	99
4) Vinyl chloride	1.98	62	2671691	29.39	ug/l	98
5) Bromomethane	2.43	94	2372767	31.48	ug/l	100
6) Chloroethane	2.51	64	1830393	31.22	ug/l	95
7) Dichlorofluoromethane	2.55	67	5929070	30.34	ug/l	98
8) Trichlorofluoromethane	2.79	101	4066672	34.02	ug/l	99
9) Acrolein	3.32	56	643849	152.96	ug/l	90
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	2664263	33.00	ug/l	100
11) Acetone	3.40	43	1823308	150.65	ug/l	97
12) 1,1-Dichloroethene	3.55	61	4759473	30.03	ug/l	99
13) tert-Butyl alcohol	3.70	59	3102130	828.57	ug/l	99
15) Methyl acetate	4.07	74	197181	30.49	ug/l	82
16) Iodomethane	3.99	142	4526140	30.47	ug/l	100
17) Allyl chloride	4.12	76	1499684	29.55	ug/l	96
18) Methylene chloride	4.28	49	3476444	29.16	ug/l	98
19) Carbon disulfide	4.26	76	5428429	28.69	ug/l	99
20) Acrylonitrile	4.51	53	2455163	163.29	ug/l	100
21) tert-Butyl methyl ether (M	4.58	73	4757117	31.31	ug/l	97
22) trans-1,2-Dichloroethene	4.79	96	2764398	29.20	ug/l	98
23) Isopropyl ether (DIPE)	5.46	45	9637058	30.78	ug/l	98
24) Vinyl acetate	5.71	43	3718693	32.88	ug/l	98
25) 1,1-Dichloroethane	5.63	63	4709963	29.75	ug/l	97
26) 2-Butanol	6.19	45	3263498	751.93	ug/l	92
27) tert-Butyl ethyl ether (ET	6.38	59	6868003	30.24	ug/l	98
28) 2-Butanone	6.65	43	3307044	160.81	ug/l	99
29) 2,2-Dichloropropane	6.93	77	2888967	29.24	ug/l	99
30) cis-1,2-Dichloroethene	7.03	96	2847278	29.11	ug/l	98
31) Chloroform	7.43	83	4474111	28.56	ug/l	98
32) Bromochloromethane	7.81	130	1328838	31.36	ug/l	100
33) Tetrahydrofuran	7.93	42	317590	28.85	ug/l	97
36) 1,1,1-Trichloroethane	8.35	97	3828686	30.38	ug/l	99
37) Cyclohexane	8.33	84	4965871	30.73	ug/l	98
39) 1,1-Dichloropropene	8.71	110	1267382	29.77	ug/l	99
40) Carbon tetrachloride	8.90	119	3286825	31.47	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	5733032	30.87	ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 1,2-Dichloroethane	9.29	62	2447233	31.03	ug/l	97
44) Benzene	9.27	78	10336717	30.10	ug/l	99
45) Trichloroethene	10.55	130	2733613	30.57	ug/l	98
46) Methylcyclohexane	10.61	83	5256309	30.90	ug/l	99
47) 1,2-Dichloropropane	10.91	63	2579347	30.36	ug/l	100
48) 1,4-Dioxane	11.45	88	226753	570.12	ug/l	100
49) Bromodichloromethane	11.35	83	3321819	30.14	ug/l	99
50) Dibromomethane	11.41	93	1282993	31.88	ug/l	97
51) 2-Chloroethyl vinyl ether	12.04	63	864724	32.35	ug/l	98
52) 4-Methyl-2-pentanone	12.08	43	9111280	160.75	ug/l	98
53) cis-1,3-Dichloropropene	12.40	75	4151190	30.77	ug/l	98
56) Toluene	12.94	91	11380108	29.08	ug/l	99
57) Ethyl methacrylate	13.38	69	2477183	28.80	ug/l	100
58) trans-1,3-Dichloropropene	13.32	75	3326453	30.25	ug/l	100
59) 1,1,2-Trichloroethane	13.59	97	1672406	29.76	ug/l	98
60) 2-Hexanone	13.65	43	6207786	151.31	ug/l	99
61) 1,3-Dichloropropane	14.03	76	3050247	29.38	ug/l	97
62) Tetrachloroethene	14.09	164	2337859	29.03	ug/l	100
63) Dibromochloromethane	14.43	129	2088544	30.17	ug/l	100
65) 1,2-Dibromoethane	14.76	107	1650966	30.91	ug/l	99
66) 1-Chlorohexane	15.12	91	4031468	24.19	ug/l	100
67) Chlorobenzene	15.50	112	7171112	29.93	ug/l	99
68) 1,1,1,2-Tetrachloroethane	15.59	131	2345975	30.97	ug/l	98
69) Ethylbenzene	15.61	91	13217589	27.41	ug/l	99
70) m-Xylene & p-Xylene	15.74	91	19467041	52.83	ug/l	98
71) o-Xylene	16.47	91	10236315	28.21	ug/l	99
72) Styrene	16.53	104	7984911	29.45	ug/l	98
73) Isopropylbenzene	17.08	105	12324935	26.18	ug/l	99
75) Bromoform	17.07	173	1048187	30.50	ug/l	98
76) 1,1,2,2-Tetrachloroethane	17.36	83	1984883	31.02	ug/l	97
78) 1,2,3-Trichloropropane	17.57	110	531594	30.15	ug/l	98
79) trans-1,4-Dichloro-2-buten	17.69	53	582680	29.94	ug/l	99
80) n-Propylbenzene	17.67	91	15892073	26.04	ug/l	98
81) Bromobenzene	17.73	156	2706883	30.96	ug/l	98
82) 1,3,5-Trimethylbenzene	17.90	105	9772572	26.25	ug/l	100
83) 2-Chlorotoluene	17.91	91	10639210	29.75	ug/l	95
84) 4-Chlorotoluene	17.97	91	8998085	27.45	ug/l	92
85) tert-Butylbenzene	18.35	134	2156275	27.40	ug/l	96
86) 1,2,4-Trimethylbenzene	18.39	105	10021249	25.96	ug/l	100
87) sec-Butylbenzene	18.61	105	12894661	24.53	ug/l	100
88) p-Isopropyltoluene	18.76	119	10930698	24.47	ug/l	99
89) 1,3-Dichlorobenzene	18.87	146	5629520	28.80	ug/l	95
90) 1,2,3-Trimethylbenzene	18.95	105	8947950	25.61	ug/l	99
91) 1,4-Dichlorobenzene	18.99	146	5542485	28.63	ug/l	99
92) n-Butylbenzene	19.21	91	11735065	24.38	ug/l	99
93) 1,2-Dichlorobenzene	19.37	146	4777836	29.53	ug/l	100
94) 1,2-Dibromo-3-chloropropan	20.14	157	336882	29.79	ug/l	96
95) 1,2,4-Trichlorobenzene	20.97	180	3523968	27.72	ug/l	100
96) Hexachlorobutadiene	21.10	225	1877895	27.34	ug/l	96
97) Naphthalene	21.24	128	4985329	29.12	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

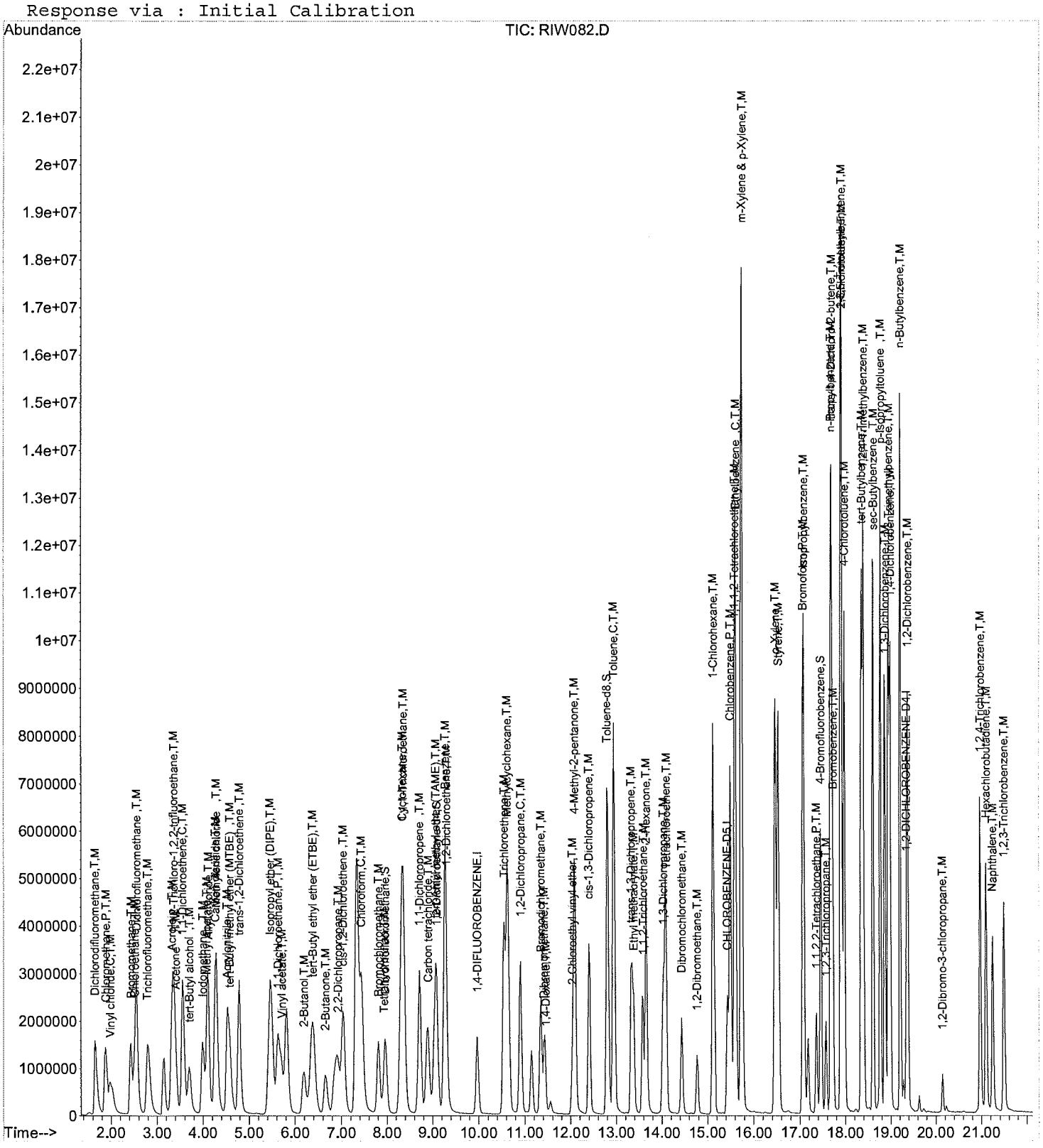
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	2604808	27.15	ug/l	99

(#) = qualifier out of range (m) = manual integration
RIW082.D VO06I19B.M Fri Oct 11 17:43:58 2024 SU 10/14/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW082.D Vial: 9
Acq On : 19 Sep 2024 2:10 pm Operator: PMai
Sample : VO06I198 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:43 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SG 10/14/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW083.D Vial: 10
Acq On : 19 Sep 2024 2:36 pm Operator: PMai
Sample : VO06I199 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:19 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.98	114	4206183	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.44	117	3395951	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1267473	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	2150	0.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.40%		
42) 1,2-Dichloroethane-d4	9.08	65	13988	0.15	ug/l	0.00
Spiked Amount 10.000			Recovery =	1.50%		
55) Toluene-d8	12.81	98	16417	0.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.40%		
77) 4-Bromofluorobenzene	17.47	95	23003	0.16	ug/l	0.01
Spiked Amount 10.000			Recovery =	1.60%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.67	85	6754956	38.01	ug/l	99
3) Chloromethane	1.89	50	6445667	39.58	ug/l	98
4) Vinyl chloride	1.99	62	3515513	27.55	ug/l	97
5) Bromomethane	2.44	94	3970742	37.51	ug/l	100
6) Chloroethane	2.52	64	2965042	36.04	ug/l	98
7) Dichlorofluoromethane	2.56	67	10112600	37.94	ug/l	97
8) Trichlorofluoromethane	2.82	101	7139355	42.55	ug/l	100
9) Acrolein	3.32	56	1406709	238.09	ug/l	98
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	4662942	47.37	ug/l	98
11) Acetone	3.42	43	4217841	248.27	ug/l	97
12) 1,1-Dichloroethene	3.57	61	9740642	43.78	ug/l	98
13) tert-Butyl alcohol	3.72	59	6835306	1300.66	ug/l	99
16) Iodomethane	4.01	142	9321990	44.71	ug/l	99
17) Allyl chloride	4.12	76	3578200	50.23	ug/l	97
18) Methylene chloride	4.30	49	7567524	45.51	ug/l	98
20) Acrylonitrile	4.54	53	5653483	267.88	ug/l	99
21) tert-Butyl methyl ether (M	4.60	73	10516211	49.30	ug/l	97
22) trans-1,2-Dichloroethene	4.81	96	6242469	46.97	ug/l	95
23) Isopropyl ether (DIPE)	5.48	45	21645712	49.25	ug/l	98
24) Vinyl acetate	5.71	43	8556935	53.90	ug/l	99
25) 1,1-Dichloroethane	5.65	63	10895440	49.02	ug/l	96
27) tert-Butyl ethyl ether (ET	6.40	59	15789414	49.54	ug/l	98
28) 2-Butanone	6.67	43	7666590	265.60	ug/l	98
29) 2,2-Dichloropropane	6.92	77	6348535	45.77	ug/l	98
30) cis-1,2-Dichloroethene	7.05	96	6666481	48.56	ug/l	99
31) Chloroform	7.45	83	10469209	47.61	ug/l	98
32) Bromochloromethane	7.83	130	3145842	52.90	ug/l	97
33) Tetrahydrofuran	7.93	42	823075	53.26	ug/l	92
36) 1,1,1-Trichloroethane	8.37	97	8404301	47.51	ug/l	98
39) 1,1-Dichloropropene	8.73	110	2938897	49.19	ug/l	100
40) Carbon tetrachloride	8.89	119	7104046	48.45	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	12687032	48.66	ug/l	97
43) 1,2-Dichloroethane	9.29	62	5648982	51.03	ug/l	95
44) Benzene	9.27	78	23027133	47.77	ug/l	97
45) Trichloroethene	10.55	130	6227092	49.61	ug/l	99
47) 1,2-Dichloropropane	10.91	63	5818578	48.79	ug/l	98

(#) = qualifier out of range (m) = manual integration

10/14/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW083.D Vial: 10
Acq On : 19 Sep 2024 2:36 pm Operator: PMai
Sample : VO06I199 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:19 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
48) 1,4-Dioxane	11.45	88	566310	1014.39 ug/l	98
49) Bromodichloromethane	11.35	83	7539332	48.73 ug/l	97
50) Dibromomethane	11.43	93	2901431	51.37 ug/l	98
51) 2-Chloroethyl vinyl ether	12.04	63	2051335	54.67 ug/l	99
52) 4-Methyl-2-pentanone	12.08	43	20321326	255.42 ug/l	97
53) cis-1,3-Dichloropropene	12.42	75	9368979	49.48 ug/l	96
56) Toluene	12.94	91	23446877	45.77 ug/l	94
57) Ethyl methacrylate	13.38	69	5674935	50.40 ug/l	99
58) trans-1,3-Dichloropropene	13.34	75	7374646	51.22 ug/l	97
59) 1,1,2-Trichloroethane	13.59	97	3809137	51.77 ug/l	98
60) 2-Hexanone	13.65	43	13855803	257.96 ug/l	98
61) 1,3-Dichloropropane	14.03	76	6819196	50.17 ug/l	97
62) Tetrachloroethene	14.09	164	5033292	47.74 ug/l	99
63) Dibromochloromethane	14.43	129	4717008	52.04 ug/l	99
65) 1,2-Dibromoethane	14.78	107	3694760	52.84 ug/l	100
66) 1-Chlorohexane	15.12	91	8067645	36.97 ug/l	99
67) Chlorobenzene	15.51	112	14846965	47.33 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.60	131	4766403	48.06 ug/l	97
69) Ethylbenzene	15.61	91	23453413	37.15 ug/l	91
70) m-Xylene & p-Xylene	15.74	91	28404866	58.88 ug/l	72
71) o-Xylene	16.47	91	19600374	41.26 ug/l	97
72) Styrene	16.53	104	16164162	45.54 ug/l	98
73) Isopropylbenzene	17.08	105	21351804	34.64 ug/l	96
75) Bromoform	17.08	173	2236173	56.71 ug/l	98
76) 1,1,2,2-Tetrachloroethane	17.36	83	3954685	53.95 ug/l	96
78) 1,2,3-Trichloropropane	17.57	110	1158755	57.36 ug/l	100
79) trans-1,4-Dichloro-2-buten	17.69	53	1225932	54.99 ug/l	98
80) n-Propylbenzene	17.69	91	22799005	32.60 ug/l	86
81) Bromobenzene	17.73	156	5310135	53.01 ug/l	99
82) 1,3,5-Trimethylbenzene	17.89	105	16646536	39.02 ug/l	97
83) 2-Chlorotoluene	17.91	91	18389880	44.88 ug/l	97
84) 4-Chlorotoluene	17.97	91	16360928	43.57 ug/l	88
85) tert-Butylbenzene	18.35	134	3928334	43.56 ug/l	94
86) 1,2,4-Trimethylbenzene	18.40	105	16666415	37.69 ug/l	92
87) sec-Butylbenzene	18.61	105	18886826	31.37 ug/l	91
88) p-Isopropyltoluene	18.76	119	17527627	34.25 ug/l	91
89) 1,3-Dichlorobenzene	18.87	146	10495959	46.88 ug/l	93
90) 1,2,3-Trimethylbenzene	18.95	105	15252661	38.11 ug/l	94
91) 1,4-Dichlorobenzene	18.98	146	10370135	46.76 ug/l	97
92) n-Butylbenzene	19.21	91	17919160	32.50 ug/l	85
93) 1,2-Dichlorobenzene	19.37	146	8649707	46.67 ug/l	98
94) 1,2-Dibromo-3-chloropropan	20.14	157	665681	51.37 ug/l	96
95) 1,2,4-Trichlorobenzene	20.97	180	6323418	43.42 ug/l	100
96) Hexachlorobutadiene	21.10	225	3248765	41.28 ug/l	96
97) Naphthalene	21.24	128	9280937	47.31 ug/l	98
98) 1,2,3-Trichlorobenzene	21.49	180	4707593	42.84 ug/l	98

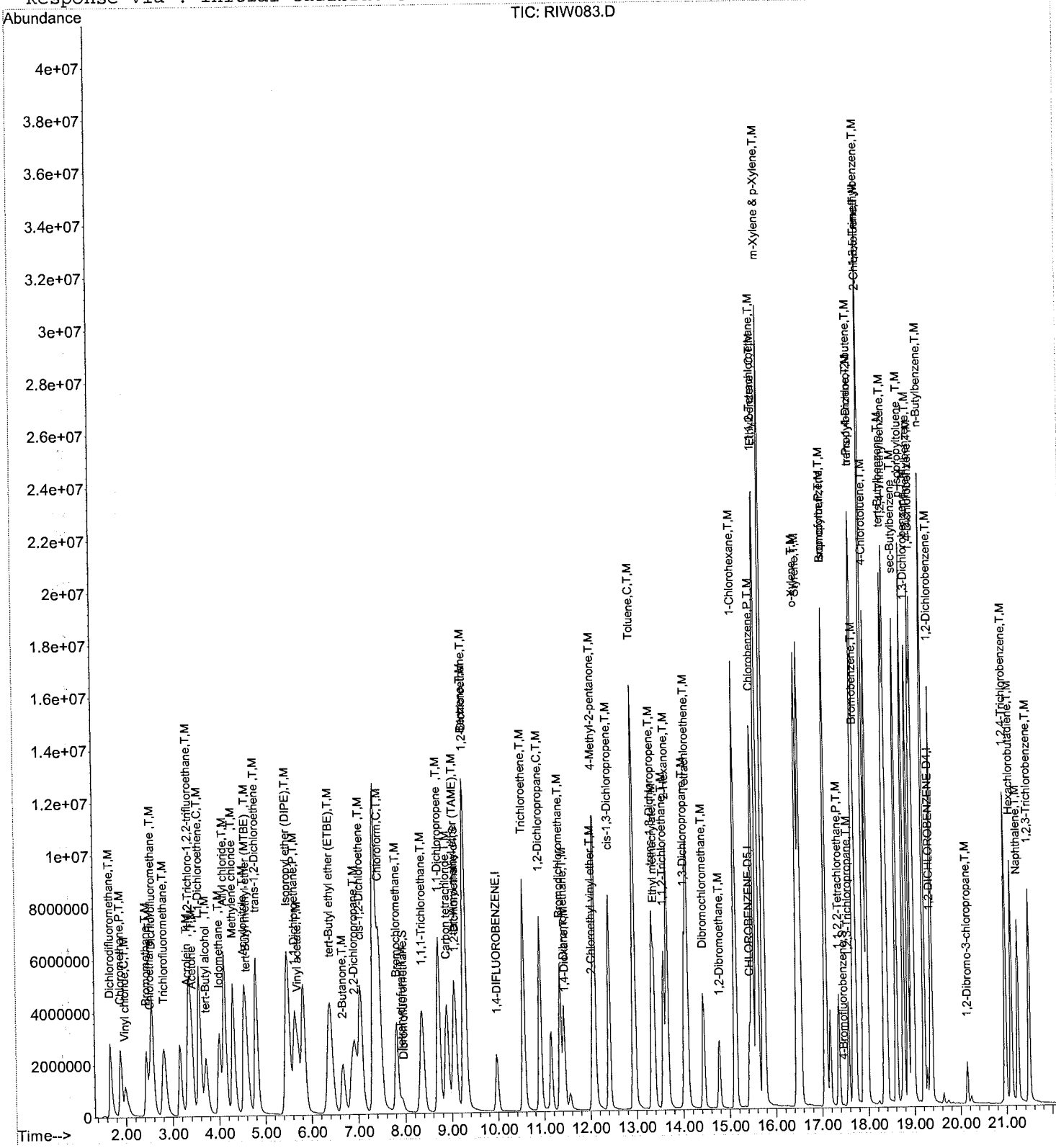
SC 10/14/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW083.D Vial: 10
Acq On : 19 Sep 2024 2:36 pm Operator: PMai
Sample : VO06I199 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:19 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SU 10/14/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW084.D Vial: 11
Acq On : 19 Sep 2024 3:02 pm Operator: PMai
Sample : VO06I1910 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:22 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.96	114	3637958	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.44	117	2768644	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1265533	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	1625	0.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.40%		
42) 1,2-Dichloroethane-d4	9.06	65	22232	0.28	ug/l	-0.02
Spiked Amount 10.000			Recovery =	2.80%		
55) Toluene-d8	12.82	98	10286	0.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.30%		
77) 4-Bromofluorobenzene	17.36	95	985993	6.98	ug/l	-0.09
Spiked Amount 10.000			Recovery =	69.80%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.65	85	16148328	105.07	ug/l	97
3) Chloromethane	1.87	50	14612117	103.73	ug/l	96
4) Vinyl chloride	1.99	62	8824260	79.97	ug/l	95
5) Bromomethane	2.42	94	9945559	108.46	ug/l	99
6) Chloroethane	2.50	64	7683261	108.05	ug/l	100
8) Trichlorofluoromethane	2.80	101	16365848	112.78	ug/l	99
9) Acrolein	3.30	56	2311513	452.34	ug/l	99
11) Acetone	3.40	43	6625917	450.94	ug/l	98
12) 1,1-Dichloroethene	3.55	61	20172568	104.83	ug/l	97
13) tert-Butyl alcohol	3.70	59	9798742	2155.79	ug/l	100
16) Iodomethane	3.99	142	18843913	104.50	ug/l	98
17) Allyl chloride	4.10	76	6196143	100.58	ug/l	96
18) Methylene chloride	4.29	49	14002938	97.97	ug/l	97
20) Acrylonitrile	4.52	53	9218905	505.05	ug/l	99
21) tert-Butyl methyl ether (M	4.56	73	16666283	90.34	ug/l	96
22) trans-1,2-Dichloroethene	4.79	96	10906587	94.88	ug/l	95
23) Isopropyl ether (DIPE)	5.46	45	35507486	93.40	ug/l	96
24) Vinyl acetate	5.69	43	14250810	103.78	ug/l	100
25) 1,1-Dichloroethane	5.63	63	18709340	97.33	ug/l	95
27) tert-Butyl ethyl ether (ET	6.38	59	24858794	90.17	ug/l	98
28) 2-Butanone	6.65	43	12262250	491.16	ug/l	97
29) 2,2-Dichloropropane	6.93	77	9875821	82.32	ug/l	97
30) cis-1,2-Dichloroethene	7.03	96	11419506	96.17	ug/l	98
31) Chloroform	7.45	83	17652598	92.81	ug/l	97
32) Bromochloromethane	7.81	130	5332114	103.66	ug/l	99
33) Tetrahydrofuran	7.91	42	1355631	101.42	ug/l	94
36) 1,1,1-Trichloroethane	8.35	97	14233825	93.02	ug/l	97
39) 1,1-Dichloropropene	8.71	110	5105574	98.80	ug/l	99
40) Carbon tetrachloride	8.90	119	13004055	102.54	ug/l	100
41) tert-Amyl methyl ether (TA	9.06	73	19774924	87.70	ug/l	96
43) 1,2-Dichloroethane	9.29	62	9529457	99.53	ug/l	95
44) Benzene	9.27	78	35095883	84.17	ug/l	92
45) Trichloroethene	10.55	130	10584429	97.49	ug/l	99
47) 1,2-Dichloropropane	10.91	63	9897446	95.96	ug/l	97
48) 1,4-Dioxane	11.45	88	674602	1397.11	ug/l	100
49) Bromodichloromethane	11.35	83	12697231	94.89	ug/l	97

(#) = qualifier out of range (m) = manual integration
RIW084.D VO06I19B.M Mon Oct 14 14:22:31 2024

10/14/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW084.D Vial: 11
Acq On : 19 Sep 2024 3:02 pm Operator: PMai
Sample : VO06I1910 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:22 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Dibromomethane	11.41	93	4869988	99.68	ug/l	99
51) 2-Chloroethyl vinyl ether	12.04	63	3453726	106.42	ug/l	99
52) 4-Methyl-2-pentanone	12.08	43	28518293	414.44	ug/l	94
53) cis-1,3-Dichloropropene	12.40	75	15322464	93.56	ug/l	95
56) Toluene	12.94	91	30993514	74.21	ug/l	77
57) Ethyl methacrylate	13.38	69	8778547	95.63	ug/l	97
58) trans-1,3-Dichloropropene	13.32	75	12179497	103.76	ug/l	98
59) 1,1,2-Trichloroethane	13.59	97	6159591	102.68	ug/l	97
60) 2-Hexanone	13.65	43	19993828	456.57	ug/l	95
61) 1,3-Dichloropropane	14.03	76	10905182	98.41	ug/l	96
62) Tetrachloroethene	14.09	164	8110952	94.37	ug/l	99
63) Dibromochloromethane	14.43	129	7608400	102.96	ug/l	100
65) 1,2-Dibromoethane	14.76	107	5909656	103.66	ug/l	100
66) 1-Chlorohexane	15.12	91	12432614	69.88	ug/l	99
67) Chlorobenzene	15.51	112	22182109	86.74	ug/l	94
68) 1,1,1,2-Tetrachloroethane	15.60	131	7353439	90.94	ug/l	99
69) Ethylbenzene	15.61	91	29012419	56.37	ug/l	74
70) m-Xylene & p-Xylene	15.74	91	33785553	85.90	ug/l	59
71) o-Xylene	16.47	91	26138674	67.49	ug/l	84
72) Styrene	16.53	104	23457621	81.06	ug/l	90
73) Isopropylbenzene	17.08	105	27993271	55.71	ug/l	84
75) Bromoform	17.08	173	3605522	91.52	ug/l	99
76) 1,1,2,2-Tetrachloroethane	17.36	83	6675080	91.20	ug/l	97
78) 1,2,3-Trichloropropane	17.58	110	1946195	96.48	ug/l	98
79) trans-1,4-Dichloro-2-buten	17.69	53	2025472	90.99	ug/l	99
80) n-Propylbenzene	17.67	91	27098555	38.81	ug/l	63
81) Bromobenzene	17.73	156	8617954	86.17	ug/l	99
82) 1,3,5-Trimethylbenzene	17.91	105	23512433	55.21	ug/l	76
83) 2-Chlorotoluene	17.91	91	24174119	59.09	ug/l	90
85) tert-Butylbenzene	18.36	134	7385473	82.03	ug/l	89
86) 1,2,4-Trimethylbenzene	18.40	105	22219874	50.32	ug/l	60
87) sec-Butylbenzene	18.59	105	24895570	41.41	ug/l	64
88) p-Isopropyltoluene	18.76	119	23545361	46.08	ug/l	62
89) 1,3-Dichlorobenzene	18.87	146	17456839	78.08	ug/l	86
90) 1,2,3-Trimethylbenzene	18.95	105	21405952	53.57	ug/l	65
91) 1,4-Dichlorobenzene	18.98	146	17091668	77.18	ug/l	86
92) n-Butylbenzene	19.20	91	23352113	42.41	ug/l	67
93) 1,2-Dichlorobenzene	19.37	146	15839316	85.60	ug/l	94
94) 1,2-Dibromo-3-chloropropan	20.15	157	1352744	104.56	ug/l	94
95) 1,2,4-Trichlorobenzene	20.97	180	12816606	88.14	ug/l	99
96) Hexachlorobutadiene	21.10	225	7015618	89.29	ug/l	96
97) Naphthalene	21.24	128	19279030	98.43	ug/l	96
98) 1,2,3-Trichlorobenzene	21.49	180	10114903	92.18	ug/l	97

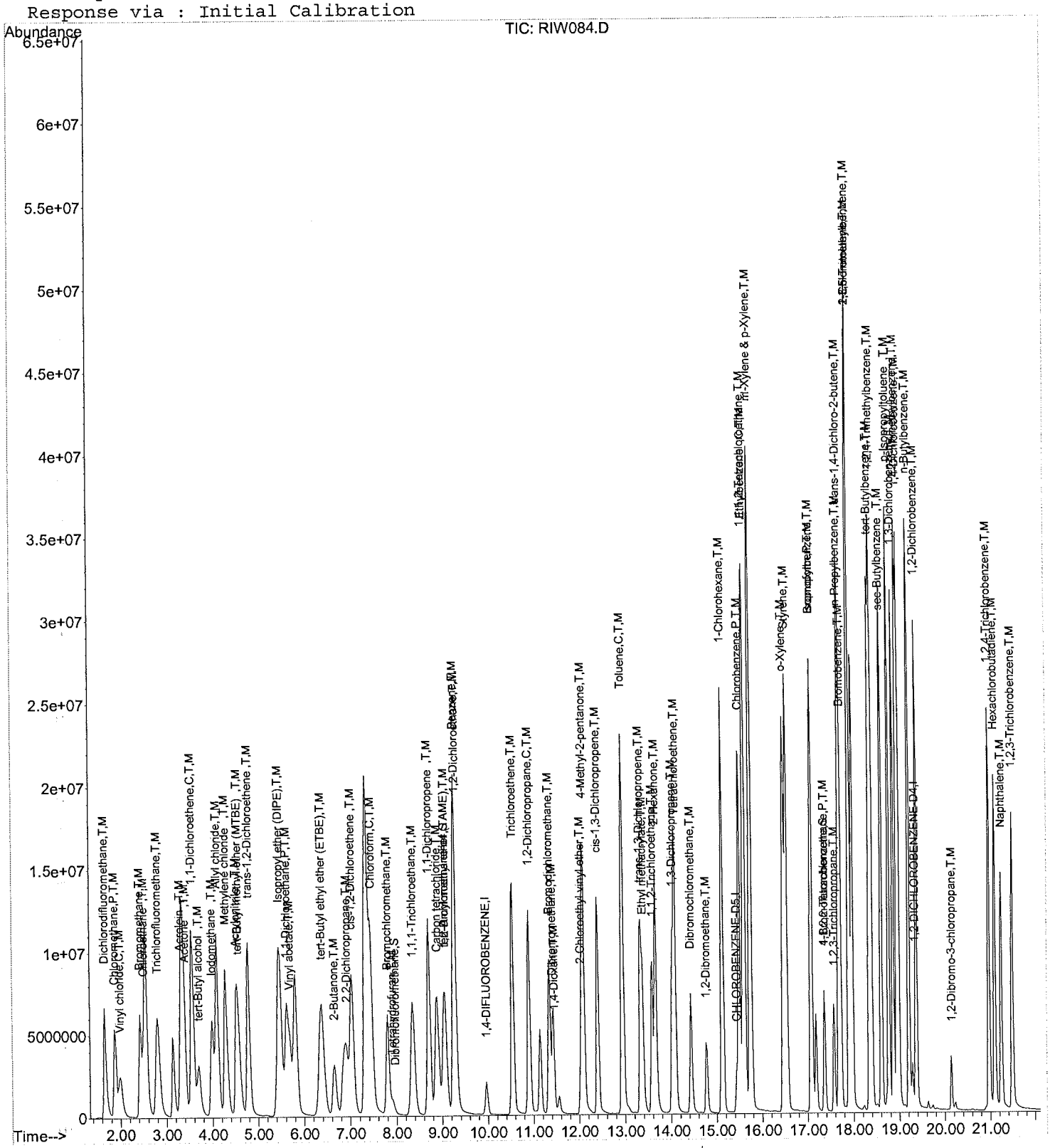
SU 10/14/24

(#) = qualifier out of range (m) = manual integration
RIW084.D VO06I19B.M Mon Oct 14 14:22:31 2024

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW084.D Vial: 11
Acq On : 19 Sep 2024 3:02 pm Operator: PMai
Sample : VO06I1910 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 14:22 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SU 10/14/24

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :06
IC_Beginning DateTime :09/19/24 11:07
Spike Amount :10 PPB
CC/CV File :RIW087
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
IC_Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B
Date_Time :09/19/24 16:20

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	3818306	1	1	9.965	9.966	0				
	2	Dichlorodifluoromethane	8.173	-18.3	1318386	0.345	0.422	1.676	1.661	13.33				
	3	Chloromethane	9.284	-7.2	1372699	0.360	0.387	1.893	1.883	13.07				
	4	Vinyl chloride	8.915	-10.9	1032595	0.270	0.303	2.012	1.993	14.03				
	5	Bromomethane	8.747	-12.5	833581	0.218	0.239	2.446	2.433	15.81	-0.0024	0.2523		0.9963
	6	Chloroethane	8.517	-14.8	638699	0.167	0.203	2.525	2.511	22.40	0.0009	0.1954		0.9954
	7	Dichlorofluoromethane	7.718	-22.8	2094253	0.548	0.725	2.565	2.557	19.79	0.0047	0.7229	-0.0239	0.9954
	8	Trichlorofluoromethane	9.175	-8.2	1397459	0.366	0.399	2.821	2.803	13.35				
5	9	Acrolein	45.514	-9.0	244115	0.013	0.014	3.321	3.318	13.03				
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	6.721	-32.8	853126	0.223	0.305	3.363	3.360	21.85	-0.0018	0.3517	-0.0248	0.9955
5	11	Acetone	46.243	-7.5	713175	0.037	0.040	3.426	3.412	5.70				
	12	1,1-Dichloroethene	9.129	-8.7	1843846	0.483	0.529	3.573	3.559	13.18				
25	13	tert-Butyl alcohol	245.553	-1.8	1171446	0.012	0.012	3.719	3.708	12.15				
	14	Acetonitrile												
	15	Methyl acetate	11.114	11.1	91600	0.024	0.022	4.097	4.092	9.28				
	16	Iodomethane	9.402	-6.0	1779527	0.466	0.496	4.013	3.997	9.49				
	17	Allyl chloride	9.917	-0.8	641278	0.168	0.169	4.117	4.113	8.27				
	18	Methylene chloride	9.084	-9.2	1434804	0.376	0.456	4.306	4.292	16.08	0.0208	0.3908		0.9991
	19	Carbon disulfide	8.431	-15.7	2007412	0.526	0.550	4.264	4.261	22.27	-0.0093	0.6346		0.9977
5	20	Acrylonitrile	49.089	-1.8	940474	0.049	0.050	4.537	4.532	11.25				
	21	tert-Butyl methyl ether (MTBE)	9.920	-0.8	1920764	0.503	0.507	4.579	4.578	9.55				
	22	trans-1,2-Dichloroethene	10.066	0.7	1214526	0.318	0.316	4.809	4.796	9.01				
	23	Isopropyl ether (DIPE)	10.318	3.2	4116889	1.078	1.045	5.480	5.473	9.74				
	24	Vinyl acetate	11.001	10.0	1585507	0.415	0.377	5.731	5.707	11.84				
	25	1,1-Dichloroethane	10.047	0.5	2027215	0.531	0.528	5.648	5.632	8.85				
25	26	2-Butanol	241.534	-3.4	1307812	0.014	0.011	6.213	6.218	34.89	-0.0108	0.0146		0.9959
	27	tert-Butyl ethyl ether (ETBE)	10.198	2.0	2950819	0.773	0.758	6.402	6.387	10.20				
5	28	2-Butanone	46.704	-6.6	1223832	0.064	0.069	6.674	6.671	8.30				
	29	2,2-Dichloropropane	10.802	8.0	1360181	0.356	0.330	6.926	6.921	10.70				
	30	cis-1,2-Dichloroethene	9.968	-0.3	1242418	0.325	0.326	7.052	7.041	5.38				
	31	Chloroform	9.678	-3.2	1932134	0.506	0.523	7.450	7.439	8.09				
	32	Bromochloromethane	10.087	0.9	544578	0.143	0.141	7.827	7.816	8.96				
	33	Tetrahydrofuran	8.878	-11.2	124557	0.033	0.037	7.953	7.929	7.29				
5	34	tert-Amyl alcohol												
	35	Dibromofluoromethane	10.515	5.2	1137646	0.298	0.231	7.974	7.968	27.01	-0.0065	0.2895		0.9975
	36	1,1,1-Trichloroethane	10.055	0.6	1614830	0.423	0.421	8.372	8.355	7.56				
	37	Cyclohexane	9.753	-2.5	2008066	0.526	0.539	8.351	8.337	10.75				
	38	2,2,4-Trimethylpentane												
	39	1,1-Dichloropropene	9.739	-2.6	528272	0.138	0.142	8.729	8.713	5.75				
	40	Carbon tetrachloride	10.124	1.2	1347587	0.353	0.349	8.896	8.891	9.23				
	41	tert-Amyl methyl ether (TAME)	10.157	1.6	2404011	0.630	0.620	9.064	9.067	8.76				
	42	1,2-Dichloroethane-d4	10.339	3.4	872922	0.229	0.221	9.106	9.084	11.06				
	43	1,2-Dichloroethane	10.152	1.5	1020146	0.267	0.263	9.294	9.287	11.07				
	44	Benzene	10.295	3.0	4505632	1.180	1.146	9.273	9.271	10.43				
	45	Trichloroethene	10.383	3.8	1183254	0.310	0.298	10.552	10.551	8.68				
	46	Methylcyclohexane	10.310	3.1	2234441	0.585	0.568	10.636	10.621	13.50				
	47	1,2-Dichloropropane	10.108	1.1	1094292	0.287	0.284	10.908	10.907	8.52				
20	48	1,4-Dioxane	207.747	3.9	105285	0.001	0.001	11.453	11.458	11.21				
	49	Bromodichloromethane	9.672	-3.3	1358411	0.356	0.368	11.348	11.348	7.61				
	50	Dibromomethane	9.722	-2.8	498553	0.131	0.134	11.432	11.417	9.25				
	51	2-Chloroethyl vinyl ether	9.360	-6.4	318858	0.084	0.089	12.040	12.042	9.82				
5	52	4-Methyl-2-pentanone	49.956	-0.1	3608051	0.189	0.189	12.082	12.087	11.78				
	53	cis-1,3-Dichloropropene	9.954	-0.5	1711128	0.448	0.450	12.417	12.398	9.21				
	54	CHLOROBENZENE-D5	10.000	0	3098667	1	1	15.442	15.432	0				
	55	Toluene-d8	11.006	10.1	4414110	1.425	1.294	12.815	12.802	6.71				
	56	Toluene	10.716	7.2	5009219	1.617	1.509	12.941	12.940	13.73				
	57	Ethyl methacrylate	9.549	-4.5	981122	0.317	0.332	13.381	13.380	5.91				
	58	trans-1,3-Dichloropropene	10.259	2.6	1347799	0.435	0.424	13.339	13.326	9.58				
	59	1,1,2-Trichloroethane	9.967	-0.3	669166	0.216	0.217	13.591	13.580	10.21				
5	60	2-Hexanone	48.622	-2.8	2383054	0.154	0.158	13.654	13.658	8.03				
	61	1,3-Dichloropropane	9.971	-0.3	1236711	0.399	0.400	14.031	14.030	9.06				
	62	Tetrachloroethene	10.301	3.0	990939	0.320	0.310	14.094	14.083	8.33				
	63	Dibromochloromethane	9.992	-0.1	826369	0.267	0.267	14.429	14.429	7.03				
	64	2-Ethyl-1-butanol												
	65	1,2-Dibromoethane	9.889	-1.1	631008	0.204	0.206	14.786	14.766	10.05				
	66	1-Chlorohexane	9.103	-9.0	1812595	0.585	0.643	15.121	15.120	9.33				
	67	Chlorobenzene	10.365	3.6	2966933	0.957	0.924	15.507	15.497	9.47				
	68	1,1,1,2-Tetrachloroethane	10.802	8.0	977595	0.315	0.292	15.597	15.589	11.30				
	69	Ethylbenzene	10.030	0.3	5777806	1.865	1.859	15.610	15.608	8.30				
2	70	m-Xylene & p-Xylene	19.978	-0.1	8794452	1.419	1.421	15.740	15.741	8.61				
	71	o-Xylene	10.024	0.2	4345475	1.402	1.399	16.467	16.466	9.46				
	72	Styrene	10.204	2.0	3305187	1.067	1.045	16.532	16.533	9.82				
	73	Isopropylbenzene	9.877	-1.2	5555064	1.793	1.815	17.077	17.078	8.91				
	74	1,2-DICHLOROBENZENE-D4	10.000	0	1315965	1	1	19.347	19.348	0				
	75	Bromoform	9.207	-7.9	373678	0.284	0.290	17.077	17.068	15.86	-0.0029	0.3116		0.9955
	76	1,1,2,2-Tetrachloroethane	9.945	-0.6	756918	0.575	0.578	17.362	17.360	11.29				
	77	4-Bromofluorobenzene	10.758	7.6	1580640	1.201	1.116	17.466	17.454	7.32				
	78	1,2,3-Trichloropropane	9.515	-4.8	199584	0.152	0.159	17.583	17.573	9.99				
	79	trans-1,4-Dichloro-2-butene	9.461	-5.4	219018	0.166	0.176	17.686	17.683	6.51				
	80	n-Propylbenzene	10.009	0.1	7267387	5.522	5.517	17.686	17.676	10.27				
	81	Bromobenzene	10.604	6.0	1102805	0.838	0.790	17.725	17.722	13.37				
	82	1,3,5-Trimethylbenzene	10.309	3.1	4565969	3.470	3.365	17.894	17.895	10.62				
	83	2-Chlorotoluene	10.658	6.6	4534547	3.446	3.233	17.907	17.908	11.15				
	84	4-Chlorotoluene	10.275	2.7	4006499	3.045	2.963	17.972	17.973	13.81				
	85	tert-Butylbenzene	10.939	9.4	1024187	0.778	0.711	18.348	18.350	11.84				
	86	1,2,4-Trimethylbenzene	10.018	0.2	4600062	3.496	3.489	18.400	18.388	9.18				
	87	sec-Butylbenzene	9.989	-0.1	6245391	4.746	4.751	18.608	18.601	9.32				
	88	p-Isopropyltoluene	10.055	0.6	5342599	4.060	4.038	18.763	18.764	8.88				
	89	1,3-Dichlorobenzene	10.248	2.5	2382410	1.810	1.767	18.867	18.867	11.22				
	90	1,2,3-Trimethylbenzene	9.955	-0.5	4136599	3.143	3.158	18.945	18.946	9.29				
	91	1,4-Dichlorobenzene	10.290	2.9	2369782	1.801	1.750	18.984	18.985	11.18				
	92	n-Butylbenzene	9.726	-2.7	5568496	4.231	4.351	19.204	19.205	9.21				
	93	1,2-Dichlorobenzene	10.443	4.4	2009595	1.527	1.462	19.373	19.374	10.78				
	94	1,2-Dibromo-3-chloropropane	8.919	-10.8	120000	0.091	0.102	20.152	20.141	3.78				
	95	1,2,4-Trichlorobenzene	10.120	1.2	1530251	1.163	1.149	20.982	20.970	11.27				
	96	Hexachlorobutadiene	10.742	7.4	877702	0.667	0.621	21.099	21.100	11.09				
	97	Naphthalene	10.212	2.1	2079964	1.581	1.548	21.241	21.242	7.87				
	98	1,2,3-Trichlorobenzene	10.484	4.8	1196302	0.909	0.867	21.488	21.489	14.10				

Spike Amount = Nominal Amount * M

SM 10/14/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	110	0.00
2	T,M	Dichlorodifluoromethane	10.000	8.173	18.3	106	0.00
3	P,T,M	Chloromethane	10.000	9.285	7.1	114	0.00
4	C,T,M	Vinyl chloride	10.000	8.915	10.9	123	0.00
5	T,M	Bromomethane	10.000	8.747	12.5	113	0.00
6	T,M	Chloroethane	10.000	8.518	14.8	106	0.00
7	T,M	Dichlorofluoromethane **	10.000	7.719	22.8#	91	0.00
8	T,M	Trichlorofluoromethane	10.000	9.175	8.2	113	0.00
9	T,M	Acrolein	50.000	45.515	9.0	117	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl**	10.000	6.721	32.8#	85	0.00
11	T,M	Acetone	50.000	46.244	7.5	104	0.00
12	C,T,M	1,1-Dichloroethene	10.000	9.129	8.7	99	0.00
13	T,M	tert-Butyl alcohol	250.000	245.553	1.8	97	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	11.115	-11.2	112	0.00
16	T,M	Iodomethane	10.000	9.402	6.0	104	0.00
17	T,M	Allyl chloride	10.000	9.917	0.8	105	0.00
18	T,M	Methylene chloride	10.000	9.084	9.2	102	0.00
19	T,M	Carbon disulfide	10.000	8.432	15.7	91	0.00
20	T,M	Acrylonitrile	50.000	49.089	1.8	105	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	9.920	0.8	100	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.067	-0.7	109	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.318	-3.2	106	0.00
24	T,M	Vinyl acetate	10.000	11.001	-10.0	126	0.02
25	P,T,M	1,1-Dichloroethane	10.000	10.047	-0.5	107	0.00
26	T,M	2-Butanol	250.000	241.534	3.4	102	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.198	-2.0	104	0.02
28	T,M	2-Butanone	50.000	46.705	6.6	102	0.00
29	T,M	2,2-Dichloropropane	10.000	10.803	-8.0	113	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	9.969	0.3	109	0.00
31	C,T,M	Chloroform	10.000	9.679	3.2	106	0.00
32	T,M	Bromochloromethane	10.000	10.087	-0.9	105	0.00
33	T,M	Tetrahydrofuran	10.000	8.879	11.2	103	0.02
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-0.06
35	S	Dibromofluoromethane	10.000	10.515	-5.2	114	0.00
36	T,M	1,1,1-Trichloroethane	10.000	10.055	-0.5	106	0.02
37	T,M	Cyclohexane	10.000	9.753	2.5	101	0.00
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.08
39	T,M	1,1-Dichloropropene	10.000	9.740	2.6	105	0.00
40	T,M	Carbon tetrachloride	10.000	10.124	-1.2	106	0.00
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.158	-1.6	103	0.00
42	S	1,2-Dichloroethane-d4	10.000	10.340	-3.4	106	0.02
43	T,M	1,2-Dichloroethane	10.000	10.152	-1.5	105	0.00
44	T,M	Benzene	10.000	10.296	-3.0	106	0.00
45	T,M	Trichloroethene	10.000	10.383	-3.8	107	0.00
46	T,M	Methylcyclohexane	10.000	10.310	-3.1	102	0.00
47	C,T,M	1,2-Dichloropropane	10.000	10.109	-1.1	108	0.00
48	T,M	1,4-Dioxane	200.000	207.748	-3.9	100	0.00
49	T,M	Bromodichloromethane	10.000	9.672	3.3	104	0.00
50	T,M	Dibromomethane	10.000	9.723	2.8	103	0.02

(#) = Out of Range

Sa 10/14/24

** to be evaluated from IVO06I1902 (File ID: RIW093)

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	10.000	9.361	6.4	102	0.00
52	T,M	4-Methyl-2-pentanone	50.000	49.957	0.1	101	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	9.955	0.4	104	0.02
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	106	0.01
55	S	Toluene-d8	10.000	11.006	-10.1	113	0.00
56	C,T,M	Toluene	10.000	10.716	-7.2	107	0.00
57	T,M	Ethyl methacrylate	10.000	9.549	4.5	101	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	10.259	-2.6	106	0.02
59	T,M	1,1,2-Trichloroethane	10.000	9.967	0.3	103	0.02
60	T,M	2-Hexanone	50.000	48.623	2.8	100	0.00
61	T,M	1,3-Dichloropropane	10.000	9.972	0.3	103	0.00
62	T,M	Tetrachloroethene	10.000	10.301	-3.0	106	0.02
63	T,M	Dibromochloromethane	10.000	9.992	0.1	105	0.00
64	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
65	T,M	1,2-Dibromoethane	10.000	9.890	1.1	102	0.02
66	T,M	1-Chlorohexane	10.000	9.103	9.0	105	0.00
67	P,T,M	Chlorobenzene	10.000	10.366	-3.7	106	0.01
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.803	-8.0	104	0.01
69	C,T,M	Ethylbenzene	10.000	10.030	-0.3	106	0.01
70	T,M	m-Xylene & p-Xylene	20.000	19.978	0.1	107	0.00
71	T,M	o-Xylene	10.000	10.024	-0.2	103	0.00
72	T,M	Styrene	10.000	10.204	-2.0	104	0.00
73	T,M	Isopropylbenzene	10.000	9.878	1.2	104	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	102	0.00
75	P,T,M	Bromoform	10.000	9.207	7.9	98	0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.946	0.5	98	0.00
77	S	4-Bromofluorobenzene	10.000	10.758	-7.6	109	0.01
78	T,M	1,2,3-Trichloropropane	10.000	9.515	4.8	97	0.01
79	T,M	trans-1,4-Dichloro-2-butene	10.000	9.462	5.4	102	0.01
80	T,M	n-Propylbenzene	10.000	10.010	-0.1	104	0.01
81	T,M	Bromobenzene	10.000	10.604	-6.0	104	0.01
82	T,M	1,3,5-Trimethylbenzene	10.000	10.310	-3.1	104	0.00
83	T,M	2-Chlorotoluene	10.000	10.658	-6.6	110	0.00
84	T,M	4-Chlorotoluene	10.000	10.276	-2.8	99	0.00
85	T,M	tert-Butylbenzene	10.000	10.940	-9.4	106	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	10.018	-0.2	103	0.01
87	T,M	sec-Butylbenzene	10.000	9.990	0.1	103	0.01
88	T,M	p-Isopropyltoluene	10.000	10.055	-0.5	103	0.00
89	T,M	1,3-Dichlorobenzene	10.000	10.248	-2.5	101	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	9.955	0.4	101	0.00
91	T,M	1,4-Dichlorobenzene	10.000	10.291	-2.9	103	0.00
92	T,M	n-Butylbenzene	10.000	9.726	2.7	102	0.00
93	T,M	1,2-Dichlorobenzene	10.000	10.444	-4.4	101	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	8.920	10.8	92	0.01
95	T,M	1,2,4-Trichlorobenzene	10.000	10.121	-1.2	100	0.01
96	T,M	Hexachlorobutadiene	10.000	10.742	-7.4	101	0.00
97	T,M	Naphthalene	10.000	10.213	-2.1	98	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	10.485	-4.8	103	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

SU 10/14/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	110	0.00
2	T,M	Dichlorodifluoromethane	0.422	0.345	18.2	106	0.00
3	P,T,M	Chloromethane	0.387	0.360	7.0	114	0.00
4	C,T,M	Vinyl chloride	0.303	0.270	10.9	123	0.00
5	T,M	Bromomethane	0.239	0.218	8.8	113	0.00
6	T,M	Chloroethane	0.203	0.167	17.7	106	0.00
7	T,M	Dichlorofluoromethane	0.725	0.548	24.4#	91	0.00
8	T,M	Trichlorofluoromethane	0.399	0.366	8.3	113	0.00
9	T,M	Acrolein	0.014	0.013	7.1	117	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.305	0.223	26.9#	85	0.00
11	T,M	Acetone	0.040	0.037	7.5	104	0.00
12	C,T,M	1,1-Dichloroethene	0.529	0.483	8.7	99	0.00
13	T,M	tert-Butyl alcohol	0.012	0.012	0.0	97	0.00
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.022	0.024	-9.1	112	0.00
16	T,M	Iodomethane	0.496	0.466	6.0	104	0.00
17	T,M	Allyl chloride	0.169	0.168	0.6	105	0.00
18	T,M	Methylene chloride	0.456	0.376	17.5	102	0.00
19	T,M	Carbon disulfide	0.550	0.526	4.4	91	0.00
20	T,M	Acrylonitrile	0.050	0.049	2.0	105	0.00
21	T,M	tert-Butyl methyl ether (MT	0.507	0.503	0.8	100	0.00
22	T,M	trans-1,2-Dichloroethene	0.316	0.318	-0.6	109	0.00
23	T,M	Isopropyl ether (DIPE)	1.045	1.078	-3.2	106	0.00
24	T,M	Vinyl acetate	0.377	0.415	-10.1	126	0.02
25	P,T,M	1,1-Dichloroethane	0.528	0.531	-0.6	107	0.00
26	T,M	2-Butanol	0.011	0.014	-27.3#	102	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.758	0.773	-2.0	104	0.02
28	T,M	2-Butanone	0.069	0.064	7.2	102	0.00
29	T,M	2,2-Dichloropropane	0.330	0.356	-7.9	113	0.00
30	T,M	cis-1,2-Dichloroethene	0.326	0.325	0.3	109	0.00
31	C,T,M	Chloroform	0.523	0.506	3.3	106	0.00
32	T,M	Bromochloromethane	0.141	0.143	-1.4	105	0.00
33	T,M	Tetrahydrofuran	0.037	0.033	10.8	103	0.02
34	T,M	tert-Amyl alcohol	0.000	0.000	0.0	0#	-0.06
35	S	Dibromofluoromethane	0.231	0.298	-29.0#	114	0.00
36	T,M	1,1,1-Trichloroethane	0.421	0.423	-0.5	106	0.02
37	T,M	Cyclohexane	0.539	0.526	2.4	101	0.00
38	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	0.08
39	T,M	1,1-Dichloropropene	0.142	0.138	2.8	105	0.00
40	T,M	Carbon tetrachloride	0.349	0.353	-1.1	106	0.00
41	T,M	tert-Amyl methyl ether (TAM	0.620	0.630	-1.6	103	0.00
42	S	1,2-Dichloroethane-d4	0.221	0.229	-3.6	106	0.02
43	T,M	1,2-Dichloroethane	0.263	0.267	-1.5	105	0.00
44	T,M	Benzene	1.146	1.180	-3.0	106	0.00
45	T,M	Trichloroethene	0.298	0.310	-4.0	107	0.00
46	T,M	Methylcyclohexane	0.568	0.585	-3.0	102	0.00
47	C,T,M	1,2-Dichloropropane	0.284	0.287	-1.1	108	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	100	0.00
49	T,M	Bromodichloromethane	0.368	0.356	3.3	104	0.00
50	T,M	Dibromomethane	0.134	0.131	2.2	103	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	0.089	0.084	5.6	102	0.00
52	T,M	4-Methyl-2-pentanone	0.189	0.189	0.0	101	0.00
53	T,M	cis-1,3-Dichloropropene	0.450	0.448	0.4	104	0.02
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	106	0.01
55	S	Toluene-d8	1.294	1.425	-10.1	113	0.00
56	C,T,M	Toluene	1.509	1.617	-7.2	107	0.00
57	T,M	Ethyl methacrylate	0.332	0.317	4.5	101	0.00
58	T,M	trans-1,3-Dichloropropene	0.424	0.435	-2.6	106	0.02
59	T,M	1,1,2-Trichloroethane	0.217	0.216	0.5	103	0.02
60	T,M	2-Hexanone	0.158	0.154	2.5	100	0.00
61	T,M	1,3-Dichloropropane	0.400	0.399	0.3	103	0.00
62	T,M	Tetrachloroethene	0.310	0.320	-3.2	106	0.02
63	T,M	Dibromochloromethane	0.267	0.267	0.0	105	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.206	0.204	1.0	102	0.02
66	T,M	1-Chlorohexane	0.643	0.585	9.0	105	0.00
67	P,T,M	Chlorobenzene	0.924	0.957	-3.6	106	0.01
68	T,M	1,1,1,2-Tetrachloroethane	0.292	0.315	-7.9	104	0.01
69	C,T,M	Ethylbenzene	1.859	1.865	-0.3	106	0.01
70	T,M	m-Xylene & p-Xylene	1.421	1.419	0.1	107	0.00
71	T,M	o-Xylene	1.399	1.402	-0.2	103	0.00
72	T,M	Styrene	1.045	1.067	-2.1	104	0.00
73	T,M	Isopropylbenzene	1.815	1.793	1.2	104	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	102	0.00
75	P,T,M	Bromoform	0.290	0.284	2.1	98	0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	0.578	0.575	0.5	98	0.00
77	S	4-Bromofluorobenzene	1.116	1.201	-7.6	109	0.01
78	T,M	1,2,3-Trichloropropane	0.159	0.152	4.4	97	0.01
79	T,M	trans-1,4-Dichloro-2-butene	0.176	0.166	5.7	102	0.01
80	T,M	n-Propylbenzene	5.517	5.522	-0.1	104	0.01
81	T,M	Bromobenzene	0.790	0.838	-6.1	104	0.01
82	T,M	1,3,5-Trimethylbenzene	3.365	3.470	-3.1	104	0.00
83	T,M	2-Chlorotoluene	3.233	3.446	-6.6	110	0.00
84	T,M	4-Chlorotoluene	2.963	3.045	-2.8	99	0.00
85	T,M	tert-Butylbenzene	0.711	0.778	-9.4	106	0.00
86	T,M	1,2,4-Trimethylbenzene	3.489	3.496	-0.2	103	0.01
87	T,M	sec-Butylbenzene	4.751	4.746	0.1	103	0.01
88	T,M	p-Isopropyltoluene	4.038	4.060	-0.5	103	0.00
89	T,M	1,3-Dichlorobenzene	1.767	1.810	-2.4	101	0.00
90	T,M	1,2,3-Trimethylbenzene	3.158	3.143	0.5	101	0.00
91	T,M	1,4-Dichlorobenzene	1.750	1.801	-2.9	103	0.00
92	T,M	n-Butylbenzene	4.351	4.231	2.8	102	0.00
93	T,M	1,2-Dichlorobenzene	1.462	1.527	-4.4	101	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.102	0.091	10.8	92	0.01
95	T,M	1,2,4-Trichlorobenzene	1.149	1.163	-1.2	100	0.01
96	T,M	Hexachlorobutadiene	0.621	0.667	-7.4	101	0.00
97	T,M	Naphthalene	1.548	1.581	-2.1	98	0.00
98	T,M	1,2,3-Trichlorobenzene	0.867	0.909	-4.8	103	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.97	114	3818306	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.44	117	3098667	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1315965	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	1137646	10.52	ug/l	0.00
Spiked Amount 10.000			Recovery = 105.20%			
42) 1,2-Dichloroethane-d4	9.11	65	872922	10.34	ug/l	0.02
Spiked Amount 10.000			Recovery = 103.40%			
55) Toluene-d8	12.82	98	4414110	11.01	ug/l	0.00
Spiked Amount 10.000			Recovery = 110.10%			
77) 4-Bromofluorobenzene	17.47	95	1580640	10.76	ug/l	0.01
Spiked Amount 10.000			Recovery = 107.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.68	85	1318386	8.17	ug/l	99
3) Chloromethane	1.89	50	1372699	9.28	ug/l	98
4) Vinyl chloride	2.01	62	1032595	8.92	ug/l	99
5) Bromomethane	2.45	94	833581	8.75	ug/l	99
6) Chloroethane	2.53	64	638699	8.52	ug/l	95
7) Dichlorofluoromethane **	2.56	67	2094253	7.72	ug/l	99
8) Trichlorofluoromethane	2.82	101	1397459	9.18	ug/l	98
9) Acrolein	3.32	56	244115	45.51	ug/l	95
10) 1,1,2-Trichloro-1,2,2-trif **	3.36	151	853126	6.72	ug/l	99
11) Acetone	3.43	43	713175	46.24	ug/l	96
12) 1,1-Dichloroethene	3.57	61	1843846	9.13	ug/l	99
13) tert-Butyl alcohol	3.72	59	1171446	245.55	ug/l	99
15) Methyl acetate	4.10	74	91600	11.11	ug/l	82
16) Iodomethane	4.01	142	1779527	9.40	ug/l	99
17) Allyl chloride	4.12	76	641278	9.92	ug/l	100
18) Methylene chloride	4.31	49	1434804	9.08	ug/l	99
19) Carbon disulfide	4.26	76	2007412	8.43	ug/l	100
20) Acrylonitrile	4.54	53	940474	49.09	ug/l	99
21) tert-Butyl methyl ether (M	4.58	73	1920764	9.92	ug/l	98
22) trans-1,2-Dichloroethene	4.81	96	1214526	10.07	ug/l	99
23) Isopropyl ether (DIPE)	5.48	45	4116889	10.32	ug/l	99
24) Vinyl acetate	5.73	43	1585507	11.00	ug/l	97
25) 1,1-Dichloroethane	5.65	63	2027215	10.05	ug/l	99
26) 2-Butanol	6.21	45	1307812	241.53	ug/l	99
27) tert-Butyl ethyl ether (ET	6.40	59	2950819	10.20	ug/l	100
28) 2-Butanone	6.67	43	1223832	46.70	ug/l	99
29) 2,2-Dichloropropane	6.93	77	1360181	10.80	ug/l	99
30) cis-1,2-Dichloroethene	7.05	96	1242418	9.97	ug/l	100
31) Chloroform	7.45	83	1932134	9.68	ug/l	99
32) Bromochloromethane	7.83	130	544578	10.09	ug/l	98
33) Tetrahydrofuran	7.95	42	124557	8.88	ug/l	98
36) 1,1,1-Trichloroethane	8.37	97	1614830	10.06	ug/l	99
37) Cyclohexane	8.35	84	2008066	9.75	ug/l	99
39) 1,1-Dichloropropene	8.73	110	528272	9.74	ug/l	100
40) Carbon tetrachloride	8.90	119	1347587	10.12	ug/l	99
41) tert-Amyl methyl ether (TA	9.06	73	2404011	10.16	ug/l	99

(#) = qualifier out of range (m) = manual integration

RIW087.D VO06I19B.M Mon Oct 14 13:39:26 2024 Su 10/14/24 Page 1

** Evaluated from IVO06I1902 (File ID: RIW093)

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloroethane	9.29	62	1020146	10.15	ug/l	99
44)	Benzene	9.27	78	4505632	10.30	ug/l	99
45)	Trichloroethene	10.55	130	1183254	10.38	ug/l	99
46)	Methylcyclohexane	10.64	83	2234441	10.31	ug/l	99
47)	1,2-Dichloropropane	10.91	63	1094292	10.11	ug/l	98
48)	1,4-Dioxane	11.45	88	105285	207.75	ug/l	95
49)	Bromodichloromethane	11.35	83	1358411	9.67	ug/l	100
50)	Dibromomethane	11.43	93	498553	9.72	ug/l	98
51)	2-Chloroethyl vinyl ether	12.04	63	318858	9.36	ug/l	99
52)	4-Methyl-2-pentanone	12.08	43	3608051	49.96	ug/l	99
53)	cis-1,3-Dichloropropene	12.42	75	1711128	9.95	ug/l	99
56)	Toluene	12.94	91	5009219	10.72	ug/l	100
57)	Ethyl methacrylate	13.38	69	981122	9.55	ug/l	98
58)	trans-1,3-Dichloropropene	13.34	75	1347799	10.26	ug/l	99
59)	1,1,2-Trichloroethane	13.59	97	669166	9.97	ug/l	99
60)	2-Hexanone	13.65	43	2383054	48.62	ug/l	99
61)	1,3-Dichloropropane	14.03	76	1236711	9.97	ug/l	99
62)	Tetrachloroethene	14.09	164	990939	10.30	ug/l	99
63)	Dibromochloromethane	14.43	129	826369	9.99	ug/l	99
65)	1,2-Dibromoethane	14.79	107	631008	9.89	ug/l	99
66)	1-Chlorohexane	15.12	91	1812595	9.10	ug/l	99
67)	Chlorobenzene	15.51	112	2966933	10.37	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.60	131	977595	10.80	ug/l	99
69)	Ethylbenzene	15.61	91	5777806	10.03	ug/l	100
70)	m-Xylene & p-Xylene	15.74	91	8794452	19.98	ug/l	100
71)	o-Xylene	16.47	91	4345475	10.02	ug/l	99
72)	Styrene	16.53	104	3305187	10.20	ug/l	99
73)	Isopropylbenzene	17.08	105	5555064	9.88	ug/l	99
75)	Bromoform	17.08	173	373678	9.21	ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.36	83	756918	9.95	ug/l	98
78)	1,2,3-Trichloropropane	17.58	110	199584	9.52	ug/l	96
79)	trans-1,4-Dichloro-2-buten	17.69	53	219018	9.46	ug/l	95
80)	n-Propylbenzene	17.69	91	7267387	10.01	ug/l	100
81)	Bromobenzene	17.73	156	1102805	10.60	ug/l	98
82)	1,3,5-Trimethylbenzene	17.89	105	4565969	10.31	ug/l	100
83)	2-Chlorotoluene	17.91	91	4534547	10.66	ug/l	93
84)	4-Chlorotoluene	17.97	91	4006499	10.28	ug/l	95
85)	tert-Butylbenzene	18.35	134	1024187	10.94	ug/l	99
86)	1,2,4-Trimethylbenzene	18.40	105	4600062	10.02	ug/l	99
87)	sec-Butylbenzene	18.61	105	6245391	9.99	ug/l	98
88)	p-Isopropyltoluene	18.76	119	5342599	10.06	ug/l	99
89)	1,3-Dichlorobenzene	18.87	146	2382410	10.25	ug/l	96
90)	1,2,3-Trimethylbenzene	18.94	105	4136599	9.96	ug/l	100
91)	1,4-Dichlorobenzene	18.98	146	2369782	10.29	ug/l	100
92)	n-Butylbenzene	19.20	91	5568496	9.73	ug/l	100
93)	1,2-Dichlorobenzene	19.37	146	2009595	10.44	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.15	157	120000	8.92	ug/l	93
95)	1,2,4-Trichlorobenzene	20.98	180	1530251	10.12	ug/l	99
96)	Hexachlorobutadiene	21.10	225	877702	10.74	ug/l	98
97)	Naphthalene	21.24	128	2079964	10.21	ug/l	100

(#) = qualifier out of range (m) = manual integration

SU 10/14/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

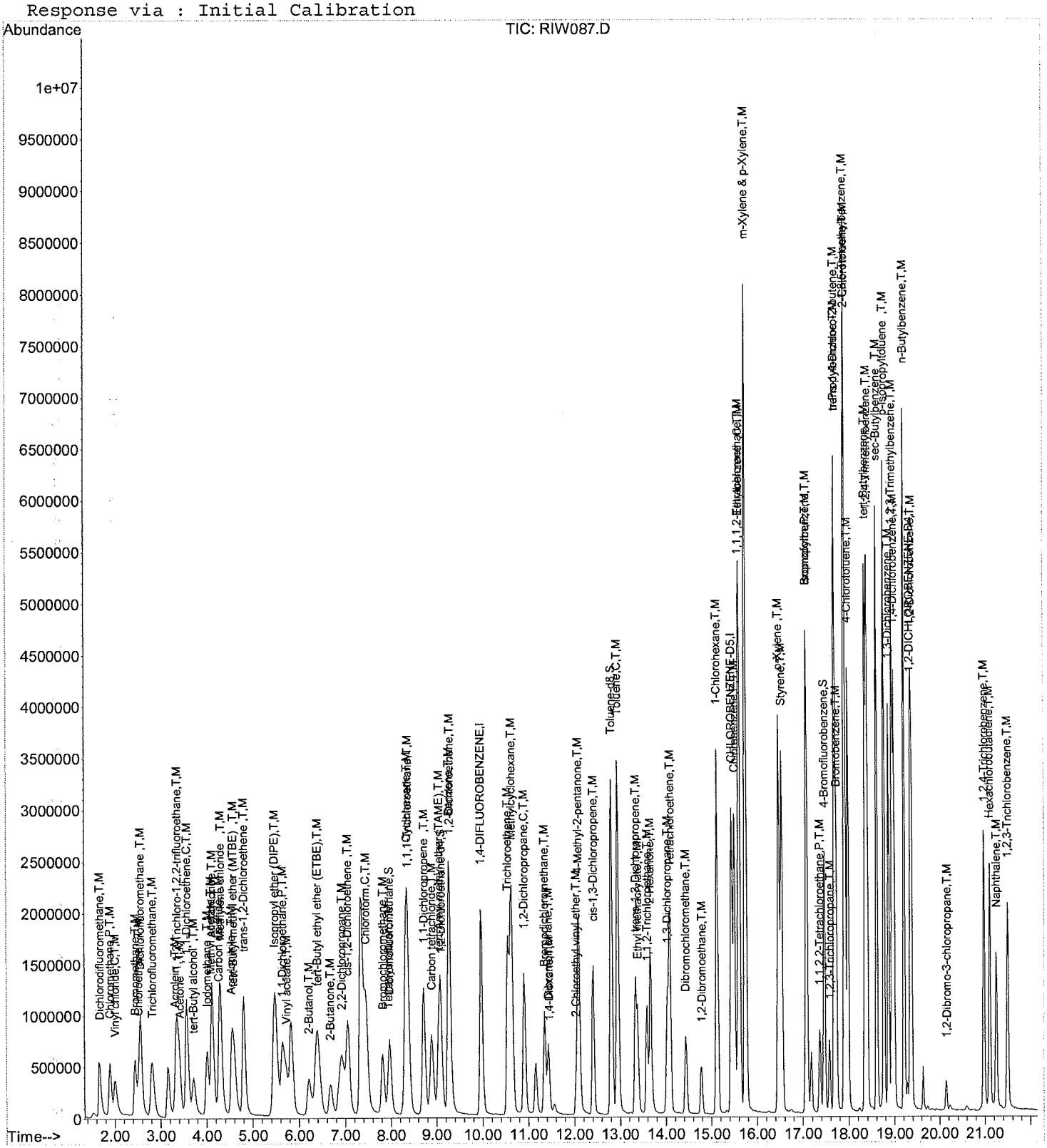
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 1,2,3-Trichlorobenzene	21.49	180	1196302	10.48	ug/l	99

(#) = qualifier out of range (m) = manual integration
RIW087.D VO06I19B.M Mon Oct 14 13:39:27 2024 SU 10/14/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW087.D Vial: 14
Acq On : 19 Sep 2024 4:20 pm Operator: PMai
Sample : IVO06I1901 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 11 17:44 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



SA 10/14/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :06
IC_Beginning DateTime :09/19/24 11:07
Spike Amount :10 PPB
CC/CV File :RIW093
IC File :RIW080

Column Spec :RTX502.2 ID :0.25MM
IC_Ending DateTime :09/19/24 15:02
HPChem Method :VO06I19B
Date_Time :09/19/24 19:59

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	2935645	1	1	9.985	9.966	0				
	2	Dichlorodifluoromethane												
	3	Chloromethane												
	4	Vinyl chloride												
	5	Bromomethane												
	6	Chloroethane												
	7	Dichlorofluoromethane	11.370	13.7	2336339	0.796	0.725	2.564	2.557	19.79	0.0047	0.7229	-0.0239	0.9954
	8	Trichlorofluoromethane												
5	9	Acrolein												
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	11.027	10.3	1044991	0.356	0.305	3.383	3.360	21.85	-0.0018	0.3517	-0.0248	0.9955
5	11	Acetone												
	12	1,1-Dichloroethene												
25	13	tert-Butyl alcohol												
	14	Acetonitrile												
	15	Methyl acetate												
	16	Iodomethane												
	17	Allyl chloride												
	18	Methylene chloride												
	19	Carbon disulfide												
5	20	Acrylonitrile												
	21	tert-Butyl methyl ether (MTBE)												
	22	trans-1,2-Dichloroethene												
	23	Isopropyl ether (DIPE)												
	24	Vinyl acetate												
	25	1,1-Dichloroethane												
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)												
5	28	2-Butanone												
	29	2,2-Dichloropropane												
	30	cis-1,2-Dichloroethene												
	31	Chloroform												
	32	Bromochloromethane												
	33	Tetrahydrofuran												
5	34	tert-Amyl alcohol												
	35	Dibromofluoromethane	10.508	5.1	874088	0.298	0.231	7.973	7.968	27.01	-0.0065	0.2895		0.9975
	36	1,1,1-Trichloroethane												
	37	Cyclohexane												
	38	2,2,4-Trimethylpentane												
	39	1,1-Dichloropropene												
	40	Carbon tetrachloride												
	41	tert-Amyl methyl ether (TAME)												
	42	1,2-Dichloroethane-d4	10.349	3.5	671780	0.229	0.221	9.105	9.084	11.06				
	43	1,2-Dichloroethane												
	44	Benzene												
	45	Trichloroethene												
	46	Methylcyclohexane												
	47	1,2-Dichloropropane												
20	48	1,4-Dioxane												
	49	Bromodichloromethane												
	50	Dibromomethane												
	51	2-Chloroethyl vinyl ether												
5	52	4-Methyl-2-pentanone												
	53	cis-1,3-Dichloropropene												
	54	CHLOROBENZENE-D5	10.000	0	2248957	1	1	15.442	15.432	0				
	55	Toluene-d8	11.363	13.6	3307626	1.471	1.294	12.815	12.802	6.71				
	56	Toluene												
	57	Ethyl methacrylate												
	58	trans-1,3-Dichloropropene												
	59	1,1,2-Trichloroethane												
5	60	2-Hexanone												
	61	1,3-Dichloropropane												
	62	Tetrachloroethene												
	63	Dibromochloromethane												
	64	2-Ethyl-1-butanol												
	65	1,2-Dibromoethane												
	66	1-Chlorohexane												
	67	Chlorobenzene												
	68	1,1,1,2-Tetrachloroethane												
	69	Ethylbenzene												
2	70	m-Xylene & p-Xylene												
	71	o-Xylene												
	72	Styrene												
	73	Isopropylbenzene												
	74	1,2-DICHLOROBENZENE-D4	10.000	0	1030195	1	1	19.347	19.348	0				
	75	Bromoform												
	76	1,1,2,2-Tetrachloroethane												
	77	4-Bromofluorobenzene	9.718	-2.8	1117852	1.085	1.116	17.453	17.454	7.32				
	78	1,2,3-Trichloropropane												
	79	trans-1,4-Dichloro-2-butene												
	80	n-Propylbenzene												
	81	Bromobenzene												
	82	1,3,5-Trimethylbenzene												
	83	2-Chlorotoluene												
	84	4-Chlorotoluene												
	85	tert-Butylbenzene												
	86	1,2,4-Trimethylbenzene												
	87	sec-Butylbenzene												
	88	p-Isopropyltoluene												
	89	1,3-Dichlorobenzene												
	90	1,2,3-Trimethylbenzene												
	91	1,4-Dichlorobenzene												
	92	n-Butylbenzene												
	93	1,2-Dichlorobenzene												
	94	1,2-Dibromo-3-chloropropane												
	95	1,2,4-Trichlorobenzene												
	96	Hexachlorobutadiene												
	97	Naphthalene												
	98	1,2,3-Trichlorobenzene												

Spike Amount = Nominal Amount * M

SM 10/14/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	84	0.02
2	T,M	Dichlorodifluoromethane	10.000	0.000	100.0#	0	-1.68#
3	P,T,M	Chloromethane	10.000	0.000	100.0#	0	-1.89#
4	C,T,M	Vinyl chloride	10.000	0.000	100.0#	0	-2.01#
5	T,M	Bromomethane	10.000	0.094	99.1#	0	-2.45#
6	T,M	Chloroethane	10.000	-0.043	100.4#	0	-2.52#
7	T,M	Dichlorofluoromethane	10.000	11.371	-13.7	101	0.00
8	T,M	Trichlorofluoromethane	10.000	0.000	100.0#	0	-2.82#
9	T,M	Acrolein	50.000	0.000	100.0#	0	-3.32#
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.028	-10.3	104	0.02
11	T,M	Acetone	50.000	0.000	100.0#	0	-3.43#
12	C,T,M	1,1-Dichloroethene	10.000	0.000	100.0#	0	-3.57#
13	T,M	tert-Butyl alcohol	250.000	0.000	100.0#	0	-3.72#
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	0.000	100.0#	0	-4.10#
16	T,M	Iodomethane	10.000	0.000	100.0#	0	-4.01#
17	T,M	Allyl chloride	10.000	0.000	100.0#	0	-4.12#
18	T,M	Methylene chloride	10.000	-0.532	105.3#	0	-4.31#
19	T,M	Carbon disulfide	10.000	0.147	98.5#	0	-4.26#
20	T,M	Acrylonitrile	50.000	0.000	100.0#	0	-4.54#
21	T,M	tert-Butyl methyl ether (MT	10.000	0.000	100.0#	0	-4.58#
22	T,M	trans-1,2-Dichloroethene	10.000	0.000	100.0#	0	-4.81#
23	T,M	Isopropyl ether (DIPE)	10.000	0.000	100.0#	0	-5.48#
24	T,M	Vinyl acetate	10.000	0.000	100.0#	0	-5.71#
25	P,T,M	1,1-Dichloroethane	10.000	0.000	100.0#	0	-5.65#
26	T,M	2-Butanol	250.000	7.374	97.1#	0	-6.21#
27	T,M	tert-Butyl ethyl ether (ETB	10.000	0.000	100.0#	0	-6.38#
28	T,M	2-Butanone	50.000	0.000	100.0#	0	-6.67#
29	T,M	2,2-Dichloropropane	10.000	0.000	100.0#	0	-6.93#
30	T,M	cis-1,2-Dichloroethene	10.000	0.000	100.0#	0	-7.05#
31	C,T,M	Chloroform	10.000	0.000	100.0#	0	-7.45#
32	T,M	Bromochloromethane	10.000	0.000	100.0#	0	-7.83#
33	T,M	Tetrahydrofuran	10.000	0.000	100.0#	0	-7.93#
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-8.12#
35	S	Dibromofluoromethane	10.000	10.509	-5.1	88	0.00
36	T,M	1,1,1-Trichloroethane	10.000	0.000	100.0#	0	-8.35#
37	T,M	Cyclohexane	10.000	0.000	100.0#	0	-8.35#
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-8.69#
39	T,M	1,1-Dichloropropene	10.000	0.000	100.0#	0	-8.73#
40	T,M	Carbon tetrachloride	10.000	0.000	100.0#	0	-8.90#
41	T,M	tert-Amyl methyl ether (TAM	10.000	0.000	100.0#	0	-9.06#
42	S	1,2-Dichloroethane-d4	10.000	10.350	-3.5	82	0.02
43	T,M	1,2-Dichloroethane	10.000	0.000	100.0#	0	-9.29#
44	T,M	Benzene	10.000	0.000	100.0#	0	-9.27#
45	T,M	Trichloroethene	10.000	0.000	100.0#	0	-10.55#
46	T,M	Methylcyclohexane	10.000	0.000	100.0#	0	-10.64#
47	C,T,M	1,2-Dichloropropane	10.000	0.000	100.0#	0	-10.91#
48	T,M	1,4-Dioxane	200.000	0.000	100.0#	0	-11.45#
49	T,M	Bromodichloromethane	10.000	0.000	100.0#	0	-11.35#
50	T,M	Dibromomethane	10.000	0.000	100.0#	0	-11.41#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	10.000	0.000	100.0#	0	-12.04#
52	T,M	4-Methyl-2-pentanone	50.000	0.000	100.0#	0	-12.08#
53	T,M	cis-1,3-Dichloropropene	10.000	0.000	100.0#	0	-12.40#
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	77	0.01
55	S	Toluene-d8	10.000	11.364	-13.6	85	0.00
56	C,T,M	Toluene	10.000	0.000	100.0#	0	-12.94#
57	T,M	Ethyl methacrylate	10.000	0.000	100.0#	0	-13.38#
58	T,M	trans-1,3-Dichloropropene	10.000	0.000	100.0#	0	-13.32#
59	T,M	1,1,2-Trichloroethane	10.000	0.000	100.0#	0	-13.57#
60	T,M	2-Hexanone	50.000	0.000	100.0#	0	-13.65#
61	T,M	1,3-Dichloropropane	10.000	0.000	100.0#	0	-14.03#
62	T,M	Tetrachloroethene	10.000	0.000	100.0#	0	-14.07#
63	T,M	Dibromochloromethane	10.000	0.000	100.0#	0	-14.43#
64	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
65	T,M	1,2-Dibromoethane	10.000	0.000	100.0#	0	-14.76#
66	T,M	1-Chlorohexane	10.000	0.000	100.0#	0	-15.12#
67	P,T,M	Chlorobenzene	10.000	0.000	100.0#	0	-15.50#
68	T,M	1,1,1,2-Tetrachloroethane	10.000	0.000	100.0#	0	-15.59#
69	C,T,M	Ethylbenzene	10.000	0.000	100.0#	0	-15.60#
70	T,M	m-Xylene & p-Xylene	20.000	0.000	100.0#	0	-15.74#
71	T,M	o-Xylene	10.000	0.000	100.0#	0	-16.47#
72	T,M	Styrene	10.000	0.000	100.0#	0	-16.53#
73	T,M	Isopropylbenzene	10.000	0.000	100.0#	0	-17.08#
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	80	0.00
75	P,T,M	Bromoform	10.000	0.094	99.1#	0	-17.07#
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	0.000	100.0#	0	-17.36#
77	S	4-Bromofluorobenzene	10.000	9.719	2.8	77	0.00
78	T,M	1,2,3-Trichloropropane	10.000	0.000	100.0#	0	-17.57#
79	T,M	trans-1,4-Dichloro-2-butene	10.000	0.000	100.0#	0	-17.68#
80	T,M	n-Propylbenzene	10.000	0.000	100.0#	0	-17.68#
81	T,M	Bromobenzene	10.000	0.000	100.0#	0	-17.71#
82	T,M	1,3,5-Trimethylbenzene	10.000	0.000	100.0#	0	-17.90#
83	T,M	2-Chlorotoluene	10.000	0.000	100.0#	0	-17.91#
84	T,M	4-Chlorotoluene	10.000	0.000	100.0#	0	-17.97#
85	T,M	tert-Butylbenzene	10.000	0.000	100.0#	0	-18.35#
86	T,M	1,2,4-Trimethylbenzene	10.000	0.000	100.0#	0	-18.39#
87	T,M	sec-Butylbenzene	10.000	0.000	100.0#	0	-18.60#
88	T,M	p-Isopropyltoluene	10.000	0.000	100.0#	0	-18.76#
89	T,M	1,3-Dichlorobenzene	10.000	0.000	100.0#	0	-18.87#
90	T,M	1,2,3-Trimethylbenzene	10.000	0.000	100.0#	0	-18.95#
91	T,M	1,4-Dichlorobenzene	10.000	0.000	100.0#	0	-18.99#
92	T,M	n-Butylbenzene	10.000	0.000	100.0#	0	-19.21#
93	T,M	1,2-Dichlorobenzene	10.000	0.000	100.0#	0	-19.37#
94	T,M	1,2-Dibromo-3-chloropropane	10.000	0.000	100.0#	0	-20.14#
95	T,M	1,2,4-Trichlorobenzene	10.000	0.000	100.0#	0	-20.97#
96	T,M	Hexachlorobutadiene	10.000	0.000	100.0#	0	-21.10#
97	T,M	Naphthalene	10.000	0.000	100.0#	0	-21.24#
98	T,M	1,2,3-Trichlorobenzene	10.000	0.000	100.0#	0	-21.49#

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	84	0.02
2	T,M	Dichlorodifluoromethane	0.422	0.000	100.0#	0#	-1.68#
3	P,T,M	Chloromethane	0.387	0.000#	100.0#	0#	-1.89#
4	C,T,M	Vinyl chloride	0.303	0.000	100.0#	0#	-2.01#
5	T,M	Bromomethane	0.239	0.000	100.0#	0#	-2.45#
6	T,M	Chloroethane	0.203	0.000	100.0#	0#	-2.52#
7	T,M	Dichlorofluoromethane	0.725	0.796	-9.8	101	0.00
8	T,M	Trichlorofluoromethane	0.399	0.000	100.0#	0#	-2.82#
9	T,M	Acrolein	0.014	0.000	100.0#	0#	-3.32#
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.305	0.356	-16.7	104	0.02
11	T,M	Acetone	0.040	0.000	100.0#	0#	-3.43#
12	C,T,M	1,1-Dichloroethene	0.529	0.000	100.0#	0#	-3.57#
13	T,M	tert-Butyl alcohol	0.012	0.000	100.0#	0#	-3.72#
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.022	0.000	100.0#	0#	-4.10#
16	T,M	Iodomethane	0.496	0.000	100.0#	0#	-4.01#
17	T,M	Allyl chloride	0.169	0.000	100.0#	0#	-4.12#
18	T,M	Methylene chloride	0.456	0.000	100.0#	0#	-4.31#
19	T,M	Carbon disulfide	0.550	0.000	100.0#	0#	-4.26#
20	T,M	Acrylonitrile	0.050	0.000	100.0#	0#	-4.54#
21	T,M	tert-Butyl methyl ether (MT	0.507	0.000	100.0#	0#	-4.58#
22	T,M	trans-1,2-Dichloroethene	0.316	0.000	100.0#	0#	-4.81#
23	T,M	Isopropyl ether (DIPE)	1.045	0.000	100.0#	0#	-5.48#
24	T,M	Vinyl acetate	0.377	0.000	100.0#	0#	-5.71#
25	P,T,M	1,1-Dichloroethane	0.528	0.000#	100.0#	0#	-5.65#
26	T,M	2-Butanol	0.011	0.000	100.0#	0#	-6.21#
27	T,M	tert-Butyl ethyl ether (ETB	0.758	0.000	100.0#	0#	-6.38#
28	T,M	2-Butanone	0.069	0.000	100.0#	0#	-6.67#
29	T,M	2,2-Dichloropropane	0.330	0.000	100.0#	0#	-6.93#
30	T,M	cis-1,2-Dichloroethene	0.326	0.000	100.0#	0#	-7.05#
31	C,T,M	Chloroform	0.523	0.000	100.0#	0#	-7.45#
32	T,M	Bromochloromethane	0.141	0.000	100.0#	0#	-7.83#
33	T,M	Tetrahydrofuran	0.037	0.000	100.0#	0#	-7.93#
34	T,M	tert-Amyl alcohol	0.000	0.000	0.0	0#	-8.12#
35	S	Dibromofluoromethane	0.231	0.298	-29.0#	88	0.00
36	T,M	1,1,1-Trichloroethane	0.421	0.000	100.0#	0#	-8.35#
37	T,M	Cyclohexane	0.539	0.000	100.0#	0#	-8.35#
38	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	-8.69#
39	T,M	1,1-Dichloropropene	0.142	0.000	100.0#	0#	-8.73#
40	T,M	Carbon tetrachloride	0.349	0.000	100.0#	0#	-8.90#
41	T,M	tert-Amyl methyl ether (TAM	0.620	0.000	100.0#	0#	-9.06#
42	S	1,2-Dichloroethane-d4	0.221	0.229	-3.6	82	0.02
43	T,M	1,2-Dichloroethane	0.263	0.000	100.0#	0#	-9.29#
44	T,M	Benzene	1.146	0.000	100.0#	0#	-9.27#
45	T,M	Trichloroethene	0.298	0.000	100.0#	0#	-10.55#
46	T,M	Methylcyclohexane	0.568	0.000	100.0#	0#	-10.64#
47	C,T,M	1,2-Dichloropropane	0.284	0.000	100.0#	0#	-10.91#
48	T,M	1,4-Dioxane	0.001	0.000	100.0#	0#	-11.45#
49	T,M	Bromodichloromethane	0.368	0.000	100.0#	0#	-11.35#
50	T,M	Dibromomethane	0.134	0.000	100.0#	0#	-11.41#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	0.089	0.000	100.0#	0#	-12.04#
52	T,M	4-Methyl-2-pentanone	0.189	0.000	100.0#	0#	-12.08#
53	T,M	cis-1,3-Dichloropropene	0.450	0.000	100.0#	0#	-12.40#
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	77	0.01
55	S	Toluene-d8	1.294	1.471	-13.7	85	0.00
56	C,T,M	Toluene	1.509	0.000	100.0#	0#	-12.94#
57	T,M	Ethyl methacrylate	0.332	0.000	100.0#	0#	-13.38#
58	T,M	trans-1,3-Dichloropropene	0.424	0.000	100.0#	0#	-13.32#
59	T,M	1,1,2-Trichloroethane	0.217	0.000	100.0#	0#	-13.57#
60	T,M	2-Hexanone	0.158	0.000	100.0#	0#	-13.65#
61	T,M	1,3-Dichloropropane	0.400	0.000	100.0#	0#	-14.03#
62	T,M	Tetrachloroethene	0.310	0.000	100.0#	0#	-14.07#
63	T,M	Dibromochloromethane	0.267	0.000	100.0#	0#	-14.43#
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.206	0.000	100.0#	0#	-14.76#
66	T,M	1-Chlorohexane	0.643	0.000	100.0#	0#	-15.12#
67	P,T,M	Chlorobenzene	0.924	0.000#	100.0#	0#	-15.50#
68	T,M	1,1,1,2-Tetrachloroethane	0.292	0.000	100.0#	0#	-15.59#
69	C,T,M	Ethylbenzene	1.859	0.000	100.0#	0#	-15.60#
70	T,M	m-Xylene & p-Xylene	1.421	0.000	100.0#	0#	-15.74#
71	T,M	o-Xylene	1.399	0.000	100.0#	0#	-16.47#
72	T,M	Styrene	1.045	0.000	100.0#	0#	-16.53#
73	T,M	Isopropylbenzene	1.815	0.000	100.0#	0#	-17.08#
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	80	0.00
75	P,T,M	Bromoform	0.290	0.000#	100.0#	0#	-17.07#
76	P,T,M	1,1,2,2-Tetrachloroethane	0.578	0.000#	100.0#	0#	-17.36#
77	S	4-Bromofluorobenzene	1.116	1.085	2.8	77	0.00
78	T,M	1,2,3-Trichloropropane	0.159	0.000	100.0#	0#	-17.57#
79	T,M	trans-1,4-Dichloro-2-butene	0.176	0.000	100.0#	0#	-17.68#
80	T,M	n-Propylbenzene	5.517	0.000	100.0#	0#	-17.68#
81	T,M	Bromobenzene	0.790	0.000	100.0#	0#	-17.71#
82	T,M	1,3,5-Trimethylbenzene	3.365	0.000	100.0#	0#	-17.90#
83	T,M	2-Chlorotoluene	3.233	0.000	100.0#	0#	-17.91#
84	T,M	4-Chlorotoluene	2.963	0.000	100.0#	0#	-17.97#
85	T,M	tert-Butylbenzene	0.711	0.000	100.0#	0#	-18.35#
86	T,M	1,2,4-Trimethylbenzene	3.489	0.000	100.0#	0#	-18.39#
87	T,M	sec-Butylbenzene	4.751	0.000	100.0#	0#	-18.60#
88	T,M	p-Isopropyltoluene	4.038	0.000	100.0#	0#	-18.76#
89	T,M	1,3-Dichlorobenzene	1.767	0.000	100.0#	0#	-18.87#
90	T,M	1,2,3-Trimethylbenzene	3.158	0.000	100.0#	0#	-18.95#
91	T,M	1,4-Dichlorobenzene	1.750	0.000	100.0#	0#	-18.99#
92	T,M	n-Butylbenzene	4.351	0.000	100.0#	0#	-19.21#
93	T,M	1,2-Dichlorobenzene	1.462	0.000	100.0#	0#	-19.37#
94	T,M	1,2-Dibromo-3-chloropropane	0.102	0.000	100.0#	0#	-20.14#
95	T,M	1,2,4-Trichlorobenzene	1.149	0.000	100.0#	0#	-20.97#
96	T,M	Hexachlorobutadiene	0.621	0.000	100.0#	0#	-21.10#
97	T,M	Naphthalene	1.548	0.000	100.0#	0#	-21.24#
98	T,M	1,2,3-Trichlorobenzene	0.867	0.000	100.0#	0#	-21.49#

(#) = Out of Range SPCC's out = 5 CCC's out = 6

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 13:43 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.99	114	2935645	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.44	117	2248957	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.35	152	1030195	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	7.97	111	874088	10.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.10%		
42) 1,2-Dichloroethane-d4	9.11	65	671780	10.35	ug/l	0.02
Spiked Amount 10.000			Recovery =	103.50%		
55) Toluene-d8	12.81	98	3307626	11.36	ug/l	0.00
Spiked Amount 10.000			Recovery =	113.60%		
77) 4-Bromofluorobenzene	17.45	95	1117852	9.72	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.20%		
Target Compounds						Qvalue
7) Dichlorofluoromethane	2.56	67	2336339	11.37	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	1044991	11.03	ug/l	99

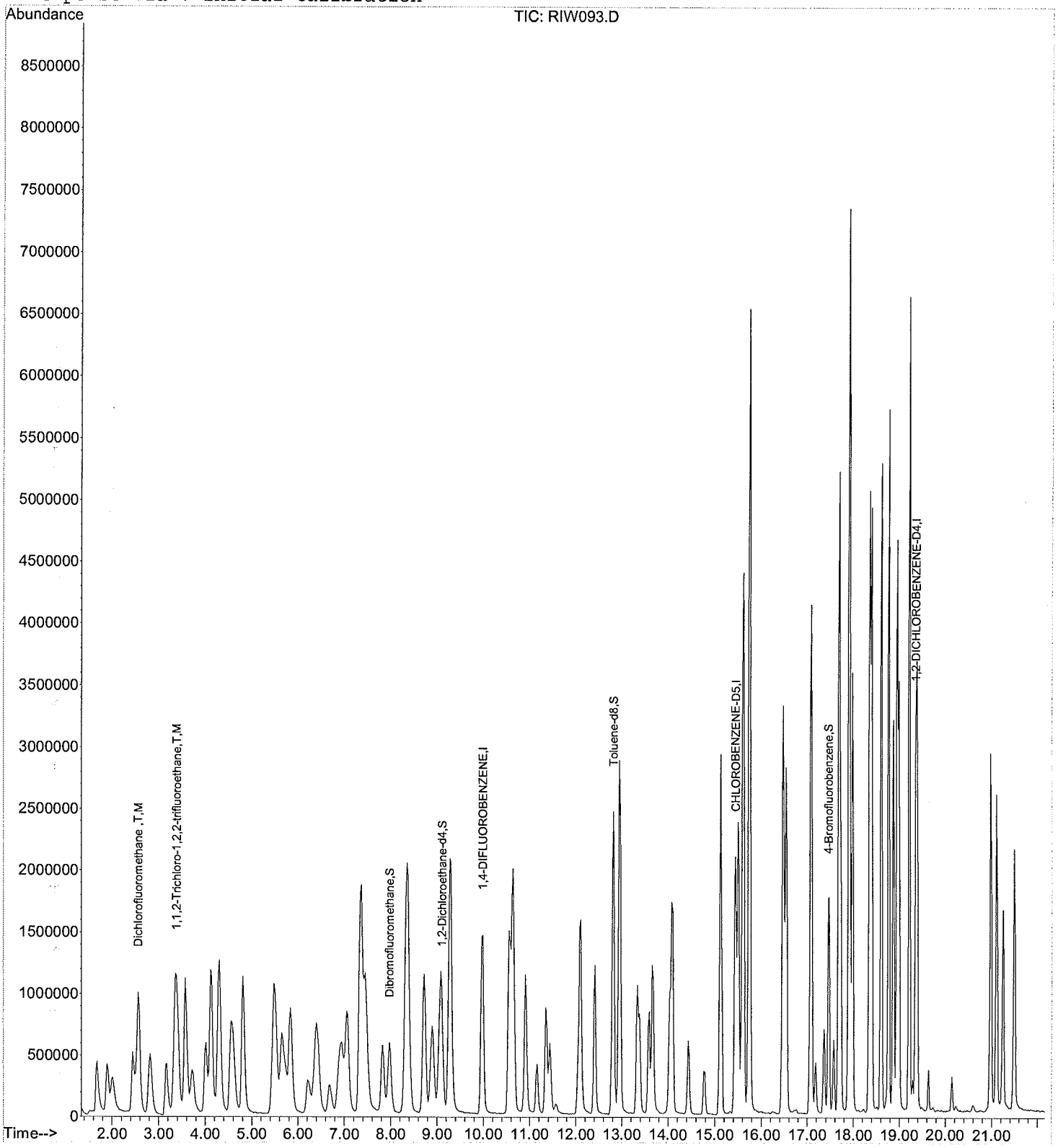
SM 10/14/24

(#) = qualifier out of range (m) = manual integration
RIW093.D VO06I19B.M Mon Oct 14 13:43:46 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24I19\RIW093.D Vial: 2
Acq On : 19 Sep 2024 7:59 pm Operator: PMai
Sample : IVO06I1902 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 14 13:43 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



RIW093.D VO06I19B.M Mon Oct 14 13:43:47 2024 SA 10/14/24 Page 2

DAILY CALIBRATIONS

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc.
Project : VA SALT LAKE CITY
Lab Code : EMAX
SDG No : 24J033
Lab File ID: RJV232
BFB Injection Date: 10/09/24
Instrument ID: 01
BFB Injection Time: 15:16

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.304
75	30 - 60% of mass 95	42.407
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.835
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	74.604
175	5 - 9% of mass 174	5.121(6.86)1
176	95 - 101% % of mass 174	73.296(98.25)1
177	5 - 9% % of mass 176	5.202(7.1)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CV001H0957	RJV233	10/09/24	16:34
2	LCS1W	V001J11L	RJV234	10/09/24	17:05
3	LCD1W	V001J11C	RJV235	10/09/24	17:35
4	MBLK1W	V001J11B	RJV237	10/09/24	18:34
5	TB06-GW100224	24J033-09	RJV242	10/09/24	21:03
6	FB10-GW100224	24J033-08	RJV246	10/09/24	23:01
7	MW40S-GW093024	24J033-01	RJV248	10/09/24	23:59
8	MW40D-GW093024	24J033-02	RJV249	10/10/24	00:29
9	MW43S-GW100124	24J033-03	RJV250	10/10/24	00:58
10	MW43D-GW100124	24J033-04	RJV251	10/10/24	01:27
11	MW44D-GW100124	24J033-05	RJV252	10/10/24	01:57
12	MW44S-GW100124	24J033-06	RJV253	10/10/24	02:26
13	MW42D-GW100224	24J033-07	RJV254	10/10/24	02:55

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RHV134
Instrument ID: 01

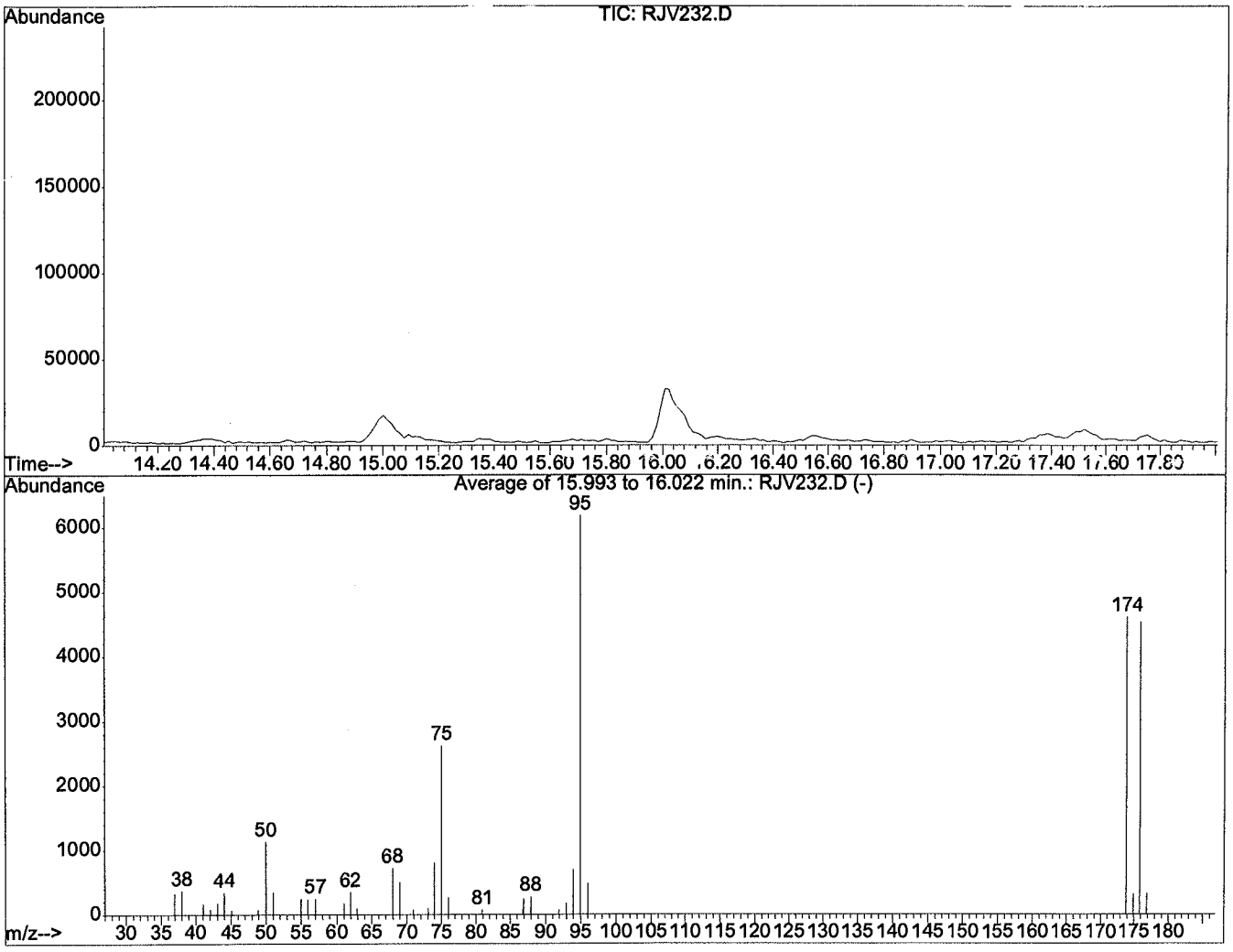
Project: VA SALT LAKE CITY
SDG No: 24J033
Date Analyzed: 08/09/24
Time Analyzed: 20:17

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	962079	8.56	831588	13.73	320498	18.69
	UPPER LIMIT	1924158	8.73	1663176	13.90	640996	18.86
	LOWER LIMIT	481040	8.39	415794	13.56	160249	18.52
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	1036634	8.54	828860	13.71	475416	18.67
2	LCS1W	1100760	8.56	876192	13.71	513365	18.67
3	LCD1W	1096362	8.56	877692	13.71	512003	18.67
4	MBLK1W	1218981	8.56	959786	13.71	480878	18.67
5	TB06-GW100224	986008	8.55	806264	13.70	408673	18.68
6	FB10-GW100224	917783	8.54	749418	13.70	374123	18.67
7	MW40S-GW093024	900655	8.54	723411	13.70	367716	18.67
8	MW40D-GW093024	881786	8.54	727333	13.70	361807	18.67
9	MW43S-GW100124	857746	8.55	700213	13.70	352565	18.67
10	MW43D-GW100124	835761	8.55	687663	13.70	349141	18.68
11	MW44D-GW100124	807136	8.55	661610	13.70	325798	18.67
12	MW44S-GW100124	803062	8.55	668666	13.70	335023	18.68
13	MW42D-GW100224	779217	8.55	655864	13.70	332055	18.67

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

BFB

Data File : D:\HPCHEM\1\DATA\24J09\RJV232.D Vial: 1
Acq On : 9 Oct 2024 3:16 pm Operator: DNguye/CLi
Sample : BFB01J11 Inst : 01
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls



AutoFind: Scans 978, 979, 980; Background Corrected with Scan 973

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	1133	PASS
75	95	30	60	42.4	2625	PASS
95	95	100	100	100.0	6190	PASS
96	95	5	9	7.8	485	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	74.6	4618	PASS
175	174	5	9	6.9	317	PASS
176	174	95	101	98.2	4537	PASS
177	176	5	9	7.1	322	PASS

RJV232.D VO01H09.M Wed Oct 16 15:33:13 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV233.D Vial: 2
Acq On : 9 Oct 2024 4:34 pm Operator: DNguye/CLingl
Sample : CVO01H0957 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	108	-0.02
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	9.588	4.1	89	-0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	11.428	-14.3	115	-0.01
6	C,T,M	Vinyl chloride	10.000	11.779	-17.8	112	-0.01
7	T,M	Bromomethane	10.000	9.292	7.1	98	0.00
8	T,M	Chloroethane	10.000	11.594	-15.9	122	-0.06
9	T,M	Dichlorofluoromethane	10.000	17.009	-70.1#	181	0.00
10	T,M	Trichlorofluoromethane	10.000	7.229	27.7	68	0.13
11	T,M	Acrolein	50.000	50.487	-1.0	114	-0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	12.796	-28.0#	133	-0.04
13	T,M	Acetone	50.000	48.391	3.2	105	-0.03
14	C,T,M	1,1-Dichloroethene	10.000	11.076	-10.8	116	-0.01
15	T,M	tert-Butyl alcohol	250.000	258.710	-3.5	108	-0.03
16	T,M	Iodomethane	10.000	11.812	-18.1	122	0.03
17	T,M	Methyl acetate	10.000	10.460	-4.6	114	-0.01
18	T,M	Methylene chloride	10.000	12.263	-22.6#	134	-0.01
19	T,M	Carbon disulfide	10.000	11.354	-13.5	116	-0.01
20	T,M	Acrylonitrile	50.000	56.802	-13.6	125	-0.01
21	T,M	tert-Butyl methyl ether (MT	10.000	12.757	-27.6#	133	-0.03
22	T,M	trans-1,2-Dichloroethene	10.000	11.470	-14.7	120	-0.01
23	T,M	Isopropyl ether (DIPE)	10.000	14.459	-44.6#	154	-0.01
24	T,M	Vinyl acetate	10.000	8.304	17.0	85	-0.01
25	P,T,M	1,1-Dichloroethane	10.000	11.507	-15.1	124	-0.01
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.01
27	T,M	tert-Butyl ethyl ether (ETB	10.000	12.164	-21.6#	127	-0.03
28	T,M	2-Butanone	50.000	50.243	-0.5	112	-0.01
29	T,M	2,2-Dichloropropane	10.000	9.653	3.5	100	-0.03
30	T,M	cis-1,2-Dichloroethene	10.000	11.515	-15.2	121	-0.02
31	C,T,M	Chloroform	10.000	9.923	0.8	105	-0.01
32	T,M	Bromochloromethane	10.000	11.403	-14.0	121	-0.02
33	T,M	Tetrahydrofuran	10.000	10.060	-0.6	120	0.00
34	S	Dibromofluoromethane	10.000	9.760	2.4	97	-0.01
35	T,M	1,1,1-Trichloroethane	10.000	8.877	11.2	89	-0.02
36	T,M	Cyclohexane	10.000	9.952	0.5	103	-0.01
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.04
38	T,M	1,1-Dichloropropene	10.000	10.348	-3.5	111	-0.02
39	T,M	Carbon tetrachloride	10.000	8.140	18.6	82	-0.02
40	T,M	tert-Amyl methyl ether (TAM	10.000	12.925	-29.3#	135	-0.02
41	S	1,2-Dichloroethane-d4	10.000	8.860	11.4	86	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV233.D Vial: 2
Acq On : 9 Oct 2024 4:34 pm Operator: DNguye/CLingl
Sample : CVO01H0957 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	12.296	-23.0#	127	-0.02
43	T,M	1,2-Dichloroethane	10.000	9.159	8.4	89	-0.02
44	T,M	Trichloroethene	10.000	10.188	-1.9	107	-0.02
45	T,M	Methylcyclohexane	10.000	9.801	2.0	100	-0.03
46	C,T,M	1,2-Dichloropropane	10.000	12.040	-20.4#	126	-0.02
47	T,M	Bromodichloromethane	10.000	9.325	6.8	100	-0.03
48	T,M	1,4-Dioxane	200.000	178.548	10.7	95	0.00
49	T,M	Dibromomethane	10.000	9.793	2.1	103	0.02
50	T,M	2-Chloroethyl vinyl ether	10.000	7.754	22.5#	86	-0.02
51	T,M	4-Methyl-2-pentanone	50.000	53.503	-7.1	106	-0.02
52	T,M	cis-1,3-Dichloropropene	10.000	10.926	-9.3	111	-0.02
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	100	-0.02
54	S	Toluene-d8	10.000	11.025	-10.3	103	-0.02
55	C,T,M	Toluene	10.000	12.193	-21.9#	116	-0.02
56	T,M	Ethyl methacrylate	10.000	12.504	-25.0#	117	-0.02
57	T,M	trans-1,3-Dichloropropene	10.000	10.442	-4.4	97	0.00
58	T,M	1,1,2-Trichloroethane	10.000	10.893	-8.9	107	-0.02
59	T,M	2-Hexanone	50.000	50.701	-1.4	99	0.00
60	T,M	1,3-Dichloropropane	10.000	11.595	-16.0	113	-0.02
61	T,M	Tetrachloroethene	10.000	11.092	-10.9	113	-0.02
62	T,M	Dibromochloromethane	10.000	9.731	2.7	93	-0.02
63	T,M	1,2-Dibromoethane	10.000	10.431	-4.3	104	-0.02
64	T,M	1-Chlorohexane	10.000	12.358	-23.6#	124	-0.02
65	P,M	Chlorobenzene	10.000	10.607	-6.1	102	-0.02
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.279	-2.8	96	0.00
67	C,T,M	Ethylbenzene	10.000	11.032	-10.3	104	-0.02
68	T,M	m-Xylene & p-Xylene	20.000	21.252	-6.3	103	-0.02
69	T,M	o-Xylene	10.000	13.026	-30.3#	121	-0.02
70	T,M	Styrene	10.000	13.760	-37.6#	131	-0.02
71	T,M	Isopropylbenzene	10.000	12.250	-22.5#	116	0.00
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	148	-0.02
73	P,T,M	Bromoform	10.000	7.169	28.3#	104	-0.02
74	T,M	trans-1,4-Dichloro-2-butene	10.000	6.481	35.2#	96	0.00
75	T,M	1,1,2,2-Tetrachloroethane	10.000	9.060	9.4	132	-0.02
76	S	4-Bromofluorobenzene	10.000	9.316	6.8	138	-0.02
77	T,M	1,2,3-Trichloropropane	10.000	6.692	33.1#	104	-0.02
78	T,M	n-Propylbenzene	10.000	8.316	16.8	123	-0.02
79	T,M	Bromobenzene	10.000	8.941	10.6	137	-0.02
80	T,M	1,3,5-Trimethylbenzene	10.000	7.920	20.8#	120	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV233.D Vial: 2
Acq On : 9 Oct 2024 4:34 pm Operator: DNguye/CLingl
Sample : CVO01H0957 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	7.697	23.0#	117	-0.02
82	T,M	4-Chlorotoluene	10.000	8.118	18.8	122	-0.02
83	T,M	tert-Butylbenzene	10.000	8.327	16.7	130	-0.02
84	T,M	1,2,4-Trimethylbenzene	10.000	8.178	18.2	120	-0.02
85	T,M	sec-Butylbenzene	10.000	8.080	19.2	118	0.00
86	T,M	p-Isopropyltoluene	10.000	7.593	24.1#	111	0.00
87	T,M	1,3-Dichlorobenzene	10.000	8.492	15.1	128	-0.02
88	T,M	1,2,3-Trimethylbenzene	10.000	8.797	12.0	127	-0.02
89	T,M	1,4-Dichlorobenzene	10.000	8.437	15.6	127	0.00
90	T,M	n-Butylbenzene	10.000	8.399	16.0	121	-0.02
91	T,M	1,2-Dichlorobenzene	10.000	8.423	15.8	125	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	8.407	15.9	115	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	8.775	12.2	130	0.00
94	T,M	Hexachlorobutadiene	10.000	7.994	20.1#	116	-0.02
95	T,M	Naphthalene	10.000	8.015	19.8	114	-0.02
96	T,M	1,2,3-Trichlorobenzene	10.000	8.951	10.5	129	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 2

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV233.D Vial: 2
Acq On : 9 Oct 2024 4:34 pm Operator: DNguye/CLingl
Sample : CVO01H0957 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	108	-0.02
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.329	0.316	4.0	89	-0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.239	0.273	-14.2	115	-0.01
6	C,T,M	Vinyl chloride	0.210	0.248	-18.1	112	-0.01
7	T,M	Bromomethane	0.186	0.173	7.0	98	0.00
8	T,M	Chloroethane	0.163	0.189	-16.0	122	-0.06
9	T,M	Dichlorofluoromethane	0.360	0.613	-70.3#	181	0.00
10	T,M	Trichlorofluoromethane	0.478	0.346	27.6#	68	0.13
11	T,M	Acrolein	0.010	0.010	0.0	114	-0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.196	0.251	-28.1#	133	-0.04
13	T,M	Acetone	0.048	0.043	10.4	105	-0.03
14	C,T,M	1,1-Dichloroethene	0.484	0.536	-10.7	116	-0.01
15	T,M	tert-Butyl alcohol	0.013	0.014	-7.7	108	-0.03
16	T,M	Iodomethane	0.437	0.517	-18.3	122	0.03
17	T,M	Methyl acetate	0.103	0.108	-4.9	114	-0.01
18	T,M	Methylene chloride	0.336	0.412	-22.6#	134	-0.01
19	T,M	Carbon disulfide	0.838	0.951	-13.5	116	-0.01
20	T,M	Acrylonitrile	0.040	0.045	-12.5	125	-0.01
21	T,M	tert-Butyl methyl ether (MT	0.550	0.702	-27.6#	133	-0.03
22	T,M	trans-1,2-Dichloroethene	0.441	0.505	-14.5	120	-0.01
23	T,M	Isopropyl ether (DIPE)	0.880	1.272	-44.5#	154	-0.01
24	T,M	Vinyl acetate	0.321	0.267	16.8	85	-0.01
25	P,T,M	1,1-Dichloroethane	0.540	0.621	-15.0	124	-0.01
26	T,M	2-Butanol	0.000	0.009	0.0	0#	-0.01
27	T,M	tert-Butyl ethyl ether (ETB	0.813	0.989	-21.6#	127	-0.03
28	T,M	2-Butanone	0.066	0.066	0.0	112	-0.01
29	T,M	2,2-Dichloropropane	0.538	0.520	3.3	100	-0.03
30	T,M	cis-1,2-Dichloroethene	0.340	0.391	-15.0	121	-0.02
31	C,T,M	Chloroform	0.608	0.603	0.8	105	-0.01
32	T,M	Bromochloromethane	0.206	0.235	-14.1	121	-0.02
33	T,M	Tetrahydrofuran	0.037	0.037	0.0	120	0.00
34	S	Dibromofluoromethane	0.304	0.297	2.3	97	-0.01
35	T,M	1,1,1-Trichloroethane	0.600	0.533	11.2	89	-0.02
36	T,M	Cyclohexane	0.432	0.430	0.5	103	-0.01
37	T,M	2,2,4-Trimethylpentane	0.000	0.019	0.0	0#	-0.04
38	T,M	1,1-Dichloropropene	0.164	0.170	-3.7	111	-0.02
39	T,M	Carbon tetrachloride	0.499	0.406	18.6	82	-0.02
40	T,M	tert-Amyl methyl ether (TAM	0.598	0.773	-29.3#	135	-0.02
41	S	1,2-Dichloroethane-d4	0.270	0.240	11.1	86	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV233.D Vial: 2
Acq On : 9 Oct 2024 4:34 pm Operator: DNguye/CLingl
Sample : CVO01H0957 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.101	1.354	-23.0#	127	-0.02
43	T,M	1,2-Dichloroethane	0.344	0.315	8.4	89	-0.02
44	T,M	Trichloroethene	0.350	0.357	-2.0	107	-0.02
45	T,M	Methylcyclohexane	0.482	0.472	2.1	100	-0.03
46	C,T,M	1,2-Dichloropropane	0.251	0.303	-20.7#	126	-0.02
47	T,M	Bromodichloromethane	0.439	0.409	6.8	100	-0.03
48	T,M	1,4-Dioxane	0.001	0.001	0.0	95	0.00
49	T,M	Dibromomethane	0.140	0.137	2.1	103	-0.02
50	T,M	2-Chloroethyl vinyl ether	0.079	0.061	22.8#	86	-0.02
51	T,M	4-Methyl-2-pentanone	0.150	0.161	-7.3	106	-0.02
52	T,M	cis-1,3-Dichloropropene	0.444	0.485	-9.2	111	-0.02
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	100	-0.02
54	S	Toluene-d8	1.222	1.347	-10.2	103	-0.02
55	C,T,M	Toluene	1.498	1.827	-22.0#	116	-0.02
56	T,M	Ethyl methacrylate	0.253	0.316	-24.9#	117	-0.02
57	T,M	trans-1,3-Dichloropropene	0.435	0.454	-4.4	97	0.00
58	T,M	1,1,2-Trichloroethane	0.219	0.239	-9.1	107	-0.02
59	T,M	2-Hexanone	0.111	0.122	-9.9	99	0.00
60	T,M	1,3-Dichloropropane	0.391	0.453	-15.9	113	-0.02
61	T,M	Tetrachloroethene	0.340	0.378	-11.2	113	-0.02
62	T,M	Dibromochloromethane	0.290	0.282	2.8	93	-0.02
63	T,M	1,2-Dibromoethane	0.221	0.231	-4.5	104	-0.02
64	T,M	1-Chlorohexane	0.695	0.859	-23.6#	124	-0.02
65	P,M	Chlorobenzene	1.030	1.092	-6.0	102	-0.02
66	T,M	1,1,1,2-Tetrachloroethane	0.344	0.354	-2.9	96	0.00
67	C,T,M	Ethylbenzene	1.876	2.069	-10.3	104	-0.02
68	T,M	m-Xylene & p-Xylene	1.481	1.574	-6.3	103	-0.02
69	T,M	o-Xylene	1.428	1.860	-30.3#	121	-0.02
70	T,M	Styrene	1.045	1.438	-37.6#	131	-0.02
71	T,M	Isopropylbenzene	1.956	2.396	-22.5#	116	0.00
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	118	-0.02
73	P,T,M	Bromoform	0.367	0.263	28.3#	104	-0.02
74	T,M	trans-1,4-Dichloro-2-butene	0.223	0.145	35.0#	96	0.00
75	T,M	1,1,2,2-Tetrachloroethane	0.597	0.541	9.4	132	-0.02
76	S	4-Bromofluorobenzene	1.269	1.182	6.9	138	-0.02
77	T,M	1,2,3-Trichloropropane	0.220	0.147	33.2#	104	-0.02
78	T,M	n-Propylbenzene	6.357	5.287	16.8	123	-0.02
79	T,M	Bromobenzene	0.963	0.861	10.6	137	-0.02
80	T,M	1,3,5-Trimethylbenzene	4.198	3.324	20.8#	120	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV233.D Vial: 2
Acq On : 9 Oct 2024 4:34 pm Operator: DNguye/CLingl
Sample : CVO01H0957 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	4.173	3.212	23.0#	117	-0.02
82	T,M	4-Chlorotoluene	3.565	2.894	18.8	122	-0.02
83	T,M	tert-Butylbenzene	0.928	0.773	16.7	130	-0.02
84	T,M	1,2,4-Trimethylbenzene	4.010	3.280	18.2	120	-0.02
85	T,M	sec-Butylbenzene	5.662	4.575	19.2	118	0.00
86	T,M	p-Isopropyltoluene	4.820	3.660	24.1#	111	0.00
87	T,M	1,3-Dichlorobenzene	1.994	1.693	15.1	128	-0.02
88	T,M	1,2,3-Trimethylbenzene	3.890	3.422	12.0	127	-0.02
89	T,M	1,4-Dichlorobenzene	1.928	1.627	15.6	127	0.00
90	T,M	n-Butylbenzene	4.412	3.706	16.0	121	-0.02
91	T,M	1,2-Dichlorobenzene	1.642	1.383	15.8	125	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.093	0.078	16.1	115	0.00
93	T,M	1,2,4-Trichlorobenzene	1.116	0.979	12.3	130	0.00
94	T,M	Hexachlorobutadiene	0.732	0.586	19.9	116	-0.02
95	T,M	Naphthalene	1.591	1.275	19.9	114	-0.02
96	T,M	1,2,3-Trichlorobenzene	0.853	0.763	10.6	129	0.00

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV233.D Vial: 2
Acq On : 9 Oct 2024 4:34 pm Operator: DNguye/CLingl
Sample : CVO01H0957 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 16:56 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	1036634	10.00 ug/l	-0.02
53) CHLOROBENZENE-D5	13.71	117	828860	10.00 ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	475416	10.00 ug/l	-0.02
System Monitoring Compounds					
34) Dibromofluoromethane	7.23	111	307661	9.76 ug/l	-0.01
Spiked Amount 10.000			Recovery =	97.60%	
41) 1,2-Dichloroethane-d4	7.97	65	248298	8.86 ug/l	-0.02
Spiked Amount 10.000			Recovery =	88.60%	
54) Toluene-d8	11.02	98	1116874	11.02 ug/l	-0.02
Spiked Amount 10.000			Recovery =	110.20%	
76) 4-Bromofluorobenzene	15.99	95	561879	9.32 ug/l	-0.02
Spiked Amount 10.000			Recovery =	93.20%	
Target Compounds					Qvalue
3) Dichlorodifluoromethane	2.23	85	327090	9.59 ug/l	98
5) Chloromethane	2.53	50	282589	11.43 ug/l	100
6) Vinyl chloride	2.67	62	256938	11.78 ug/l	100
7) Bromomethane	3.21	94	179502	9.29 ug/l	96
8) Chloroethane	3.21	64	196336	11.59 ug/l	75
9) Dichlorofluoromethane	3.35	67	635278	17.01 ug/l	91
10) Trichlorofluoromethane	3.61	101	358393	7.23 ug/l	96
11) Acrolein	4.00	56	52743	50.49 ug/l	81
12) 1,1,2-Trichloro-1,2,2-trif	4.10	151	259839	12.80 ug/l	95
13) Acetone	4.07	43	225414	48.39 ug/l	82
14) 1,1-Dichloroethene	4.24	61	555594	11.08 ug/l	94
15) tert-Butyl alcohol	4.34	59	360847	258.71 ug/l	98
16) Iodomethane	4.69	142	535654	11.81 ug/l	80
17) Methyl acetate	4.67	43	112126	10.46 ug/l	98
18) Methylene chloride	4.87	49	427554	12.26 ug/l	95
19) Carbon disulfide	4.89	76	985828	11.35 ug/l	99
20) Acrylonitrile	5.04	53	234018	56.80 ug/l	98
21) tert-Butyl methyl ether (M	5.07	73	727685	12.76 ug/l	90
22) trans-1,2-Dichloroethene	5.26	61	523995	11.47 ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	1318619	14.46 ug/l	100
24) Vinyl acetate	5.84	43	276581	8.30 ug/l	97
25) 1,1-Dichloroethane	5.84	63	644216	11.51 ug/l	99
27) tert-Butyl ethyl ether (ET	6.23	59	1025657	12.16 ug/l	96
28) 2-Butanone	6.43	43	342907	50.24 ug/l	98
29) 2,2-Dichloropropane	6.62	77	538676	9.65 ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	405705	11.51 ug/l	95
31) Chloroform	6.92	83	625567	9.92 ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV233.D Vial: 2
Acq On : 9 Oct 2024 4:34 pm Operator: DNguye/CLingl
Sample : CVO01H0957 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 16:56 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	244048	11.40	ug/l	93
33)	Tetrahydrofuran	7.21	42	38334	10.06	ug/l	95
35)	1,1,1-Trichloroethane	7.49	97	552250	8.88	ug/l	97
36)	Cyclohexane	7.52	84	445840	9.95	ug/l	99
38)	1,1-Dichloropropene	7.72	110	176357	10.35	ug/l	99
39)	Carbon tetrachloride	7.88	119	420928	8.14	ug/l	98
40)	tert-Amyl methyl ether (TA	7.89	73	801058	12.93	ug/l	99
42)	Benzene	8.13	78	1403516	12.30	ug/l	98
43)	1,2-Dichloroethane	8.10	62	326915	9.16	ug/l	100
44)	Trichloroethene	9.06	130	369993	10.19	ug/l	97
45)	Methylcyclohexane	9.15	83	489747	9.80	ug/l	93
46)	1,2-Dichloropropane	9.34	63	313742	12.04	ug/l	82
47)	Bromodichloromethane	9.71	83	424075	9.33	ug/l	96
48)	1,4-Dioxane	9.77	88	23032	178.55	ug/l	86
49)	Dibromomethane	9.82	93	142014	9.79	ug/l	90
50)	2-Chloroethyl vinyl ether	10.22	63	63253	7.75	ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	834642	53.56	ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	502719	10.93	ug/l	99
55)	Toluene	11.15	91	1514358	12.19	ug/l	99
56)	Ethyl methacrylate	11.45	69	261880	12.50	ug/l	90
57)	trans-1,3-Dichloropropene	11.48	75	376137	10.44	ug/l	98
58)	1,1,2-Trichloroethane	11.74	97	198180	10.89	ug/l	94
59)	2-Hexanone	11.76	43	504484	50.70	ug/l	96
60)	1,3-Dichloropropane	12.19	76	375656	11.60	ug/l	98
61)	Tetrachloroethene	12.29	164	312905	11.09	ug/l	92
62)	Dibromochloromethane	12.66	129	234060	9.73	ug/l	100
63)	1,2-Dibromoethane	13.02	107	191059	10.43	ug/l	100
64)	1-Chlorohexane	13.30	91	711844	12.36	ug/l	98
65)	Chlorobenzene	13.77	112	905421	10.61	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	293017	10.28	ug/l	98
67)	Ethylbenzene	13.88	91	1715205	11.03	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2608888	21.25	ug/l	100
69)	o-Xylene	14.82	91	1541391	13.03	ug/l	100
70)	Styrene	14.90	104	1191724	13.76	ug/l	93
71)	Isopropylbenzene	15.52	105	1986100	12.25	ug/l	98
73)	Bromoform	15.55	173	125169	7.17	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.62	53	68817	6.48	ug/l	87
75)	1,1,2,2-Tetrachloroethane	15.85	83	257260	9.06	ug/l	94
77)	1,2,3-Trichloropropane	16.14	110	69935	6.69	ug/l	86
78)	n-Propylbenzene	16.29	91	2513362	8.32	ug/l	98
79)	Bromobenzene	16.38	156	409210	8.94	ug/l	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J09\RJV233.D Vial: 2
Acq On : 9 Oct 2024 4:34 pm Operator: DNguye/CLingl
Sample : CVO01H0957 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 16:56 2024 Quant Results File: VO01H09.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration
DataAcq Meth : VO01H09

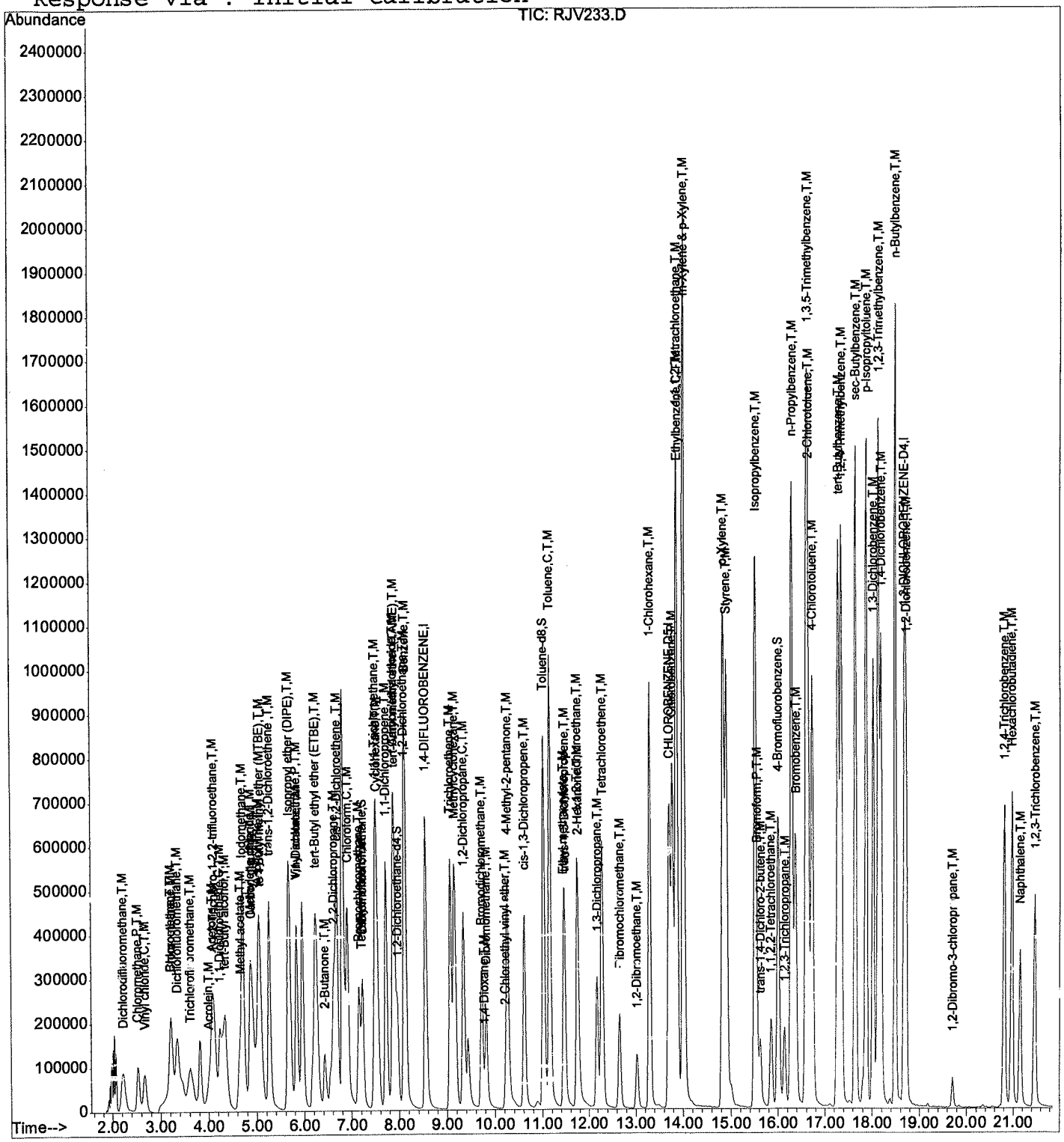
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1580462	7.92	ug/l	97
81)	2-Chlorotoluene	16.63	91	1527005	7.70	ug/l	96
82)	4-Chlorotoluene	16.72	91	1375728	8.12	ug/l	98
83)	tert-Butylbenzene	17.28	134	367475	8.33	ug/l	94
84)	1,2,4-Trimethylbenzene	17.34	105	1559232	8.18	ug/l	97
85)	sec-Butylbenzene	17.65	105	2175065	8.08	ug/l	98
86)	p-Isopropyltoluene	17.87	119	1739831	7.59	ug/l	95
87)	1,3-Dichlorobenzene	18.02	146	805074	8.49	ug/l	93
88)	1,2,3-Trimethylbenzene	18.13	105	1626975	8.80	ug/l	98
89)	1,4-Dichlorobenzene	18.18	146	773419	8.44	ug/l	93
90)	n-Butylbenzene	18.48	91	1761930	8.40	ug/l	97
91)	1,2-Dichlorobenzene	18.72	146	657510	8.42	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.71	157	36974	8.41	ug/l	93
93)	1,2,4-Trichlorobenzene	20.81	180	465492	8.77	ug/l	97
94)	Hexachlorobutadiene	20.97	225	278375	7.99	ug/l	100
95)	Naphthalene	21.15	128	606091	8.02	ug/l	98
96)	1,2,3-Trichlorobenzene	21.47	180	362787	8.95	ug/l	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J09\RJV233.D Vial: 2
Acq On : 9 Oct 2024 4:34 pm Operator: DNguye/CLing
Sample : CVO01H0957 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 9 16:56 2024 Quant Results File: VO01H09.RES

Method : D:\HPCHEM\1\METHODS\VO01H09.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon Aug 26 20:20:54 2024
Response via : Initial Calibration



FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc.

Project : VA SALT LAKE CITY

Lab Code : EMAX
SDG No : 24J033
Lab File ID: RJW256
BFB Injection Date: 10/11/24
Instrument ID: 06
BFB Injection Time: 13:54

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	15.490
75	30 - 60% of mass 95	41.922
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.091
173	Less than 2% of mass 174	0.353(.57)1
174	Greater than 50% of mass 95	62.226
175	5 - 9% of mass 174	4.356(7)1
176	95 - 101% % of mass 174	61.044(98.1)1
177	5 - 9% % of mass 176	3.699(6.06)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CVO06I1928	RJW257	10/11/24	15:48
2	MBLK2W	VO06J12B	RJW260	10/11/24	17:06
3	MW43D-GW100124	24J033-04I	RJW263	10/11/24	18:25
4	LCS2W	VO06J12C	RJW278	10/12/24	00:57

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RIW080
Instrument ID: 06

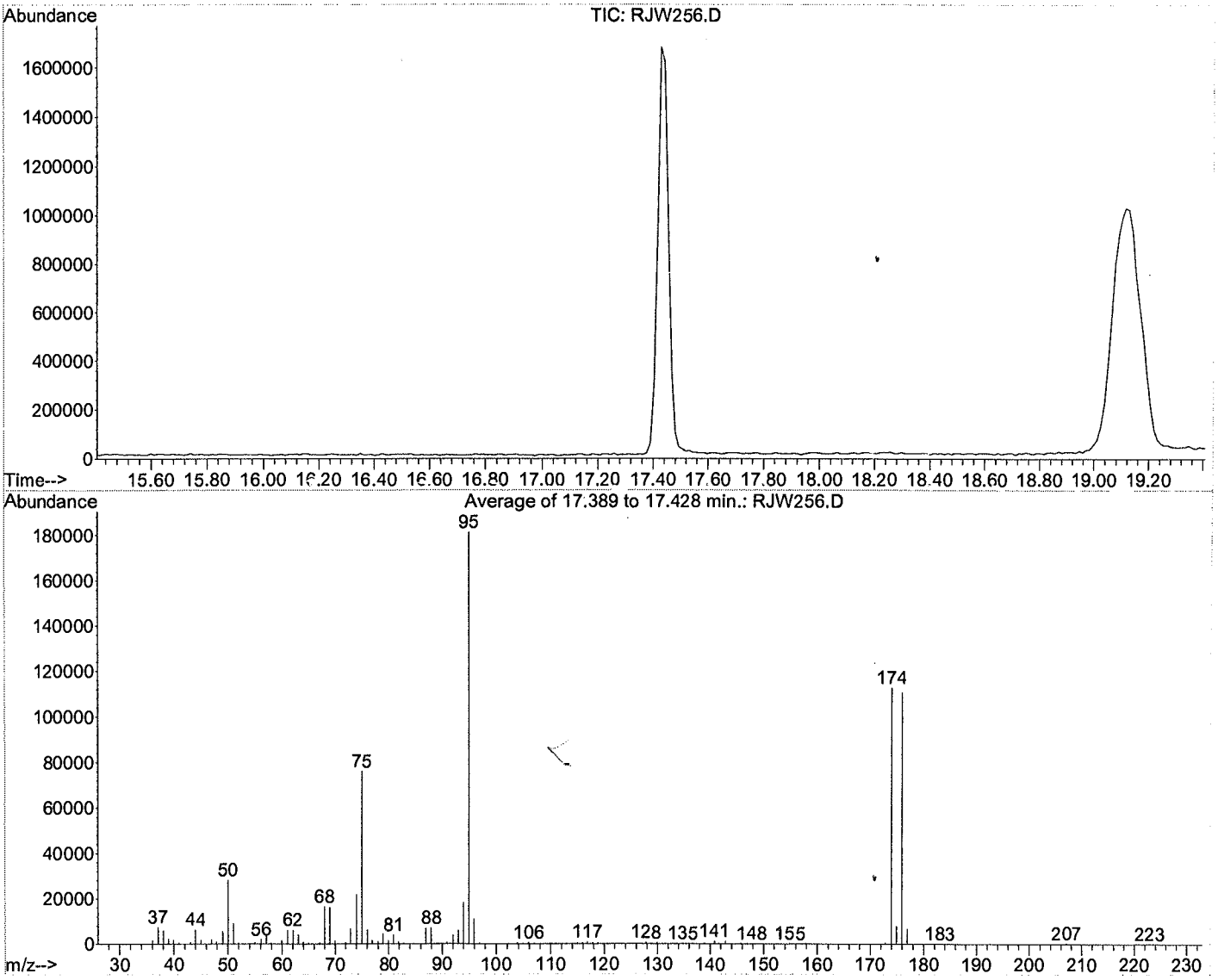
Project: VA SALT LAKE CITY
SDG No: 24J033
Date Analyzed: 09/19/24
Time Analyzed: 13:18

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	3477436	9.96	2910329	15.43	1285376	19.35
	UPPER LIMIT	6954872	10.1	5820658	15.60	2570752	19.52
	LOWER LIMIT	1738718	9.79	1455165	15.26	642688	19.18
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	3268502	9.94	2262106	15.42	902271	19.33
2	MBLK2W	3653908	9.94	2881529	15.42	1250629	19.33
3	MW43D-GW100124	3554261	9.94	2761126	15.42	1165204	19.33
4	LCS2W	3238819	9.92	2579682	15.42	1114775	19.34

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data File : D:\HPCHEM\1\DATA\24J11\RJW256.D
Acq On : 11 Oct 2024 1:54 pm
Sample : BFB06J12
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260

Vial: 1
Operator: PMai
Inst : 06
Multiplr: 1.00



Spectrum Information: Average of 17.389 to 17.428 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.5	28073	PASS
75	95	30	60	41.9	75976	PASS
95	95	100	100	100.0	181231	PASS
96	95	5	9	5.1	11039	PASS
173	174	0.00	2	0.6	639	PASS
174	95	50	100	62.2	112772	PASS
175	174	5	9	7.0	7894	PASS
176	174	95	101	98.1	110630	PASS
177	176	5	9	6.1	6704	PASS

RJW256.D VO06I19B.M Mon Nov 11 14:52:29 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J11\RJW257.D Vial: 2
Acq On : 11 Oct 2024 3:48 pm Operator: PMai
Sample : CVO06I1928 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	94	-0.02
2	T,M	Dichlorodifluoromethane	10.000	10.581	-5.8	117	-0.08
3	P,T,M	Chloromethane	10.000	10.124	-1.2	107	-0.08
4	C,T,M	Vinyl chloride	10.000	10.533	-5.3	124	-0.08
5	T,M	Bromomethane	10.000	11.483	-14.8	127	-0.08
6	T,M	Chloroethane	10.000	11.472	-14.7	122	-0.08
7	T,M	Dichlorofluoromethane	10.000	6.668	33.3#	67	-0.06
8	T,M	Trichlorofluoromethane	10.000	12.981	-29.8#	137	-0.08
9	T,M	Acrolein	50.000	78.888	-57.8#	174	-0.06
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	7.238	27.6#	78	-0.06
11	T,M	Acetone	50.000	43.104	13.8	83	-0.08
12	C,T,M	1,1-Dichloroethene	10.000	8.576	14.2	80	-0.06
13	T,M	tert-Butyl alcohol	250.000	168.622	32.6#	57	-0.08
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	8.228	17.7	71	-0.06
16	T,M	Iodomethane	10.000	9.336	6.6	88	-0.08
17	T,M	Allyl chloride	10.000	10.179	-1.8	93	-0.06
18	T,M	Methylene chloride	10.000	8.198	18.0	80	-0.08
19	T,M	Carbon disulfide	10.000	0.152	98.5#	0	0.19#
20	T,M	Acrylonitrile	50.000	48.714	2.6	89	-0.06
21	T,M	tert-Butyl methyl ether (MT	10.000	10.571	-5.7	92	-0.06
22	T,M	trans-1,2-Dichloroethene	10.000	10.440	-4.4	97	-0.08
23	T,M	Isopropyl ether (DIPE)	10.000	9.285	7.1	82	-0.06
24	T,M	Vinyl acetate	10.000	8.464	15.4	83	-0.06
25	P,T,M	1,1-Dichloroethane	10.000	9.214	7.9	84	-0.08
26	T,M	2-Butanol	250.000	134.940	46.0#	48	-0.08
27	T,M	tert-Butyl ethyl ether (ETB	10.000	9.604	4.0	84	-0.06
28	T,M	2-Butanone	50.000	38.934	22.1#	73	-0.06
29	T,M	2,2-Dichloropropane	10.000	12.348	-23.5#	111	-0.06
30	T,M	cis-1,2-Dichloroethene	10.000	9.699	3.0	90	-0.06
31	C,T,M	Chloroform	10.000	9.457	5.4	89	-0.06
32	T,M	Bromochloromethane	10.000	9.591	4.1	86	-0.06
33	T,M	Tetrahydrofuran	10.000	6.208	37.9#	61	-0.04
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-0.04
35	S	Dibromofluoromethane	10.000	10.778	-7.8	100	-0.06
36	T,M	1,1,1-Trichloroethane	10.000	10.945	-9.5	99	-0.04
37	T,M	Cyclohexane	10.000	8.636	13.6	76	-0.06
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.02
39	T,M	1,1-Dichloropropene	10.000	9.399	6.0	87	-0.04
40	T,M	Carbon tetrachloride	10.000	10.672	-6.7	95	-0.04
41	T,M	tert-Amyl methyl ether (TAM	10.000	9.749	2.5	85	-0.04
42	S	1,2-Dichloroethane-d4	10.000	8.389	16.1	74	-0.04
43	T,M	1,2-Dichloroethane	10.000	7.459	25.4#	66	-0.04
44	T,M	Benzene	10.000	9.568	4.3	84	-0.04
45	T,M	Trichloroethene	10.000	10.274	-2.7	91	-0.04
46	T,M	Methylcyclohexane	10.000	9.887	1.1	84	-0.04
47	C,T,M	1,2-Dichloropropane	10.000	7.988	20.1#	73	-0.02
48	T,M	1,4-Dioxane	200.000	107.789	46.1#	44	-0.02
49	T,M	Bromodichloromethane	10.000	8.081	19.2	74	-0.02
50	T,M	Dibromomethane	10.000	7.760	22.4#	70	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J11\RJW257.D Vial: 2
Acq On : 11 Oct 2024 3:48 pm Operator: PMai
Sample : CVO06I1928 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	10.000	5.570	44.3#	52	-0.02
52	T,M	4-Methyl-2-pentanone	50.000	41.031	17.9	71	-0.02
53	T,M	cis-1,3-Dichloropropene	10.000	7.533	24.7#	67	-0.02
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	78	-0.01
55	S	Toluene-d8	10.000	11.278	-12.8	85	-0.02
56	C,T,M	Toluene	10.000	10.696	-7.0	78	-0.02
57	T,M	Ethyl methacrylate	10.000	6.368	36.3#	49	-0.02
58	T,M	trans-1,3-Dichloropropene	10.000	7.766	22.3#	59	0.00
59	T,M	1,1,2-Trichloroethane	10.000	8.382	16.2	63	0.00
60	T,M	2-Hexanone	50.000	38.120	23.8#	57	-0.02
61	T,M	1,3-Dichloropropane	10.000	7.763	22.4#	58	-0.02
62	T,M	Tetrachloroethene	10.000	11.001	-10.0	83	0.00
63	T,M	Dibromochloromethane	10.000	8.644	13.6	66	-0.02
64	T,M	2-Ethyl-1-butanol	-1.000	0.000	0.0	0	0.00
65	T,M	1,2-Dibromoethane	10.000	8.027	19.7	60	0.00
66	T,M	1-Chlorohexane	10.000	10.395	-3.9	88	-0.02
67	P,T,M	Chlorobenzene	10.000	9.261	7.4	69	-0.01
68	T,M	1,1,1,2-Tetrachloroethane	10.000	12.270	-22.7#	86	-0.01
69	C,T,M	Ethylbenzene	10.000	9.145	8.6	71	0.00
70	T,M	m-Xylene & p-Xylene	20.000	17.778	11.1	70	-0.01
71	T,M	o-Xylene	10.000	9.955	0.4	75	-0.01
72	T,M	Styrene	10.000	8.287	17.1	62	-0.01
73	T,M	Isopropylbenzene	10.000	10.516	-5.2	81	-0.01
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	70	-0.01
75	P,T,M	Bromoform	10.000	8.068	19.3	59	-0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	8.539	14.6	57	-0.01
77	S	4-Bromofluorobenzene	10.000	9.410	5.9	65	-0.01
78	T,M	1,2,3-Trichloropropane	10.000	7.253	27.5#	51	-0.01
79	T,M	trans-1,4-Dichloro-2-butene	10.000	4.942	50.6#	37	0.00
80	T,M	n-Propylbenzene	10.000	9.642	3.6	69	0.00
81	T,M	Bromobenzene	10.000	9.541	4.6	64	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	11.074	-10.7	77	-0.01
83	T,M	2-Chlorotoluene	10.000	10.614	-6.1	75	-0.01
84	T,M	4-Chlorotoluene	10.000	8.495	15.1	56	-0.01
85	T,M	tert-Butylbenzene	10.000	12.791	-27.9#	85	-0.01
86	T,M	1,2,4-Trimethylbenzene	10.000	10.236	-2.4	72	0.00
87	T,M	sec-Butylbenzene	10.000	11.178	-11.8	79	0.00
88	T,M	p-Isopropyltoluene	10.000	10.772	-7.7	75	-0.01
89	T,M	1,3-Dichlorobenzene	10.000	8.949	10.5	60	-0.01
90	T,M	1,2,3-Trimethylbenzene	10.000	12.087	-20.9#	84	-0.01
91	T,M	1,4-Dichlorobenzene	10.000	8.567	14.3	59	-0.01
92	T,M	n-Butylbenzene	10.000	9.007	9.9	65	-0.01
93	T,M	1,2-Dichlorobenzene	10.000	9.504	5.0	63	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	7.712	22.9#	54	0.00
95	T,M	1,2,4-Trichlorobenzene	10.000	8.708	12.9	59	0.00
96	T,M	Hexachlorobutadiene	10.000	10.307	-3.1	66	-0.01
97	T,M	Naphthalene	10.000	8.619	13.8	57	-0.01
98	T,M	1,2,3-Trichlorobenzene	10.000	8.763	12.4	59	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J11\RJW257.D Vial: 2
Acq On : 11 Oct 2024 3:48 pm Operator: PMai
Sample : CVO06I1928 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	94	-0.02
2	T,M	Dichlorodifluoromethane	0.422	0.447	-5.9	117	-0.08
3	P,T,M	Chloromethane	0.387	0.392	-1.3	107	-0.08
4	C,T,M	Vinyl chloride	0.303	0.319	-5.3	124	-0.08
5	T,M	Bromomethane	0.239	0.287	-20.1#	127	-0.08
6	T,M	Chloroethane	0.203	0.225	-10.8	122	-0.08
7	T,M	Dichlorofluoromethane	0.725	0.476	34.3#	67	-0.06
8	T,M	Trichlorofluoromethane	0.399	0.518	-29.8#	137	-0.08
9	T,M	Acrolein	0.014	0.022	-57.1#	174	-0.06
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.305	0.240	21.3#	78	-0.06
11	T,M	Acetone	0.040	0.035	12.5	83	-0.08
12	C,T,M	1,1-Dichloroethene	0.529	0.454	14.2	80	-0.06
13	T,M	tert-Butyl alcohol	0.012	0.008	33.3#	57	-0.08
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.022	0.018	18.2	71	-0.06
16	T,M	Iodomethane	0.496	0.463	6.7	88	-0.08
17	T,M	Allyl chloride	0.169	0.172	-1.8	93	-0.06
18	T,M	Methylene chloride	0.456	0.341	25.2#	80	-0.08
19	T,M	Carbon disulfide	0.550	0.000	100.0#	0#	0.19#
20	T,M	Acrylonitrile	0.050	0.049	2.0	89	-0.06
21	T,M	tert-Butyl methyl ether (MT	0.507	0.536	-5.7	92	-0.06
22	T,M	trans-1,2-Dichloroethene	0.316	0.330	-4.4	97	-0.08
23	T,M	Isopropyl ether (DIPE)	1.045	0.970	7.2	82	-0.06
24	T,M	Vinyl acetate	0.377	0.319	15.4	83	-0.06
25	P,T,M	1,1-Dichloroethane	0.528	0.487	7.8	84	-0.08
26	T,M	2-Butanol	0.011	0.007	36.4#	48#	-0.08
27	T,M	tert-Butyl ethyl ether (ETB	0.758	0.728	4.0	84	-0.06
28	T,M	2-Butanone	0.069	0.053	23.2#	73	-0.06
29	T,M	2,2-Dichloropropane	0.330	0.407	-23.3#	111	-0.06
30	T,M	cis-1,2-Dichloroethene	0.326	0.317	2.8	90	-0.06
31	C,T,M	Chloroform	0.523	0.494	5.5	89	-0.06
32	T,M	Bromochloromethane	0.141	0.136	3.5	86	-0.06
33	T,M	Tetrahydrofuran	0.037	0.023	37.8#	61	-0.04
34	T,M	tert-Amyl alcohol	0.000	0.000	0.0	0#	-0.04
35	S	Dibromofluoromethane	0.231	0.306	-32.5#	100	-0.06
36	T,M	1,1,1-Trichloroethane	0.421	0.460	-9.3	99	-0.04
37	T,M	Cyclohexane	0.539	0.466	13.5	76	-0.06
38	T,M	2,2,4-Trimethylpentane	0.000	0.000	0.0	0#	-0.02
39	T,M	1,1-Dichloropropene	0.142	0.134	5.6	87	-0.04
40	T,M	Carbon tetrachloride	0.349	0.372	-6.6	95	-0.04
41	T,M	tert-Amyl methyl ether (TAM	0.620	0.604	2.6	85	-0.04
42	S	1,2-Dichloroethane-d4	0.221	0.185	16.3	74	-0.04
43	T,M	1,2-Dichloroethane	0.263	0.196	25.5#	66	-0.04
44	T,M	Benzene	1.145	1.097	4.3	84	-0.04
45	T,M	Trichloroethene	0.283	0.307	-3.0	91	-0.04
46	T,M	Methylcyclohexane	0.568	0.561	1.2	84	-0.04
47	C,T,M	1,2-Dichloropropane	0.284	0.226	20.4#	73	-0.02
48	T,M	1,4-Dioxane	0.001	0.001	0.0	44#	-0.02
49	T,M	Bromodichloromethane	0.368	0.297	19.3	74	-0.02
50	T,M	Dibromomethane	0.134	0.104	22.4#	70	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J11\RJW257.D Vial: 2
Acq On : 11 Oct 2024 3:48 pm Operator: PMai
Sample : CVO06I1928 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T,M	2-Chloroethyl vinyl ether	0.089	0.050	43.8#	52	-0.02
52	T,M	4-Methyl-2-pentanone	0.189	0.155	18.0	71	-0.02
53	T,M	cis-1,3-Dichloropropene	0.450	0.339	24.7#	67	-0.02
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	78	-0.01
55	S	Toluene-d8	1.294	1.460	-12.8	85	-0.02
56	C,T,M	Toluene	1.509	1.614	-7.0	78	-0.02
57	T,M	Ethyl methacrylate	0.332	0.211	36.4#	49#	-0.02
58	T,M	trans-1,3-Dichloropropene	0.424	0.329	22.4#	59	0.00
59	T,M	1,1,2-Trichloroethane	0.217	0.182	16.1	63	0.00
60	T,M	2-Hexanone	0.158	0.121	23.4#	57	-0.02
61	T,M	1,3-Dichloropropane	0.400	0.311	22.3#	58	-0.02
62	T,M	Tetrachloroethene	0.310	0.341	-10.0	83	0.00
63	T,M	Dibromochloromethane	0.267	0.231	13.5	66	-0.02
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.206	0.165	19.9	60	0.00
66	T,M	1-Chlorohexane	0.643	0.668	-3.9	88	-0.02
67	P,T,M	Chlorobenzene	0.924	0.855	7.5	69	-0.01
68	T,M	1,1,1,2-Tetrachloroethane	0.292	0.358	-22.6#	86	-0.01
69	C,T,M	Ethylbenzene	1.859	1.700	8.6	71	0.00
70	T,M	m-Xylene & p-Xylene	1.421	1.263	11.1	70	-0.01
71	T,M	o-Xylene	1.399	1.393	0.4	75	-0.01
72	T,M	Styrene	1.045	0.866	17.1	62	-0.01
73	T,M	Isopropylbenzene	1.815	1.909	-5.2	81	-0.01
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	70	-0.01
75	P,T,M	Bromoform	0.290	0.248	14.5	59	-0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	0.578	0.494	14.5	57	-0.01
77	S	4-Bromofluorobenzene	1.116	1.051	5.8	65	-0.01
78	T,M	1,2,3-Trichloropropane	0.159	0.116	27.0#	51	-0.01
79	T,M	trans-1,4-Dichloro-2-butene	0.176	0.087	50.6#	37#	0.00
80	T,M	n-Propylbenzene	5.517	5.320	3.6	69	0.00
81	T,M	Bromobenzene	0.790	0.754	4.6	64	0.00
82	T,M	1,3,5-Trimethylbenzene	3.365	3.727	-10.8	77	-0.01
83	T,M	2-Chlorotoluene	3.233	3.432	-6.2	75	-0.01
84	T,M	4-Chlorotoluene	2.963	2.517	15.1	56	-0.01
85	T,M	tert-Butylbenzene	0.711	0.910	-28.0#	85	-0.01
86	T,M	1,2,4-Trimethylbenzene	3.489	3.571	-2.4	72	0.00
87	T,M	sec-Butylbenzene	4.751	5.310	-11.8	79	0.00
88	T,M	p-Isopropyltoluene	4.038	4.349	-7.7	75	-0.01
89	T,M	1,3-Dichlorobenzene	1.767	1.581	10.5	60	-0.01
90	T,M	1,2,3-Trimethylbenzene	3.158	3.817	-20.9#	84	-0.01
91	T,M	1,4-Dichlorobenzene	1.750	1.499	14.3	59	-0.01
92	T,M	n-Butylbenzene	4.351	3.919	9.9	65	-0.01
93	T,M	1,2-Dichlorobenzene	1.462	1.390	4.9	63	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.102	0.079	22.5#	54	0.00
95	T,M	1,2,4-Trichlorobenzene	1.149	1.001	12.9	59	0.00
96	T,M	Hexachlorobutadiene	0.621	0.640	-3.1	66	-0.01
97	T,M	Naphthalene	1.548	1.334	13.8	57	-0.01
98	T,M	1,2,3-Trichlorobenzene	0.867	0.760	12.3	59	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J11\RJW257.D Vial: 2
Acq On : 11 Oct 2024 3:48 pm Operator: PMai
Sample : CVO06I1928 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Nov 11 14:54 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.94	114	3268502	10.00	ug/l	-0.02
54) CHLOROBENZENE-D5	15.42	117	2262106	10.00	ug/l	-0.01
74) 1,2-DICHLOROBENZENE-D4	19.33	152	902271	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	7.91	111	998713	10.78	ug/l	-0.06
Spiked Amount 10.000			Recovery = 107.80%			
42) 1,2-Dichloroethane-d4	9.04	65	606267	8.39	ug/l	-0.04
Spiked Amount 10.000			Recovery = 83.90%			
55) Toluene-d8	12.79	98	3301840	11.28	ug/l	-0.02
Spiked Amount 10.000			Recovery = 112.80%			
77) 4-Bromofluorobenzene	17.44	95	947945	9.41	ug/l	-0.01
Spiked Amount 10.000			Recovery = 94.10%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	1461069	10.58	ug/l	99
3) Chloromethane	1.82	50	1281255	10.12	ug/l	100
4) Vinyl chloride	1.93	62	1044243	10.53	ug/l	98
5) Bromomethane	2.37	94	939132	11.48	ug/l	98
6) Chloroethane	2.45	64	735397	11.47	ug/l	84
7) Dichlorofluoromethane	2.51	67	1556085	6.67	ug/l	100
8) Trichlorofluoromethane	2.74	101	1692399	12.98	ug/l	98
9) Acrolein	3.26	56	362183	78.89	ug/l	93
10) 1,1,2-Trichloro-1,2,2-trif	3.30	151	783908	7.24	ug/l	99
11) Acetone	3.34	43	569041	43.10	ug/l	99
12) 1,1-Dichloroethene	3.51	61	1482739	8.58	ug/l	92
13) tert-Butyl alcohol	3.64	59	688603	168.62	ug/l	97
15) Methyl acetate	4.03	74	58047	8.23	ug/l	83
16) Iodomethane	3.93	142	1512478	9.34	ug/l	96
17) Allyl chloride	4.05	76	563425	10.18	ug/l	97
18) Methylene chloride	4.22	49	1114994	8.20	ug/l	88
19) Carbon disulfide	4.45	76	861	0.15	ug/l #	14
20) Acrylonitrile	4.47	53	798896	48.71	ug/l	98
21) tert-Butyl methyl ether (M	4.52	73	1752069	10.57	ug/l	98
22) trans-1,2-Dichloroethene	4.72	96	1078211	10.44	ug/l	99
23) Isopropyl ether (DIPE)	5.42	45	3171373	9.29	ug/l	92
24) Vinyl acetate	5.65	43	1044163	8.46	ug/l	98
25) 1,1-Dichloroethane	5.56	63	1591446	9.21	ug/l	98
26) 2-Butanol	6.13	45	609801	134.94	ug/l	92
27) tert-Butyl ethyl ether (ET	6.32	59	2378820	9.60	ug/l	92
28) 2-Butanone	6.61	43	873296	38.93	ug/l	93
29) 2,2-Dichloropropane	6.86	77	1330912	12.35	ug/l	98
30) cis-1,2-Dichloroethene	6.99	96	1034716	9.70	ug/l	100
31) Chloroform	7.39	83	1616005	9.46	ug/l	96
32) Bromochloromethane	7.76	130	443230	9.59	ug/l	99
33) Tetrahydrofuran	7.89	42	74551	6.21	ug/l	96
36) 1,1,1-Trichloroethane	8.31	97	1504567	10.94	ug/l	97
37) Cyclohexane	8.29	84	1522003	8.64	ug/l	96
39) 1,1-Dichloropropene	8.69	110	436384	9.40	ug/l	100
40) Carbon tetrachloride	8.85	119	1215906	10.67	ug/l	99
41) tert-Amyl methyl ether (TA	9.02	73	1974977	9.75	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J11\RJW257.D Vial: 2
Acq On : 11 Oct 2024 3:48 pm Operator: PMai
Sample : CVO06I1928 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Nov 11 14:54 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	1,2-Dichloroethane	9.25	62	641595	7.46 ug/l	97
44)	Benzene	9.23	78	3584337	9.57 ug/l	97
45)	Trichloroethene	10.51	130	1002165	10.27 ug/l	96
46)	Methylcyclohexane	10.59	83	1834166	9.89 ug/l	91
47)	1,2-Dichloropropane	10.89	63	740170	7.99 ug/l	99
48)	1,4-Dioxane	11.43	88	46761	107.79 ug/l	92
49)	Bromodichloromethane	11.33	83	971503	8.08 ug/l	97
50)	Dibromomethane	11.39	93	340598	7.76 ug/l	95
51)	2-Chloroethyl vinyl ether	12.02	63	162419	5.57 ug/l	96
52)	4-Methyl-2-pentanone	12.06	43	2536675	41.03 ug/l	93
53)	cis-1,3-Dichloropropene	12.37	75	1108424	7.53 ug/l	93
56)	Toluene	12.32	91	3649989	10.70 ug/l	99
57)	Ethyl methacrylate	13.36	69	477629	6.37 ug/l	88
58)	trans-1,3-Dichloropropene	13.32	75	744851	7.77 ug/l	80
59)	1,1,2-Trichloroethane	13.57	97	410816	8.38 ug/l	98
60)	2-Hexanone	13.63	43	1363908	38.12 ug/l	96
61)	1,3-Dichloropropane	14.01	76	702889	7.76 ug/l	99
62)	Tetrachloroethene	14.07	164	772509	11.00 ug/l	97
63)	Dibromochloromethane	14.41	129	521856	8.64 ug/l	98
65)	1,2-Dibromoethane	14.76	107	373883	8.03 ug/l	100
66)	1-Chlorohexane	15.10	91	1511088	10.40 ug/l	90
67)	Chlorobenzene	15.48	112	1935104	9.26 ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.57	131	810563	12.27 ug/l	100
69)	Ethylbenzene	15.60	91	3845883	9.15 ug/l	97
70)	m-Xylene & p-Xylene	15.73	91	5713165	17.78 ug/l	97
71)	o-Xylene	16.45	91	3150340	9.96 ug/l	98
72)	Styrene	16.52	104	1959556	8.29 ug/l	98
73)	Isopropylbenzene	17.06	105	4317378	10.52 ug/l	98
75)	Bromoform	17.05	173	224173	8.07 ug/l	97
76)	1,1,2,2-Tetrachloroethane	17.35	83	445568	8.54 ug/l	99
78)	1,2,3-Trichloropropane	17.56	110	104303	7.25 ug/l	96
79)	trans-1,4-Dichloro-2-buten	17.67	53	78431	4.94 ug/l	99
80)	n-Propylbenzene	17.67	91	4799972	9.64 ug/l	98
81)	Bromobenzene	17.71	156	680338	9.54 ug/l	100
82)	1,3,5-Trimethylbenzene	17.88	105	3362659	11.07 ug/l	99
83)	2-Chlorotoluene	17.89	91	3096182	10.61 ug/l	96
84)	4-Chlorotoluene	17.96	91	2271024	8.50 ug/l	92
85)	tert-Butylbenzene	18.34	134	821081	12.79 ug/l	96
86)	1,2,4-Trimethylbenzene	18.39	105	3222453	10.24 ug/l	97
87)	sec-Butylbenzene	18.59	105	4791429	11.18 ug/l	100
88)	p-Isopropyltoluene	18.75	119	3924221	10.77 ug/l	98
89)	1,3-Dichlorobenzene	18.85	146	1426475	8.95 ug/l	97
90)	1,2,3-Trimethylbenzene	18.93	105	3443660	12.09 ug/l	98
91)	1,4-Dichlorobenzene	18.97	146	1352644	8.57 ug/l	99
92)	n-Butylbenzene	19.19	91	3535830	9.01 ug/l	98
93)	1,2-Dichlorobenzene	19.37	146	1253857	9.50 ug/l	96
94)	1,2-Dibromo-3-chloropropan	20.14	157	71138	7.71 ug/l	98
95)	1,2,4-Trichlorobenzene	20.97	180	902736	8.71 ug/l	99
96)	Hexachlorobutadiene	21.09	225	577389	10.31 ug/l	97
97)	Naphthalene	21.23	128	1203593	8.62 ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J11\RJW257.D Vial: 2
Acq On : 11 Oct 2024 3:48 pm Operator: PMai
Sample : CVO06I1928 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Nov 11 14:54 2024 Quant Results File: VO06I19B.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration
DataAcq Meth : VO06I19

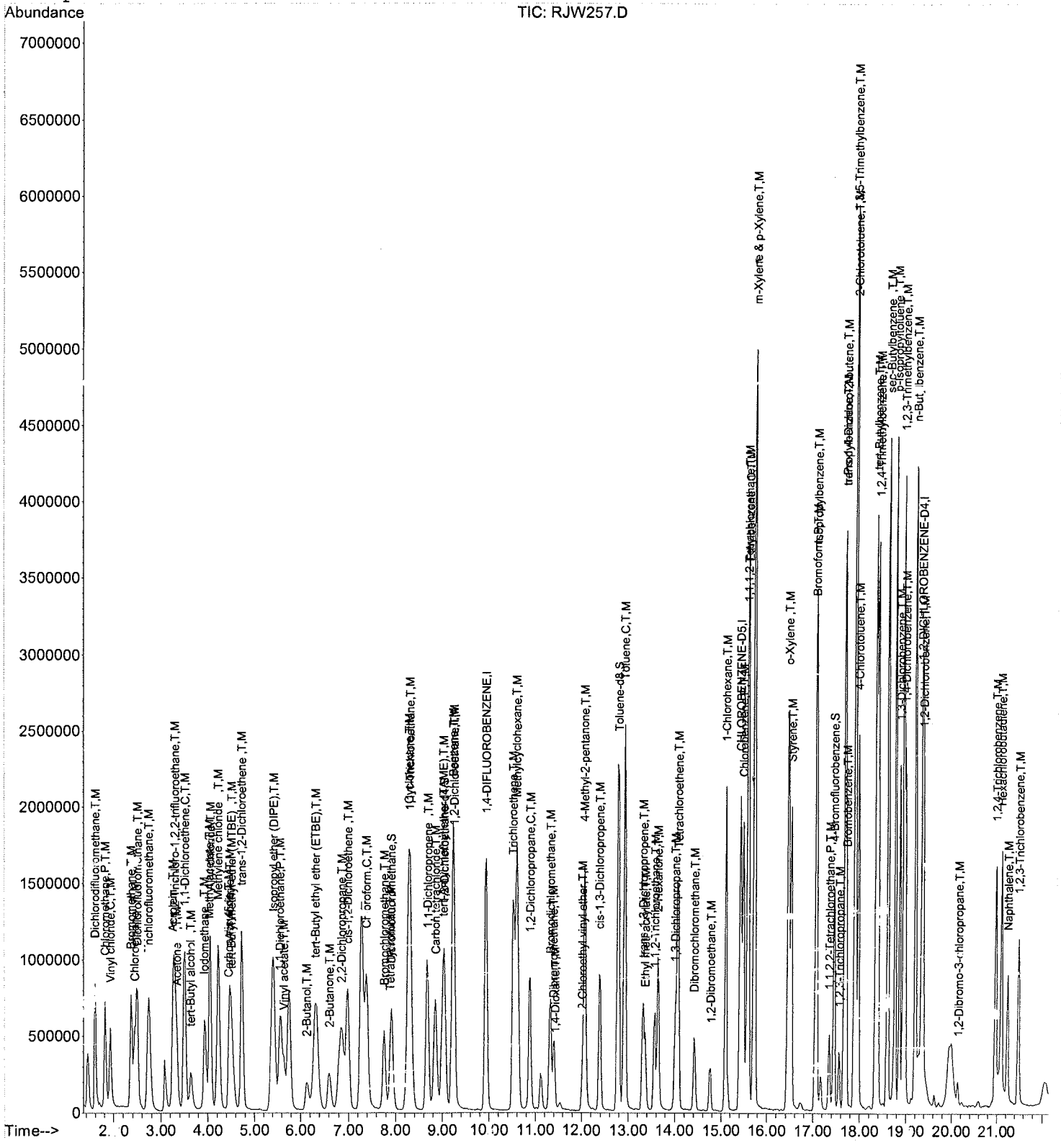
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	1,2,3-Trichlorobenzene	21.48	180	685544	8.76	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J11\RJW257.D Vial: 2
Acq On : 11 Oct 2024 3:48 pm Operator: PMai
Sample : CVO06I1928 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Nov 11 14:54 2024 Quant Results File: VO06I19B.RES

Method : D:\HPCHEM\1\METHODS\VO06I19B.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Oct 11 15:06:31 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments: * Varied Amounts

* ICV (1V001H0901) not evaluated for chloroethane only - compound to be evaluated from ICV (1V001H0902)

Book #: A01-076
Instrument No.: 01
Analytical Sequence: 24H09
Method File: V001H09
Analytical Batch: V001H096

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	V001H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2	SVI-45-19-01	*	250
DCC GAS	-15-03		250
DCC 4ADD	-06-02		250
DCC 8260	-21-01		50
DCC KET	-19-02		250
BFB	-01-01	1	50
IS/SURR. IS	SVI-43-95-01	1	250
IS/SURR. SS	-45-07-02	*	250
ICV/LCS CS2	-43-79-02	1	250
ICV/LCS GAS	-45-06-01	1	250
ICV/LCS 4ADD	-43-81-03	5	50
ICV/LCS KET	-45-21-03	5	250
ICV/LCS 8260	-43-78-03	5	50
Data File Folder	24H09		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-09-12-4	
Chlorine strip		-01-12-6	
Methanol		-03-23	
$NaHSO_4$		-02-24	
Reagent Water	RW4-23-001		
Sand			

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☐ Water
☐ pH <2. Outliers indicated on analytical sequence.
☐ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☑ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: DN
Date: 8/9/24
Disposed By: DN
Date Disposed: 8/10/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24H09

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RHV128.D	1.	BFB01H09	T/CHK	9 Aug 2024 08:08
2	2	RHV129.D	1.	VO01H091 0.03/0.15	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	9 Aug 2024 17:28
3	3	RHV130.D	1.	VO01H092 0.05/0.25	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	9 Aug 2024 18:14
4	4	RHV131.D	1.	VO01H093 0.1/0.5	1ppb 8260/5ppb KET-AA/25ppb TBA	9 Aug 2024 18:45
5	5	RHV132.D	1.	VO01H094 0.2/1.0	2ppb 8260/10ppb KET-AA/50ppb TBA	9 Aug 2024 19:15
6	6	RHV133.D	1.	VO01H095 0.5/2.5	5ppb 8260/25ppb KET-AA/125ppb TBA	9 Aug 2024 19:46
7	7	RHV134.D	1.	VO01H096 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	9 Aug 2024 20:17
8	8	RHV135.D	1.	VO01H097 2.0/10	20ppb 8260/100ppb KET-AA/500ppb TBA	9 Aug 2024 20:47
9	9	RHV136.D	1.	VO01H098 3.0/15	30ppb 8260/150ppb KET-AA/750ppb TBA	9 Aug 2024 21:17
10	10	RHV137.D	1.	VO01H099 5.0/25	50ppb 8260/250ppb KET-AA/1250ppb TBA	9 Aug 2024 21:47
11	11	RHV138.D	1.	VO01H0910 10/50	100ppb 8260/500ppb KET-AA/2500ppb TBA	9 Aug 2024 22:17
12	12	RHV139.D	1.	RINSE		9 Aug 2024 22:47
13	13	RHV140.D	1.	RINSE		9 Aug 2024 23:17
14	14	RHV141.D	1.	IVO01H0901 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	9 Aug 2024 23:47
15	15	RHV142.D	1.	RINSE		10 Aug 2024 00:17
16	16	RHV143.D	1.	LOD1	0.2ppb 8260/4.0ppb KET-AA/5.0ppb TBA	10 Aug 2024 00:48
17	17	RHV144.D	1.	LOD2	0.3ppb 8260/4.0ppb KET-AA/5.0ppb TBA	10 Aug 2024 01:18

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: A01-076
Instrument No.: 01
Analytical Sequence: 24H13
Method File: V001H09
Analytical Batch: CV001H0901

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1

PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge

SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	V001H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SV1-45-19-01	1	
DCC	-15-03	1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-19-02	5	50/
BFB	-01-01	1	250
IS/SURR.	SV1-43-78-01	5	
ICV/LCS	-43-79-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03	5	
	-45-21-03	5	
ICV/LCS	-43-78-03	5	
Data File Folder	24H13		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-04-12-4	
Chlorine strip	301902	↓	-6
Methanol			
$NaHSO_4$			
Reagent Water	EW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: DM
Date: 8/13/24
Disposed By: DM
Date Disposed: 8/14/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24H13

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RHV145.D	1.	BFB01H10	T/CHK	13 Aug 2024 15:24
2	1	RHV146.D	1.	CVO01H0901	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 16:12
3	3	RHV147.D	1.	IVO01H0902 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 16:44
4	4	RHV148.D	1.	VO01H10L	10ppb 8260/50ppb KET-AA/250ppb TBA	13 Aug 2024 17:17
5	5	RHV149.D	1.	RINSE	25mL	13 Aug 2024 17:49
6	6	RHV150.D	1.	VO01H10B	25mL	13 Aug 2024 18:21
7	7	RHV151.D	1.	24H006-12	25mL	13 Aug 2024 18:53
8	8	RHV152.D	1.	24H006-11	25mL	13 Aug 2024 19:25
9	9	RHV153.D	1.	24H006-10	25mL	13 Aug 2024 19:57
10	10	RHV154.D	1.	24H006-01	25mL	13 Aug 2024 20:29
11	11	RHV155.D	1.	24H006-02	25mL	13 Aug 2024 21:00
12	12	RHV156.D	1.	24H006-03	25mL	13 Aug 2024 21:31
13	13	RHV157.D	1.	24H006-04	25mL	13 Aug 2024 22:02
14	14	RHV158.D	1.	24H006-05	25mL	13 Aug 2024 22:33
15	15	RHV159.D	1.	24H006-06	25mL	13 Aug 2024 23:04
16	16	RHV160.D	1.	24H006-07	25mL	13 Aug 2024 23:35
17	17	RHV161.D	1.	24H006-08	25mL	14 Aug 2024 00:05
18	18	RHV162.D	1.	24H006-09	25mL	14 Aug 2024 00:35
19	19	RHV163.D	1.	24H006-01M	25mL	14 Aug 2024 01:06
20	20	RHV164.D	1.	24H006-01S	25mL	14 Aug 2024 01:36
21	21	RHV165.D	1.	EVO01H0901	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 02:06
22	22	RHV166.D	1.	EVO01H09011	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 02:36
23	23	RHV167.D	1.	EVO01H09012	10ppb 8260/50ppb KET-AA/250ppb TBA	14 Aug 2024 03:06

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments: ✱ = varied amount

Book #:	A06-083
Instrument No.:	06
Analytical Sequence:	24I19
Method File:	V006I19
Analytical Batch:	V006I196

INITIAL CALIBRATION REFERENCE			
DATE	9/19/2024		
ICAL ID	V006 I 19		
STANDARDS			
NAME		Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SV1-45-24-03 SV1-45-27-02	✱	250 250
DCC 4ADD	SV1-45-32-02		250
DCC 8260	SV1-45-32-03		50
DCC KET	SV1-45-19-02		250
BFB	SV1-45-01-01	1	50
IS/SURR. IS SS	SV1-43-95-01 SV1-38-15-15	1 ✱	250 250
ICV/LCS CS2 GAS	SV1-45-25-02 SV1-43-80-02	1 1	250 250
ICV/LCS 3ADD	SV1-43-81-03	5	50
ICV/LCS 8260	SV1-43-85-02	5	50
ICV/LCS KET 2-BUT	SV1-45-21-03	5 12.5	250 500
Data File Folder	24I19		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-4	
Chlorine strip		MSV-03-04-12-6	
Methanol		MSV-03-~~26~~03-26	
$NaHSO_4$		MSV-03-02-24	
Reagent Water	RWS-24-001		
Sand			

SOP #
☒ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☒ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☐ Water
☐ pH <2. Outliers indicated on analytical sequence.
☐ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☒ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: MM/IM

Date: 9/19/2024

Disposed By: MM

Date Disposed: 9/20/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24I19

Line	Vial	FileName	Multiplier	SampleName		Misc Info	Injected
1	1	RIW074.D	1.	BFB06I04		T/CHK	19 Sep 2024 09:28
2	2	RIW075.D	1.	VO06I191	0.03/0.15uL	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	19 Sep 2024 11:07
3	3	RIW076.D	1.	VO06I192	0.05/0.25uL	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	19 Sep 2024 11:33
4	4	RIW077.D	1.	VO06I193	0.10/0.50uL	1.0ppb 8260/5.0ppb KET-AA/25ppb TBA	19 Sep 2024 11:59
5	5	RIW078.D	1.	VO06I194	0.20/1.00uL	2.0ppb 8260/10ppb KET-AA/50ppb TBA	19 Sep 2024 12:25
6	6	RIW079.D	1.	VO06I195	0.50/2.50uL	5.0ppb 8260/25ppb KET-AA/125ppb TBA	19 Sep 2024 12:51
7	7	RIW080.D	1.	VO06I196	1.00/5.00uL	10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 13:18
8	8	RIW081.D	1.	VO06I197	2.00/10.0uL	20ppb 8260/100ppb KET-AA/500ppb TBA	19 Sep 2024 13:44
9	9	RIW082.D	1.	VO06I198	3.00/15.0uL	30ppb 8260/150ppb KET-AA/750ppb TBA	19 Sep 2024 14:10
10	10	RIW083.D	1.	VO06I199	5.00/25.0uL	50ppb 8260/250ppb KET-AA/1250ppb TBA	19 Sep 2024 14:36
11	11	RIW084.D	1.	VO06I1910	10.0/50.0uL	100ppb 8260/500ppb KET-AA/2500ppb TBA	19 Sep 2024 15:02
12	12	RIW085.D	1.	RINSE			19 Sep 2024 15:28
13	13	RIW086.D	1.	RINSE			19 Sep 2024 15:54
14	14	RIW087.D	1.	IVO06I1901 **		10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 16:20
15	15	RIW088.D	1.	RINSE			19 Sep 2024 16:59
16	16	RIW089.D	1.	LOD1 0.02/0.10		0.2ppb 8260/4.0ppb KET-AA/5.0ppb TBA	19 Sep 2024 17:26
17	17	RIW090.D	1.	LOD2 0.03/0.15		0.4ppb 8260/4.0ppb KET-AA/10ppb TBA	19 Sep 2024 17:52
18	18	RIW091.D	1.	LOQ		80ppb 1,4-Dioxane	19 Sep 2024 18:18
19	1	RIW092.D	1.	BFB06I05		T/CHK	19 Sep 2024 18:52
20	2	RIW093.D	1.	IVO06I1902		10ppb 8260/50ppb KET-AA/250ppb TBA	19 Sep 2024 19:59

** Not evaluated for Dichlorofluoromethane & 1,1,2 Trichloro-1,2,2-trifluoroethane

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-077
Instrument No.:	01
Analytical Sequence:	24J09
Method File:	V001H09
Analytical Batch:	CV001HC957

INITIAL CALIBRATION REFERENCE			
DATE	8/9/24		
ICAL ID	V001H09		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-45-19-01	1	
DCC	-15-03	1	
DCC	-06-02	1	
DCC	-21-01	5	
DCC	-19-02	5	
BFB	-41-03	1	50/250
IS/SURR.	SVI-45-29-03	5	
ICV/LCS	-43-74-02	1	
ICV/LCS	-45-06-01	1	
ICV/LCS	-43-81-03	5	
	-45-21-03	5	
ICV/LCS	-43-78-03	5	
Data File Folder	24J09		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-09-12-4	
Chlorine strip	301902	↓ -6	
Methanol			
$NaHSO_4$			
Reagent Water	RW3-23-201		
Sand			

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: CL / DN
Date: 10/9/24
Disposed By: CL
Date Disposed: 10/10/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24J09

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RJV232.D	1.	BFB01J11	T/CHK	9 Oct 2024 15:16
2	2	RJV233.D	1.	CVO01H0957	10ppb 8260/50ppb KET-AA/250ppb TBA	9 Oct 2024 16:34
3	3	RJV234.D	1.	VO01J11L	10ppb 8260/50ppb KET-AA/250ppb TBA	9 Oct 2024 17:05
4	4	RJV235.D	1.	VO01J11C	10ppb 8260/50ppb KET-AA/250ppb TBA	9 Oct 2024 17:35
5	5	RJV236.D	1.	RINSE	25mL	9 Oct 2024 18:05
6	6	RJV237.D	1.	VO01J11B	25mL	9 Oct 2024 18:34
7	7	RJV238.D	1.	24I156-01	25mL	9 Oct 2024 19:04
8	8	RJV239.D	1.	24I172-08	25mL	9 Oct 2024 19:34
9	9	RJV240.D	1.	24I166-15	25mL	9 Oct 2024 20:04
10	10	RJV241.D	1.	24I187-02	25mL	9 Oct 2024 20:33
11	11	RJV242.D	1.	24J033-09	25mL	9 Oct 2024 21:03
12	12	RJV243.D	1.	24J001-12	25mL	9 Oct 2024 21:32
13	13	RJV244.D	1.	24I166-16	25mL	9 Oct 2024 22:02
14	14	RJV245.D	1.	24J001-13	25mL	9 Oct 2024 22:31
15	15	RJV246.D	1.	24J033-08	25mL	9 Oct 2024 23:01
16	16	RJV247.D	1.	24I168-02	25mL	9 Oct 2024 23:30
17	17	RJV248.D	1.	24J033-01	25mL	9 Oct 2024 23:59
18	18	RJV249.D	1.	24J033-02	25mL	10 Oct 2024 00:29
19	19	RJV250.D	1.	24J033-03	25mL	10 Oct 2024 00:58
20	20	RJV251.D	1.	24J033-04	25mL	10 Oct 2024 01:27
21	21	RJV252.D	1.	24J033-05	25mL	10 Oct 2024 01:57
22	22	RJV253.D	1.	24J033-06	25mL	10 Oct 2024 02:26
23	23	RJV254.D	1.	24J033-07	25mL	10 Oct 2024 02:55
24	24	RJV255.D	1.	24J006-04I 50X	0.5mL	10 Oct 2024 03:24
25	25	RJV256.D	1.	EVO01H0957	10ppb 8260/50ppb KET-AA/250ppb TBA	10 Oct 2024 03:54
26	26	RJV257.D	1.	EVO01H09571	10ppb 8260/50ppb KET-AA/250ppb TBA	10 Oct 2024 04:23
27	27	RJV258.D	1.	EVO01H09572	10ppb 8260/50ppb KET-AA/250ppb TBA	10 Oct 2024 04:52
28	28	RJV259.D	1.	RINSE	25mL	10 Oct 2024 05:21
29	29	RJV260.D	1.	RINSE	25mL	10 Oct 2024 05:51

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
VOLATILES

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A06-083
Instrument No.:	06
Analytical Sequence:	24J11
Method File:	VOQ6I19B
Analytical Batch:	CVOQ6I1928

INITIAL CALIBRATION REFERENCE			
DATE	9/19/2024		
ICAL ID	VOQ6I19B		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2	SV1 45 24 03	1	125
DCC GAS	SV1 45 27 02	1	250
DCC 4ABD	SV1 45 32 02	1	250
DCC 8260	SV1 45 32 03	5	50
DCC KET	SV1 45 19 02	5	250
BFB	SV1 45 01 01	1	50
IS/SURR 1S	SV1 43 95 01	5	250
IS/SURR SS	SV1 38 15 15	5	250
ICV/LCS			
ICV/LCS			
ICV/LCS			
ICV/LCS			
Data File Folder	~~24J11~~ 24I19		
	LOT #	Syringe Lot #	
pH strip	HCH39975	MSV 03 04 12 6	
Chlorine strip	213906/233018	MSV 03 04 12 4	
Methanol			
$NaHSO_4$			
Reagent Water	RW4 23 001		
Sand			

SOP #
☒ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1

PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☒ 25-mL Purge

SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☒ Water
☒ pH <2. Outliers indicated on analytical sequence.
☒ Cl_2 <Sppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Late
HPCHEM_VOA/TO06	

Analyzed By: [signature]

Date: ~~10/11/2024~~ 10/11/24

Disposed By: [signature]

Date Disposed: 10/12/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24J11

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RJW256.D	1.	BFB06J12	T/CHK	11 Oct 2024 13:54
2	2	RJW257.D	1.	CVO06I1928	10ppb 8260/50ppb KET-AA/250ppb TBA	11 Oct 2024 15:48
3	3	RJW258.D	1.	VO06J12L *	10ppb 8260/50ppb KET-AA/250ppb TBA	11 Oct 2024 16:14
4	4	RJW259.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	11 Oct 2024 16:40
5	5	RJW260.D	1.	VO06J12B	10ppb 8260/50ppb KET-AA/250ppb TBA	11 Oct 2024 17:06
6	6	RJW261.D	1.	24I187-01	10ppb 8260/50ppb KET-AA/250ppb TBA	11 Oct 2024 17:33
7	7	RJW262.D	1.	24J006-04I 50X	0.5mL	11 Oct 2024 17:59
8	8	RJW263.D	1.	24J033-04I 10X	0.5mL	11 Oct 2024 18:25
9	9	RJW264.D	1.	24J020-02	2.5mL	11 Oct 2024 18:51
10	10	RJW265.D	1.	24J020-03	25mL	11 Oct 2024 19:17
11	11	RJW266.D	1.	24J020-04	25mL	11 Oct 2024 19:44
12	12	RJW267.D	1.	24J026-01	25mL	11 Oct 2024 20:10
13	13	RJW268.D	1.	24J026-02	25mL	11 Oct 2024 20:36
14	14	RJW269.D	1.	24J021-01	25mL	11 Oct 2024 21:02
15	15	RJW270.D	1.	24J021-02	25mL	11 Oct 2024 21:28
16	16	RJW271.D	1.	24J035-01	25mL	11 Oct 2024 21:54
17	17	RJW272.D	1.	24J035-02	25mL	11 Oct 2024 22:20
18	18	RJW273.D	1.	24J035-03	25mL	11 Oct 2024 22:47
19	19	RJW274.D	1.	24J019-01	25mL	11 Oct 2024 23:12
20	20	RJW275.D	1.	24J019-02	25mL	11 Oct 2024 23:38
21	21	RJW276.D	1.	24J028-09	25mL	12 Oct 2024 00:05
22	22	RJW277.D	1.	24J028-10	25mL	12 Oct 2024 00:31
23	23	RJW278.D	1.	VO06J12C	25mL	12 Oct 2024 00:57
24	24	RJW279.D	1.	EVO06I1928	10ppb 8260/50ppb KET-AA/250ppb TBA	12 Oct 2024 01:23
25	25	RJW280.D	1.	EVO06I19281	10ppb 8260/50ppb KET-AA/250ppb TBA	12 Oct 2024 01:50
26	26	RJW281.D	1.	EVO06I19282	10ppb 8260/50ppb KET-AA/250ppb TBA	12 Oct 2024 02:16
27	27	RJW282.D	1.	RINSE	25mL	12 Oct 2024 02:42

* DBFM out of range (high)
D4 out of range (high)
4BFB out of range (low)

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

METHOD RSK-175
DISSOLVED GASES

SDG#: 24J033

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24J033

METHOD RSK-175
DISSOLVED GASES

A total of two(2) water samples were received on 10/03/24 to be analyzed for Dissolved Gases in accordance with Method RSK-175 and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DGJ004WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. DGJ004WL/DGJ004WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE
DISSOLVED GASES

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24J033
Instrument ID : GCT072

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DGJ004WB	1	NA	10/04/2407:43	10/04/2407:00	BJ04003A	BJ04002A	DGJ004W	Method Blank
LCS1W	DGJ004WL	1	NA	10/04/2407:56	10/04/2407:00	BJ04004A	BJ04002A	DGJ004W	Lab Control Sample (LCS)
LCD1W	DGJ004WC	1	NA	10/04/2408:07	10/04/2407:00	BJ04005A	BJ04002A	DGJ004W	LCS Duplicate
MW42D-GW100224	J033-07	1	NA	10/04/2412:57	10/04/2407:00	BJ04025A	BJ04016A	DGJ004W	Field Sample
FB10-GW100224	J033-08	1	NA	10/04/2413:12	10/04/2407:00	BJ04026A	BJ04016A	DGJ004W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD RSK-175
DISSOLVED GASES

Client : CDM SMITH	Date Collected: 10/02/24
Project : VA SALT LAKE CITY	Date Received: 10/03/24
Batch No. : 24J033	Date Extracted: 10/04/24 07:00
Sample ID: MW42D-GW100224	Date Analyzed: 10/04/24 12:57
Lab Samp ID: J033-07	Dilution Factor: 1
Lab File ID: BJ04025A	Matrix : WATER
Ext Btch ID: DGJ004W	% Moisture : NA
Calib. Ref.: BJ04016A	Instrument ID : GCT072

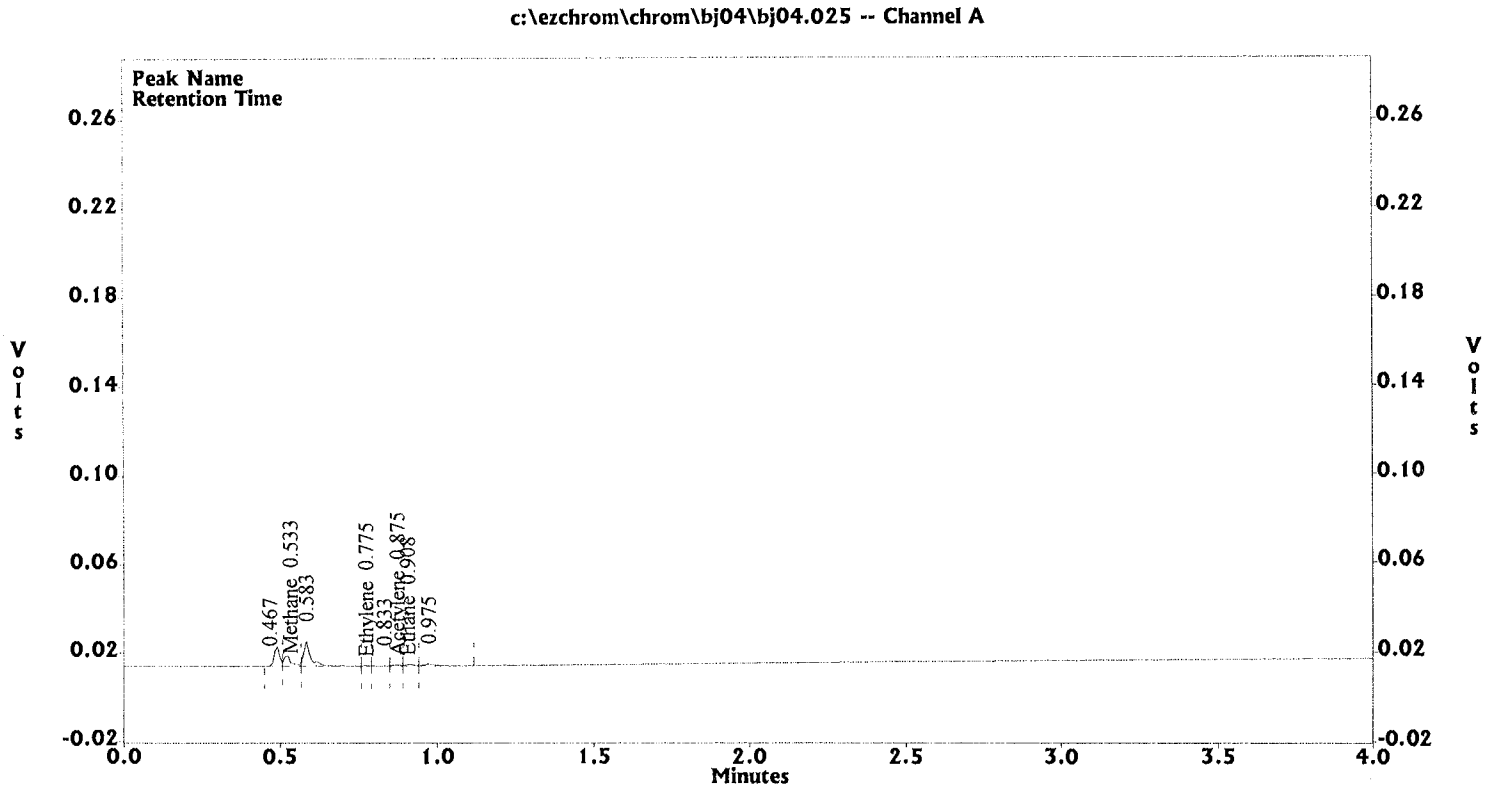
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	0.39J	2.0	0.32
ETHENE	ND	2.0	0.30
METHANE	2.1	2.0	0.17

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bj04\bj04.025
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : J033-07
Acquired : Oct 04, 2024 12:57:12
Printed : Oct 04, 2024 13:23:15
User : LErmol

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.533	6681	3195.35	2.091
4	Ethylene	0.775	124	2060.05	0.060
6	Acetylene	0.875	552	574.97	0.960
7	Ethane	0.908	1155	2984.48	0.387
--	Propane	2.450	0	0.00	0.000



METHOD RSK-175
DISSOLVED GASES

Client : CDM SMITH	Date Collected: 10/02/24
Project : VA SALT LAKE CITY	Date Received: 10/03/24
Batch No. : 24J033	Date Extracted: 10/04/24 07:00
Sample ID: FB10-GW100224	Date Analyzed: 10/04/24 13:12
Lab Samp ID: J033-08	Dilution Factor: 1
Lab File ID: BJ04026A	Matrix : WATER
Ext Btch ID: DGJ004W	% Moisture : NA
Calib. Ref.: BJ04016A	Instrument ID : GCT072

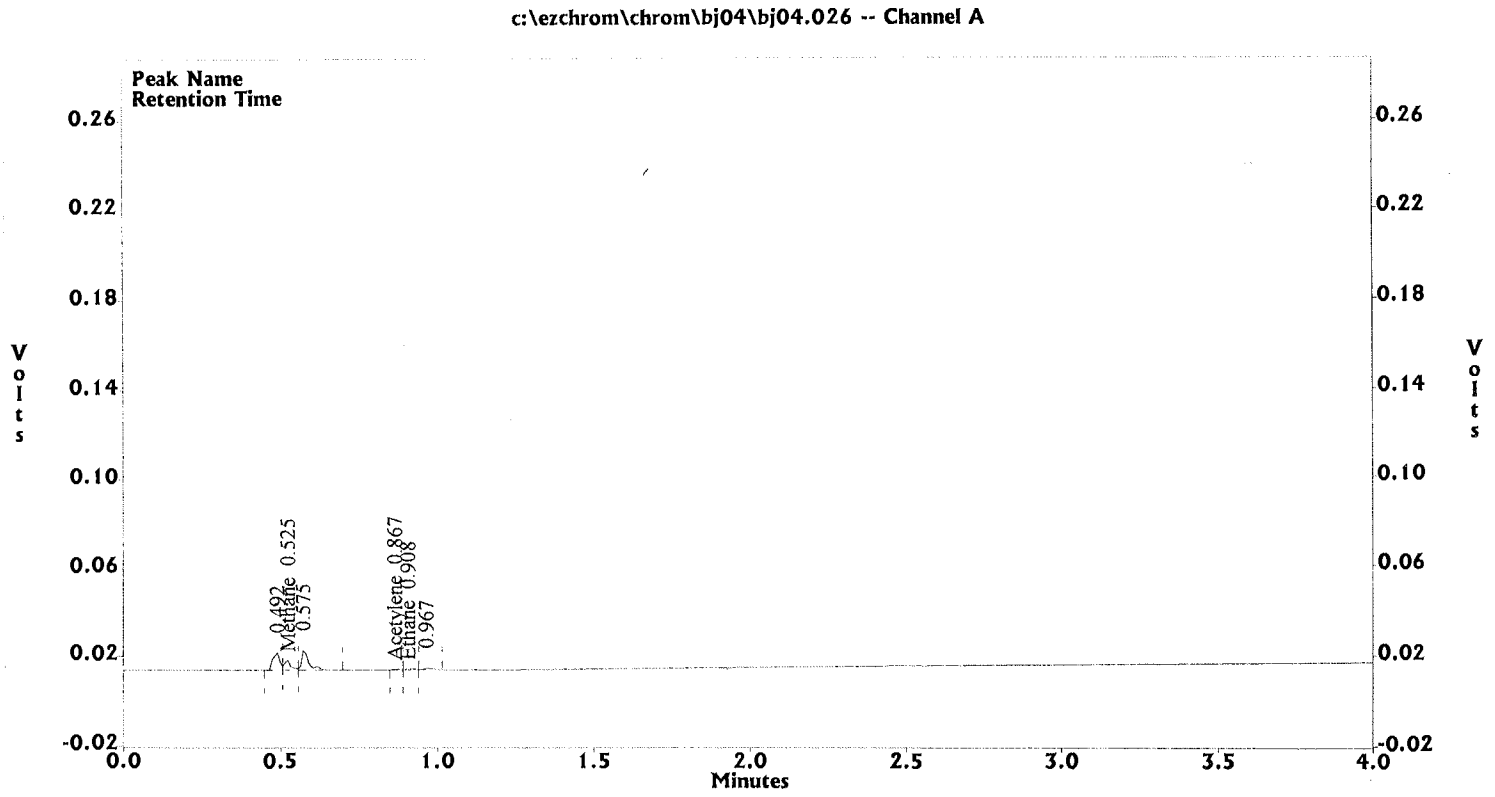
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	2.0	0.32
ETHENE	ND	2.0	0.30
METHANE	1.9J	2.0	0.17

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bj04\bj04.026
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : J033-08
Acquired : Oct 04, 2024 13:12:48
Printed : Oct 04, 2024 13:32:26
User : LErmol

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	6005	3195.35	1.879
--	Ethylene	0.775	0	0.00	0.000
4	Acetylene	0.867	338	574.97	0.588
5	Ethane	0.908	588	2984.48	0.197
--	Propane	2.450	0	0.00	0.000



QC SUMMARIES

METHOD RSK-175
DISSOLVED GASES

Client : CDM SMITH	Date Collected: NA
Project : VA SALT LAKE CITY	Date Received: 10/04/24
Batch No. : 24J033	Date Extracted: 10/04/24 07:00
Sample ID: MBLK1W	Date Analyzed: 10/04/24 07:43
Lab Samp ID: DGJ004WB	Dilution Factor: 1
Lab File ID: BJ04003A	Matrix : WATER
Ext Btch ID: DGJ004W	% Moisture : NA
Calib. Ref.: BJ04002A	Instrument ID : GCT072

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANE	ND	2.0	0.32
ETHENE	ND	2.0	0.30
METHANE	ND	2.0	0.17

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: CDM SMITH
PROJECT: VA SALT LAKE CITY
BATCH NO.: 24J033
METHOD: RSK-175

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	DGJ004WB	DGJ004WL	DGJ004WC		
LAB FILE ID:	BJ04003A	BJ04004A	BJ04005A		
DATE EXTRACTED:	10/04/2407:00	10/04/2407:00	10/04/2407:00	DATE COLLECTED:	NA
DATE ANALYZED:	10/04/2407:43	10/04/2407:56	10/04/2408:07	DATE RECEIVED:	10/04/24
PREP. BATCH:	DGJ004W	DGJ004W	DGJ004W		
CALIB. REF:	BJ04002A	BJ04002A	BJ04002A		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Ethane	ND	25.5	21.7	85	25.5	22.1	87	2	70-140	30
Ethene	ND	23.8	20.5	86	23.8	21.0	88	2	70-140	30
Methane	ND	13.6	12.3	90	13.6	12.8	94	4	70-130	30

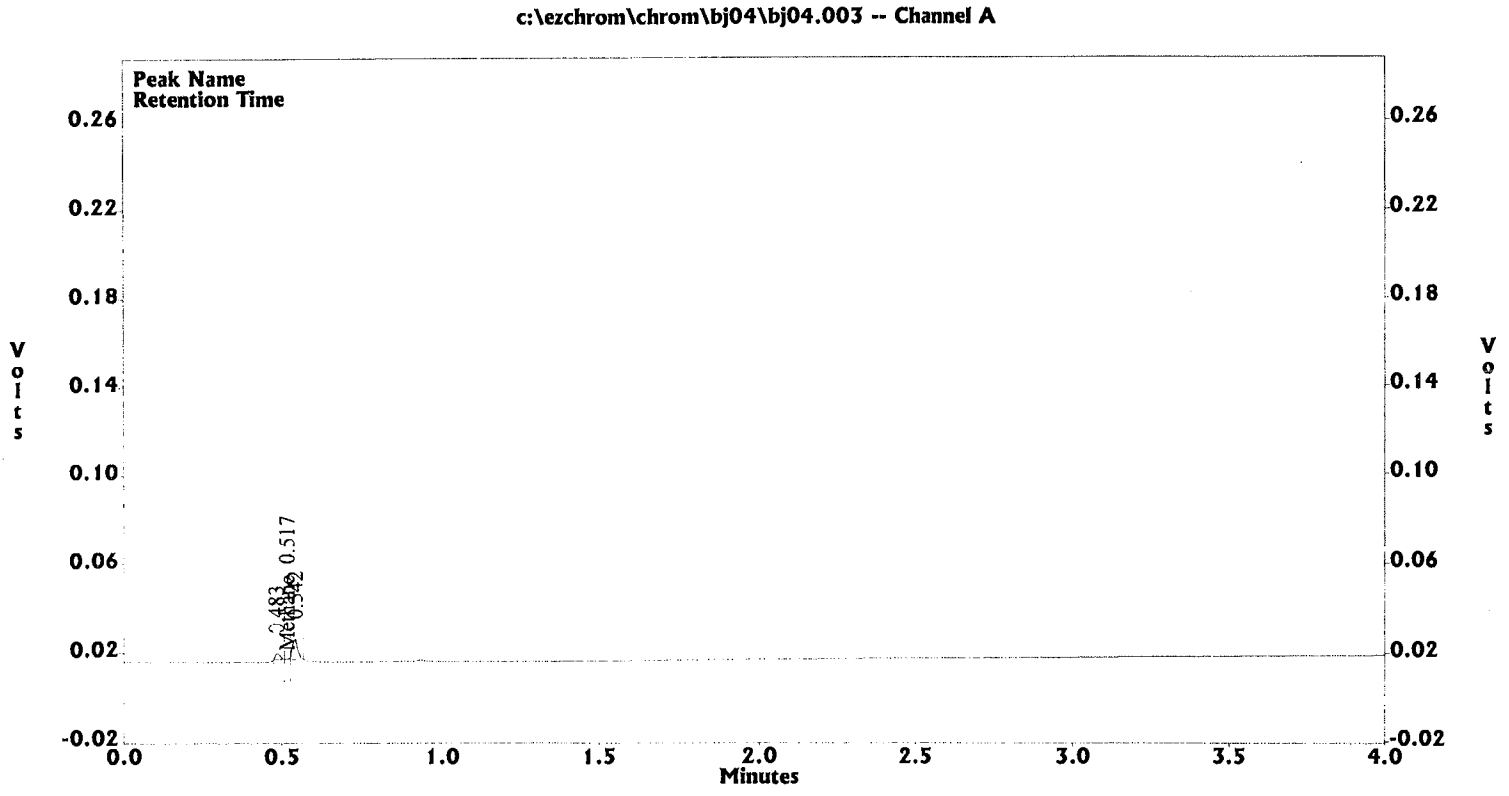
QC DATA

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bj04\bj04.003
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DGJ004WB
Acquired : Oct 04, 2024 07:43:36
Printed : Oct 04, 2024 08:33:05
User : LErmol

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	314	3195.35	0.098
--	Ethylene	0.783	0	0.00	0.000
--	Acetylene	0.867	0	0.00	0.000
--	Ethane	0.917	0	0.00	0.000
--	Propane	2.458	0	0.00	0.000

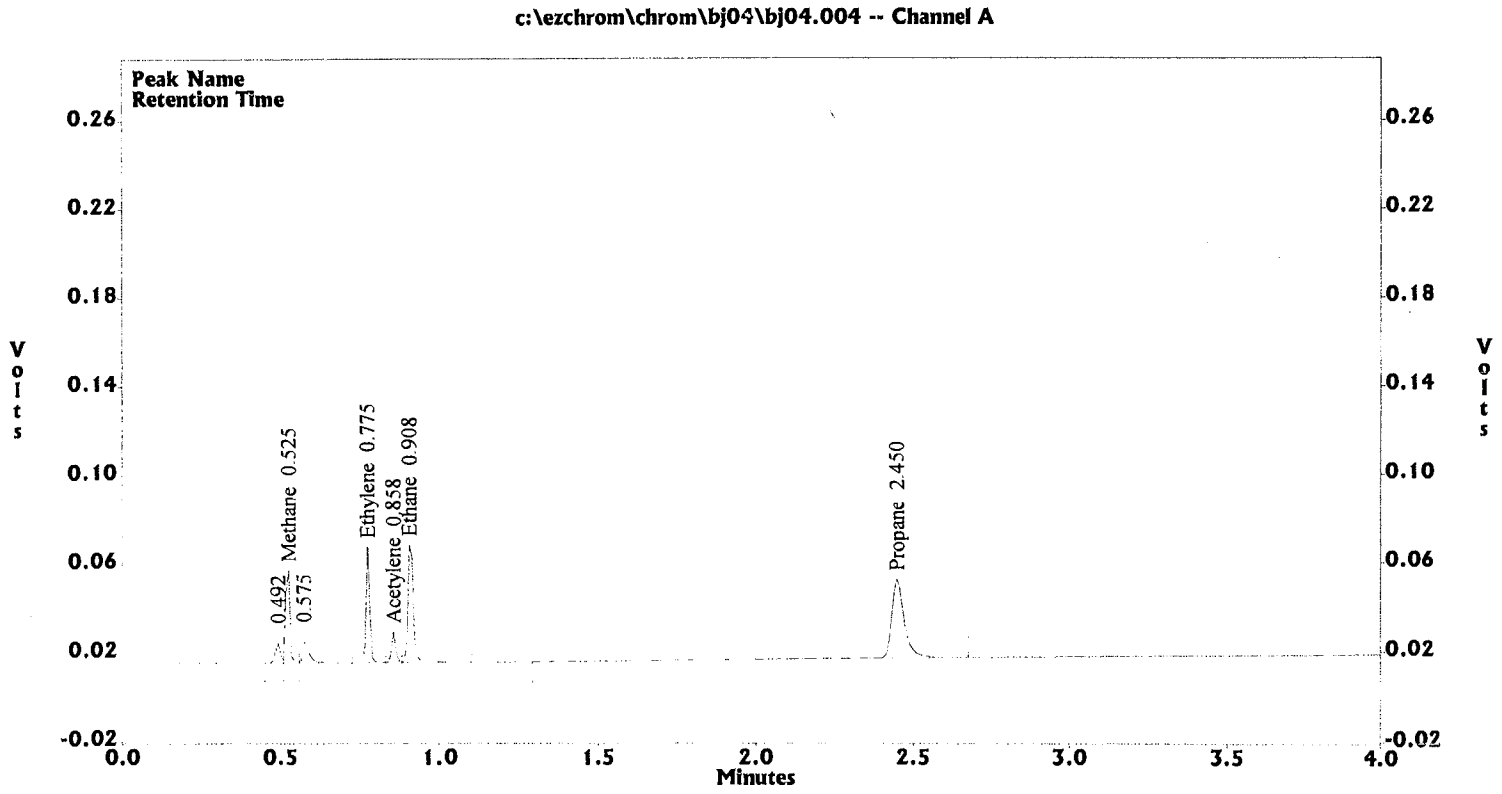


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bj04\bj04.004
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DGJ004WL
Acquired : Oct 04, 2024 07:56:33
Printed : Oct 04, 2024 08:33:15
User : LErmol

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	39269	3195.35	12.289
4	Ethylene	0.775	42285	2060.05	20.526
5	Acetylene	0.858	11533	574.97	20.058
6	Ethane	0.908	64629	2984.48	21.655
7	Propane	2.450	97582	2994.95	32.582

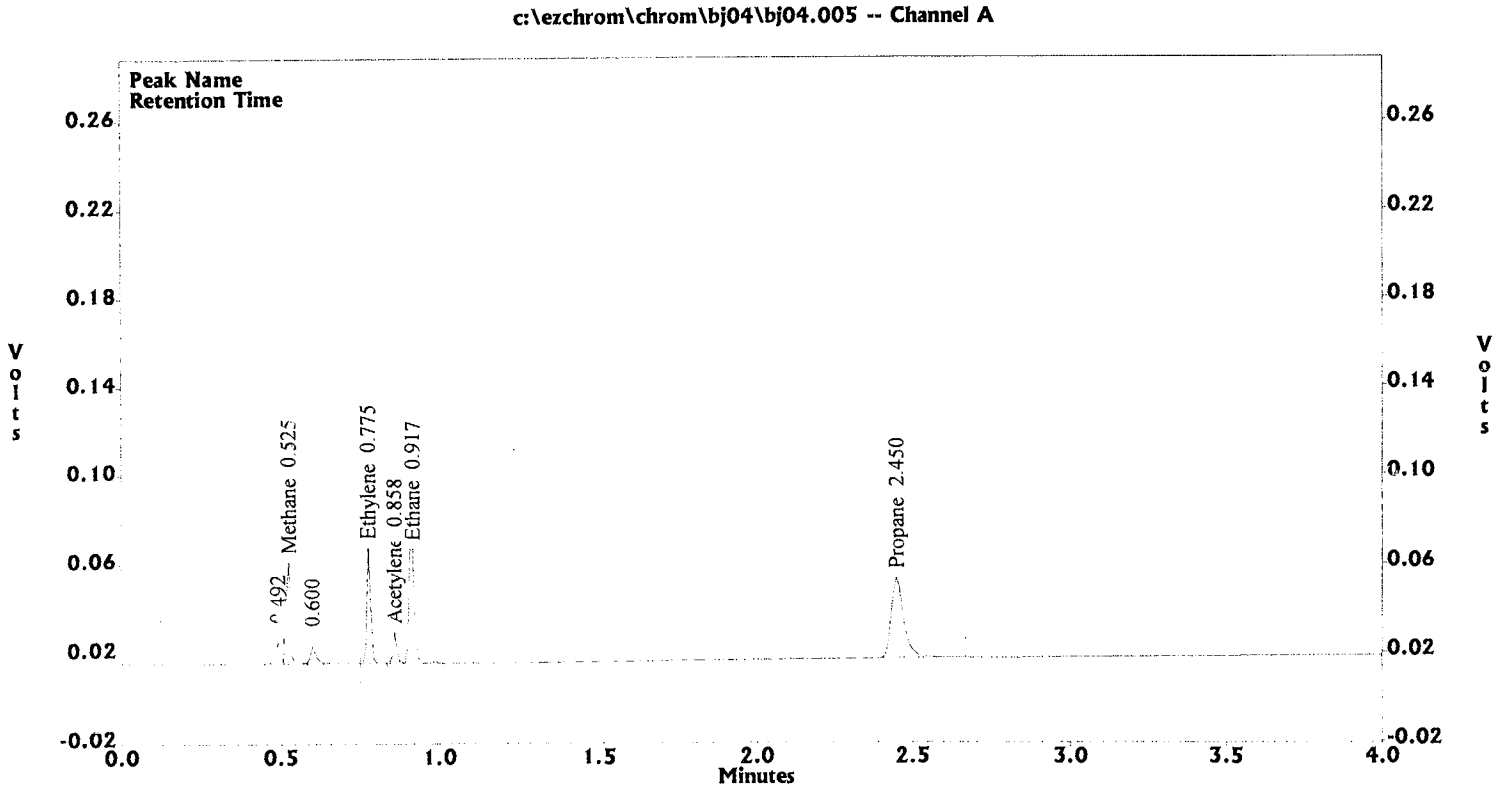


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bj04\bj04.005
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DGJ004WC
Acquired : Oct 04, 2024 08:07:16
Printed : Oct 04, 2024 08:33:24
User : LErmol

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	41043	3195.35	12.845
4	Ethylene	0.775	43253	2060.05	20.996
5	Acetylene	0.858	11944	574.97	20.773
6	Ethane	0.917	65963	2984.48	22.102
7	Propane	2.450	100181	2994.95	33.450



INITIAL CALIBRATION(S)

INITIAL CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
LFID & Datetime: BH10002A 08/10/23 11:25
LFID & Datetime: BH10003A 08/10/23 11:38
LFID & Datetime: BH10004A 08/10/23 11:50
LFID & Datetime: BH10005A 08/10/23 12:03
LFID & Datetime: BH10006A 08/10/23 12:17
LFID & Datetime: BH10007A 08/10/23 12:29
CONC UNIT: ppb

COMPOUND	CONC X	CALIBRATION FACTORS (AREA)/UNIT 2.00X	10.00X	25.00X	40.00X	75.00X	100.00X	MEAN	%RSD
Methane	0.34	3675	3492	3190	3042	2924	2849	3195.3	10.2
Ethylene	0.60	2234	2136	2105	1958	1969	1957	2060.0	5.6
Acetylene	0.55	529	605	618	550	573	575	575.0	5.7
Ethane	0.64	3365	3080	3053	2834	2815	2760	2984.5	7.7
Propane	0.94	3398	3041	2994	2886	2856	2794	2995.0	7.3

DG72H10.MET

8/11/23

INITIAL CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
LFID & Datetime: BH10002A 08/10/23 11:25
LFID & Datetime: BH10003A 08/10/23 11:38
LFID & Datetime: BH10004A 08/10/23 11:50
LFID & Datetime: BH10005A 08/10/23 12:03
LFID & Datetime: BH10006A 08/10/23 12:17
LFID & Datetime: BH10007A 08/10/23 12:29

COMPOUND	RT OF STANDARDS (MIN) 2.0X	10.0X	25.0X	40.0X	75.0X	100.0X	MEAN RT	RT WINDOW FROM	TO	RTWINDOW WIDTH
Methane	0.508	0.517	0.525	0.517	0.517	0.517	0.517	0.474	0.560	0.043
Ethylene	0.767	0.767	0.775	0.767	0.767	0.775	0.770	0.655	0.885	0.115
Acetylene	0.850	0.850	0.858	0.850	0.850	0.850	0.851	0.736	0.966	0.115
Ethane	0.900	0.900	0.908	0.900	0.900	0.908	0.903	0.799	1.007	0.104
Propane	2.442	2.442	2.450	2.442	2.442	2.442	2.443	2.273	2.613	0.170

DG72H10.MET

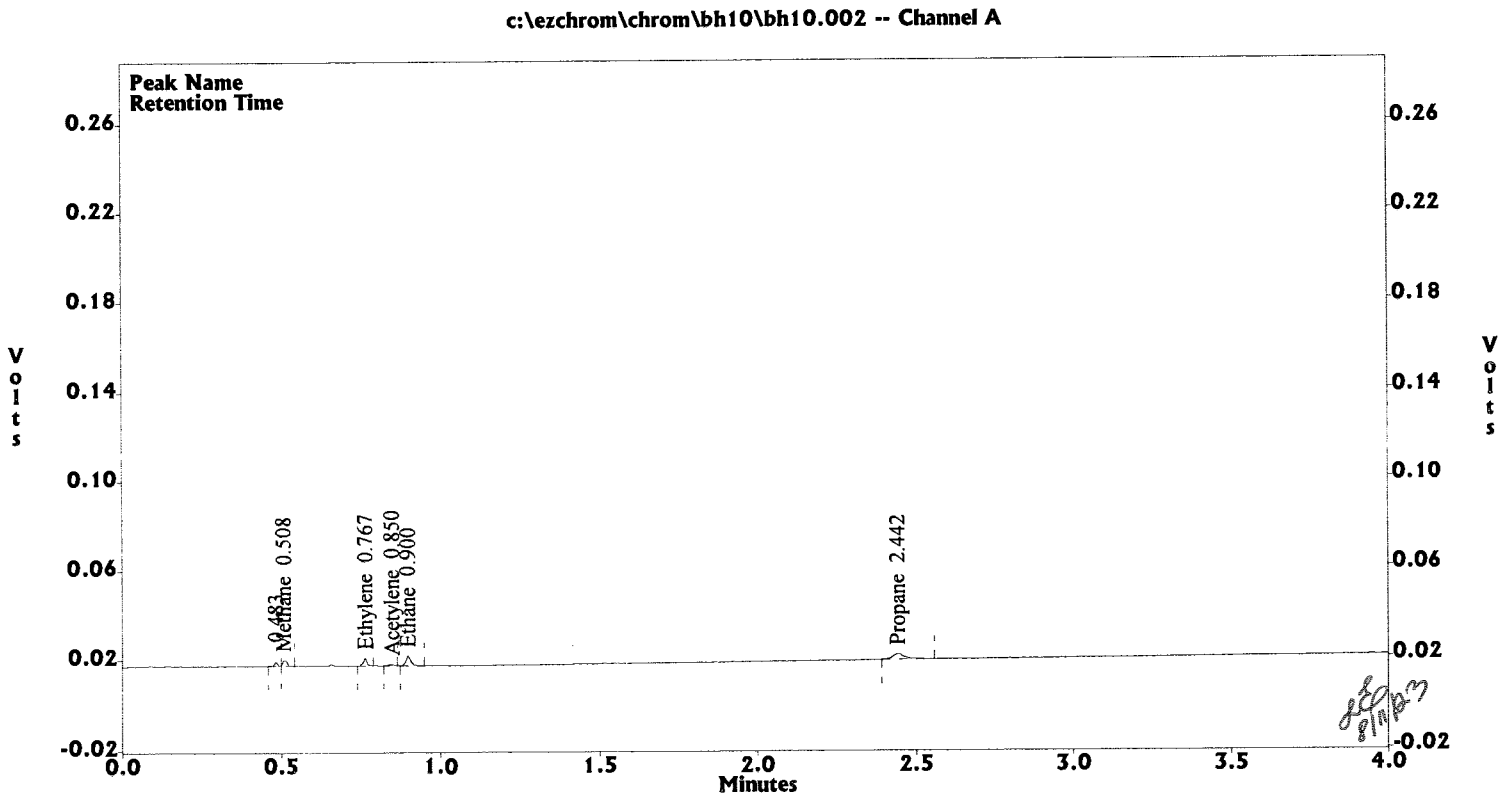
8/11/23

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.002
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1001
Acquired : Aug 10, 2023 11:25:46
Printed : Aug 10, 2023 12:59:27
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.508	2499	3195.35	0.680
3	Ethylene	0.767	2659	2060.05	1.190
4	Acetylene	0.850	585	574.97	1.105
5	Ethane	0.900	4291	2984.48	1.275
6	Propane	2.442	6355	2994.95	1.870

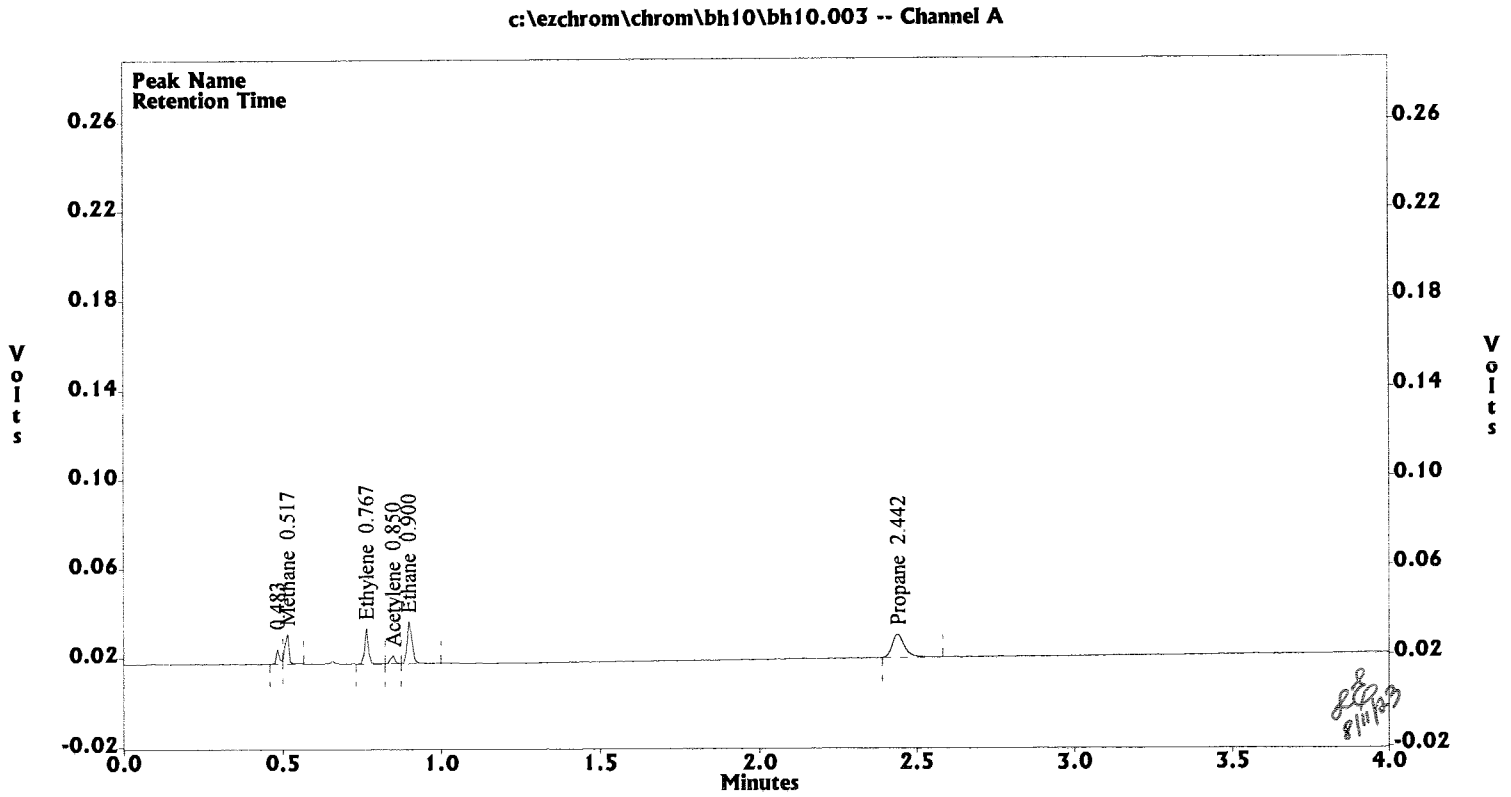


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.003
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1002
Acquired : Aug 10, 2023 11:38:22
Printed : Aug 10, 2023 13:00:53
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	11880	3195.35	3.402
3	Ethylene	0.767	12718	2060.05	5.953
4	Acetylene	0.850	3346	574.97	5.528
5	Ethane	0.900	19644	2984.48	6.378
6	Propane	2.442	28430	2994.95	9.350

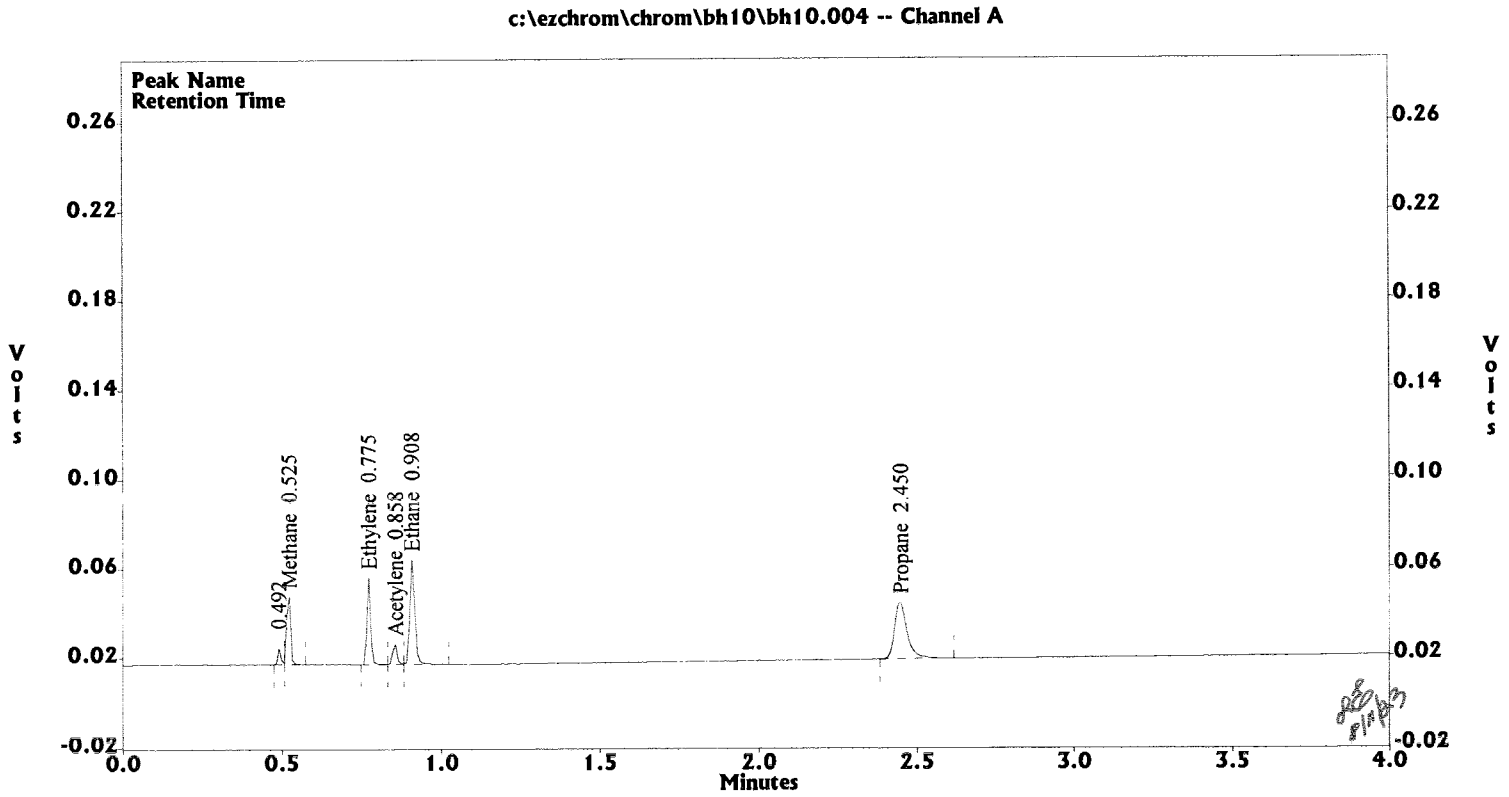


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.004
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1003
Acquired : Aug 10, 2023 11:50:35
Printed : Aug 10, 2023 13:01:17
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	27130	3195.35	8.504
3	Ethylene	0.775	31321	2060.05	14.880
4	Acetylene	0.858	8535	574.97	13.820
5	Ethane	0.908	48689	2984.48	15.950
6	Propane	2.450	70036	2994.95	23.390

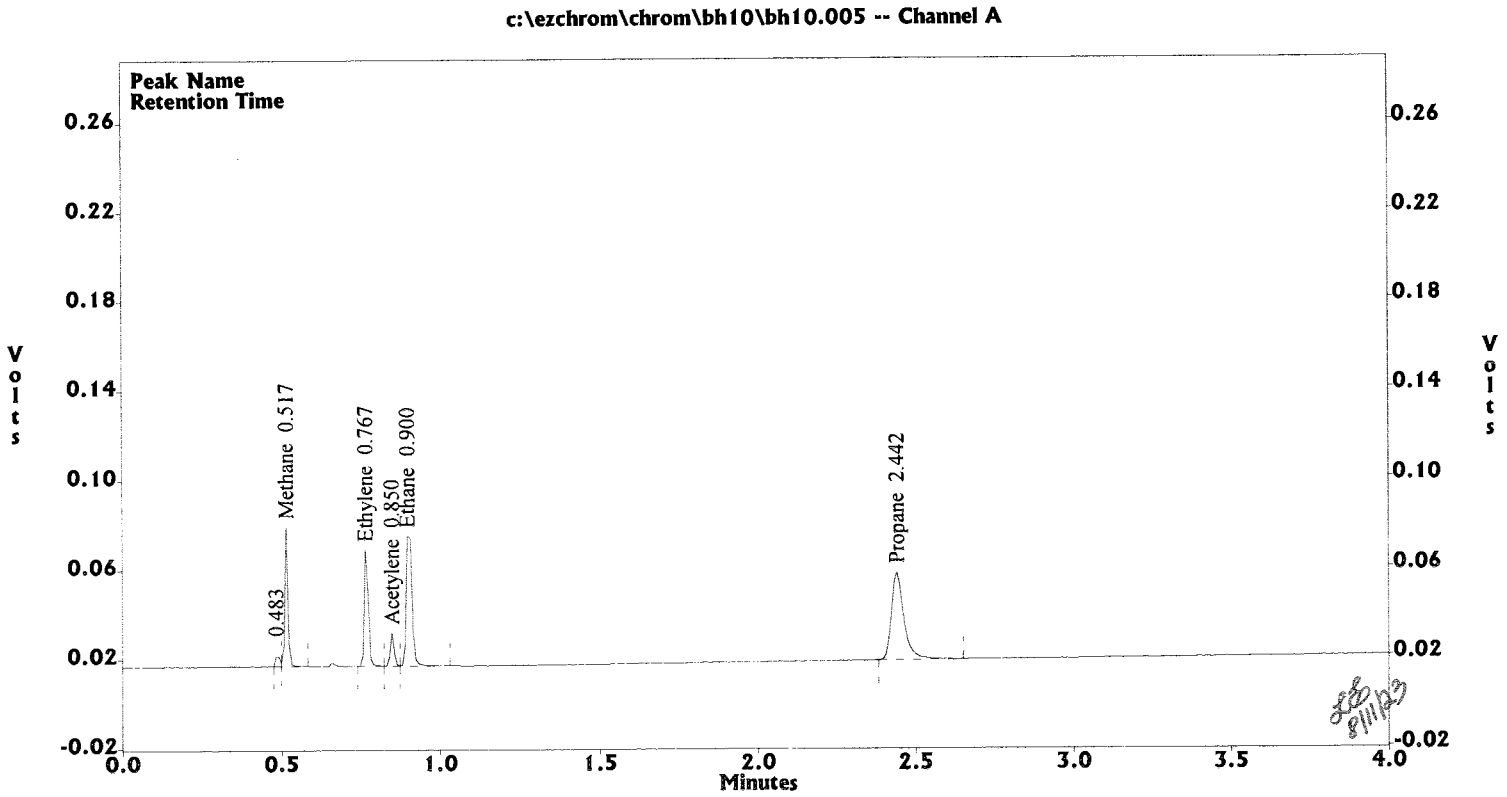


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.005
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1004
Acquired : Aug 10, 2023 12:03:54
Printed : Aug 10, 2023 13:01:25
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	41377	3195.35	13.600
3	Ethylene	0.767	46631	2060.05	23.810
4	Acetylene	0.850	12154	574.97	22.110
5	Ethane	0.900	72285	2984.48	25.510
6	Propane	2.442	107962	2994.95	37.410

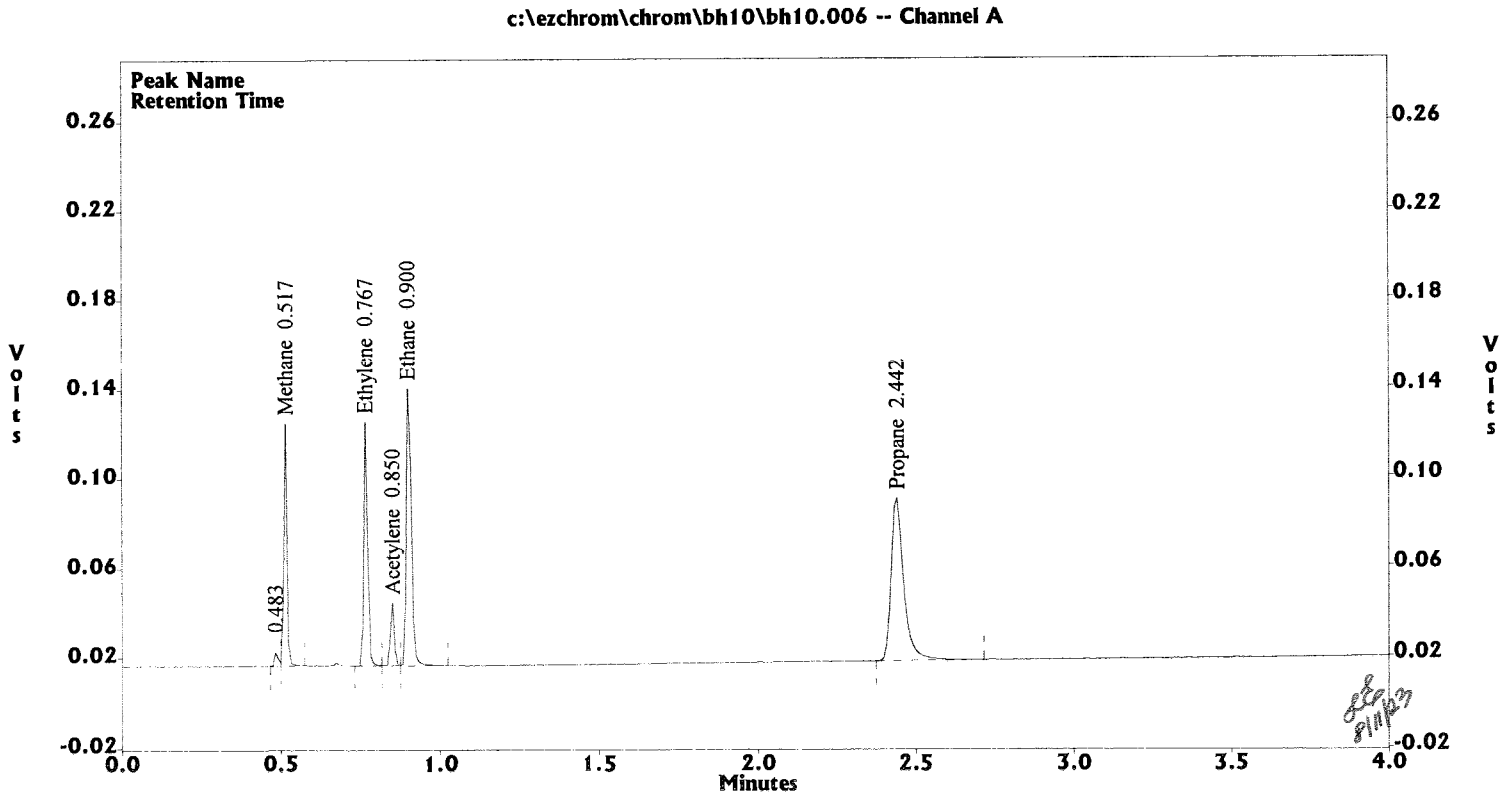


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.006
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1005
Acquired : Aug 10, 2023 12:17:22
Printed : Aug 10, 2023 13:01:34
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	74581	3195.35	25.510
3	Ethylene	0.767	87901	2060.05	44.640
4	Acetylene	0.850	23740	574.97	41.450
5	Ethane	0.900	134633	2984.48	47.830
6	Propane	2.442	200349	2994.95	70.150

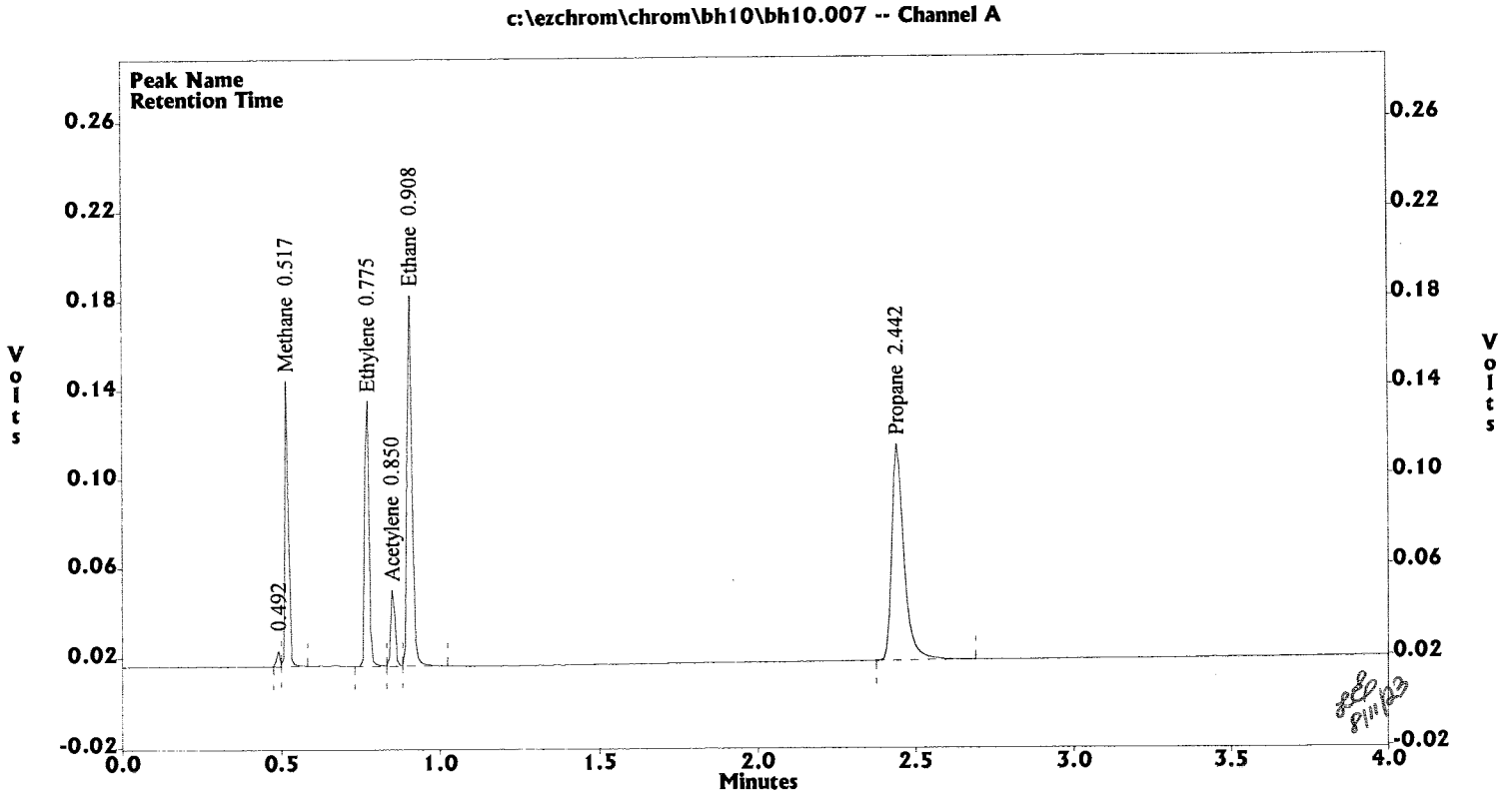


METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.007
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : DG72H1006
Acquired : Aug 10, 2023 12:29:40
Printed : Aug 10, 2023 13:01:43
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	96885	3195.35	34.010
3	Ethylene	0.775	116477	2060.05	59.520
4	Acetylene	0.850	31787	574.97	55.270
5	Ethane	0.908	176033	2984.48	63.770
6	Propane	2.442	261368	2994.95	93.530



SECOND SOURCE VERIFICATION

INITIAL CALIBRATION VERIFICATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BH10008A 08/10/2023 12:54
CONC UNIT : ppb

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.517	0.474	0.560	13.6	3195.3	43313	13.56	-0		15
Ethylene	0.767	0.652	0.882	23.8	2060.0	49406	23.98	1		15
Acetylene	0.850	0.735	0.965	22.1	575.000	12812	22.28	1		15
Ethane	0.900	0.796	1.004	25.5	2984.5	73566	24.65	-3		15
Propane	2.442	2.272	2.612	37.4	2995.0	109634	36.61	-2		15

DG72H10.MET

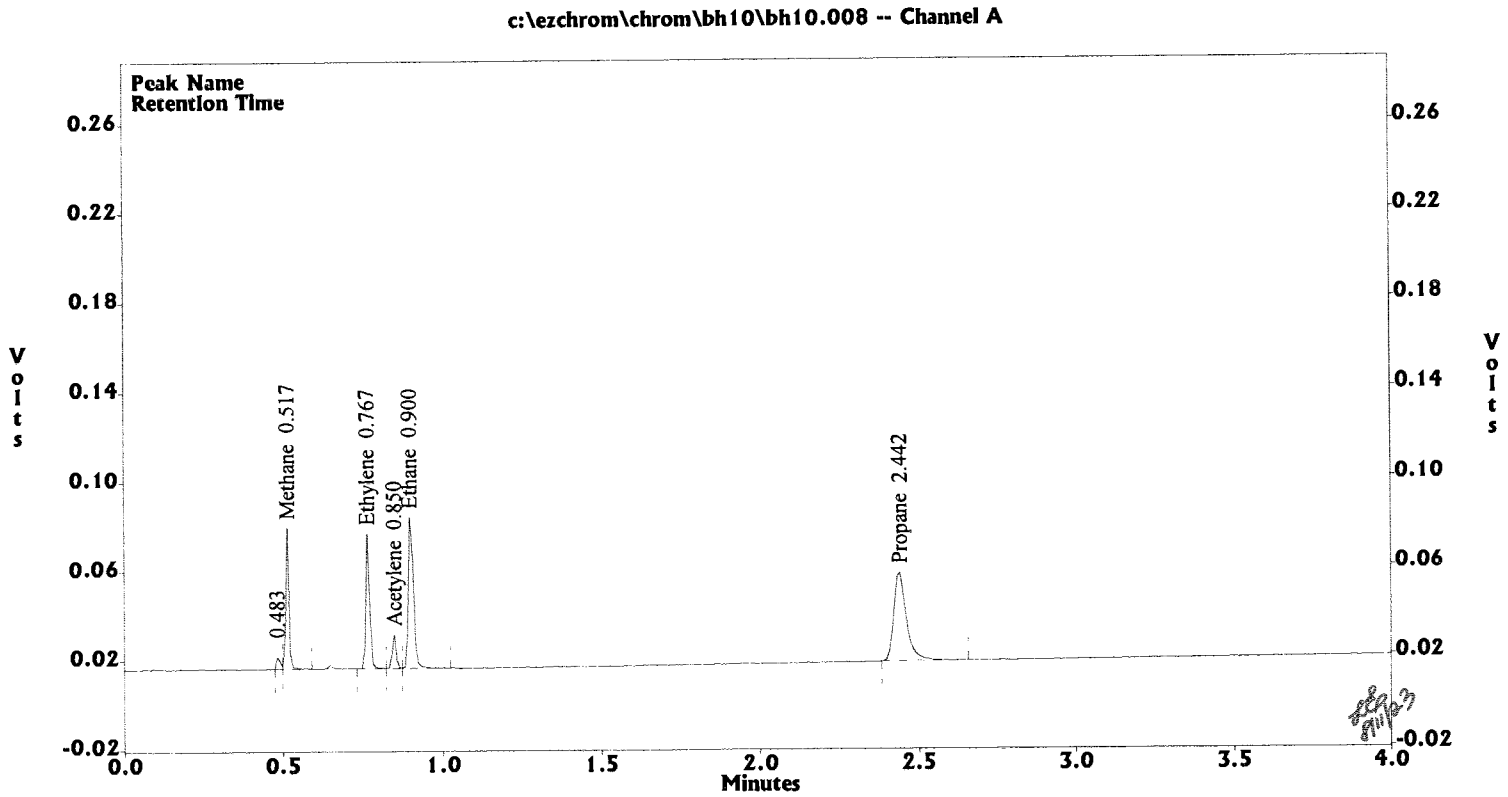
9/11/23

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bh10\bh10.008
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : IDG72H10001
Acquired : Aug 10, 2023 12:54:30
Printed : Aug 10, 2023 13:07:59
User : LTran

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.517	43313	3195.35	13.555
3	Ethylene	0.767	49406	2060.05	23.983
4	Acetylene	0.850	12812	574.97	22.283
5	Ethane	0.900	73566	2984.48	24.649
6	Propane	2.442	109634	2994.95	36.606



DAILY CALIBRATION(S)

CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BJ04002A 10/04/2024 07:27
CONC UNIT : ppb

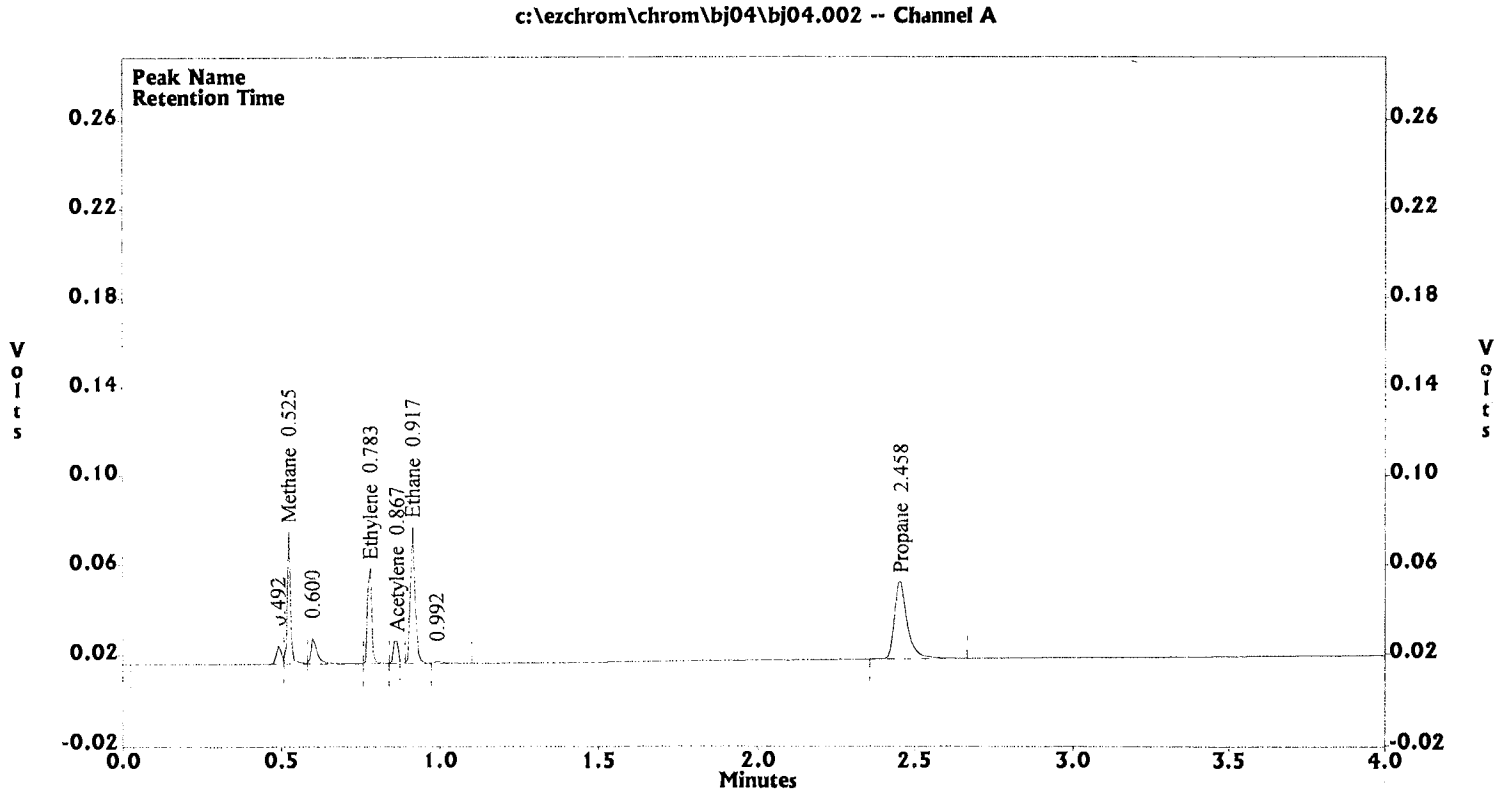
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.525	0.482	0.568	13.6	3195.3	41046	12.85	-6		15
Ethylene	0.783	0.668	0.898	23.8	2060.0	42089	20.43	-14		15
Acetylene	0.867	0.752	0.982	22.1	575.000	11489	19.98	-10		15
Ethane	0.917	0.813	1.021	25.5	2984.5	65195	21.84	-14		15
Propane	2.458	2.288	2.628	37.4	2995.0	96747	32.30	-14		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bj04\bj04.002
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10558
Acquired : Oct 04, 2024 07:27:53
Printed : Oct 04, 2024 10:11:42
User : LErmol

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	41046	3195.35	12.846
4	Ethylene	0.783	42089	2060.05	20.431
5	Acetylene	0.867	11489	574.97	19.982
6	Ethane	0.917	65195	2984.48	21.845
8	Propane	2.458	96747	2994.95	32.303



CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BJ04016A 10/04/2024 10:33
CONC UNIT : ppb

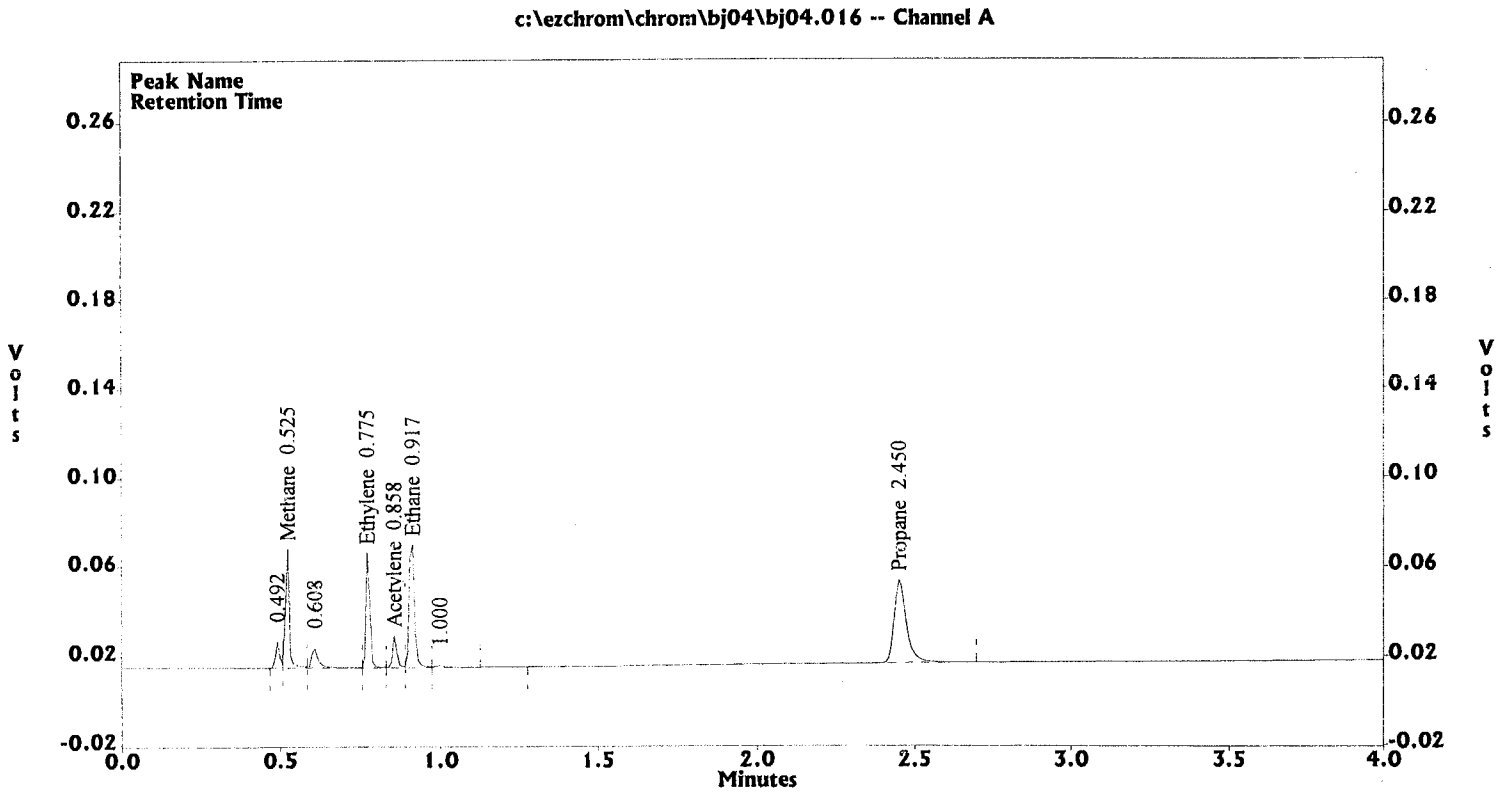
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.525	0.482	0.568	13.6	3195.3	43137	13.50	-1		15
Ethylene	0.775	0.660	0.890	23.8	2060.0	44696	21.70	-9		15
Acetylene	0.858	0.743	0.973	22.1	575.000	12650	22.00	-0		15
Ethane	0.917	0.813	1.021	25.5	2984.5	65580	21.97	-14		15
Propane	2.450	2.280	2.620	37.4	2995.0	103000	34.39	-8		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bj04\bj04.016
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10559
Acquired : Oct 04, 2024 10:33:35
Printed : Oct 04, 2024 12:04:48
User : LErmol

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	43137	3195.35	13.500
4	Ethylene	0.775	44696	2060.05	21.697
5	Acetylene	0.858	12650	574.97	22.001
6	Ethane	0.917	65580	2984.48	21.974
8	Propane	2.450	103000	2994.95	34.391



CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BJ04027A 10/04/2024 13:33
CONC UNIT : ppb

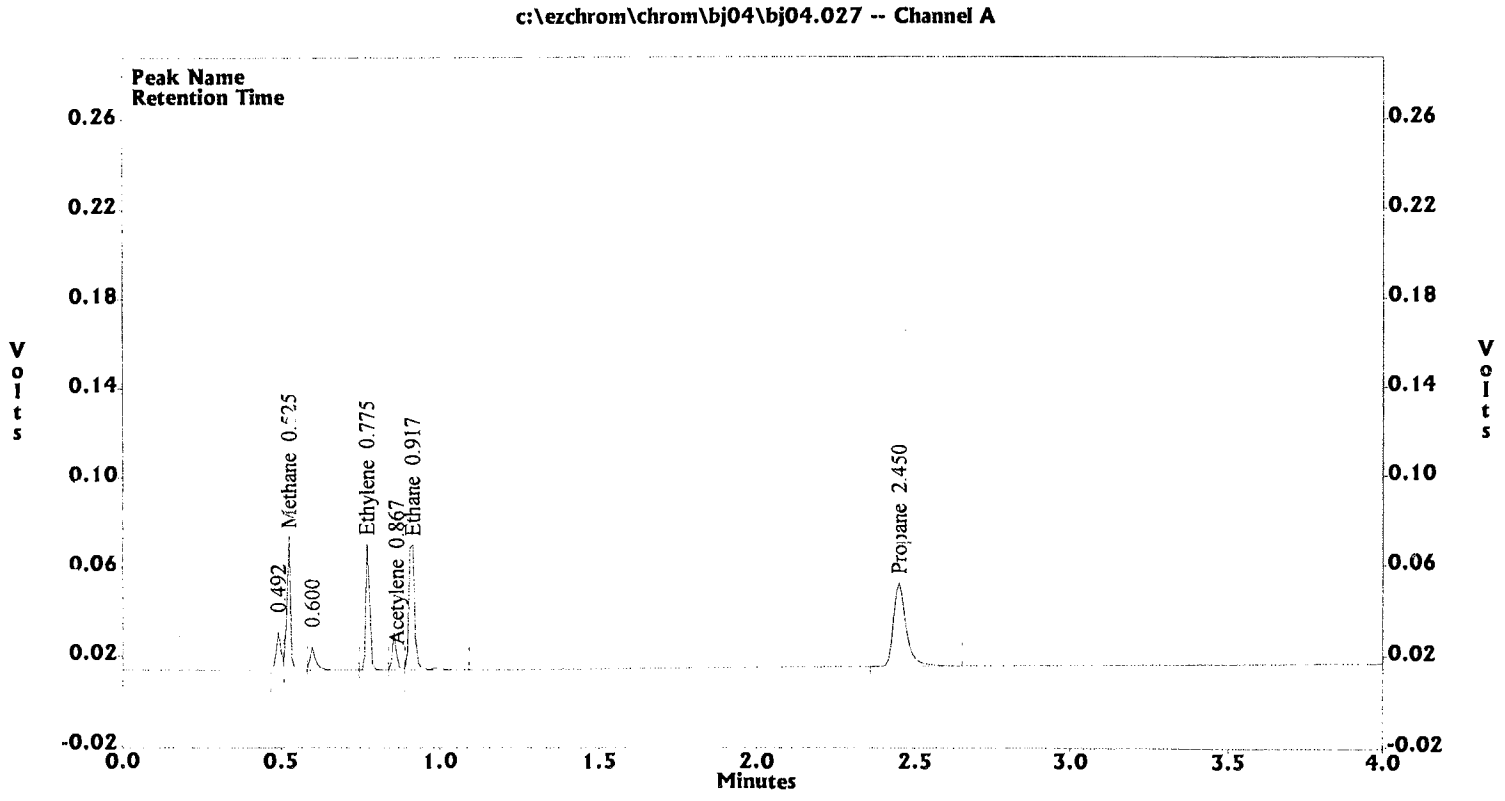
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.525	0.482	0.568	13.6	3195.3	45820	14.34	5		15
Ethylene	0.775	0.660	0.890	23.8	2060.0	48644	23.61	-1		15
Acetylene	0.867	0.752	0.982	22.1	575.000	14472	25.17	14		15
Ethane	0.917	0.813	1.021	25.5	2984.5	71004	23.79	-7		15
Propane	2.450	2.280	2.620	37.4	2995.0	100828	33.67	-10		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bj04\bj04.027
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10560
Acquired : Oct 04, 2024 13:33:06
Printed : Oct 04, 2024 14:17:26
User : LErmol

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	45820	3195.35	14.340
4	Ethylene	0.775	48644	2060.05	23.613
5	Acetylene	0.867	14472	574.97	25.170
6	Ethane	0.917	71004	2984.48	23.791
7	Propane	2.450	100828	2994.95	33.666



CONTINUE CALIBRATION
DISSOLVED GASES

Lab Name : EMAX Inc
Instrument ID : GCT072
GC Columm : RT-QS-BOND
Column size ID : 30MX0.53MM
Mid Conc Init LFID & Datetime: BH10005A 08/10/2023 12:03
Conc Cont LFID & Datetime: BJ04036A 10/04/2024 15:47
CONC UNIT : ppb

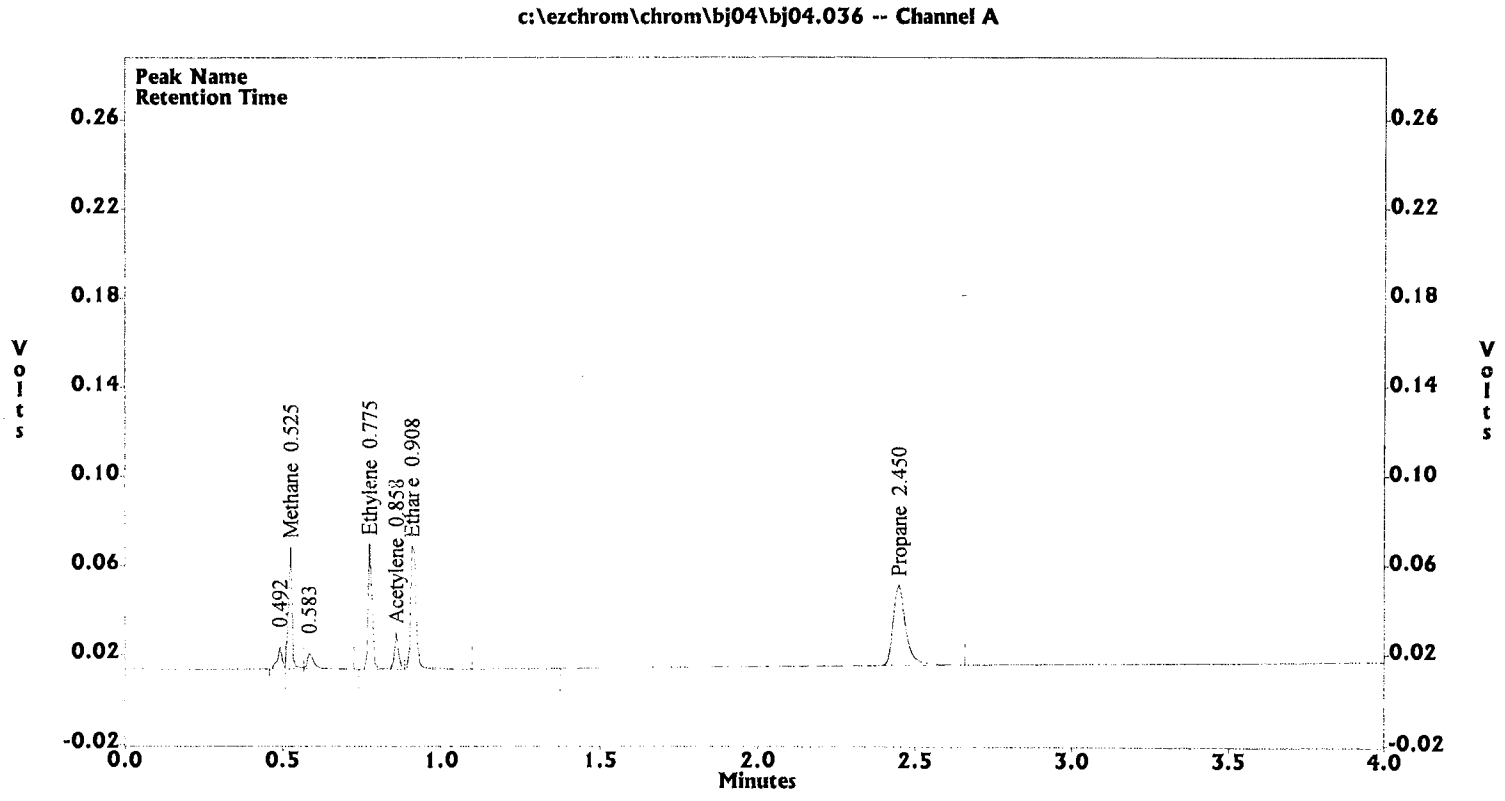
COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	AVERAGE CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
Methane	0.525	0.482	0.568	13.6	3195.3	41386	12.95	-5		15
Ethylene	0.775	0.660	0.890	23.8	2060.0	47177	22.90	-4		15
Acetylene	0.858	0.743	0.973	22.1	575.000	13673	23.78	8		15
Ethane	0.908	0.804	1.012	25.5	2984.5	68459	22.94	-10		15
Propane	2.450	2.280	2.620	37.4	2995.0	98518	32.90	-12		15

METHOD EPA DGAS by GC/FID
EMAX Analytical Laboratories, Inc.

File : c:\ezchrom\chrom\bj04\bj04.036
Method : c:\ezchrom\methods\dg72h10.met
Sample ID : CDG72H10561
Acquired : Oct 04, 2024 15:47:19
Printed : Oct 04, 2024 15:58:08
User : LErmol

Channel A Results

#	Peak Name	Ret.Time(Min)	Area	Ave. CF	ESTD Conc.(ppb)
2	Methane	0.525	41386	3195.35	12.952
4	Ethylene	0.775	47177	2060.05	22.901
5	Acetylene	0.858	13673	574.97	23.780
6	Ethane	0.908	68459	2984.48	22.938
7	Propane	2.450	98518	2994.95	32.895



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

- ☐ 10x : 400 µL of sample to 4000 µL final vol. (He)
- ☐ 20x : 200 µL of sample to 4000 µL final vol. (He)
- ☐ 40x : 100 µL of sample to 4000 µL final vol. (He)

DGAS ICAL
DGH008W : 4LCS (Training File Long Term)

Book #: A72-031
Instrument No.: 72
Analytical Sequence: BH10
Method File: DG72H10
Analytical Batch: CDG72H10001

SOP #	Rev. #
☑ EMAX-RSK175	5
☐ EMAX-D1945	0
☐ EMAX	
☐ EMAX	

STANDARDS ID		Conc (µL/L)
DCC	SS5B-25-22-02	200
ICAL	SS5B-25-21-03	10→500
ICV	SS5B-25-22-01	200
Temperature (°C)	21	
Data File		

SYRINGES
☐ 100 µL - MSF-02-01-12
☑ 100 µL - MSF-03-01-09
☐ 50 µL - MSF-03-01-08
☐ 100 µL - MSF-03-01-03
☐ 10 µL - MSF-03-01-06
☐

ELECTRONIC DATA ARCHIVAL	
Location	Date
Labbkup/Ezchrom/EZC_9_DGAS	

Analyzed By: LT
Date: 08/10/23
Disposed By:
Date Disposed:

Batch: bh10.seq

Run	Run Type	Sample ID	Method	Filename	Level	Mult.	Description
1	Unknown	IB72H1001	dg72h10.met	BH10.001	0	1	100uL
2	Begin Calibration	DG72H1001	dg72h10.met	BH10.002	1	1	100uL
3	Calibration	DG72H1002	dg72h10.met	BH10.003	2	1	100uL
4	Calibration	DG72H1003	dg72h10.met	BH10.004	3	1	100uL
5	Calibration	DG72H1004	dg72h10.met	BH10.005	4	1	100uL
6	Calibration	DG72H1005	dg72h10.met	BH10.006	5	1	100uL
7	End Calibration	DG72H1006	dg72h10.met	BH10.007	6	1	100uL
8	Unknown	IDG72H10001	dg72h10.met	BH10.008	0	1	100uL

FINAL

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
DISSOLVED GAS

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

- ☐ 10x : 400 µL of sample to 4000 µL final vol. (He)
- ☐ 20x : 200 µL of sample to 4000 µL final vol. (He)
- ☐ 40x : 100 µL of sample to 4000 µL final vol. (He)

DGJ004W: I135
I164
J033

Book #:	A72-034
Instrument No.:	72
Analytical Sequence:	BJ04
Method File:	DG72H10
Analytical Batch:	CDG72H10558

SOP #	Rev. #
☑ EMAX-RSK175	5
☐ EMAX-D1945	0
☐ EMAX-	
☐ EMAX-	

STANDARDS ID		Conc (µL/L)
DCC	SGIB-26-29-03	200
Temperature (°C)	21	
Data File		

SYRINGES
☑ 100 µL - MSF-02-01-12
☐ 100 µL - MSF-03-01-09
☑ 50 µL - MSF-03-01-08
☐ 100 µL - MSF-03-01-03
☐ 10 µL - MSF-03-01-12
☐

ELECTRONIC DATA ARCHIVAL	
Location	Date
Labbkup/Ezchrom/EZC_9_DGAS	

Analyzed By: LS

Date: 10/4/24

Disposed By:

Date Disposed:

Batch: bj04.seq

Run	Sample ID	Method	Filename	Vials	Description
1	IB72J0401	dq72h10.met	BJ04.001	1	100 uL
2	CDG72H10558	dq72h10.met	BJ04.002	1	100 uL
3	DGJ004WB	dq72h10.met	BJ04.003	1	100 uL
4	DGJ004WL	dq72h10.met	BJ04.004	1	100 uL
5	DGJ004WC	dq72h10.met	BJ04.005	1	100 uL
6	I135-02	dq72h10.met	BJ04.006	1	100 uL
7	I135-03	dq72h10.met	BJ04.007	1	100 uL
8	I135-04	dq72h10.met	BJ04.008	1	100 uL
9	I135-05	dq72h10.met	BJ04.009	1	100 uL
10	I135-06	dq72h10.met	BJ04.010	1	100 uL
11	I135-08	dq72h10.met	BJ04.011	1	100 uL
12	I135-09	dq72h10.met	BJ04.012	1	100 uL
13	I135-10	dq72h10.met	BJ04.013	1	100 uL
14	I135-12	dq72h10.met	BJ04.014	1	100 uL
15	I135-14	dq72h10.met	BJ04.015	1	100 uL
16	CDG72H10559	dq72h10.met	BJ04.016	1	100 uL
17	I135-15	dq72h10.met	BJ04.017	1	100 uL
18	I135-16	dq72h10.met	BJ04.018	1	100 uL
19	I135-02I DF=10	dq72h10.met	BJ04.019	10	100 uL
20	I135-05I DF=50	dq72h10.met	BJ04.020	50	100 uL
21	I135-06I DF=2	dq72h10.met	BJ04.021	2	100 uL
22	I135-10I DF=50	dq72h10.met	BJ04.022	50	100 uL
23	I135-12I DF=5	dq72h10.met	BJ04.023	5	100 uL
24	I135-14I DF=100	dq72h10.met	BJ04.024	100	100 uL
25	J033-07	dq72h10.met	BJ04.025	1	100 uL
26	J033-08	dq72h10.met	BJ04.026	1	100 uL
27	CDG72H10560	dq72h10.met	BJ04.027	1	100 uL
28	I164-03	dq72h10.met	BJ04.028	1	100 uL
29	I164-05	dq72h10.met	BJ04.029	1	100 uL
30	I164-06	dq72h10.met	BJ04.030	1	100 uL
31	I164-07	dq72h10.met	BJ04.031	1	100 uL
32	I164-07M	dq72h10.met	BJ04.032	1	100 uL
33	I164-07S	dq72h10.met	BJ04.033	1	100 uL
34	I164-08	dq72h10.met	BJ04.034	1	100 uL
35	I164-09	dq72h10.met	BJ04.035	1	100 uL
36	CDG72H10561	dq72h10.met	BJ04.036	1	100 uL
37		dq72h10.met	BJ04.037	1	100 uL

FINAL

EXTRACTION LOG(S)

EMAX LABORATORIES, INC.

EXTRACTION LOG FOR DISSOLVED GAS

SOP ☑ EMAX-RSK175 Rev. 5 ☐ Propylene ☐ Room Temp. (°C): 21 LC 10/4/24 Book #: EDG-062

Start Date: 10/4/24 Time: 7:00 End Date: 10/4/24 Time: ~~8:00~~ 11:00

PREPARATION BATCH* 24J0044S

Sample Prep ID	Lab Sample ID	Sample Amount (ml)	Extract Volume (ml)	pH (< 2)	Notes
01	DBJ004 WB	39	4	n/a	
02	WL			n/a	
03	WC			n/a	
04	I135 - 02			✓	
05	03			✓	
06	04			✓	
07	05			✓	
08	06			✓	
09	08			✓	
10	09			✓	
11	10			✓	
12	12			✓	
13	14			✓	
14	15			✓	
15	16			✓	
16	I164 - 03			✓	
17	05			✓	
18	06			✓	
19	07			✓	
20	07M			✓	
21	07S			✓	
22	08			✓	
23	09			✓	
24	J033 - 07			✓	
25	08			✓	
26					
27					
28		LC 10/4/24			
29					
30					

Standards	ID	Amount Added (ul)
LCS/MS	SS5A-13-0105	1600

Reagent	Source
H_2O	RW3-23-001
He	SS5A-13-02-09
Thermometer ID #:	RSK175-01
Tedlar Bag Lot#:	28221012
pH Strips:	MC439975
Vial Manufacturer:	ESS# OR309621

Syringes

- ☑ 5 mL - MSF-01-03-06
- ☐ 5 mL - MSF-01-01-12
- ☑ 5 mL - MSF-03-01-1S
- ☐ 1 mL - MSF-01-03-14
- ☐ 1 mL - MSF-01-02-24
- ☐

Comments:

Prepared By: LC

Standard Added By: LC

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

WET CHEMICAL ANALYSES

SDG#: 24J033

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24J033

METHOD E300.0
CHLORIDE

A total of two(2) water samples were received on 10/03/24 to be analyzed for Chloride in accordance with Method E300.0 and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Chloride was not detected in ICJ034WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. ICJ034WL/ICJ034WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Chloride was within MS QC limits in J033-08IM/J033-08IS. Sample duplicate was analyzed and RPD was within expected value. Refer to Matrix QC summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24J033

METHOD E300.0
SULFATE

A total of two(2) water samples were received on 10/03/24 to be analyzed for Sulfate in accordance with Method E300.0 and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Sulfate was not detected in ICJ034WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. ICJ034WL/ICJ034WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Sulfate was within MS QC limits in J033-08IM/J033-08IS. Sample duplicate was analyzed and RPD was within expected value. Refer to Matrix QC summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

SAMPLE RESULTS

METHOD E300.0
CHLORIDE

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24J033
Matrix : WATER
InstrumentID : D7

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DFxPREP FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	ICJ034WB	ND	1	NA	0.2	0.05	10/25/2402:14	NA	AJ30-38	AJ30-36	ICJ034W	NA	NA
LCS1W	ICJ034WL	1.98	1	NA	0.2	0.05	10/25/2402:34	NA	AJ30-39	AJ30-36	ICJ034W	NA	NA
LCD1W	ICJ034WC	1.86	1	NA	0.2	0.05	10/25/2402:55	NA	AJ30-40	AJ30-36	ICJ034W	NA	NA
MW42D-GW100224	J033-07I	176	100	NA	20	5	10/25/2407:18	NA	AJ30-53	AJ30-48	ICJ034W	10/02/2412:10	10/03/24
FB10-GW100224	J033-08I	152	100	NA	20	5	10/25/2407:39	NA	AJ30-54	AJ30-48	ICJ034W	10/02/2408:00	10/03/24
FB10-GW100224DUP	J033-08ID	154	100	NA	20	5	10/25/2407:59	NA	AJ30-55	AJ30-48	ICJ034W	10/02/2408:00	10/03/24
FB10-GW100224MS	J033-08IM	357	100	NA	20	5	10/25/2408:19	NA	AJ30-56	AJ30-48	ICJ034W	10/02/2408:00	10/03/24
FB10-GW100224MSD	J033-08IS	369	100	NA	20	5	10/25/2408:39	NA	AJ30-57	AJ30-48	ICJ034W	10/02/2408:00	10/03/24

METHOD E300.0
SULFATE

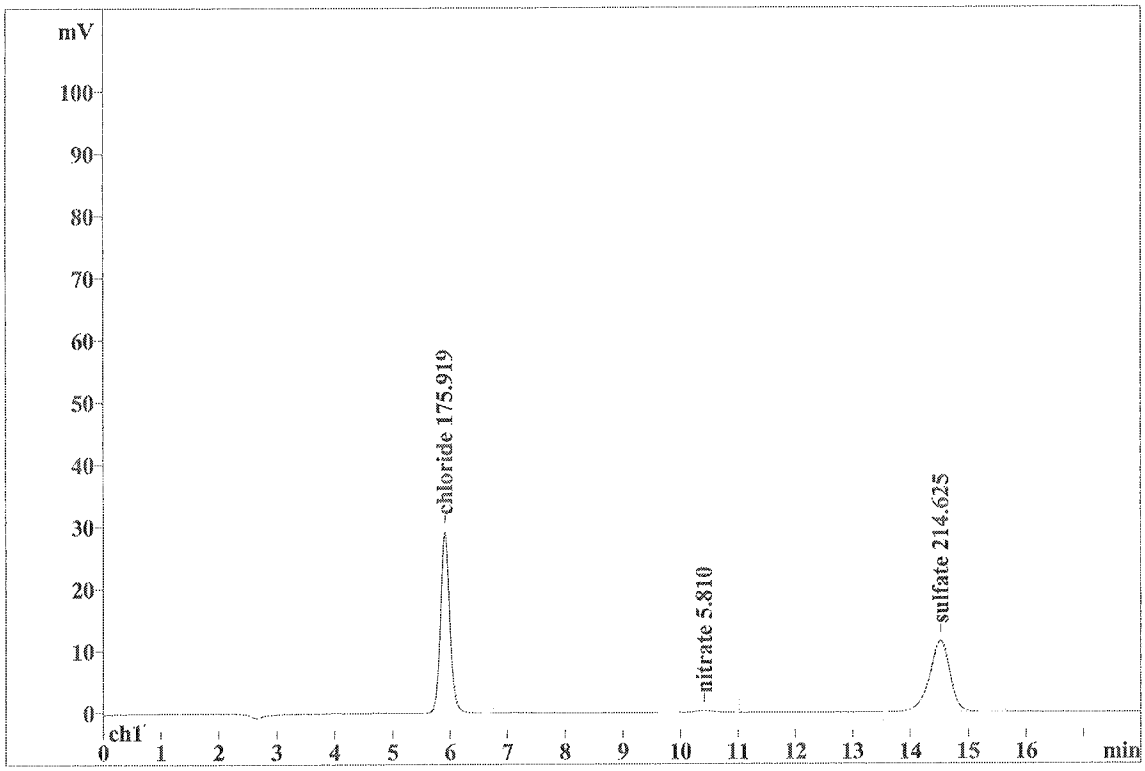
Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24J033
Matrix : WATER
InstrumentID : D7

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DFxPREP FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	ICJ034WB	ND	1	NA	0.5	0.13	10/25/2402:14	NA	AJ30-38	AJ30-36	ICJ034W	NA	NA
LCS1W	ICJ034WL	5.05	1	NA	0.5	0.13	10/25/2402:34	NA	AJ30-39	AJ30-36	ICJ034W	NA	NA
LCD1W	ICJ034WC	4.70	1	NA	0.5	0.13	10/25/2402:55	NA	AJ30-40	AJ30-36	ICJ034W	NA	NA
MW42D-GW100224	J033-07I	215	100	NA	50	13	10/25/2407:18	NA	AJ30-53	AJ30-48	ICJ034W	10/02/2412:10	10/03/24
FB10-GW100224	J033-08I	149	100	NA	50	13	10/25/2407:39	NA	AJ30-54	AJ30-48	ICJ034W	10/02/2408:00	10/03/24
FB10-GW100224DUP	J033-08ID	159	100	NA	50	13	10/25/2407:59	NA	AJ30-55	AJ30-48	ICJ034W	10/02/2408:00	10/03/24
FB10-GW100224MS	J033-08IM	691	100	NA	50	13	10/25/2408:19	NA	AJ30-56	AJ30-48	ICJ034W	10/02/2408:00	10/03/24
FB10-GW100224MSD	J033-08IS	676	100	NA	50	13	10/25/2408:39	NA	AJ30-57	AJ30-48	ICJ034W	10/02/2408:00	10/03/24

Report date: 11/5/2024 4:29:44 PM
Printed by: ERodel

Ident: AJ30-53 J033-07I DF=100
Analysis from: 10/25/2024 7:18:48 AM
File: _2024-10-25_07-18.chw Last save: 10/28/2024 12:59:09 PM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134858

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/20ml
Vial number: 53
Volume: 1.0 µL
Dilution: 100.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	5.91	29.23	330.108	175.919	chloride
2	10.42	0.33	7.108	5.810	nitrate
3	14.52	11.49	283.388	214.625	sulfate
3	18.00	41.05	620.603	396.354	

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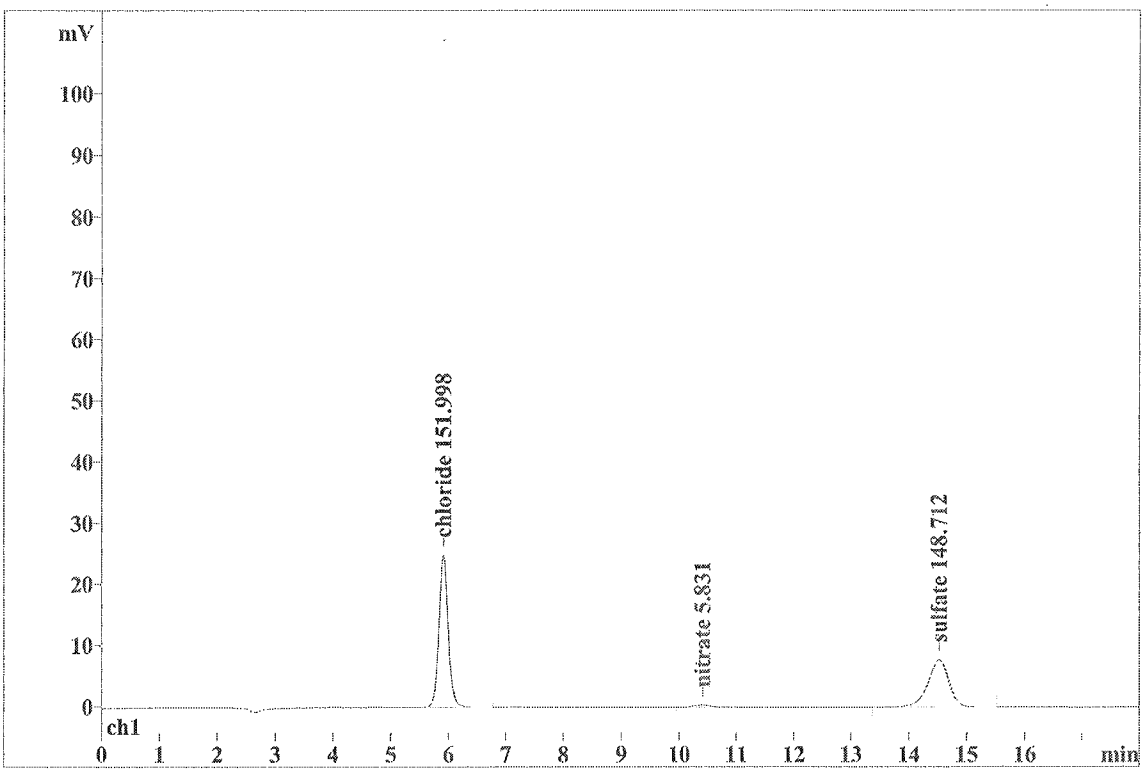
Report date: 11/5/2024 4:37:30 PM
Printed by: ERodel

Ident: AJ30-54 J033-08I DF=100
Analysis from: 10/25/2024 7:39:05 AM
File: _2024-10-25_07-39.chw Last save: 10/28/2024 12:59:52 PM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134859

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/20ml
Vial number: 54
Volume: 1.0 µL
Dilution: 100.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	5.92	24.94	283.144	151.998	chloride
2	10.41	0.36	7.202	5.831	nitrate
3	14.53	7.68	191.995	148.712	sulfate
3	18.00	32.99	482.341	306.541	

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QC SUMMARIES

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : E300.0

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID :	MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID :	ICJ034WB	ICJ034WL	ICJ034WC
LAB FILE ID :	AJ30-38	AJ30-39	AJ30-40
DATE PREPARED :	NA	NA	NA
DATE ANALYZED :	10/25/2402:14	10/25/2402:34	10/25/2402:55
PREP BATCH :	ICJ034W	ICJ034W	ICJ034W
CALIBRATION REF:	AJ30-36	AJ30-36	AJ30-36

ACCESSION:

PARAMETER	MB RESULT (mg/L)	SPIKE AMT (mg/L)	BS RESULT (mg/L)	BS REC (%)	SPIKE AMT (mg/L)	BSD RESULT (mg/L)	BSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Chloride	ND	2	1.98	99	2	1.86	93	6	87-111	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : E300.0

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	100	100	100
SAMPLE ID :	FB10-GW100224	FB10-GW100224MS	FB10-GW100224MSD
LAB SAMPLE ID :	J033-08I	J033-08IM	J033-08IS
LAB FILE ID :	AJ30-54	AJ30-56	AJ30-57
DATE PREPARED :	NA	NA	NA
DATE ANALYZED :	10/25/2407:39	10/25/2408:19	10/25/2408:39
PREP BATCH :	ICJ034W	ICJ034W	ICJ034W
CALIBRATION REF:	AJ30-48	AJ30-48	AJ30-48

ACCESSION:

PARAMETER	PARENT RESULT (mg/L)	SPIKE AMT (mg/L)	MS RESULT (mg/L)	MS REC (%)	SPIKE AMT (mg/L)	MSD RESULT (mg/L)	MSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Chloride	152	200	357	102	200	369	108	3	87-111	20

EMAX QUALITY CONTROL DATA
SAMPLE DUPLICATE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : E300.0

MATRIX	: WATER	
DILUTION FACTOR	: 100	100
SAMPLE ID	: FB10-GW100224	FB10-GW100224DUP
LAB SAMPLE ID	: J033-08I	J033-08ID
LAB FILE ID	: AJ30-54	AJ30-55
DATE PREPARED	: NA	NA
DATE ANALYZED	: 10/25/2407:39	10/25/2407:59
PREP BATCH	: ICJ034W	ICJ034W
CALIBRATION REF	: AJ30-48	AJ30-48

ACCESSION:

PARAMETER	PARENT RESULT (mg/L)	DUP RESULT (mg/L)	RPD (%)	MAX RPD (%)
Chloride	152	154	1	20

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : E300.0

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID :	MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID :	ICJ034WB	ICJ034WL	ICJ034WC
LAB FILE ID :	AJ30-38	AJ30-39	AJ30-40
DATE PREPARED :	NA	NA	NA
DATE ANALYZED :	10/25/2402:14	10/25/2402:34	10/25/2402:55
PREP BATCH :	ICJ034W	ICJ034W	ICJ034W
CALIBRATION REF:	AJ30-36	AJ30-36	AJ30-36

ACCESSION:

PARAMETER	MB RESULT (mg/L)	SPIKE AMT (mg/L)	BS RESULT (mg/L)	BS REC (%)	SPIKE AMT (mg/L)	BSD RESULT (mg/L)	BSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Sulfate	ND	5	5.05	101	5	4.70	94	7	87-112	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : E300.0

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	100	100	100
SAMPLE ID :	FB10-GW100224	FB10-GW100224MS	FB10-GW100224MSD
LAB SAMPLE ID :	J033-08I	J033-08IM	J033-08IS
LAB FILE ID :	AJ30-54	AJ30-56	AJ30-57
DATE PREPARED :	NA	NA	NA
DATE ANALYZED :	10/25/2407:39	10/25/2408:19	10/25/2408:39
PREP BATCH :	ICJ034W	ICJ034W	ICJ034W
CALIBRATION REF:	AJ30-48	AJ30-48	AJ30-48

ACCESSION:

PARAMETER	PARENT RESULT (mg/L)	SPIKE AMT (mg/L)	MS RESULT (mg/L)	MS REC (%)	SPIKE AMT (mg/L)	MSD RESULT (mg/L)	MSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Sulfate	149	500	651	100	500	676	105	4	87-112	20

EMAX QUALITY CONTROL DATA
SAMPLE DUPLICATE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : E300.0

MATRIX	: WATER	
DILUTION FACTOR	: 100	100
SAMPLE ID	: FB10-GW100224	FB10-GW100224DUP
LAB SAMPLE ID	: J033-08I	J033-08ID
LAB FILE ID	: AJ30-54	AJ30-55
DATE PREPARED	: NA	NA
DATE ANALYZED	: 10/25/2407:39	10/25/2407:59
PREP BATCH	: ICJ034W	ICJ034W
CALIBRATION REF	: AJ30-48	AJ30-48

ACCESSION:

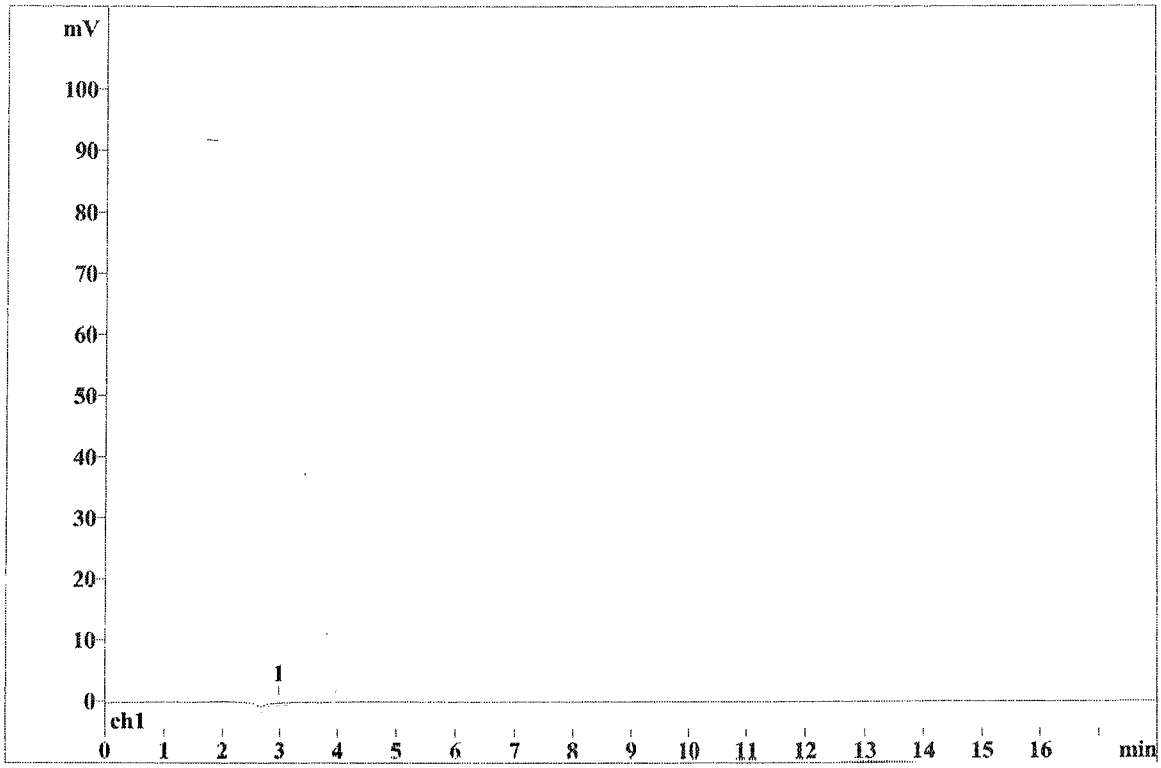
PARAMETER	PARENT RESULT (mg/L)	DUP RESULT (mg/L)	RPD (%)	MAX RPD (%)
Sulfate	149	159	6	20

QC DATA

Report date: 11/5/2024 2:06:51 PM
Printed by: ERodel

Ident: AJ30-38 ICJ034WB
Analysis from: 10/25/2024 2:14:28 AM
File: _2024-10-25_02-14.chw Last save: 10/25/2024 1:32:29 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134843

SAMPLE: METHOD 300/9056/4110B
:
Vial number. 38
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	2.97	0.40	19.599	0.000	

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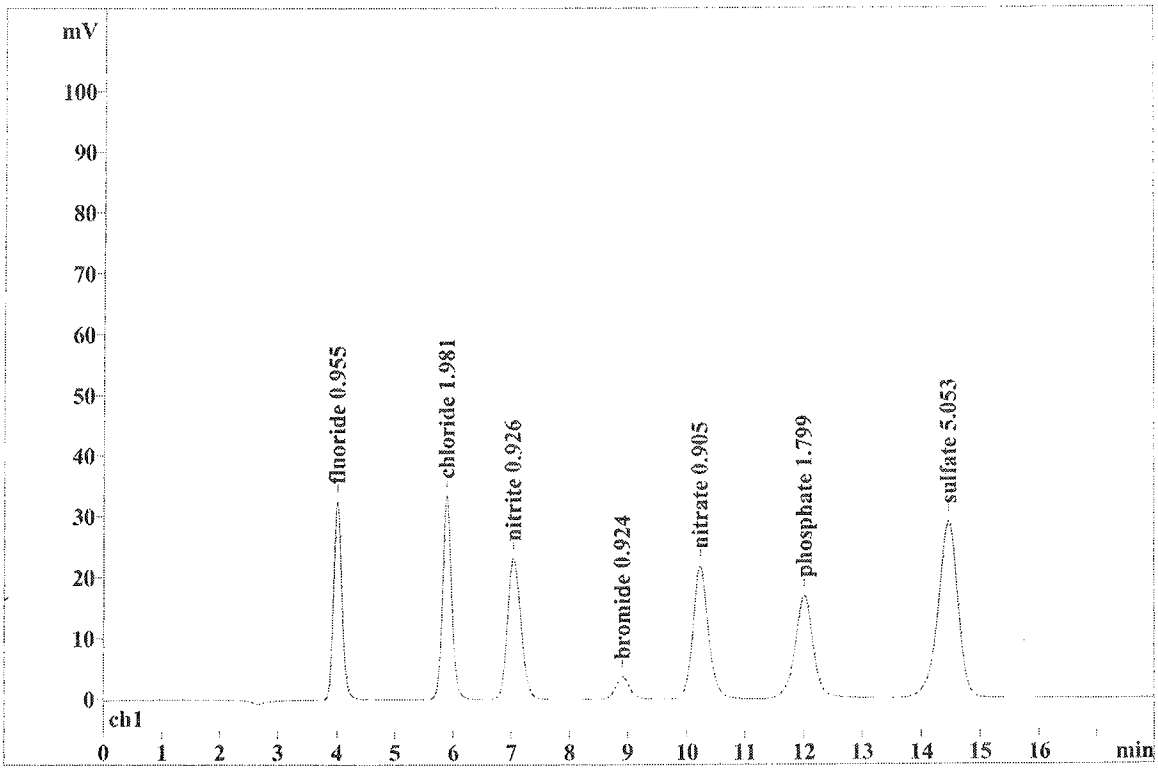
Report date: 11/5/2024 2:07:11 PM
Printed by: ERodel

Ident: AJ30-39 ICJ034WL
Analysis from: 10/25/2024 2:34:46 AM
File: _2024-10-25_02-34.chw Last save: 10/25/2024 1:52:46 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134844

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 39
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	4.01	32.63	320.235	0.955	fluoride
2	5.89	33.47	373.652	1.981	chloride
3	7.04	23.14	374.295	0.926	nitrite
4	8.92	3.70	63.359	0.924	bromide
5	10.23	21.81	405.608	0.905	nitrate
6	12.01	16.97	369.606	1.799	phosphate
7	14.46	28.95	686.397	5.053	sulfate
7	18.00	160.67	2593.153	12.542	

This report has been created by IC Net
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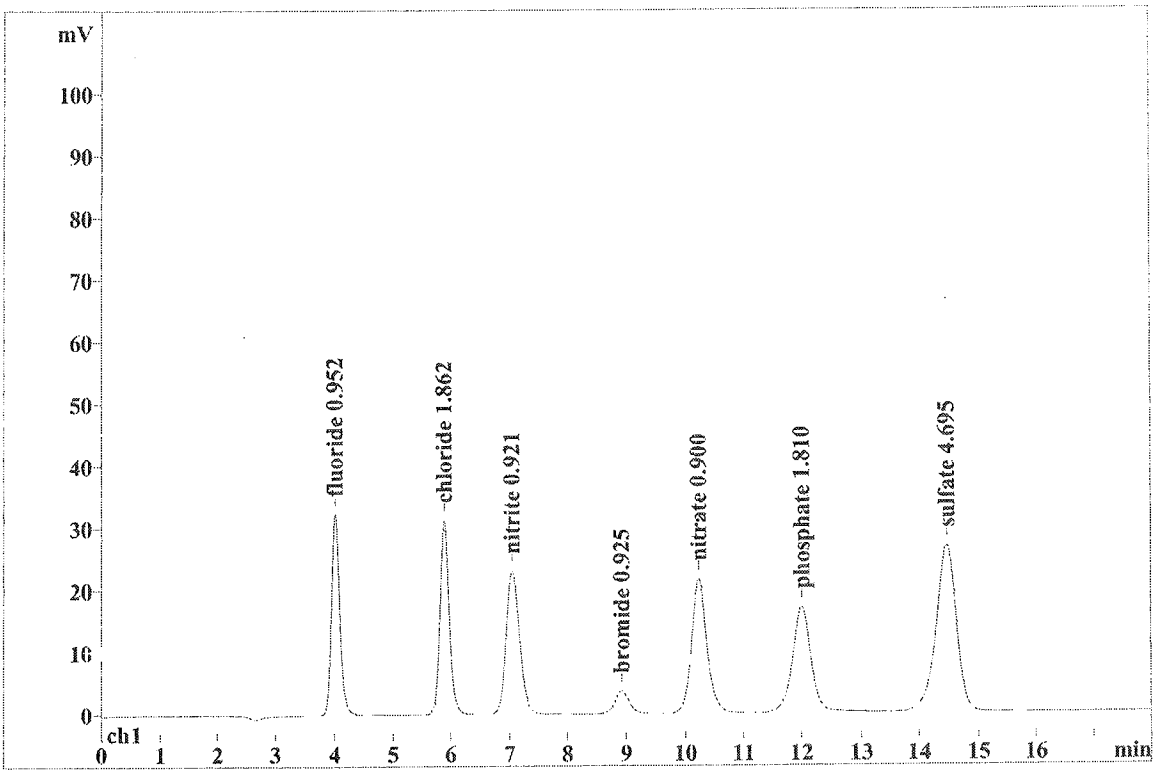
Report date: 11/5/2024 2:07:35 PM
Printed by: ERodel

Ident: AJ30-40 ICJ034WC
Analysis from: 10/25/2024 2:55:03 AM
File: _2024-10-25_02-55.chw Last save: 10/25/2024 2:13:03 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134845

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 40
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	4.01	32.48	319.024	0.952	fluoride
2	5.90	31.31	350.292	1.862	chloride
3	7.05	23.04	372.570	0.921	nitrite
4	8.92	3.69	63.451	0.925	bromide
5	10.23	21.72	403.288	0.900	nitrate
6	12.01	17.05	371.843	1.810	phosphate
7	14.47	26.82	636.857	4.695	sulfate
7	18.00	156.12	2517.325	12.065	

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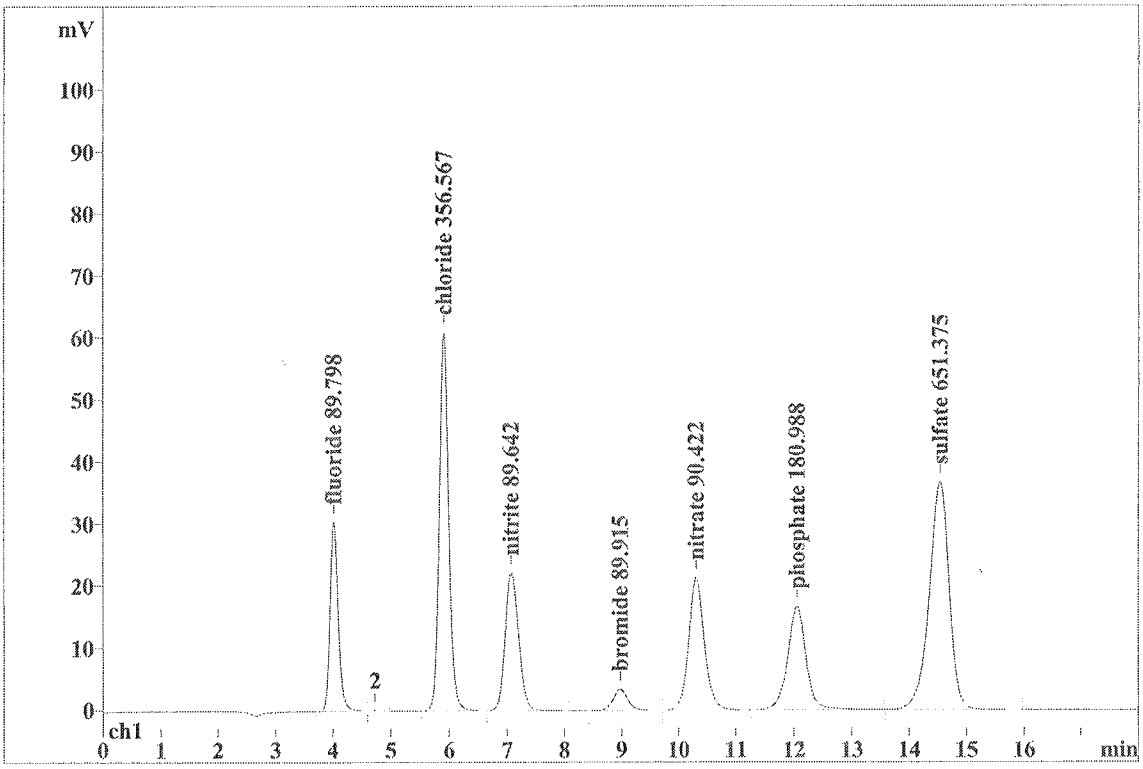
Report date: 11/5/2024 4:38:38 PM
Printed by: ERodel

Ident: AJ30-56 J033-08IM DF=100
Analysis from: 10/25/2024 8:19:40 AM
File: _2024-10-25_08-19.chw Last save: 10/28/2024 1:00:35 PM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134861

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/20ml
Vial number: 56
Volume: 1.0 µL
Dilution: 100.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	4.02	30.47	300.295	89.798	fluoride
2	4.73	0.04	0.390	0.000	
3	5.91	60.90	684.782	356.567	chloride
4	7.08	22.18	362.019	89.642	nitrite
5	8.98	3.48	61.360	89.915	bromide
6	10.31	21.33	405.382	90.422	nitrate
7	12.06	16.62	371.839	180.988	phosphate
8	14.54	36.70	888.974	651.375	sulfate
8	18.00	191.71	3075.041	1548.705	

This report has been created by IC Net
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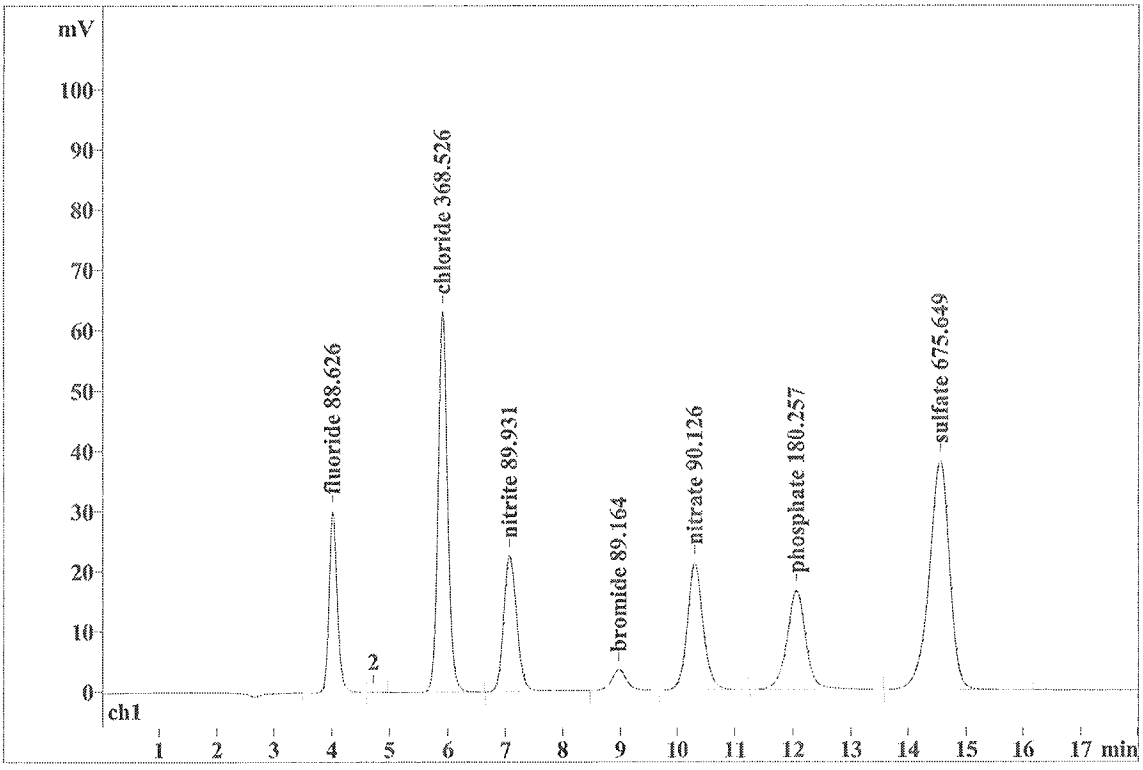
Report date: 11/5/2024 4:39:17 PM
Printed by: ERodel

Ident: AJ30-57 J033-08IS DF=100
Analysis from: 10/25/2024 8:39:59 AM
File: _2024-10-25_08-39.chw Last save: 10/25/2024 7:57:59 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134862

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/20ml
Vial number: 57
Volume: 1.0 µL
Dilution: 100.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	4.01	30.11	296.208	88.626	fluoride
2	4.72	0.03	0.351	0.000	
3	5.91	63.15	708.263	368.526	chloride ✓
4	7.07	22.64	363.238	89.931	nitrite
5	8.97	3.46	60.755	89.164	bromide
6	10.30	21.32	403.991	90.126	nitrate
7	12.06	16.51	370.289	180.257	phosphate
8	14.55	38.08	922.632	675.649	sulfate ✓
8	18.00	195.30	3125.726	1582.279	

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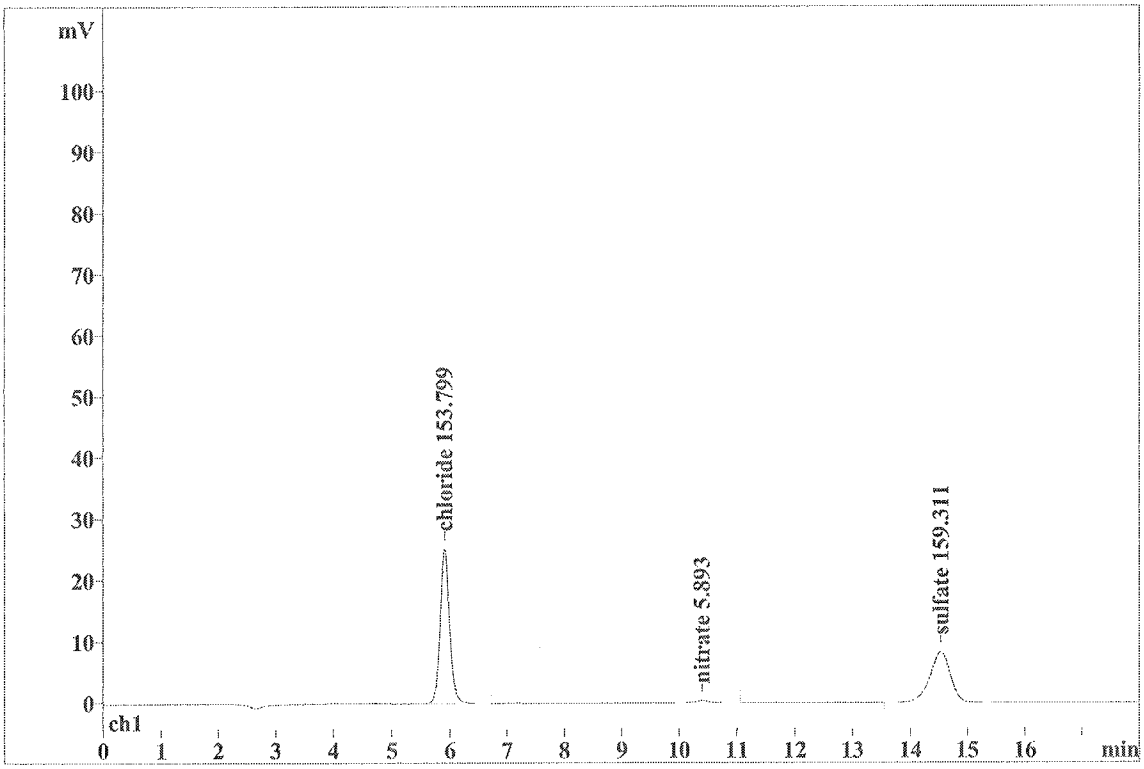
Report date: 11/5/2024 4:38:19 PM
Printed by: ERodel

Ident: AJ30-55 J033-08ID DF=100
Analysis from: 10/25/2024 7:59:23 AM
File: _2024-10-25_07-59.chw Last save: 10/28/2024 1:00:11 PM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134860

SAMPLE: METHOD 300/9056/4110B
: 0.2ml/20ml
Vial number: 55
Volume: 1.0 µL
Dilution: 100.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	5.92	25.23	286.680	153.799	chloride
2	10.41	0.37	7.497	5.893	nitrate
3	14.53	8.27	206.691	159.311	sulfate
3	18.00	33.87	500.868	319.003	

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INITIAL CALIBRATION(S)

IC Result Check FormVersion : J21/AJ26(2024)

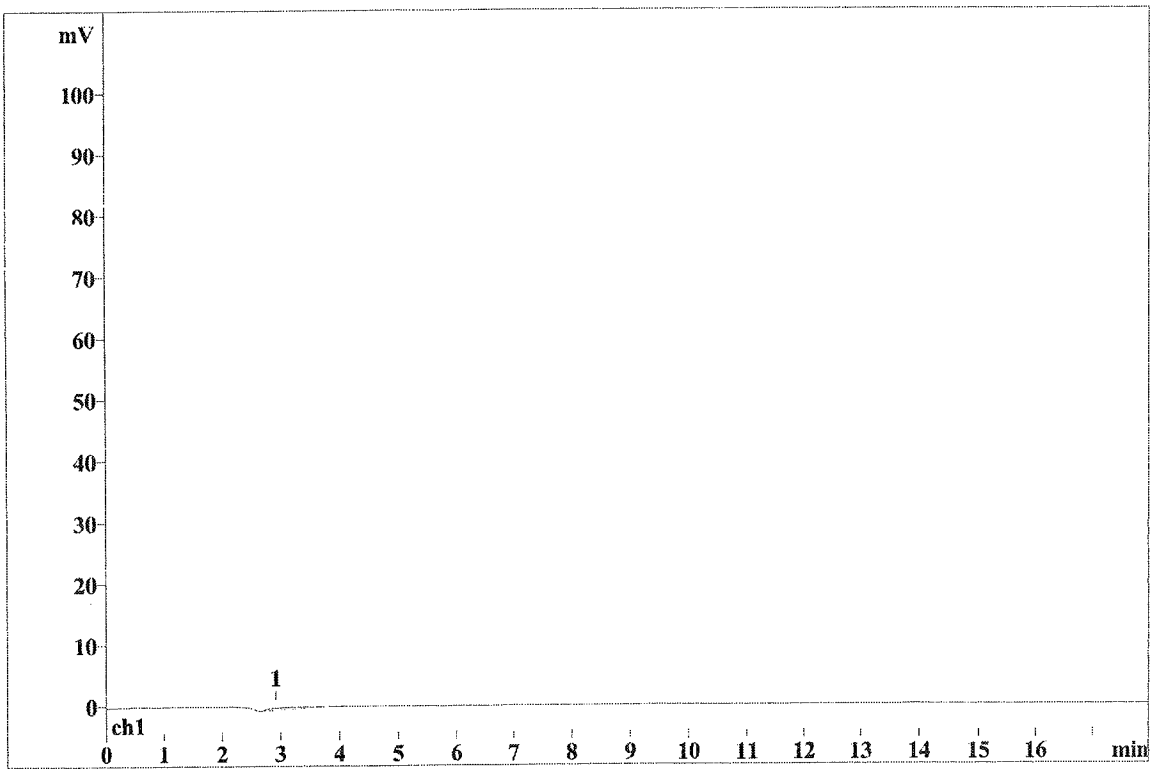
LFID	LSID	Selection	iodide	chloride	fluoride	nitrite	bromide	nitrate	phosphate	sulfate	RawNetID	DF
AJ26-01	IB	OCFIBNPS	0	0	0	0	0	0	0	0	_2024-10-21_17-22	1
AJ26-02	S0	OCFIBNPS	0	0	0	0	0	0	0	0	_2024-10-21_17-42	1
AJ26-03	S1	OCFIBNPS	0	0.113314	0.0843118	0.0754622	0.181615	0.0783143	0.0995225	0.162014	_2024-10-21_18-03	1
AJ26-04	S2	OCFIBNPS	0	0.15893	0.123789	0.116079	0.26032	0.118023	0.134537	0.202608	_2024-10-21_18-23	1
AJ26-05	S3	OCFIBNPS	0	0.231872	0.203578	0.19882	0.291786	0.202829	0.303246	0.337798	_2024-10-21_18-43	1
AJ26-06	S4	OCFIBNPS	0	0.47988	0.461944	0.471125	0.532745	0.467713	0.453858	0.522048	_2024-10-21_19-04	1
AJ26-07	S5	OCFIBNPS	0	0.921663	0.945641	0.968382	0.94075	0.9584	0.905119	0.927694	_2024-10-21_19-24	1
AJ26-08	S6	OCFIBNPS	0	1.89266	2.03074	2.02013	1.8045	2.02472	1.90471	1.8077	_2024-10-21_19-44	1
AJ26-09	S7	OCFIBNPS	0	5.05168	5.30491	5.33826	4.72259	5.43363	5.04901	4.7355	_2024-10-21_20-04	1
AJ26-10	S8	OCFIBNPS	0	10.6074	10.3842	10.8428	10.16	11.3296	10.4177	10.1546	_2024-10-21_20-25	1
AJ26-11	S9	OCFIBNPS	0	21.9141	19.4114	21.3891	21.7215	23.2743	21.182	21.5476	_2024-10-21_20-45	1
AJ26-12	ICV	OCFIBNPS	0%*	92%	93%	99.2%	90.7%	90.2%	90.3%	92.2%	_2024-10-21_21-05	1
AJ26-13	ICV1	OCFIBNPS	0%*	87%*	91.5%	94.7%	91.3%	89.9%*	85.5%*	89%*	_2024-10-21_21-26	1
AJ26-14	ICB	OCFIBNPS	0	0	0	0	0	0	0	0	_2024-10-21_21-46	1

10/24/24

Report date: 10/24/2024 5:56:36 PM
Printed by: ERodel

Ident: AJ26-02 S0
Analysis from: 10/21/2024 5:42:56 PM
File: _2024-10-21_17-42.chw Last save: 10/22/2024 10:04:23 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134643

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 2
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

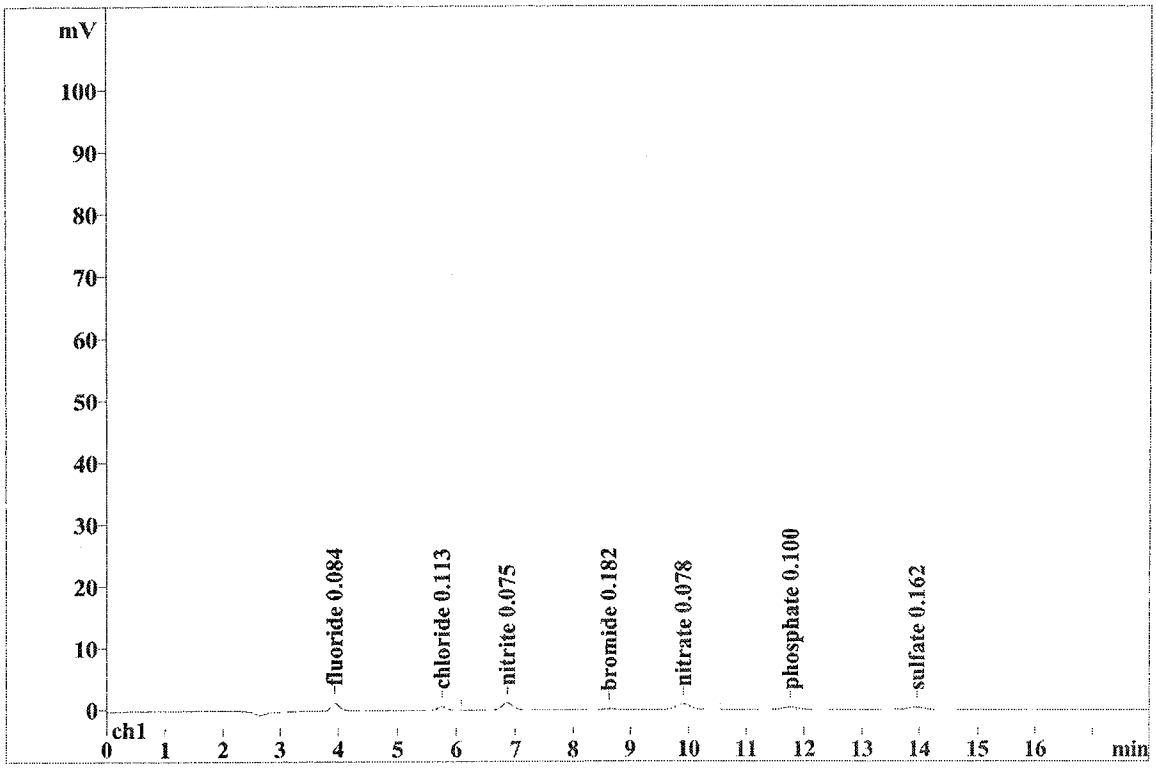


Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	2.93	0.35	15.080	0.000	

This report has been created by IC Net
METROHM LTD

Report date:	10/24/2024 5:56:48 PM		
Printed by:	ERodel		
Ident:	AJ26-03 S1		
Analysis from:	10/21/2024 6:03:14 PM		
File:	_2024-10-21_18-03.chw	Last save:	10/22/2024 10:04:23 AM
Method:	ICD7-J21.mtw	Last save:	10/21/2024 7:01:49 PM
Run operator:	ERodel		
Analysis number:	134644		
SAMPLE:	METHOD 300/9056/4110B		
:	0.05 ppm		
Vial number:	3		
Volume:	1.0 µL		
Dilution:	1.00		
Amount:	1.0000		



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.94	1.28	16.477	0.084	fluoride
2	5.76	0.62	6.967	0.113	chloride
3	6.87	1.17	15.719	0.075	nitrite
4	8.63	0.20	3.539	0.182	bromide
5	9.91	0.94	16.620	0.078	nitrate
6	11.77	0.41	8.881	0.100	phosphate
7	13.95	0.36	8.259	0.162	sulfate
7	18.00	4.99	76.463	0.795	

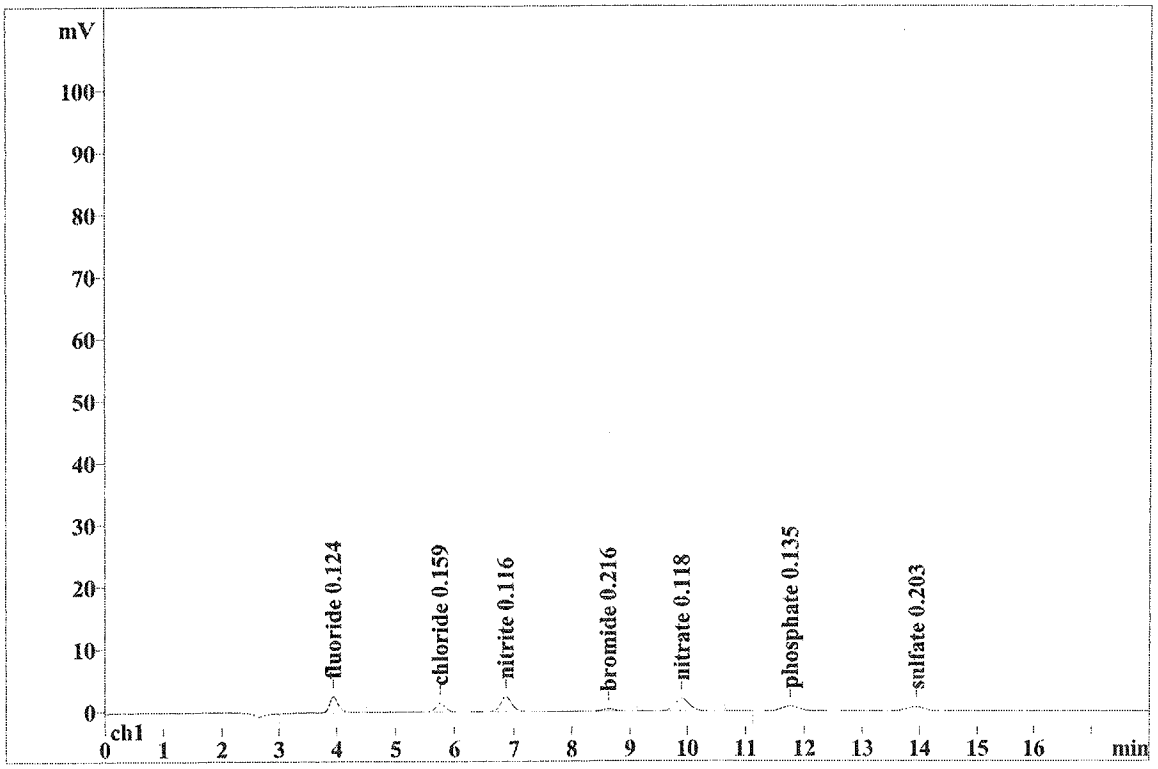
This report has been created by IC Net
METROHM LTD

Report date: 10/24/2024 5:56:57 PM
Printed by: ERodel

Ident: AJ26-04 S2
Analysis from: 10/21/2024 6:23:31 PM
File: _2024-10-21_18-23.chw Last save: 10/22/2024 10:04:23 AM

Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134645

SAMPLE: METHOD 300/9056/4110B
: 0.1 ppm
Vial number: 4
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.95	2.60	30.247	0.124	fluoride
2	5.76	1.40	15.923	0.159	chloride
3	6.87	2.43	32.853	0.116	nitrite
4	8.63	0.39	6.313	0.216	bromide
5	9.91	2.02	35.312	0.118	nitrate
6	11.76	0.78	16.312	0.135	phosphate
7	13.95	0.63	13.887	0.203	sulfate
7	18.00	10.26	150.846	1.070	

This report has been created by IC Net
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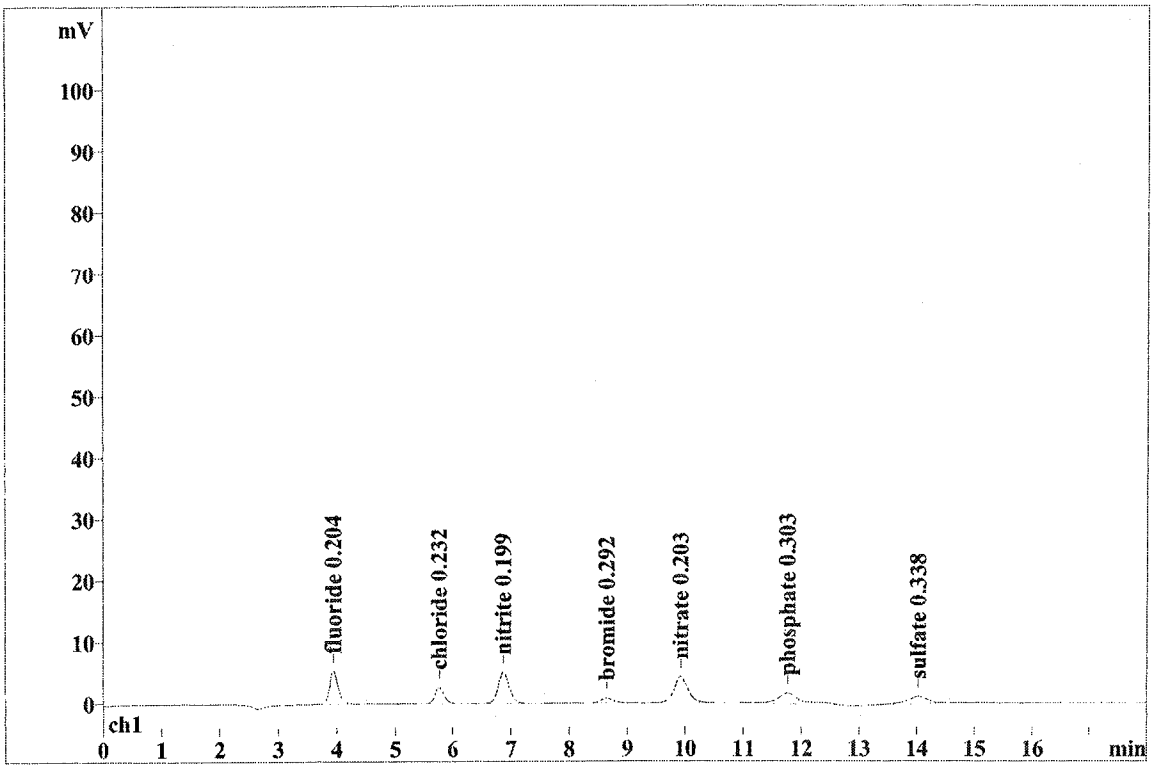
Report date: 10/24/2024 5:57:11 PM
Printed by: ERodel

Ident: AJ26-05 S3
Analysis from: 10/21/2024 6:43:49 PM
File: _2024-10-21_18-43.chw Last save: 10/22/2024 10:04:23 AM

Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134646

SAMPLE: METHOD 300/9056/4110B
: 0.2 ppm
Vial number: 5
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.95	5.42	58.078	0.204	fluoride
2	5.77	2.69	30.244	0.232	chloride
3	6.88	5.05	67.755	0.199	nitrite
4	8.65	0.79	12.417	0.292	bromide
5	9.92	4.31	75.231	0.203	nitrate
6	11.77	1.76	52.114	0.303	phosphate
7	14.03	1.22	32.633	0.338	sulfate
7	18.00	21.24	328.472	1.770	

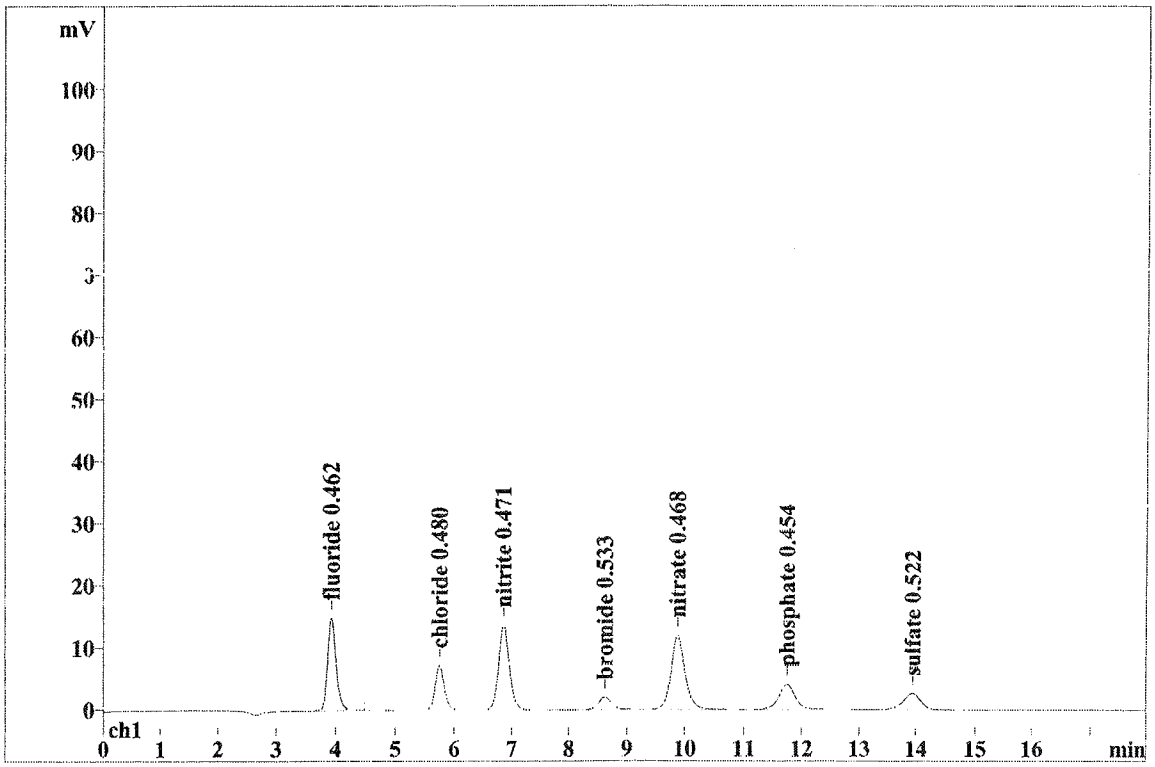
This report has been created by IC Net
METROHM LTD

Report date: 10/24/2024 5:57:21 PM
Printed by: ERodel

Ident: AJ26-06 S4
Analysis from: 10/21/2024 7:04:06 PM
File: _2024-10-21_19-04.chw Last save: 10/22/2024 10:04:23 AM

Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134647

SAMPLE: METHOD 300/9056/4110B
: 0.5 ppm
Vial number: 6
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.94	14.94	148.200	0.462	fluoride
2	5.76	7.19	78.936	0.480	chloride
3	6.86	13.66	182.620	0.471	nitrite
4	8.63	2.03	31.835	0.533	bromide
5	9.88	11.96	199.914	0.468	nitrate
6	11.75	4.10	84.075	0.454	phosphate
7	13.94	2.65	58.180	0.522	sulfate
7	17.99	56.54	783.761	3.389	

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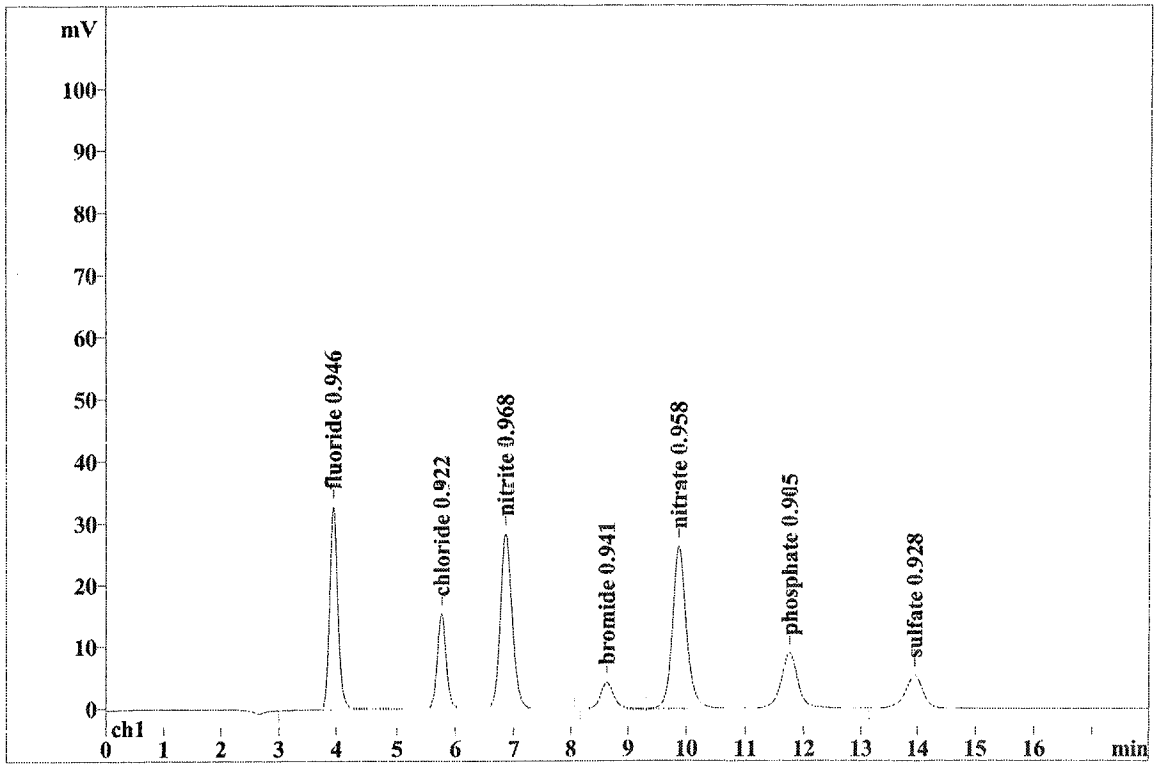
TR 10/28/24

Report date: 10/24/2024 5:57:41 PM
Printed by: ERodel

Ident: AJ26-07 S5
Analysis from: 10/21/2024 7:24:24 PM
File: _2024-10-21_19-24.chw Last save: 10/22/2024 10:04:23 AM

Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134648

SAMPLE: METHOD 300/9056/4110B
: 1.0 ppm
Vial number: 7
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.95	32.84	316.920	0.946	fluoride
2	5.76	15.42	165.674	0.922	chloride
3	6.86	28.41	392.376	0.968	nitrite
4	8.63	4.22	64.713	0.941	bromide
5	9.87	26.27	430.885	0.958	nitrate
6	11.76	8.92	179.838	0.905	phosphate
7	13.95	5.32	114.426	0.928	sulfate
7	18.00	121.41	1664.833	6.568	

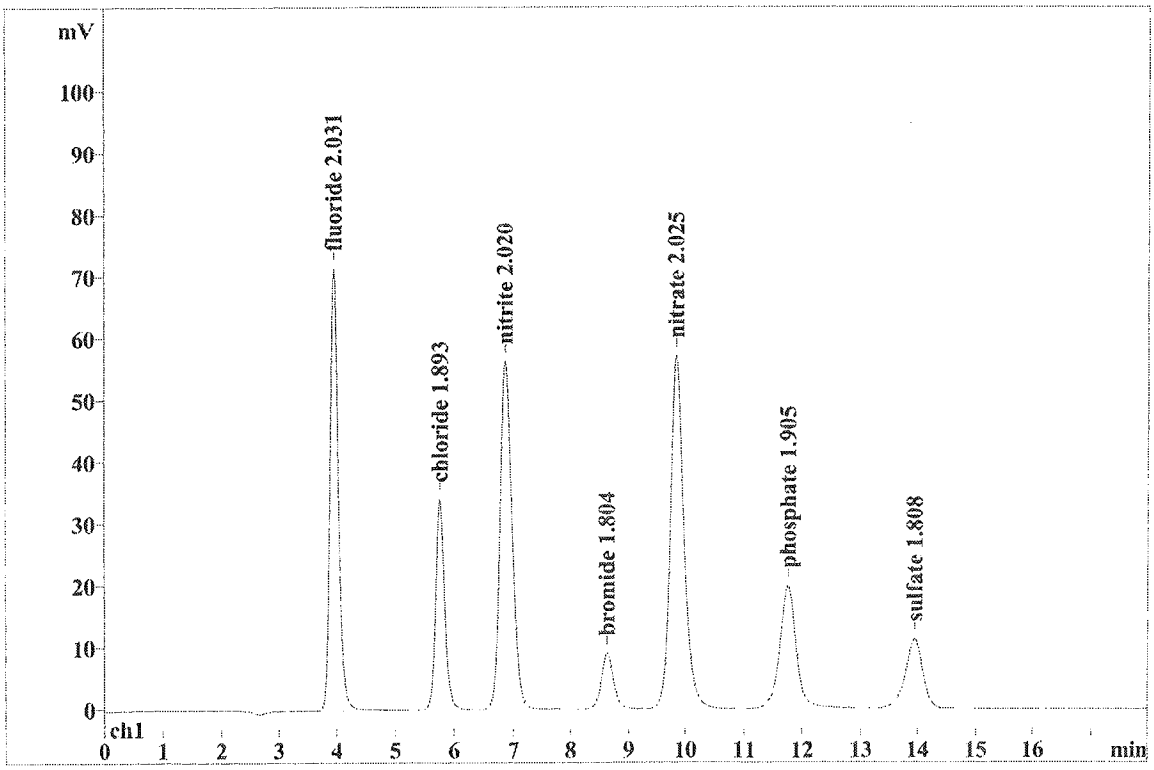
This report has been created by IC Net
METROHM LTD

Report date: 10/24/2024 5:58:05 PM
Printed by: ERodel

Ident: AJ26-08 S6
Analysis from: 10/21/2024 7:44:41 PM
File: _2024-10-21_19-44.chw Last save: 10/22/2024 10:04:23 AM

Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134649

SAMPLE: METHOD 300/9056/4110B
: 2.0 ppm
Vial number: 8
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.95	71.52	695.417	2.031	fluoride
2	5.77	33.98	356.313	1.893	chloride
3	6.86	56.31	836.031	2.020	nitrite
4	8.63	9.05	134.316	1.804	bromide
5	9.85	57.16	932.814	2.025	nitrate
6	11.76	19.82	391.964	1.905	phosphate
7	13.95	11.23	236.446	1.808	sulfate
7	18.00	259.08	3583.301	13.485	

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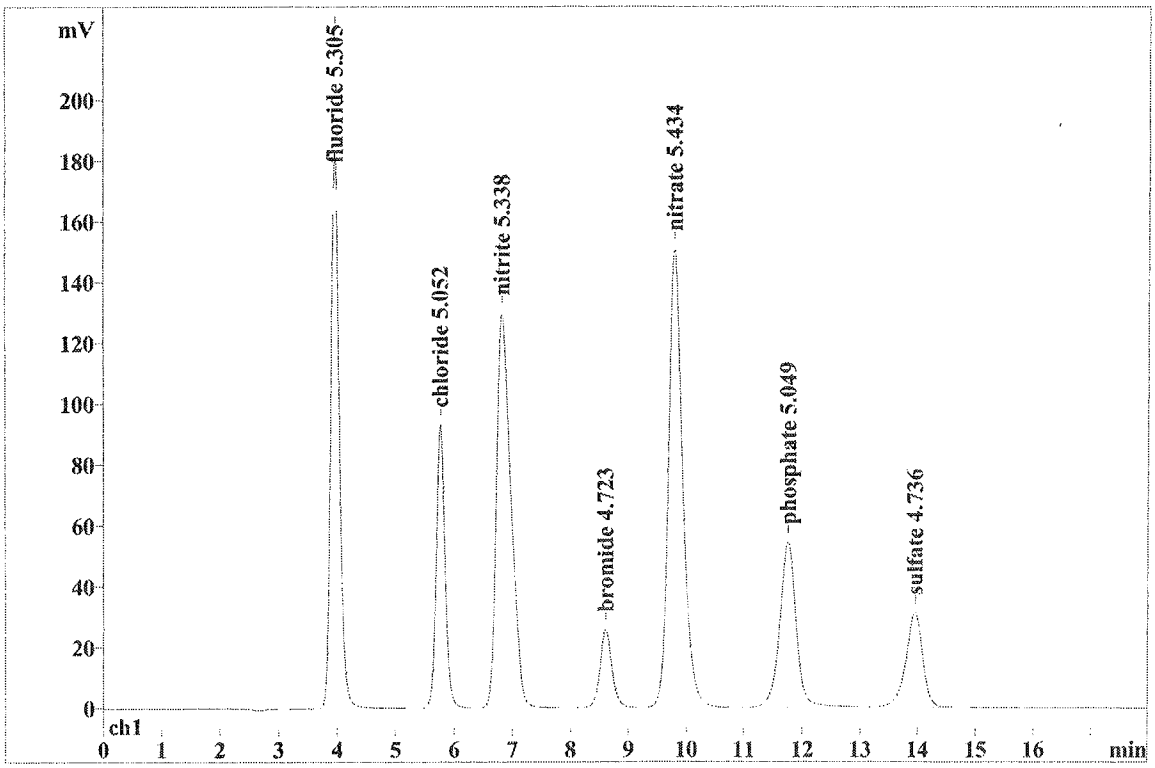
Report date: 10/24/2024 5:58:11 PM
Printed by: ERodel

Ident: AJ26-09 S7
Analysis from: 10/21/2024 8:04:59 PM
File: _2024-10-21_20-04.chw Last save: 10/22/2024 10:04:23 AM

Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134650

SAMPLE: METHOD 300/9056/4110B
: 5.0 ppm
Vial number: 9
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.96	182.77	1837.497	5.305	fluoride
2	5.76	93.00	976.538	5.052	chloride
3	6.82	129.75	2235.705	5.338	nitrite
4	8.61	25.83	369.465	4.723	bromide
5	9.79	150.96	2537.422	5.434	nitrate
6	11.76	54.32	1059.220	5.049	phosphate
7	13.95	31.24	642.407	4.736	sulfate
7	18.00	667.88	9658.253	35.636	

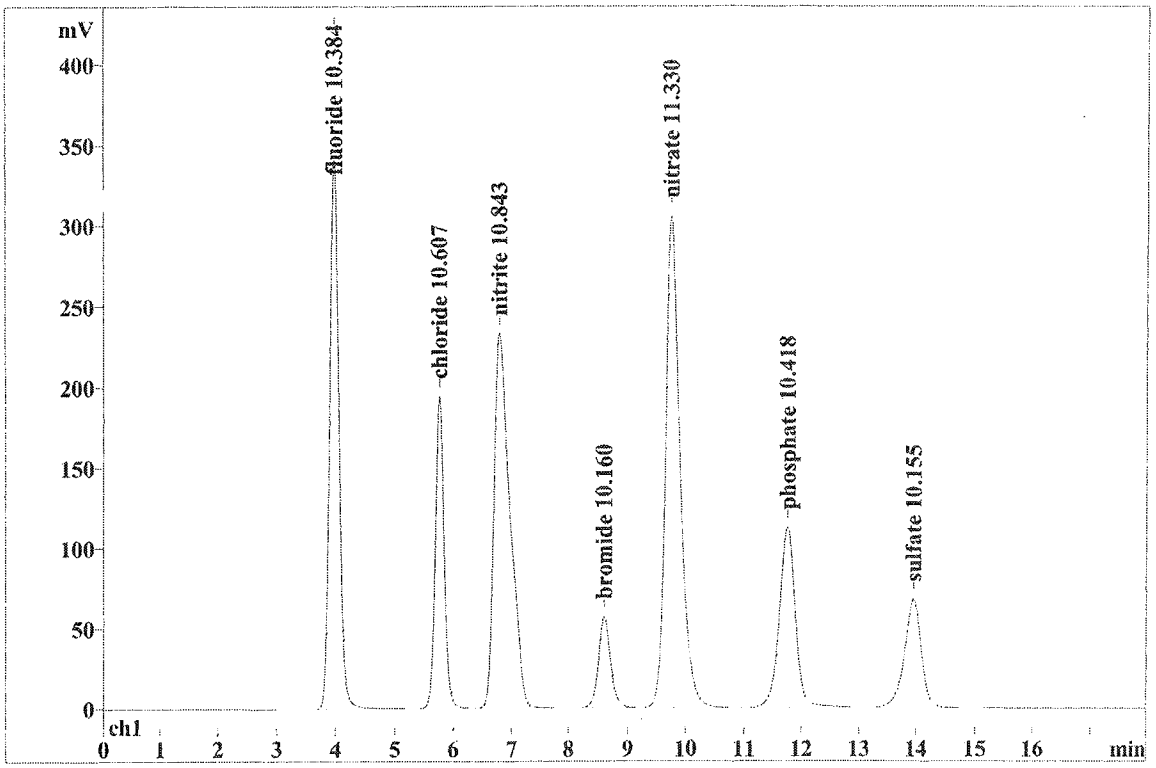
This report has been created by IC Net
METROHM LTD

Report date: 10/24/2024 5:58:20 PM
Printed by: ERodel

Ident: AJ26-10 S8
Analysis from: 10/21/2024 8:25:16 PM
File: _2024-10-21_20-25.chw Last save: 10/22/2024 10:04:23 AM

Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134651

SAMPLE: METHOD 300/9056/4110B
: 10.0 ppm
Vial number: 10
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.98	341.28	3609.229	10.384	fluoride
2	5.76	194.60	2067.318	10.607	chloride
3	6.79	233.38	4557.654	10.843	nitrite
4	8.61	57.01	807.626	10.160	bromide
5	9.75	305.73	5312.697	11.330	nitrate
6	11.76	112.49	2198.511	10.418	phosphate
7	13.96	67.71	1393.810	10.155	sulfate
7	18.00	1312.19	19946.844	73.896	

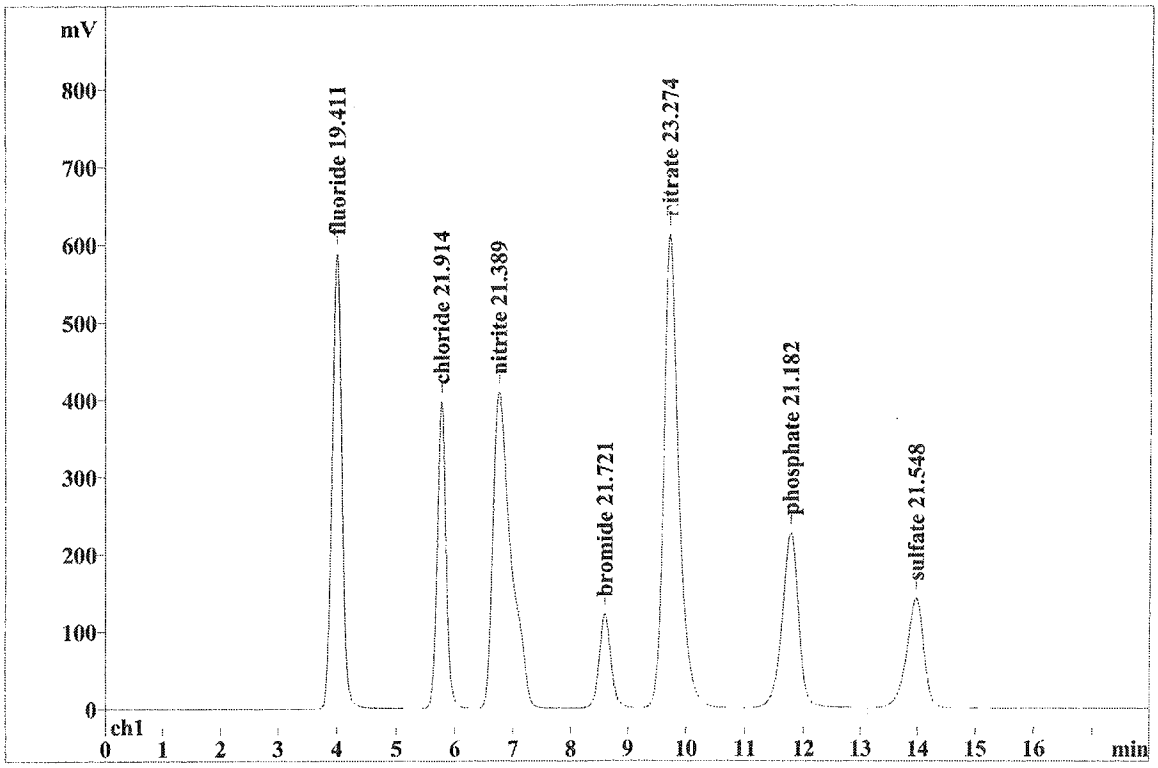
This report has been created by IC Net
METROHM LTD

Report date: 10/24/2024 5:57:56 PM
Printed by: ERodel

Ident: AJ26-11 S9
Analysis from: 10/21/2024 8:45:33 PM
File: _2024-10-21_20-45.chw Last save: 10/22/2024 10:04:24 AM

Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134652

SAMPLE: METHOD 300/9056/4110B
: 20.0 ppm
Vial number: 11
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	4.00	589.19	6758.050	19.411	fluoride
2	5.76	397.14	4287.212	21.914	chloride
3	6.75	409.59	9006.374	21.389	nitrite
4	8.60	121.61	1739.284	21.721	bromide
5	9.71	611.84	10935.191	23.274	nitrate
6	11.77	226.92	4482.838	21.182	phosphate
7	13.97	142.41	2973.537	21.548	sulfate
7	18.00	2498.70	40182.486	150.440	

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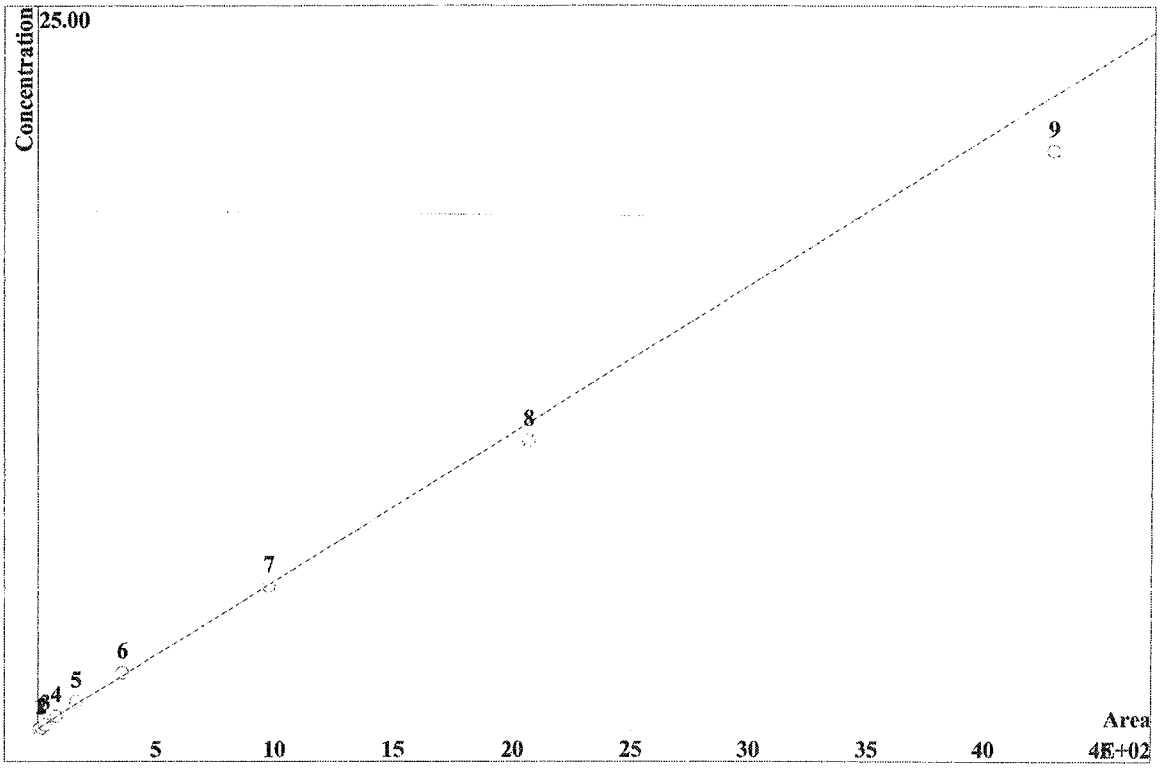
CALIBRATION OF COMPONENT chloride

Method: ICD7-J21.mtw
Equation: Q = 0.00509335·A + 0.0778285
RSD: 6.048 %
Correlation coefficient: 0.999235

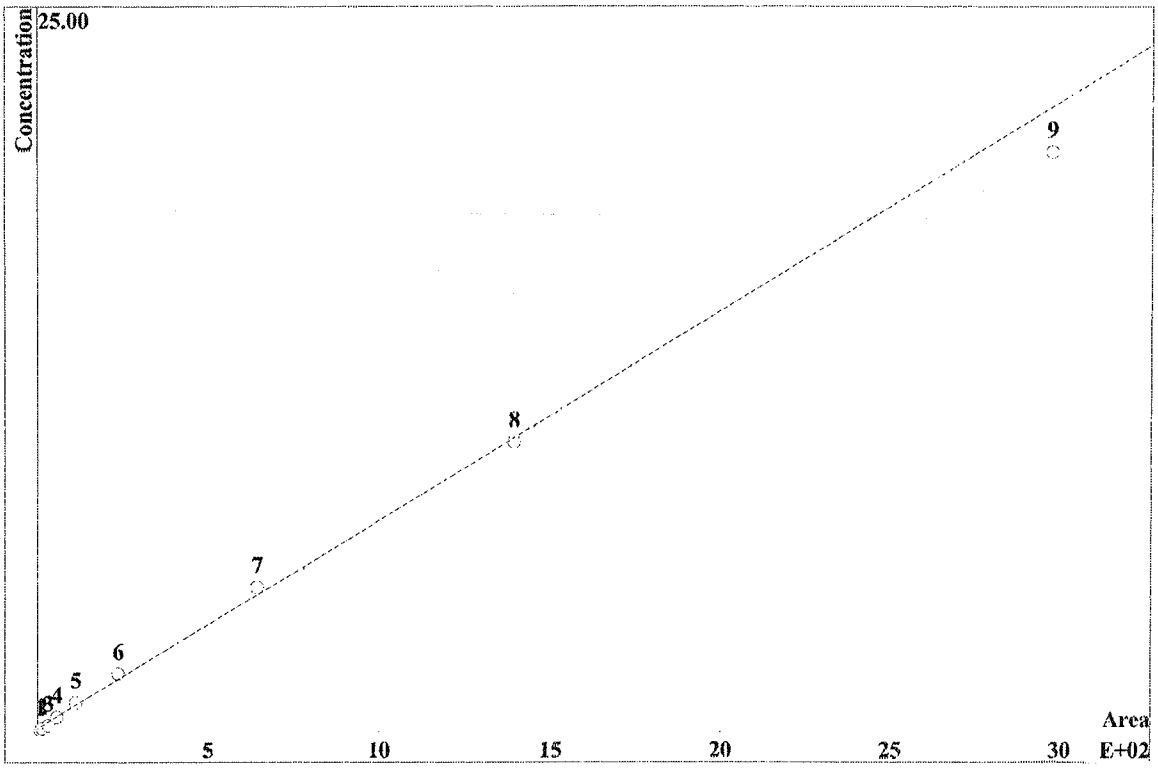


K3 = 0 K2 = 0 K1 = 0.00509335 K0 = 0.0778285
Base: Area
Ref.channel: ch1
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.623	6.967	0.05	1	5.76	Yes	_2024-10-21_1□
2	1.4	15.92	0.1	1	5.76	Yes	_2024-10-21_1□
3	2.692	30.24	0.2	1	5.76	Yes	_2024-10-21_1□
4	7.188	78.94	0.5	1	5.76	Yes	_2024-10-21_1□
5	15.42	165.7	1	1	5.76	Yes	_2024-10-21_1□
6	33.98	356.3	2	1	5.76	Yes	_2024-10-21_1□
7	93	976.5	5	1	5.76	Yes	_2024-10-21_2□
8	194.6	2067	10	1	5.76	No	_2024-10-21_2
9	397.2	4287	20	1	5.76	No	_2024-10-21_2

CALIBRATION OF COMPONENT sulfate

Method: ICD7-J21.mtw
Equation: Q = 0.00721202·A + 0.102451
RSD: 7.323 %
Correlation coefficient: 0.998960



K3 = 0 K2 = 0 K1 = 0.00721202 K0 = 0.102451
Base: Area
Ref.channel: ch1
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1	0.3647	8.259	0.05	1	13.96	Yes	2024-10-21_1□
2	0.6338	13.89	0.1	1	13.96	Yes	2024-10-21_1□
3	1.224	32.63	0.2	1	13.96	Yes	2024-10-21_1□
4	2.653	58.18	0.5	1	13.96	Yes	2024-10-21_1□
5	5.324	114.4	1	1	13.96	Yes	2024-10-21_1□
6	11.23	236.4	2	1	13.96	Yes	2024-10-21_1□
7	31.24	642.4	5	1	13.96	Yes	2024-10-21_2□
8	57.71	1394	10	1	13.96	Yes	2024-10-21_2
9	142.4	2974	20	1	13.96	No	2024-10-21_2

SECOND SOURCE VERIFICATION

IC Result Check FormVersion : J21/AJ26(2024)

LFID	LSID	Selection	phosphate	nitrite	nitrate	iodide	fluoride	chloride	bromide	sulfate	RawNetID	DF
AJ26-01	IB	PINOFCBS	0	0	0	0	0	0	0	0	_2024-10-21_17-22	1
AJ26-12	ICV	PINOFCBS	90.3%	99.2%	90.2%	0%*	93%	92%	90.7%	92.2%	_2024-10-21_21-05	1
AJ26-13	ICV1	PINOFCBS	85.5%*	94.7%	89.9%*	0%*	91.5%	87%*	91.3%	89%*	_2024-10-21_21-26	1
AJ26-14	ICB	PINOFCBS	0	0	0	0	0	0	0	0	_2024-10-21_21-46	1

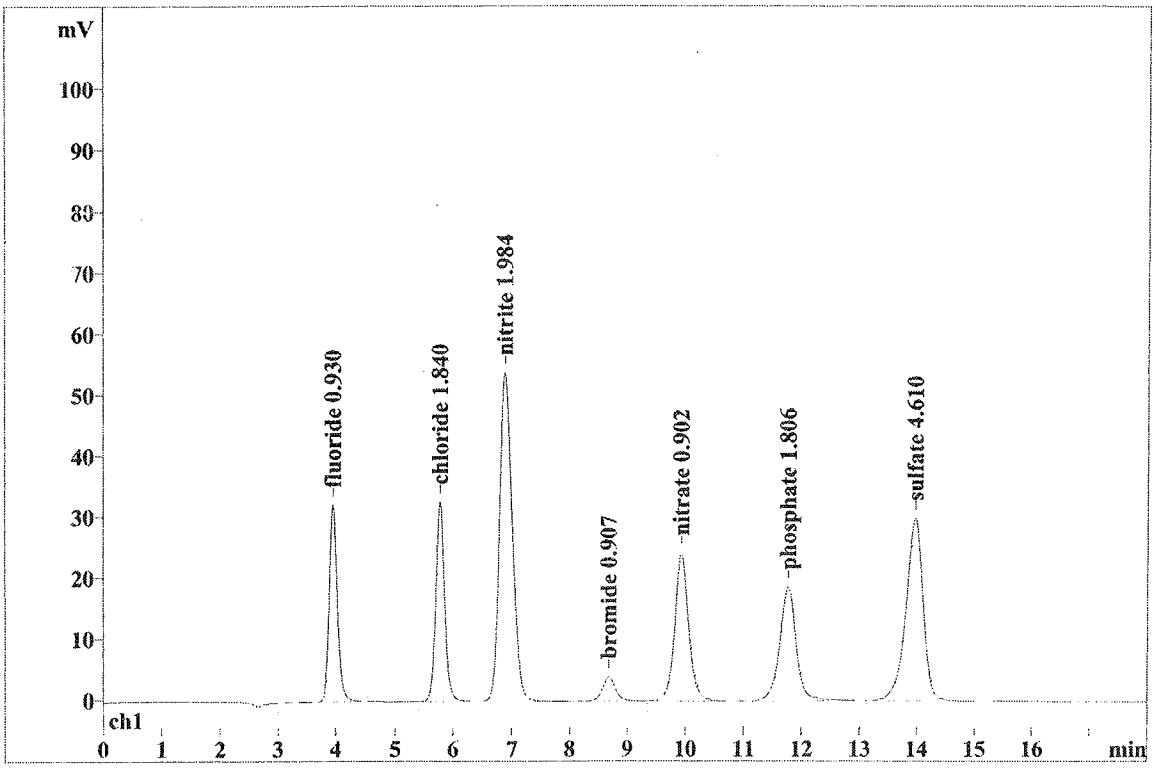
10/24/24

Report date: 10/24/2024 5:58:33 PM
Printed by: ERodel

Ident: AJ26-12 ICV
Analysis from: 10/21/2024 9:05:50 PM
File: _2024-10-21_21-05.chw Last save: 10/22/2024 10:04:24 AM

Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134653

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 12
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.96	32.24	311.580	0.930	fluoride
2	5.78	32.71	346.054	1.840	chloride
3	6.88	53.82	820.607	1.984	nitrite
4	8.68	3.99	62.007	0.907	bromide
5	9.93	24.24	404.315	0.902	nitrate
6	11.77	18.58	371.042	1.806	phosphate
7	13.97	29.91	624.977	4.610	sulfate
7	18.00	195.48	2940.582	12.979	

This report has been created by IC Net
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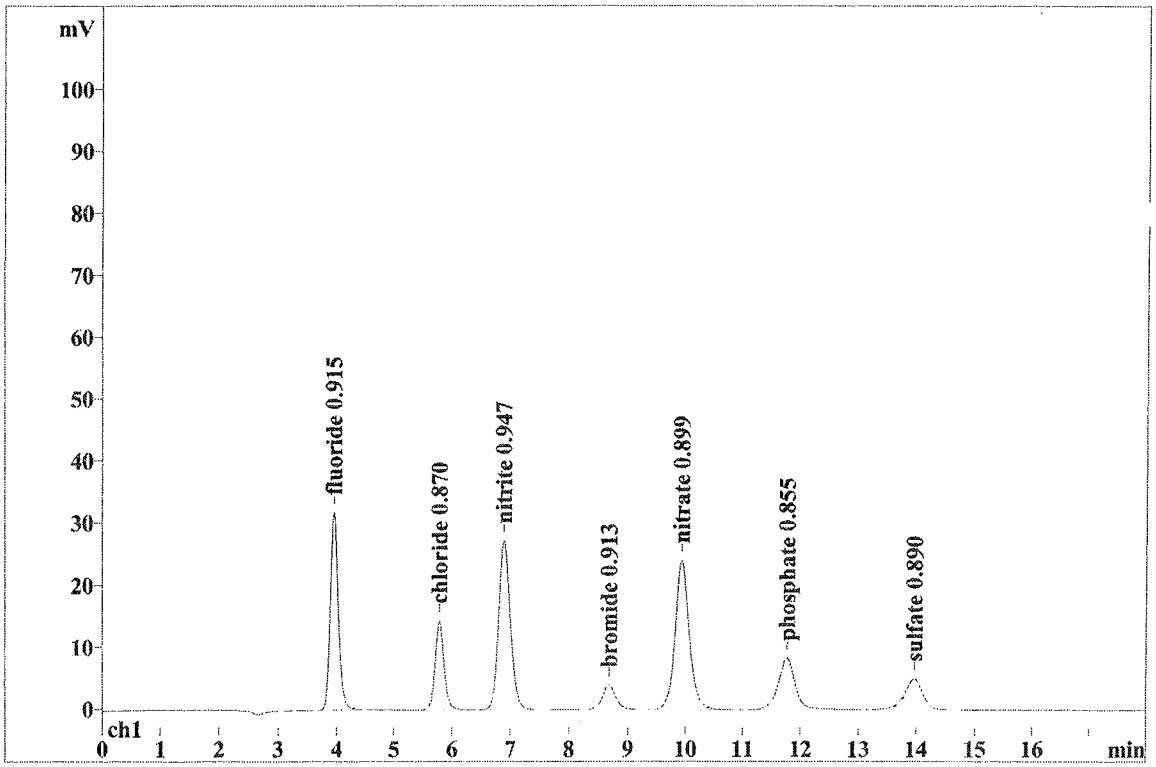
Report date: 10/24/2024 5:58:49 PM
Printed by: ERodel

Ident: AJ26-13 ICV1
Analysis from: 10/21/2024 9:26:08 PM
File: _2024-10-21_21-26.chw Last save: 10/22/2024 10:04:24 AM

Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134654

SAMPLE: METHOD 300/9056/4110B
: 1.0 ppm
Vial number: 13
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.95	31.81	306.330	0.915	fluoride
2	5.78	14.34	155.534	0.870	chloride
3	6.89	27.22	383.233	0.947	nitrite
4	8.68	3.98	62.514	0.913	bromide
5	9.94	24.03	402.696	0.899	nitrate
6	11.77	8.26	169.142	0.855	phosphate
7	13.97	4.96	109.213	0.890	sulfate
7	18.00	114.61	1588.661	6.289	

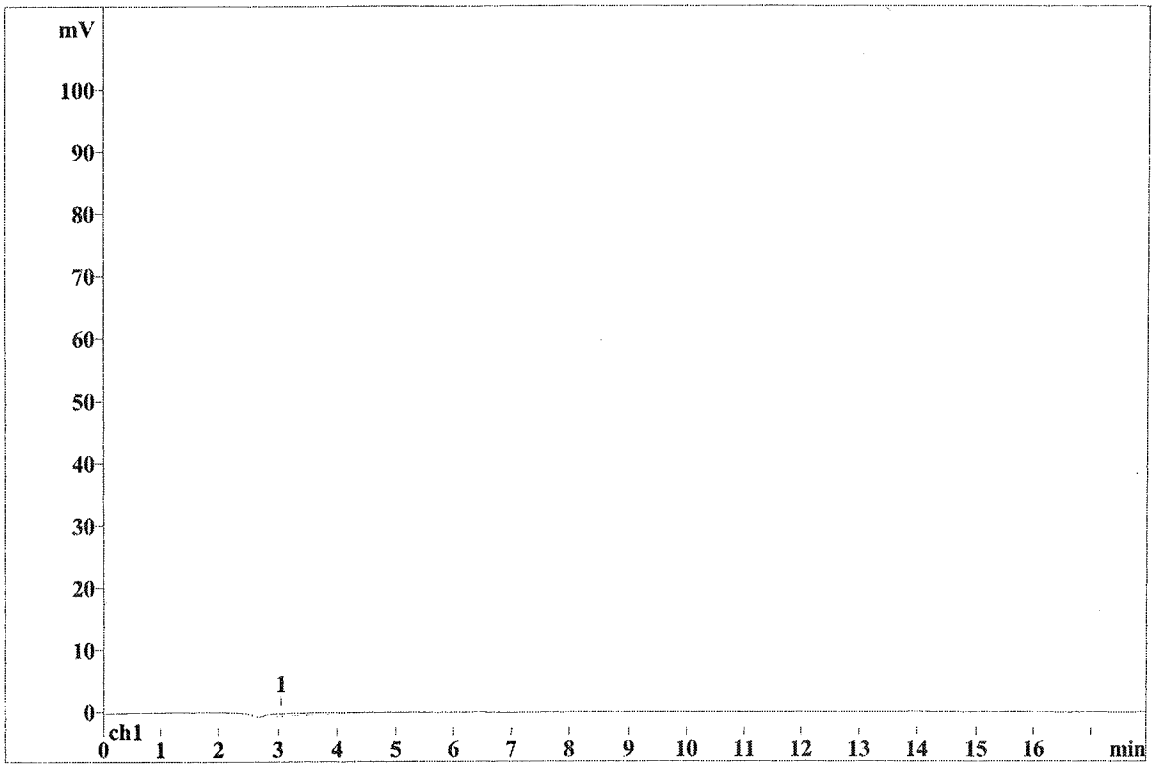
This report has been created by IC Net
METROHM LTD

TR 10/29/24

Report date: 10/24/2024 5:59:14 PM
Printed by: ERodel

Ident: AJ26-14 ICB
Analysis from: 10/21/2024 9:46:25 PM
File: _2024-10-21_21-46.chw Last save: 10/22/2024 10:04:24 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/21/2024 7:01:49 PM
Run operator: ERodel
Analysis number: 134655

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 14
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.05	0.42	28.976	0.000	

This report has been created by IC Net
METROHM LTD

TR 10/28/24

DAILY CALIBRATION(S)

Continuing Calibration Summary Form

Client : CDM SMITH
Project : VA SALT LAKE CITY
SDG : 24J033
Method : E300.0
ICAL Ref. : 24AJ26
InstrumentID: D7
Parameter : CHLORIDE

LFID	LSID	Recovery (%)	AnalysisDateTime
AJ30-36	CCV36	98.3	10/25/2401:33
AJ30-48	CCV38	95	10/25/2405:37
AJ30-58	CCV40	93.3	10/25/2409:00

CCV Acceptance Criteria: 90-110%

Continuing Calibration Summary Form

Client : CDM SMITH
Project : VA SALT LAKE CITY
SDG : 24J033
Method : E300.0
ICAL Ref. : 24AJ26
InstrumentID: D7
Parameter : SULFATE

LFID	LSID	Recovery (%)	AnalysisDateTime
AJ30-36	CCV36	96.5	10/25/2401:33
AJ30-48	CCV38	95.1	10/25/2405:37
AJ30-58	CCV40	93.8	10/25/2409:00

CCV Acceptance Criteria: 90-110%

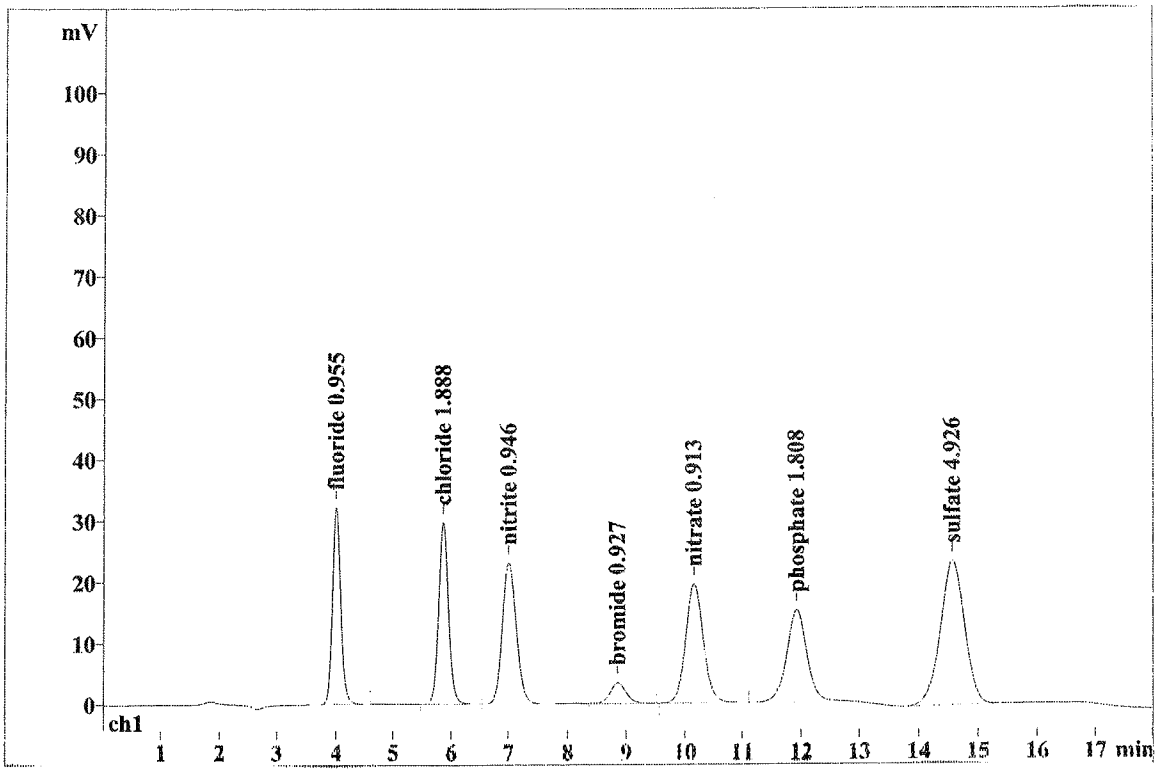
IC Result Check FormVersion : J21/AJ26(2024)

LFID	LSID	Selection	nitrate	chloride	fluoride	iodide	nitrite	bromide	phosphate	sulfate	RawNetID	DF
AJ30-01	CCV30	NCFOIBPS	91.3%	94.4%	95.5%	0%*	94.6%	92.7%	90.4%	98.5%	_2024-10-24_12-39	1
AJ30-02	CCB30	NCFOIBPS	0	0	0	0	0	0	0	0	_2024-10-24_13-18	1
AJ30-13	CCV32	NCFOIBPS	90.4%	93.6%	94.3%	0%*	92.3%	93.6%	90.3%	94.8%	_2024-10-24_17-47	1
AJ30-14	CCB32	NCFOIBPS	0	0	0	0	0	0	0	0	_2024-10-24_18-07	1
AJ30-25	CCV34	NCFOIBPS	90.3%	94.7%	91.7%	0%*	86.4%*	91.9%	89.3%*	95.4%	_2024-10-24_21-50	1
AJ30-26	CCB34	NCFOIBPS	0	0	0	0	0	0	0	0	_2024-10-24_22-10	1
AJ30-36	CCV36	NCFOIBPS	91.7%	98.3%	93.4%	0%*	88.4%*	92.3%	89.9%*	96.5%	_2024-10-25_01-33	1
AJ30-37	CCB36	NCFOIBPS	0	0.119703	0	0	0	0	0	0	_2024-10-25_01-54	1
AJ30-48	CCV38	NCFOIBPS	90.8%	95%	92.9%	0%*	86.5%*	91.3%	88.8%*	95.1%	_2024-10-25_05-37	1
AJ30-49	CCB38	NCFOIBPS	0	0	0	0	0	0	0	0	_2024-10-25_05-57	1
AJ30-58	CCV40	NCFOIBPS	90.6%	93.3%	95%	0%*	92.3%	92.4%	89.8%*	93.8%	_2024-10-25_09-00	1
AJ30-59	CCB40	NCFOIBPS	0	0	0	0	0	0	0	0	_2024-10-25_09-20	1

Report date: 11/5/2024 1:29:39 PM
Printed by: ERodel

Ident: AJ30-01 CCV30
Analysis from: 10/24/2024 12:39:09 PM
File: _2024-10-24_12-39.chw Last save: 10/24/2024 11:58:11 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134800

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 1
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	4.00	32.17	320.243	0.955	fluoride
2	5.87	29.69	355.479	1.888	chloride
3	7.01	23.12	382.739	0.946	nitrite
4	8.86	3.36	63.626	0.927	bromide
5	10.15	19.48	409.521	0.913	nitrate
6	11.92	15.15	371.389	1.808	phosphate
7	14.57	23.62	668.807	4.926	sulfate
7	18.00	146.59	2571.804	12.363	

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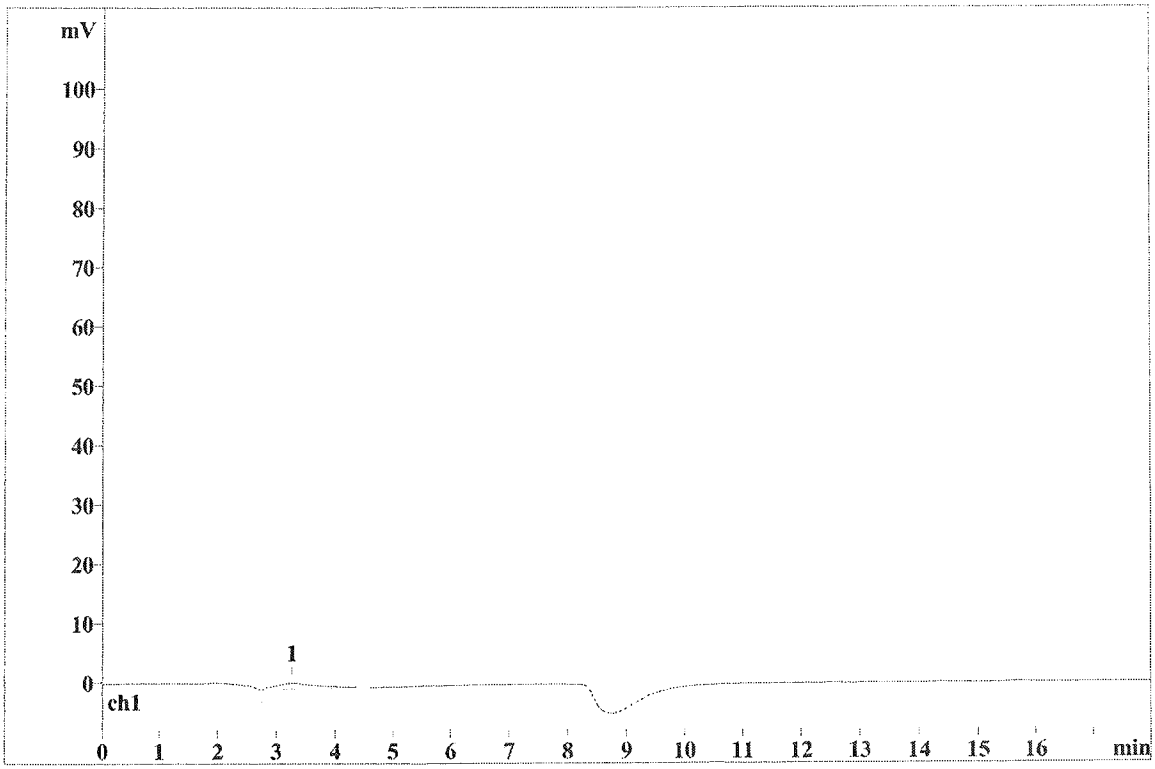
Report date: 11/5/2024 1:33:32 PM
Printed by: ERodel

Ident: AJ30-02 CCB30
Analysis from: 10/24/2024 1:18:19 PM
File: _2024-10-24_13-18.chw Last save: 10/24/2024 12:36:19 PM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134804

SAMPLE: METHOD 300/9056/41°0B
:
Vial number: 2
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.28	0.98	50.459	0.000	

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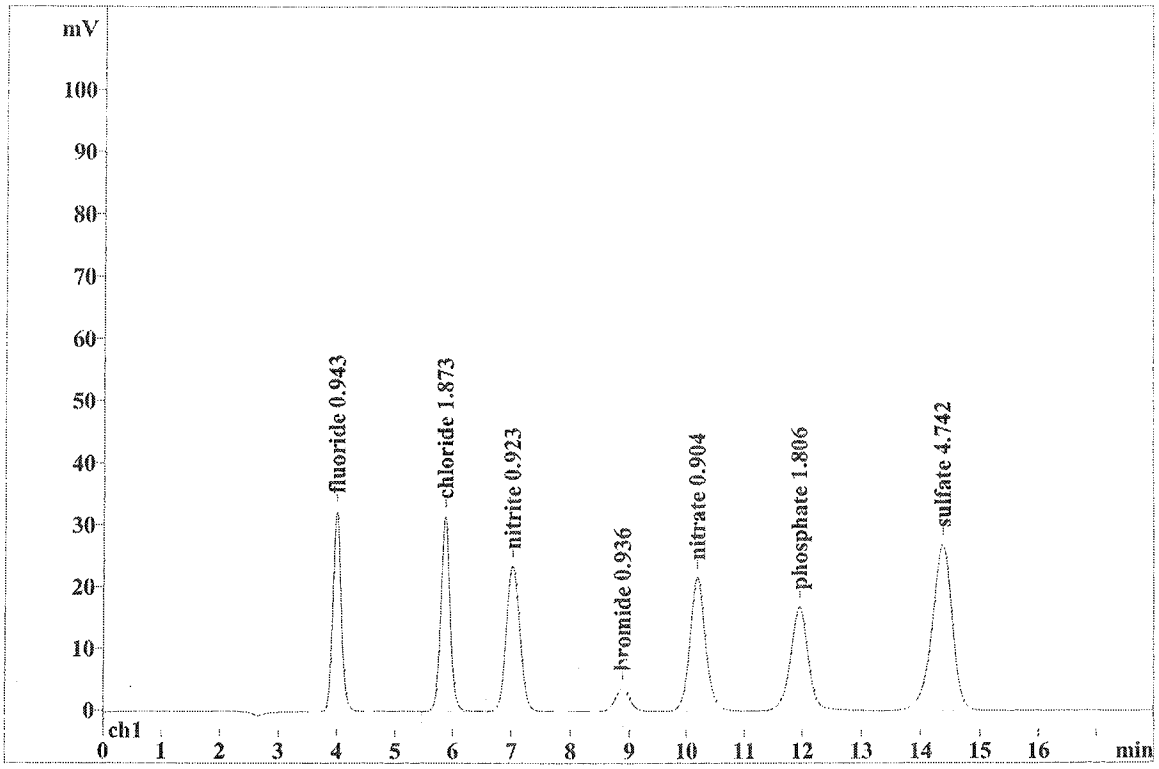
Report date: 11/5/2024 1:44:13 PM
Printed by: ERodel

Ident: AJ30-13 CCV32
Analysis from: 10/24/2024 5:47:05 PM
File: _2024-10-24_17-47.chw Last save: 10/24/2024 5:25:56 PM

Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134818

SAMPLE: METHOD 300/9056/4110B
:
vial number: 13
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	4.00	32.45	316.169	0.943	fluoride
2	5.87	31.58	352.380	1.873	chloride
3	7.02	23.47	373.294	0.923	nitrite
4	8.88	3.71	64.335	0.936	bromide
5	10.19	21.72	405.419	0.904	nitrate
6	11.95	16.83	370.991	1.806	phosphate
7	14.37	26.84	643.245	4.742	sulfate
7	18.00	156.60	2525.832	12.127	

This report has been created by IC Net
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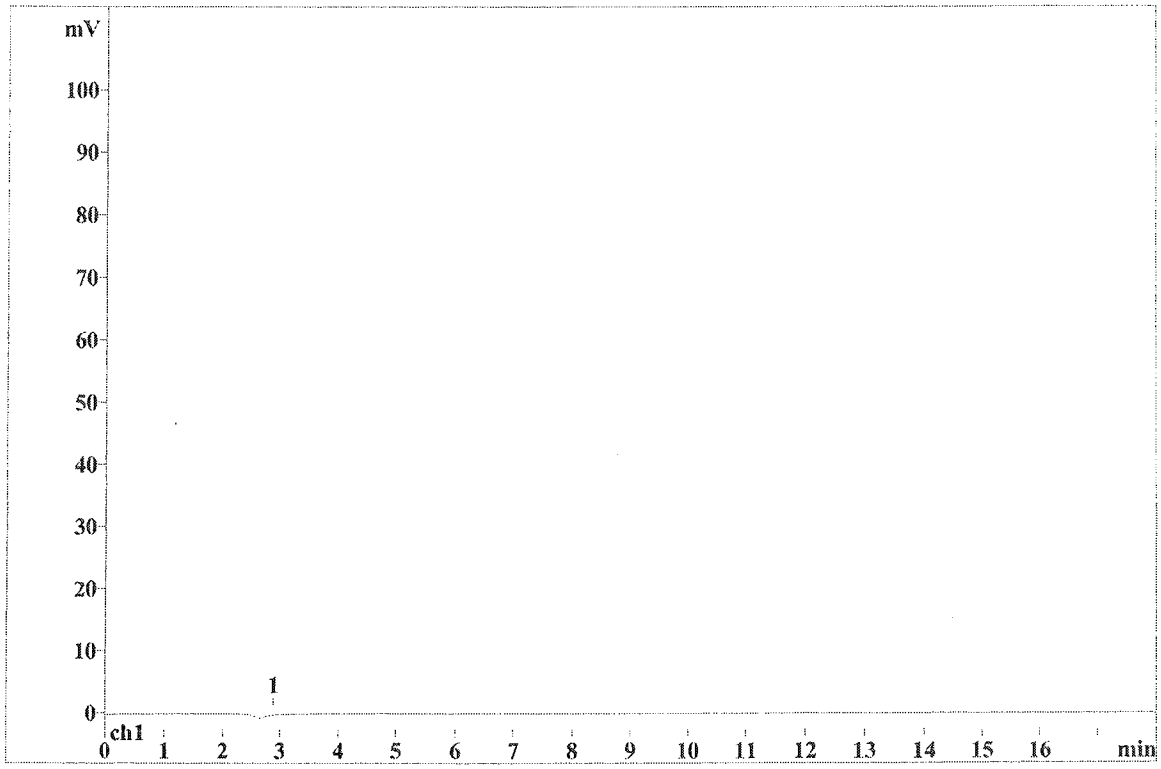
Report date: 11/5/2024 1:44:45 PM
Printed by: ERodel

Ident: AJ30-14 CCB32
Analysis from: 10/24/2024 6:07:22 PM
File: _2024-10-24_18-07.chw Last save: 10/24/2024 5:25:22 PM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134819

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 14
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

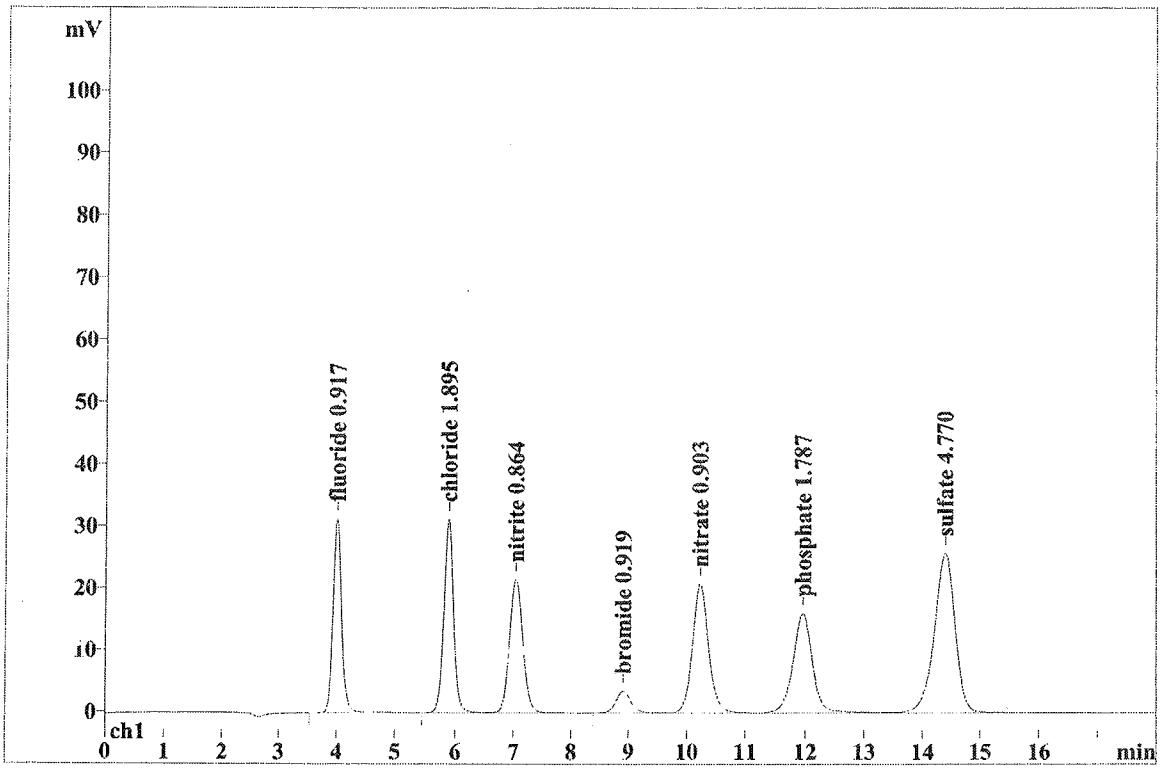
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	2.91	0.39	15.370	0.000	

This report has been created by IC Net
METROHM LTD

Report date: 11/5/2024 1:53:53 PM
Printed by: ERodel

Ident: AJ30-25 CCV34
Analysis from: 10/24/2024 9:50:39 PM
File: _2024-10-24_21-50.chw Last save: 10/24/2024 9:08:39 PM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134830

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 25
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	4.00	31.28	306.996	0.917	fluoride
2	5.88	31.23	356.721	1.895	chloride
3	7.04	21.53	348.477	0.864	nitrite
4	8.91	3.51	62.932	0.919	bromide
5	10.23	20.79	404.612	0.903	nitrate
6	11.96	16.02	366.926	1.787	phosphate
7	14.39	25.79	647.224	4.770	sulfate
7	18.00	150.15	2493.887	12.054	

This report has been created by IC Net
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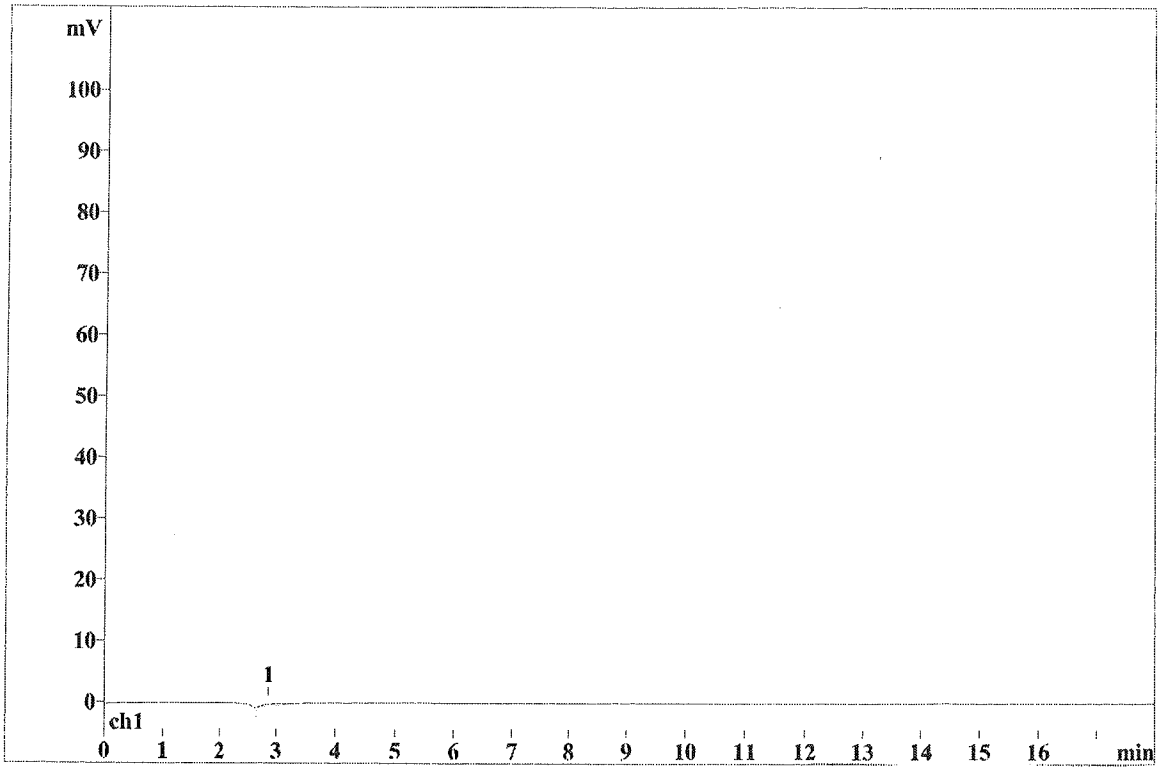
Report date: 11/5/2024 1:54:49 PM
Printed by: ERodel

Ident: AJ30-26 CCB34
Analysis from: 10/24/2024 10:10:57 PM
File: _2024-10-24_22-10.chw Last save: 10/24/2024 9:28:58 PM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: EFodel
Analysis number: 134831

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 26
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	2.87	0.32	8.717	0.000	

This report has been created by IC Net
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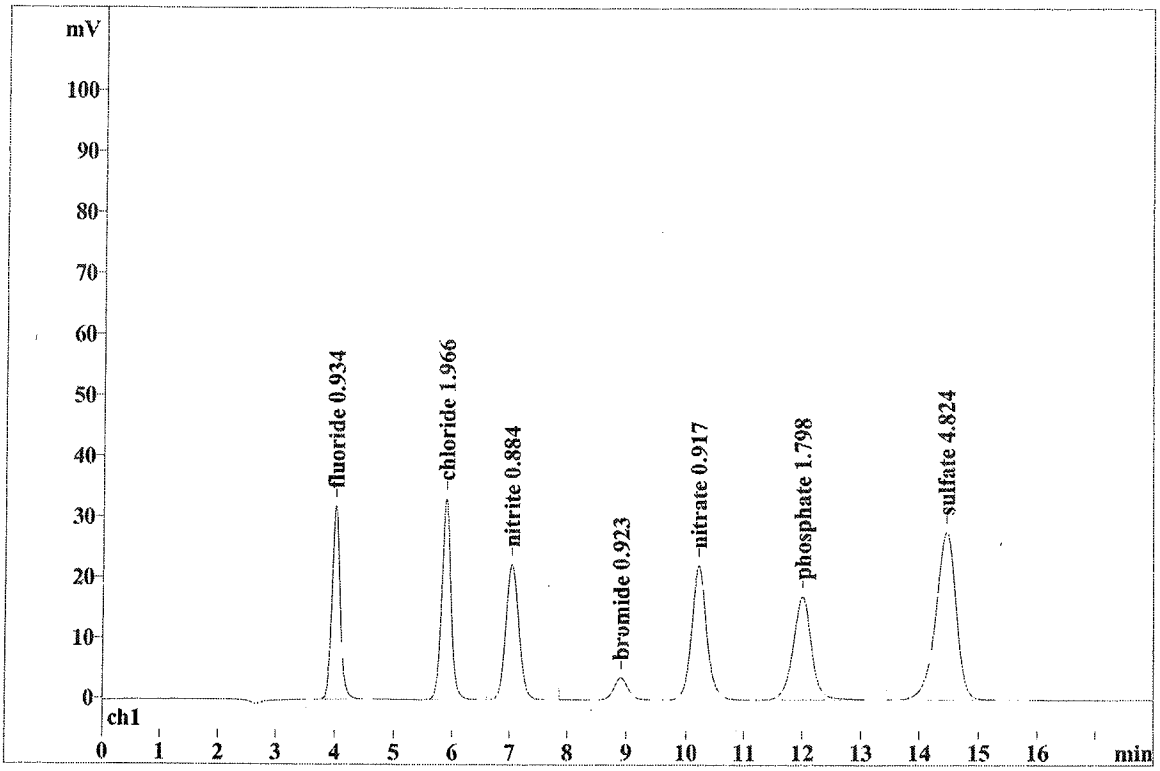
Report date: 11/5/2024 2:05:43 PM
Printed by: ERodel

Ident: AJ30-36 CCV36
Analysis from: 10/25/2024 1:33:53 AM
File: _2024-10-25_01-33.chw Last save: 10/25/2024 12:51:54 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134841

SAMPLE: METHOD 300/9056/4110E
:
Vial number: 36
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	4.01	31.96	312.891	0.934	fluoride
2	5.89	33.28	370.781	1.966	chloride
3	7.04	22.35	356.878	0.884	nitrite
4	8.91	3.70	63.293	0.923	bromide
5	10.22	22.21	411.214	0.917	nitrate
6	12.00	17.03	369.269	1.798	phosphate
7	14.45	27.68	654.677	4.824	sulfate
7	18.00	158.21	2539.004	12.246	

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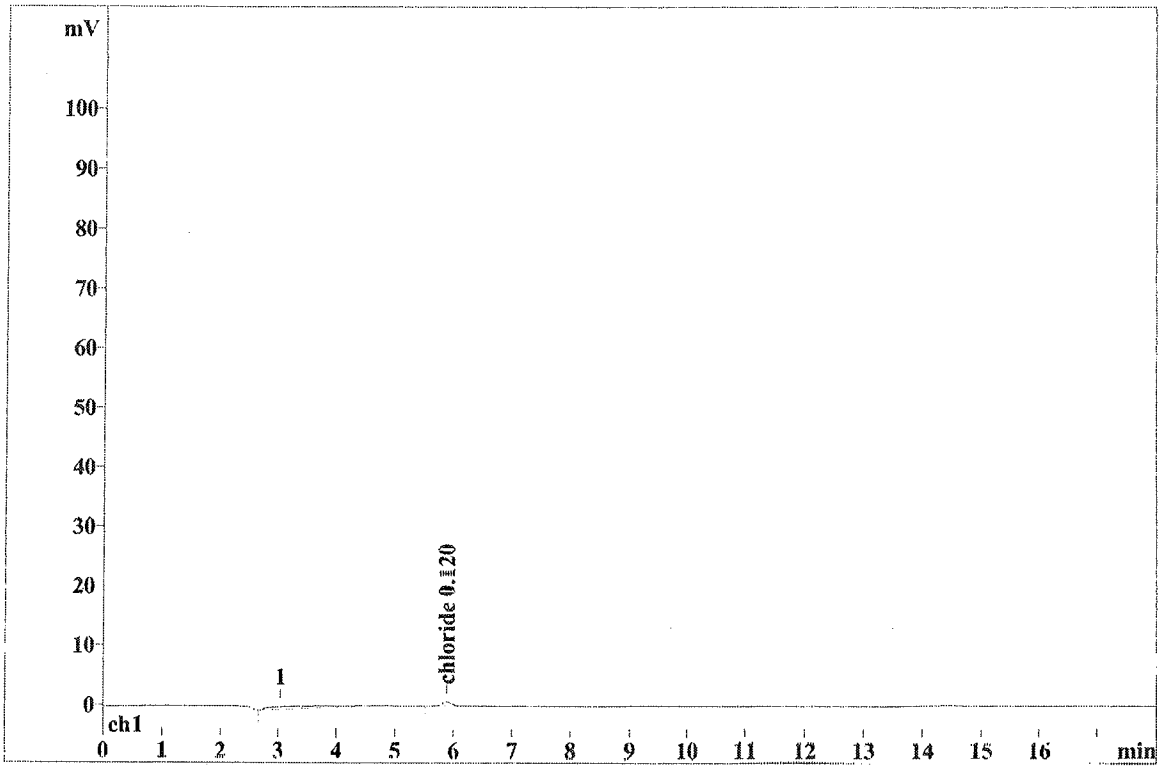
Report date: 11/5/2024 2:06:11 PM
Printed by: ERodel

Ident: AJ30-37 CCB36
Analysis from: 10/25/2024 1:54:11 AM
File: _2024-10-25_01-54.chw Last save: 10/25/2024 1:12:11 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134642

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 37
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	3.04	0.46	32.230	0.000	
2	5.89	0.68	8.221	0.120	chloride
2	18.00	1.14	40.451	0.120	

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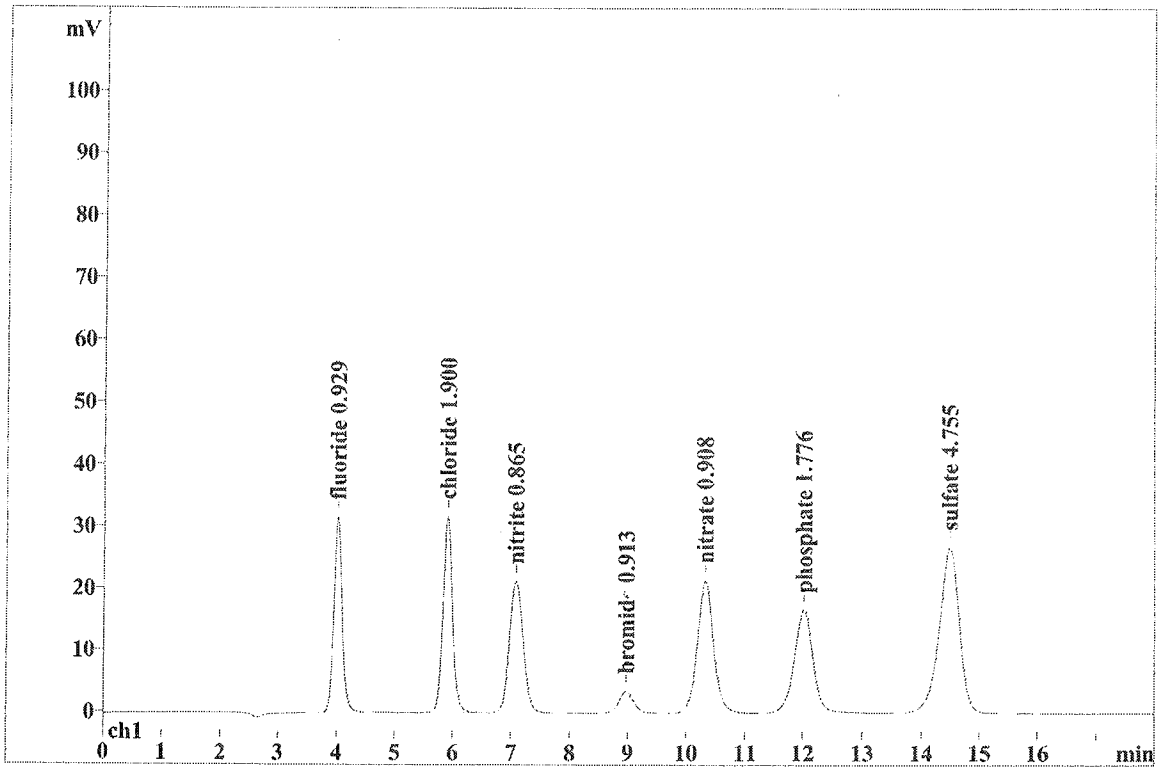
Report date: 11/5/2024 4:33:31 PM
Printed by: ERodel

Ident: AJ30-48 CCV38
Analysis from: 10/25/2024 5:37:21 AM
File: _2024-10-25_05-37.chw Last save: 10/25/2024 4:55:21 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134853

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 48
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	4.01	31.55	311.237	0.929	fluoride
2	5.91	31.69	357.707	1.900	chloride
3	7.08	21.24	348.654	0.865	nitrite
4	8.98	3.57	62.451	0.913	bromide
5	10.31	21.44	407.135	0.908	nitrate
6	12.02	16.63	364.565	1.776	phosphate
7	14.49	26.80	645.077	4.755	sulfate
7	18.00	152.91	2496.827	12.045	

This report has been created by IC Net
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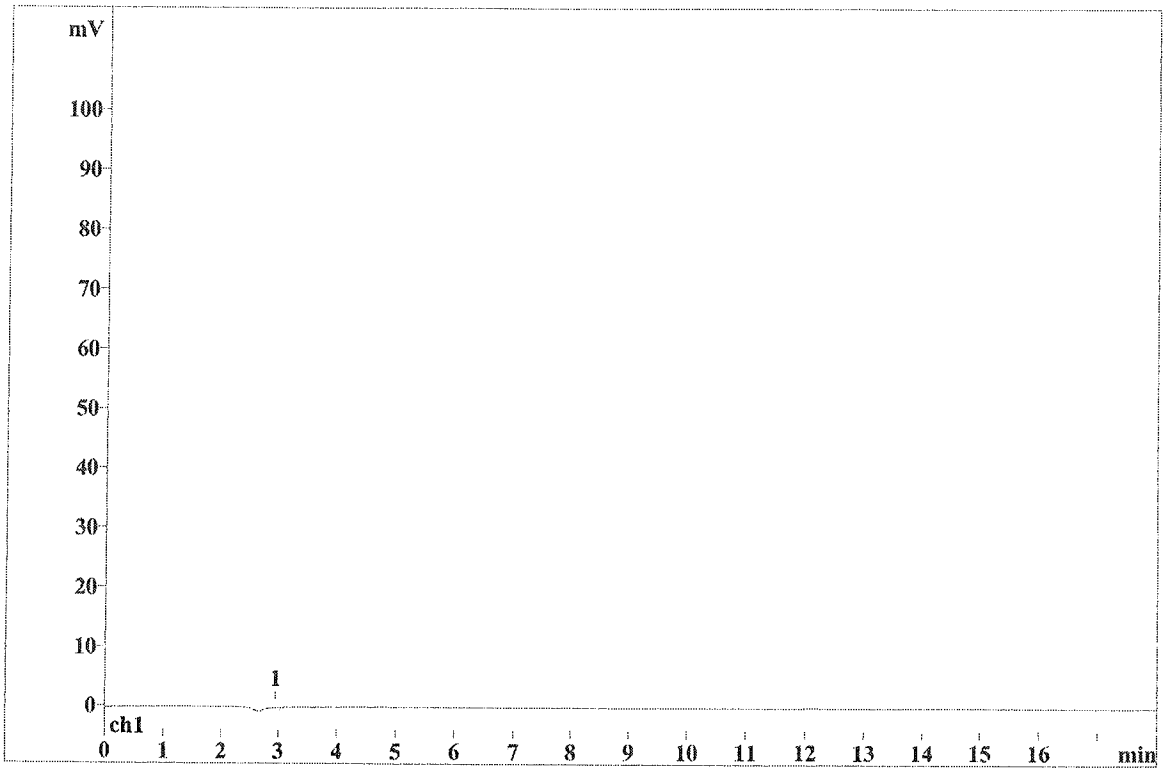
Report date: 11/5/2024 4:33:51 PM
Printed by: ERodel

Ident: AJ30-49 CCB38
Analysis from: 10/25/2024 5:57:38 AM
File: _2024-10-25_05-57.chw Last save: 10/25/2024 5:15:39 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134854

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 49
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

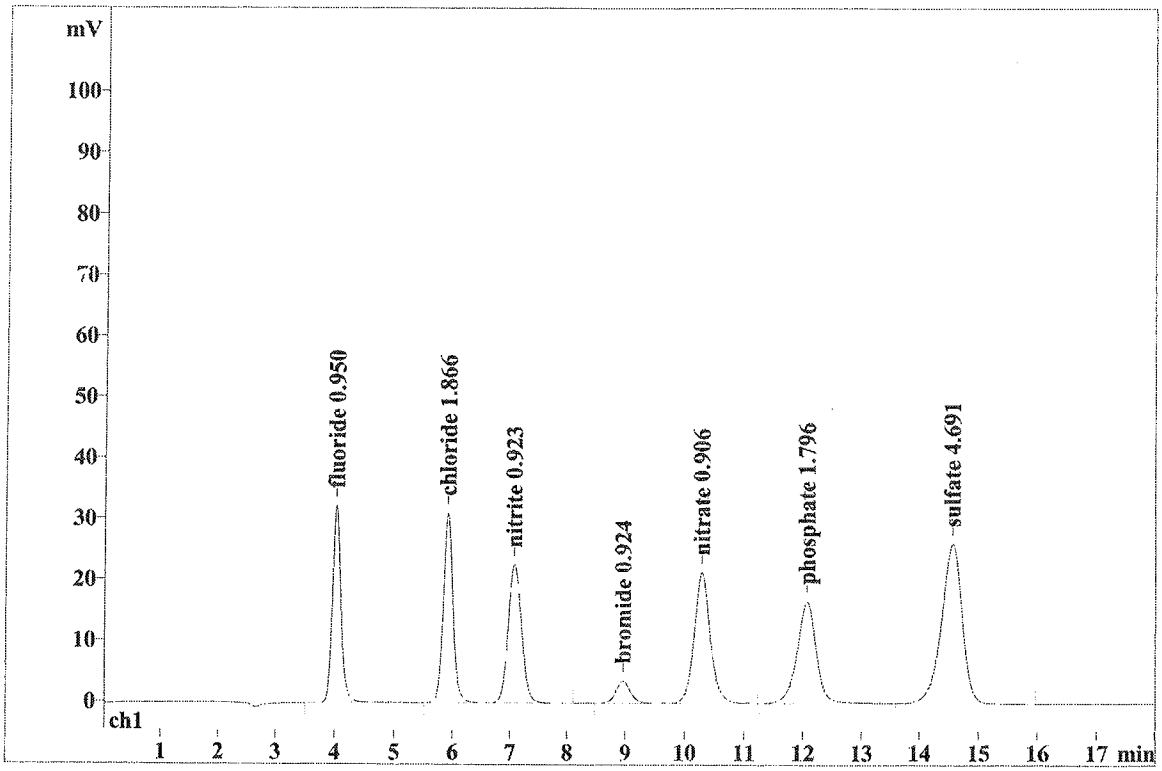
No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	2.95	0.40	19.673	0.000	

This report has been created by IC Net
METROHM LTD

Report date: 11/5/2024 4:39:52 PM
Printed by: ERodel

Ident: AJ30-58 CCV40
Analysis from: 10/25/2024 9:00:16 AM
File: _2024-10-25_09-00.chw Last save: 10/25/2024 8:18:17 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Run operator: ERodel
Analysis number: 134863

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 58
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	4.02	32.29	318.378	0.950	fluoride
2	5.91	31.08	351.086	1.866	chloride
3	7.07	22.67	373.308	0.923	nitrite
4	8.96	3.63	63.378	0.924	bromide
5	10.28	21.45	406.046	0.906	nitrate
6	12.06	16.64	368.843	1.796	phosphate
7	14.56	26.19	636.302	4.691	sulfate
7	18.00	153.95	2517.340	12.056	

This report has been created by IC Net
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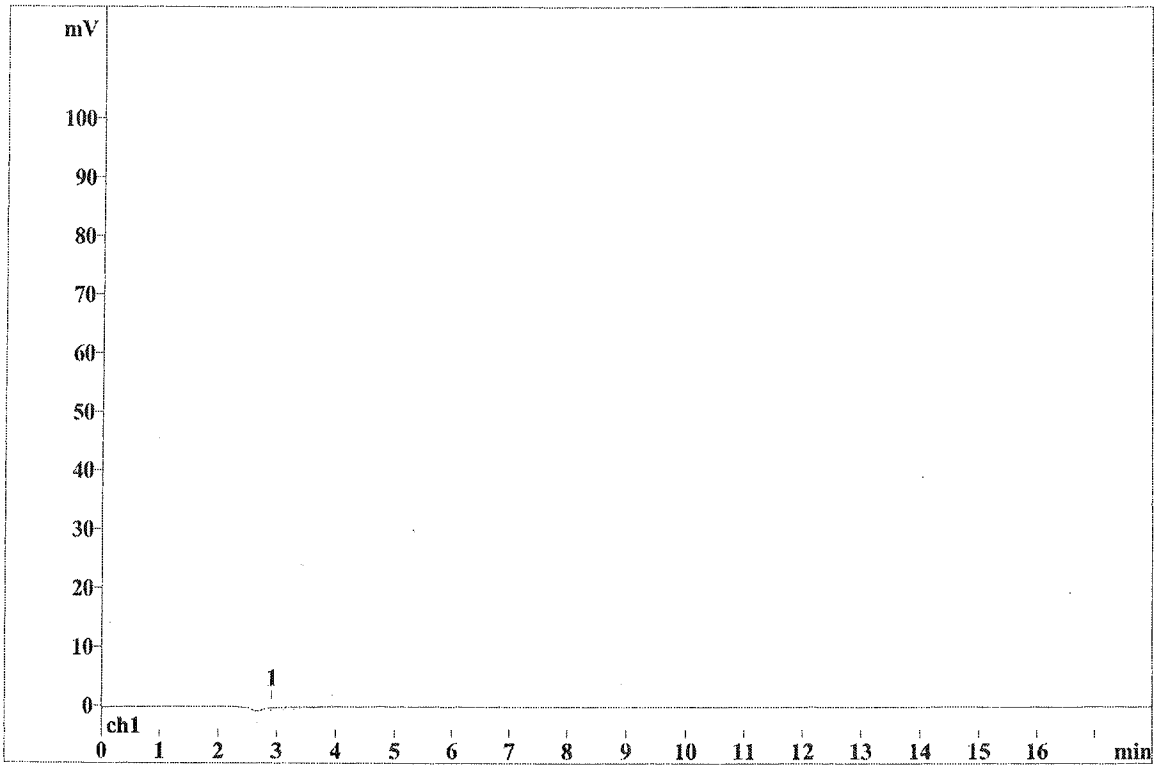
Report date: 11/5/2024 4:40:19 PM
Printed by: ERodel

Ident: AJ30-59 CCB40
Analysis from: 10/25/2024 9:20:34 AM
File: _2024-10-25_09-20.chw Last save: 10/25/2024 8:38:34 AM
Modified!
Method: ICD7-J21.mtw Last save: 10/24/2024 12:21:33 PM
Rur operator: ERodel
Analysis number: 134864

SAMPLE: METHOD 300/9056/4110B
:
Vial number: 55
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No	Retention min	Height mV	Area mV*sec	Conc. mg/L	Name
1	2.93	0.40	18.837	0.000	

This report has been created by IC Net
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ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence. For dillution preparation (sample aliquot/final volume), refer to sample info

Comments: Concentration (ppm)

S1	0.05
S2	0.1
S3	0.2
S4	0.5
S5	1.0
S6	2.0
S7	5.0
S8	10.0
S9	20.0

Linearity (ppm)

F	2
Cl	5
NO_2	2
Br	10
NO_3	2
PO_4	5
SO_4	10

IC ELUENT PREPARATION Expiration Date: 11/18/24

Std ID	Aliquot	Final Vol*
SP2-06-15-02	20 mL	2 L
SP2-06-15-03	20 mL	

IC REGENERANT PREPARATION Expiration Date: 11/16/24

Std ID	Aliquot	Final Vol*
SP2-06-24-04	100 mL	1 L

* Reagent Water ID: SW1A-012-14-02

Book #: AD7-048
Instrument No.: D7
Pipette ID's: B42780066
D42763327
439350100
Analytical Sequence: AD26
Method File: ICD7-D21.mtw
Analytical Batch: –

SOP #	Rev. #
☑ EMAX-300.0	14
☑ EMAX-4110B	7
☑ EMAX-9056	10
☐ EMAX-	
STANDARDS ID	
ICAL	SW3B-35-19-03
ICV	SW3B-35-80-01
ICV_1	SW3B-35-20-02
LCS	–
MS	–

Filters Lot #:
0.45 µm:
0.22 µm:

Snap Seal Containers Lot #:
4 oz: 16324005
1.5 oz:

Column. Metrosep A Supp 5-150
Flow Rate: 0.70 ml/min

ELECTRONIC DATA ARCHIVAL	
Location	Date
☐ IC-METROHM	
☐ External Hard Drive	

Analyzed By: ER
Date: 10/21/24

File Name	Method	Ident	Vial	Volume	Dilution	Amount	Internal Standard Amount	Calibration Level	Sample Info 1	Sample Info 2
_2024-10-21_17-22.chw	ICD7-J21.mtw	AJ26-01 IB	1	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-21_17-42.chw	ICD7-J21.mtw	AJ26-02 S0	2	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-21_18-03.chw	ICD7-J21.mtw	AJ26-03 S1	3	1.0	1.0	1.0	100.0	1	METHOD 300/9056/4110B	0.05 ppm
_2024-10-21_18-23.chw	ICD7-J21.mtw	AJ26-04 S2	4	1.0	1.0	1.0	100.0	2	METHOD 300/9056/4110B	0.1 ppm
_2024-10-21_18-43.chw	ICD7-J21.mtw	AJ26-05 S3	5	1.0	1.0	1.0	100.0	3	METHOD 300/9056/4110B	0.2 ppm
_2024-10-21_19-04.chw	ICD7-J21.mtw	AJ26-06 S4	6	1.0	1.0	1.0	100.0	4	METHOD 300/9056/4110B	0.5 ppm
_2024-10-21_19-24.chw	ICD7-J21.mtw	AJ26-07 S5	7	1.0	1.0	1.0	100.0	5	METHOD 300/9056/4110B	1.0 ppm
_2024-10-21_19-44.chw	ICD7-J21.mtw	AJ26-08 S6	8	1.0	1.0	1.0	100.0	6	METHOD 300/9056/4110B	2.0 ppm
_2024-10-21_20-04.chw	ICD7-J21.mtw	AJ26-09 S7	9	1.0	1.0	1.0	100.0	7	METHOD 300/9056/4110B	5.0 ppm
_2024-10-21_20-25.chw	ICD7-J21.mtw	AJ26-10 S8	10	1.0	1.0	1.0	100.0	8	METHOD 300/9056/4110B	10.0 ppm
_2024-10-21_20-45.chw	ICD7-J21.mtw	AJ26-11 S9	11	1.0	1.0	1.0	100.0	9	METHOD 300/9056/4110B	20.0 ppm
_2024-10-21_21-05.chw	ICD7-J21.mtw	AJ26-12 ICV	12	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-21_21-26.chw	ICD7-J21.mtw	AJ26-13 ICV1	13	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	1.0 ppm
_2024-10-21_21-46.chw	ICD7-J21.mtw	AJ26-1 ICB	14	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	

FINAL
EL 10/24/24

EL 10/24/24

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence. For dillution preparation (sample aliquot/final volume), refer to sample info

Comments:

Book #:	AD7-048
Instrument No.:	D7
Pipette ID's:	B42780066
	D42763327
	439350100
Analytical Sequence:	AJ30
Method File:	ICD7-J21.mtw
Analytical Batch:	ICJ032W, ICJ034W

SOP #	Rev. #
☑ EMAX-300.0	14
☐ EMAX-4110B	7
☐ EMAX-9056	10
☐ EMAX-	
STANDARDS ID	
ICAL	—
ICV	—
CCV	SW33-35-24-01
LCS	SW33-35-24-02
MS	See Refer to LCS Parent ID

Filters Lot #: Snap Seal Containers Lot #:

0.45 µm: 3220452754 oz:

0.22 µm: 32106629 1.5 oz: 099 09524004 10/24/24

Column: Metrosep A Supp 5-150

Flow Rate: 0.70 ml/min

IC ELUENT PREPARATION Expiration Date: 11/23/24

Std ID	Aliquot	Final Vol*
SP2-06-~~22~~ 23-01	20 mL	2 L
SP2-06-22-02 10/24/24	20 mL	

IC REGENERANT PREPARATION Expiration Date: 11/24/24

Std ID	Aliquot	Final Vol*
SP2-06-25-02	100 mL	1 L

* Reagent Water ID: SWIA-02-14-07

ELECTRONIC DATA ARCHIVAL	
Location	Date
☐ IC-METROHM	
☐ External Hard Drive	

Analyzed By: EN

Date: 10/24/24

File Name	Method	Ident	Vial	Volume	Dilution	Amount	Internal Standard Amount	Calibration Level	Sample Info 1	Sample Info 2
_2024-10-24_12-39.chw	ICD7-J21.mtw	AJ30-01 CCV30	1	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_13-18.chw	ICD7-J21.mtw	AJ30-02 CCB30	2	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_13-38.chw	ICD7-J21.mtw	AJ30-03 ICJ032WB	3	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_13-59.chw	ICD7-J21.mtw	AJ30-04 ICJ032WL	4	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_14-19.chw	ICD7-J21.mtw	AJ30-05 ICJ032WC	5	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_14-39.chw	ICD7-J21.mtw	AJ30-06 J147-01J DF=20	6	1.0	20.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_15-00.chw	ICD7-J21.mtw	AJ30-07 J142-01	7	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_16-04.chw	ICD7-J21.mtw	AJ30-08 J142-02	8	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_16-25.chw	ICD7-J21.mtw	AJ30-09 J795-01I DF=2	9	1.0	2.0	1.0	100.0	0	METHOD 300/9056/4110B	10ml/20ml Yellow
_2024-10-24_16-46.chw	ICD7-J21.mtw	AJ30-10 J153-02	10	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_17-06.chw	ICD7-J21.mtw	AJ30-11 J153-03	11	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_17-26.chw	ICD7-J21.mtw	AJ30-12 J154-01	12	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_17-47.chw	ICD7-J21.mtw	AJ30-13 CCV32	13	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_18-07.chw	ICD7-J21.mtw	AJ30-14 CCB32	14	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_18-27.chw	ICD7-J21.mtw	AJ30-15 J796-01I DF=2	15	1.0	2.0	1.0	100.0	0	METHOD 300/9056/4110B	10ml/20ml Yellow
_2024-10-24_18-47.chw	ICD7-J21.mtw	AJ30-16 I168-01I DF=200	16	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-24_19-08.chw	ICD7-J21.mtw	AJ30-17 I168-01JD DF=200	17	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-24_19-28.chw	ICD7-J21.mtw	AJ30-18 I168-01JM DF=200	18	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-24_19-48.chw	ICD7-J21.mtw	AJ30-19 I168-01JS DF=200	19	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-24_20-09.chw	ICD7-J21.mtw	AJ30-20 I168-021 DF=100	20	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-24_20-29.chw	ICD7-J21.mtw	AJ30-21 I167-011 DF=400	21	1.0	400.0	1.0	100.0	0	METHOD 300/9056/4110B	0.1ml/40ml
_2024-10-24_20-49.chw	ICD7-J21.mtw	AJ30-22 I167-021 DF=200	22	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-24_21-10.chw	ICD7-J21.mtw	AJ30-23 I167-031 DF=200	23	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-24_21-30.chw	ICD7-J21.mtw	AJ30-24 I167-041 DF=200	24	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-24_21-50.chw	ICD7-J21.mtw	AJ30-25 CCV34	25	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_22-10.chw	ICD7-J21.mtw	AJ30-26 CCB34	26	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-24_22-31.chw	ICD7-J21.mtw	AJ30-27 I_92-01J DF=100	27	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-24_22-51.chw	ICD7-J21.mtw	AJ30-28 I_92-02J DF=100	28	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-24_23-11.chw	ICD7-J21.mtw	AJ30-29 I192-031 DF=100	29	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-24_23-32.chw	ICD7-J21.mtw	AJ30-30 I192-041 DF=100	30	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-24_23-52.chw	ICD7-J21.mtw	AJ30-31 I192-051 DF=200	31	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-25_00-12.chw	ICD7-J21.mtw	AJ30-32 I192-05ID DF=200	32	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-25_00-33.chw	ICD7-J21.mtw	AJ30-33 I192-05IM DF=200	33	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-25_00-53.chw	ICD7-J21.mtw	AJ30-34 I192-05IS DF=200	34	1.0	200.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/40ml
_2024-10-25_01-13.chw	ICD7-J21.mtw	AJ30-35 I192-061 DF=100	35	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_01-33.chw	ICD7-J21.mtw	AJ30-36 CCV36	36	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-25_01-54.chw	ICD7-J21.mtw	AJ30-37 CCB36	37	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-25_02-14.chw	ICD7-J21.mtw	AJ30-38 ICJ034WB	38	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-25_02-34.chw	ICD7-J21.mtw	AJ30-39 ICJ034WL	39	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-25_02-55.chw	ICD7-J21.mtw	AJ30-40 ICJ034WC	40	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-25_03-15.chw	ICD7-J21.mtw	AJ30-41 I192-071 DF=100	41	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_03-35.chw	ICD7-J21.mtw	AJ30-42 I192-081 DF=100	42	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_03-55.chw	ICD7-J21.mtw	AJ30-43 I192-09J DF=100	43	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_04-16.chw	ICD7-J21.mtw	AJ30-44 J004-01K DF=100	44	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_04-36.chw	ICD7-J21.mtw	AJ30-45 J004-01T DF=1000	45	1.0	1000.0	1.0	100.0	0	METHOD 300/9056/4110B	0.04ml/40ml
_2024-10-25_04-56.chw	ICD7-J21.mtw	AJ30-46 J004-02K DF=1000	46	1.0	1000.0	1.0	100.0	0	METHOD 300/9056/4110B	0.04ml/40ml
_2024-10-25_05-17.chw	ICD7-J21.mtw	AJ30-47 J004-03J DF=100	47	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_05-37.chw	ICD7-J21.mtw	AJ30-48 CCV38	48	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-25_05-57.chw	ICD7-J21.mtw	AJ30-49 CCB38	49	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-25_06-17.chw	ICD7-J21.mtw	AJ30-50 J004-03T DF=1000	50	1.0	1000.0	1.0	100.0	0	METHOD 300/9056/4110B	0.04ml/40ml
_2024-10-25_06-38.chw	ICD7-J21.mtw	AJ30-51 J004-04K DF=100	51	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_06-58.chw	ICD7-J21.mtw	AJ30-52 J004-04T DF=1000	52	1.0	1000.0	1.0	100.0	0	METHOD 300/9056/4110B	0.04ml/40ml
_2024-10-25_07-18.chw	ICD7-J21.mtw	AJ30-53 J033-071 DF=100	53	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_07-39.chw	ICD7-J21.mtw	AJ30-54 J033-08I DF=100	54	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_07-59.chw	ICD7-J21.mtw	AJ30-55 J033-08ID DF=100	55	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_08-19.chw	ICD7-J21.mtw	AJ30-56 J033-08IM DF=100	56	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_08-39.chw	ICD7-J21.mtw	AJ30-57 J033-08IS DF=100	57	1.0	100.0	1.0	100.0	0	METHOD 300/9056/4110B	0.2ml/20ml
_2024-10-25_09-00.chw	ICD7-J21.mtw	AJ30-58 CCV40	58	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	
_2024-10-25_09-20.chw	ICD7-J21.mtw	AJ30-59 CCB40	59	1.0	1.0	1.0	100.0	0	METHOD 300/9056/4110B	

FINAL
EA 11/6/24

RETENTION TIME WINDOW

TWENTY FOUR HOUR RETENTION TIME WINDOW
METHOD 300.0

Lab name:	**EMAX**	**Method:**	**EMAX-300.0**
Instrument ID:	D0 (761 IC)	**IC column:**	METROSEP A SUPP 5
		Column size:	100X4.0mm

Compound	ICAL Mean RT	from	to	RTW
FLUORIDE	**3.04**	2.90	3.17	**0.137**
CHLORIDE	**4.15**	3.97	4.33	**0.181**
NITRITE	**4.83**	4.63	5.03	**0.197**
BROMIDE	**5.92**	5.54	6.30	**0.380**
NITRATE	**6.70**	6.21	7.19	**0.488**
PHOSPHATE	**8.46**	8.13	8.80	**0.335**
SULFATE	**9.66**	9.13	10.19	**0.527**

ICD0-J22.mtw

RETENTION TIME WINDOW
METHOD 300.0

Lab name:	**EMAX**	**Method:**	**EMAX-300.0**
Instrument ID:	D7 (800IC)	IC column:	METROSEP A SUPP 5
		Column size:	150X4.0mm

Compound		Retention time Window
FLUORIDE	**(+/-)**	**0.151**
CHLORIDE	**(+/-)**	**0.195**
NITRITE	**(+/-)**	**0.242**
BROMIDE	**(+/-)**	**0.345**
NITRATE	**(+/-)**	**0.420**
PHOSPHATE	**(+/-)**	**0.601**
SULFATE	**(+/-)**	**0.840**
IODIDE	**(+/-)**	**0.920**

AA
5/6/13/14

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24J033

METHOD SM2320B
TOTAL ALKALINITY

A total of two(2) water samples were received on 10/03/24 to be analyzed for Total Alkalinity in accordance with Method SM2320B and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Alkalinity was not detected in ALJ004WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. ALJ004WL/ALJ004WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

METHOD SM2320B
TOTAL ALKALINITY

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24J033

Matrix : WATER
InstrumentID : E5

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	PREP. FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	ALJ004WB	ND	1	NA	5	5	10/11/2413:51	NA	24E5J0404	24E5J04	ALJ004W	NA	NA
LCS1W	ALJ004WL	73.9	1	NA	5	5	10/11/2413:58	NA	24E5J0405	24E5J04	ALJ004W	NA	NA
LCD1W	ALJ004WC	74.4	1	NA	5	5	10/11/2414:05	NA	24E5J0406	24E5J04	ALJ004W	NA	NA
MW42D-GW100224	J033-07	228	1	NA	5	5	10/11/2415:28	NA	24E5J0418	24E5J04	ALJ004W	10/02/2412:10	10/03/24
FB10-GW100224	J033-08	233	1	NA	5	5	10/11/2415:37	NA	24E5J0419	24E5J04	ALJ004W	10/02/2408:00	10/03/24

Note that Alkalinity concentration is reported as:
Alkalinity to pH 4.5 for results greater than or equal to 20 mg/L
Alkalinity to pH 4.2 for results less than 20 mg/L

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : METHOD SM2320B

MATRIX : WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID :	MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID :	ALJ004WB	ALJ004WL	ALJ004WC
LAB FILE ID :	24E5J0404	24E5J0405	24E5J0406
DATE EXTRACTED :	NA	NA	NA
DATE ANALYZED :	10/11/2413:51	10/11/2413:58	10/11/2414:05
PREP BATCH :	ALJ004W	ALJ004W	ALJ004W
CALIBRATION REF:	24E5J04	24E5J04	24E5J04

ACCESSION:

PARAMETER	MB RESULT (mg/L)	SPIKE AMT (mg/L)	BS RESULT (mg/L)	BS REC (%)	SPIKE AMT (mg/L)	BSD RESULT (mg/L)	BSD REC (%)	RPD (%)	QC LIMIT (%)	MAX RPD (%)
ALKALINITY	ND	73.2	73.9	101	73.2	74.4	102	1	80-120	20

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
ALKALINITY

Note: For samples and relevent QCs/Standards analyzed, refer to attached analytical sequence.

☑ Titration end point: pH 4.5 ± 0.04

☑ Low alkalinity: pH 4.2 ± 0.04

Micropipette ID: N/A

MS/MSD amount of spike: N/A

Reagent Water: RW1-24-003

Comments:

Book#: AAL-052

Instrument No.: ☐ 53 ☑ E5

Analytical Batch: 24E5J04

Analytical Sequence: AL J004W

SOP #	Rev. #
☑ EMAX-2320B	8
☐ EMAX-	

STANDARDS ID		Conc. (mg/L)
0.02N HCL	SWR1-04-21-04	0.0207N
LCS	SW1A-03-29-03	73.2
MS/MSD	N/A	N/A
ICV	N/A	N/A

pH Buffer	ID
pH 4	SW1A-03-26-01
pH 7	SW1A-03-28-06
pH 10	SW1A-03-28-07
pH 8.0 (Check)	SW1A-03-25-10
pH Strip	HC446507

Analyzed By: AW

Date: 10/11/24

PC-TitratION PLUS

pH and Alkalinity In-Run Report

Run Number 1737 **Analytical Batch#** 24E5J04

Seq. #	SampleID	Data File Name	RunDate	RunTime	pH	Volume @pH 8.3	Volume @pH 4.5	Volume @pH 4.2	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	Review Notes
1	ICV PH 8	24E5J04	10/11/24	1:31 PM	8.01	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	
2	INSTR. CHK.	24E5J04	10/11/24	1:38 PM	7.29	.00	.13	.15	.00	4.62	4.62	.00	.00	
3	LOQV	24E5J04	10/11/24	1:45 PM	8.25	.00	.14	.16	.00	4.90	4.90	.00	.00	
4	ALJ004WB	24E5J04	10/11/24	1:51 PM	6.20	.00	.04	.06	.00	1.06	1.06	.00	.00	
5	ALJ004WL	24E5J04	10/11/24	1:58 PM	8.80	.87	1.78	-1.00	35.87	73.87	2.13	71.74	.00	
6	ALJ004WC	24E5J04	10/11/24	2:05 PM	8.82	.90	1.80	-1.00	37.32	74.38	.00	74.13	.25	
7	I883-01	24E5J04	10/11/24	2:12 PM	7.90	.00	2.41	-1.00	.00	99.97	99.97	.00	.00	
8	I883-02	24E5J04	10/11/24	2:19 PM	7.46	.00	.83	-1.00	.00	34.55	34.55	.00	.00	
9	I883-03	24E5J04	10/11/24	2:26 PM	7.26	.00	.93	-1.00	.00	38.64	38.64	.00	.00	
10	I883-04	24E5J04	10/11/24	2:34 PM	7.54	.00	1.16	-1.00	.00	47.99	47.99	.00	.00	
11	I883-05	24E5J04	10/11/24	2:41 PM	7.79	.00	1.55	-1.00	.00	64.03	64.03	.00	.00	
12	I883-06	24E5J04	10/11/24	2:48 PM	7.28	.00	.80	-1.00	.00	33.14	33.14	.00	.00	
13	J004-01	24E5J04	10/11/24	2:54 PM	7.00	.00	.87	-1.00	.00	36.16	36.16	.00	.00	
14	J004-01D	24E5J04	10/11/24	3:01 PM	7.06	.00	.90	-1.00	.00	37.41	37.41	.00	.00	
15	J004-02	24E5J04	10/11/24	3:08 PM	7.03	.00	.77	-1.00	.00	31.81	31.81	.00	.00	
16	J004-03	24E5J04	10/11/24	3:15 PM	7.08	.00	.40	.44	.00	14.85	14.85	.00	.00	
17	J004-04	24E5J04	10/11/24	3:21 PM	6.93	.00	.87	-1.00	.00	36.01	36.01	.00	.00	
18	J033-07	24E5J04	10/11/24	3:28 PM	7.51	.00	5.50	-1.00	.00	227.75	227.75	.00	.00	

Analyzed by: AW Reviewed by: AW Date: 10/11/24

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Run Number 1737 **Analytical Batch#** 24E5J04

Seq. #	SampleID	Data File Name	RunDate	RunTime	pH	Volume @pH 8.3	Volume @pH 4.5	Volume @pH 4.2	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	Review Notes
19	J033-08	24E5J04	10/11/24	3:37 PM	7.46	.00	5.63	-1.00	.00	233.24	233.24	.00	.00	
20	RINSE	24E5J04	10/11/24	3:43 PM	6.06	.00	.04	.07	.00	.78	.78	.00	.00	

Analyzed by: AW Reviewed by: AW Date: 10/11/24

PC-TitratION PLUS by Man-Tech Associates, Inc.

pH AND ALKALINITY IN-RUN REPORT.SRW

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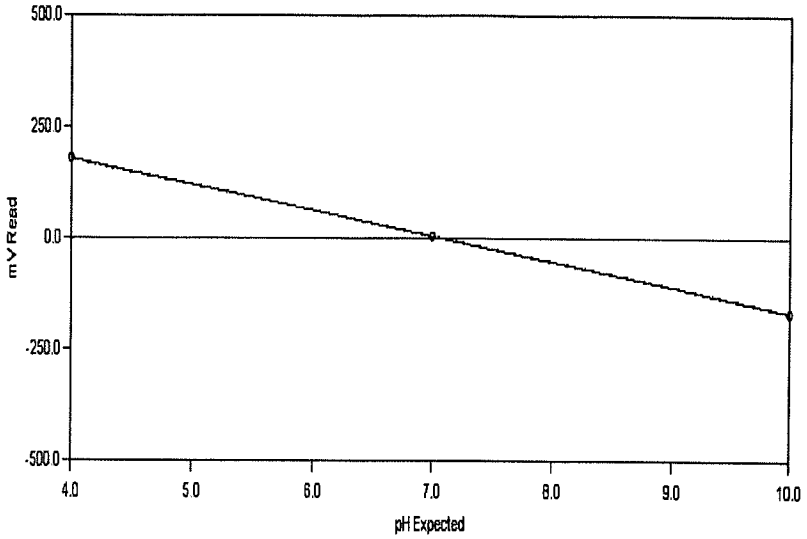
PC-TitratION PLUS
Calibration Report

Calibration Record # 1359



Calibration Setting

Calibration ID	PH CAL 4-7-10	Date	10/11/2024
Channel	1	Time	1:28 PM
Probe Type	pH	Temperature	297.97 K 24.82 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

Calibration Results

Slope	-57.635	CorrCoeff	1.0000
Intercept	5.370	Equation: Y = (-57.635) X + (5.370)	

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-57.635	-65.00	-53.00
Intercept	5.370	-40.00	40.00
Correlation Coefficient	1.0000	0.99	1.00

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

Calibration Data	Standard	Reading
	4.00	178.58
	7.00	4.73
	10.00	-167.23

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PC-Titrate For Windows

Running List Report

Order Number - 24E5J04

	Schedule	Sample Id	Vial	Weight	Volume
1	PH CAL	CAL	1	.00	25.00
2	PH ONLY	ICV PH 8	4	.00	25.00
3	PH-ALK	INSTR. CHK.	5	.00	25.00
4	PH-ALK	LOQV	6	.00	25.00
5	PH-ALK	ALJ004WB	7	.00	25.00
6	PH-ALK	ALJ004WL	8	.00	25.00
7	PH-ALK	ALJ004WC	9	.00	25.00
8	PH-ALK	I883-01	10	.00	25.00
9	PH-ALK	I883-02	11	.00	25.00
10	PH-ALK	I883-03	12	.00	25.00
11	PH-ALK	I883-04	13	.00	25.00
12	PH-ALK	I883-05	14	.00	25.00
13	PH-ALK	I883-06	15	.00	25.00
14	PH-ALK	J004-01	16	.00	25.00
15	PH-ALK	J004-01D	17	.00	25.00
16	PH-ALK	J004-02	18	.00	25.00
17	PH-ALK	J004-03	19	.00	25.00
18	PH-ALK	J004-04	20	.00	25.00
19	PH-ALK	J033-07	21	.00	25.00
20	PH-ALK	J033-08	22	.00	25.00
21	PH-ALK	RINSE	23	.00	25.00

PC-TitratION PLUS by Man-Tech Associates, Inc.

runninglist.SRW

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CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24J033

METHOD SM4500-NO3E
NITRATE/NITRITE-N

A total of two(2) water samples were received on 10/03/24 to be analyzed for Nitrate/Nitrite-N in accordance with Method SM4500-NO3E and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Nitrogen, Nitrate-Nitrite was not detected in NAJ004WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. NAJ004WL/NAJ004WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

METHOD SM4500-NO3E
NITRATE/NITRITE-N

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24J033

Matrix : WATER
InstrumentID : H9

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DFxPREP FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATETIME
MBLK1W	NAJ004WB	ND	1	NA	0.05	0.01	10/18/2417:39	NA	24NAJ00410	24NAJ004	NAJ004W	NA	NA
LCS1W	NAJ004WL	0.545	1	NA	0.05	0.01	10/18/2417:39	NA	24NAJ00411	24NAJ004	NAJ004W	NA	NA
LCD1W	NAJ004WC	0.568	1	NA	0.05	0.01	10/18/2417:39	NA	24NAJ00412	24NAJ004	NAJ004W	NA	NA
MW42D-GW100224	J033-07	2.54	10	NA	0.5	0.1	10/18/2417:39	NA	24NAJ00414	24NAJ004	NAJ004W	10/02/2412:10	10/03/24
FB10-GW100224	J033-08	2.58	10	NA	0.5	0.1	10/18/2417:40	NA	24NAJ00415	24NAJ004	NAJ004W	10/02/2408:00	10/03/24

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : SM4500-NO3E

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: NAJ004WB	NAJ004WL	NAJ004WC
LAB FILE ID	: 24NAJ00410	24NAJ00411	24NAJ00412
DATE PREPARED	: NA	NA	NA
DATE ANALYZED	: 10/18/2417:39	10/18/2417:39	10/18/2417:39
PREP BATCH	: NAJ004W	NAJ004W	NAJ004W
CALIBRATION REF	: 24NAJ004	24NAJ004	24NAJ004

ACCESSION:

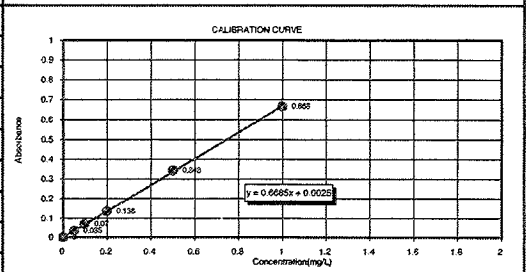
PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Nitrogen, Nitrate-Nitrite	ND	0.500	0.545	109	0.500	0.568	114	4	80-120	20

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

NITRATE-NITRITE ANALYSIS

Data File Name	Calibration ID	Conc. mg/L	WL	Abs	CalDate	FC	%Rec
24NAJ00401	S0	0	543nm	0	10/18/24 17:37	-0.003796186	ND
24NAJ00402	S1	0.05	543nm	0.035	10/18/24 17:37	0.048557807	97
24NAJ00403	S2	0.1	542nm	0.07	10/18/24 17:37	0.1009118	101
24NAJ00404	S3	0.2	542nm	0.136	10/18/24 17:37	0.199636472	100
24NAJ00405	S4	0.5	543nm	0.343	10/18/24 17:38	0.509272944	102
24NAJ00406	S5	1	543nm	0.668	10/18/24 17:38	0.995417163	100
24NAJ00407	NO2-N Std Check	0.5	543nm	0.382	10/18/24 17:38	0.56761025	90
24NAJ00408	ICV	0.5	543nm	0.364	10/18/24 17:38	0.54068534	108
24NAJ00409	ICB	0	542nm	0.002	10/18/24 17:38	-0.000804529	ND
24NAJ00420	CCV1	0.5	543nm	0.352	10/18/24 17:40	0.522735399	105
24NAJ00421	CCB1	0	542nm	0	10/18/24 17:41	-0.003796186	ND
24NAJ00424	CCV2	0.5	543nm	0.35	10/18/24 17:41	0.519743743	104
24NAJ00425	CCB2	0	543nm	0.003	10/18/24 17:41	0.000691299	ND

Reduction Time	Coloring Time	InstrumentID: J5
10/18/24 15:39	10/18/24 15:40	
10/18/24 15:43	10/18/24 15:44	
10/18/24 15:47	10/18/24 15:48	
10/18/24 15:51	10/18/24 15:52	
10/18/24 15:55	10/18/24 15:56	
10/18/24 15:59	10/18/24 16:00	
NA	10/18/24 16:01	
10/18/24 16:04	10/18/24 16:05	
10/18/24 16:09	10/18/24 16:10	



$$FC = [(A * CF) - Y] * DF$$

CF= 1.495828367 Y= 0.00380 r= 0.999915

DL Water(mg/L)	0.01	DL Soil(mg/Kg)	0.1
LOD Water(mg/L)	0.02	LOD Soil(mg/Kg)	0.2
LOQ Water(mg/L)	0.05	LOQ Soil(mg/Kg)	0.5

SOP

☑ EMAX-4500-NO3E Rev. 6

Standard / Reagent ID	Description	Conc.	Exp.Date
SW2B-52-17-06	ICAL CCV (mg/L)	10	10/18/24
SW2B-52-17-07	ICV LCS MS Std (mg/L)	10	10/18/24
SW2B-52-17-08	NO2 CHK	10	10/18/24
SW1A-012-11-09	Reagent Water	N/A	2/29/2025
N/A	Sand	N/A	N/A
SWP1-89-33-01	Coloring Reagent	**	10/23/24
SWP1-89-34-02	NH4Cl-EDTA Soln	**	02/29/2025
SWP1-89-08-03	HCl	1N	06/06/25
N/A	NH4OH	N/A	N/A
N/A	Extraction Solvent	N/A	N/A
N/A	ZnSO4	N/A	N/A
SWP1-86-31-02	NaOH	10N	01/03/25
SWP1-87-33-01	NaOH	1N	01/03/25
SWP1-76-37-01	Cadmium Reduction Column	N/A	12/09/31
09524004	Snap Seal	1.5 OZ	N/A

Standard Prep	Intermediate Std Aliquot (ml)	Final Vol (ml)	DateTime
S0	0	20	10/18/24 14:52
S1	0.1	20	10/18/24 14:52
S2	0.2	20	10/18/24 14:52
S3	0.4	20	10/18/24 14:52
S4	1	20	10/18/24 14:52
S5	2	20	10/18/24 14:52
ICV	1	20	10/18/24 14:52
CCV	1	20	10/18/24 14:52
NO2 CHK	1	20	10/18/24 14:52
LCS EV	1	20	10/18/24 14:52
MS EV	1	20	10/18/24 14:52

MicropipetteID: B42780919 C42760318 B42753316

Expected Sample Amount: 20

Notes:

** Concentration can be found in Reagent Log SWP1-89

See notes for dilution preparation

sample aliquot/final volume

LAB QC CHECK

DataFileID	LabSampleID	Result	Expected Value	QC Result
24NAJ00410	NAJ004WB	ND	ND	MB Passed
24NAJ00411	NAJ004WL	0.545	0.5	%R=109
24NAJ00412	NAJ004WC	0.568	0.5	%R=114

MS CHECK

DataFileID	LabSampleID	Result	Expected Value	QC Result
24NAJ00416	J446-01	0.06		
24NAJ00418	J446-01M	0.68	0.5	%R=123

DUP CHECK

DataFile	LabSampleID	Result	Expected Value	RPD
24NAJ00416	J446-01	0.06		0
24NAJ00417	J446-01D	0.06	0.06	

CALIBRATION CHECK pH Meter ID: 97

Buffer ID	Buffer	Rdg	Date
SW1A-03-23-08	1	1.05	10/18/24 11:22
SW1A-03-21-10	7.01	6.99	10/18/24 11:23
SW1A-03-26-08	10	10	10/18/24 11:24
SW1A-03-19-01	Check Std (E)	7.97	10/18/24 11:25

☐ Leaching Date Time Start: ☐ End:

Filter: 0.45 µm

Analyzed by: AWhite

Reviewed by: AW

Date: 10/18/24

DataFileID	LabSampleID	Result	Flag	RUnit	Sample Amt	SUnit	PDateTime	FinalVol (ml)	WL	Abs	ADateTime	Sample Bkgnd	DF	%M	Conc.	DFxPrep Factor	Notes	Analyst	Sample pH	Sample pH Adj	Reduction Time	Coloring Time
24NAJ00410	NAJ004WB	ND		mg/L	20	ml	NA	20	543nm	0.008 a	10/18/24 17:39	0	1		0.00817	1		AWhite	5.72	8.59	10/18/24 16:13	10/18/24 16:14
24NAJ00411	NAJ004WL	0.545		mg/L	20	ml	NA	20	543nm	0.367 a	10/18/24 17:39	0	1		0.545173	1		AWhite	5.72	8.59	10/18/24 16:17	10/18/24 16:18
24NAJ00412	NAJ004WC	0.568		mg/L	20	ml	NA	20	543nm	0.382 a	10/18/24 17:39	0	1		0.56761	1		AWhite	5.72	8.59	10/18/24 16:21	10/18/24 16:22
24NAJ00413	MRL	0.0545		mg/L	20	ml	NA	20	543nm	0.039 a	10/18/24 17:39	0	1		0.054541	1		AWhite	5.72	8.59	10/18/24 16:26	10/18/24 16:27
24NAJ00414	J033-07	2.535		mg/L	20	ml	NA	20	543nm	0.172 a	10/18/24 17:39	0	10		2.534863	10	1ml/10ml	AWhite	1.58	8.59	10/18/24 16:31	10/18/24 16:32
24NAJ00415	J033-08	2.58		mg/L	20	ml	NA	20	542nm	0.175 a	10/18/24 17:40	0	10		2.579738	10	1ml/10ml	AWhite	1.52	8.54	10/18/24 16:36	10/18/24 16:37
24NAJ00416	J446-01	0.0635		mg/L	20	ml	NA	20	543nm	0.045 a	10/18/24 17:40	0	1		0.063516	1		AWhite	1.52	8.53	10/18/24 16:41	10/18/24 16:42
24NAJ00417	J446-01D	0.0635		mg/L	20	ml	NA	20	543nm	0.045 a	10/18/24 17:40	0	1		0.063516	1		AWhite	1.52	8.53	10/18/24 16:46	10/18/24 16:47
24NAJ00418	J446-01M	0.678		mg/L	20	ml	NA	20	543nm	0.456 a	10/18/24 17:40	0	1		0.678302	1		AWhite	1.52	8.53	10/18/24 16:51	10/18/24 16:52
24NAJ00419	J450-01	0.0171	J	mg/L	20	ml	NA	20	542nm	0.014 a	10/18/24 17:40	0	1		0.017145	1		AWhite	1.52	8.5	10/18/24 16:56	10/18/24 16:57
24NAJ00420	CCV1	0.52		mg/L	20	ml	NA	20	543nm	0.352 a	10/18/24 17:40	0	1		0.522735	1		AWhite			10/18/24 17:01	10/18/24 17:02
24NAJ00421	CCB1	ND		mg/L	20	ml	NA	20	542nm	0 a	10/18/24 17:41	0	1		-0.0038	1		AWhite			10/18/24 17:06	10/18/24 17:07
24NAJ00422	J450-02	ND		mg/L	20	ml	NA	20	543nm	0.007 a	10/18/24 17:41	0	1		0.006675	1		AWhite	1.51	8.5	10/18/24 17:11	10/18/24 17:12
24NAJ00423	J450-03	0.0186	J	mg/L	20	ml	NA	20	542nm	0.015 a	10/18/24 17:41	0	1		0.018641	1		AWhite	1.47	8.51	10/18/24 17:16	10/18/24 17:17
24NAJ00424	CCV2	0.52		mg/L	20	ml	NA	20	543nm	0.35 a	10/18/24 17:41	0	1		0.519744	1		AWhite			10/18/24 17:21	10/18/24 17:22
24NAJ00425	CCB2	ND		mg/L	20	ml	NA	20	543nm	0.003 a	10/18/24 17:41	0	1		0.000691	1		AWhite			10/18/24 17:26	10/18/24 17:27

Reviewed by: AW

Date: 10/18/24

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24J033

METHOD SW9060
TOC

A total of two(2) water samples were received on 10/03/24 to be analyzed for TOC in accordance with Method SW9060 and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Calibration was performed as prescribed by the method and was verified using a secondary source (ICV). All calibration requirements were within acceptance criteria.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. Total Organic Carbon was not detected in TCJ004WB. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. TCJ004WL/TCJ004WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Total Organic Carbon was within MS QC limits in J033-08M/J033-08S. Sample duplicate was analyzed and RPD was within expected value. Refer to Matrix QC summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

METHOD SW9060
TOC

Client : CDM SMITH
Project : VA SALT LAKE CITY
Batch No. : 24J033

Matrix : WATER
InstrumentID : 62

CLIENT SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DIL'N FACTOR	MOIST (%)	RL (mg/L)	MDL (mg/L)	ANALYSIS DATETIME	PREPARATION DATETIME	DATA FILE ID	CAL REF	PREP BATCH	COLLECTION DATETIME	RECEIVED DATE
MBLK1W	TCJ004WB	ND	1	NA	1.00	0.250	10/21/2419:02	NA	TCJ003-06	TCJ003-02	TCJ004W	NA	NA
LCS1W	TCJ004WL	25.5	1	NA	1.00	0.250	10/21/2419:16	NA	TCJ003-07	TCJ003-02	TCJ004W	NA	NA
LCD1W	TCJ004WC	25.6	1	NA	1.00	0.250	10/21/2419:31	NA	TCJ003-08	TCJ003-02	TCJ004W	NA	NA
MW42D-GW100224	J033-07R	0.731J	1	NA	1.00	0.250	10/21/2421:30	NA	TCJ003-16	TCJ003-14	TCJ004W	10/02/2412:10	10/03/24
FB10-GW100224	J033-08R	0.673J	1	NA	1.00	0.250	10/21/2421:45	NA	TCJ003-17	TCJ003-14	TCJ004W	10/02/2408:00	10/03/24
FB10-GW100224DUP	J033-08D	0.695J	1	NA	1.00	0.250	10/21/2422:00	NA	TCJ003-18	TCJ003-14	TCJ004W	10/02/2408:00	10/03/24
FB10-GW100224MS	J033-08M	25.2	1	NA	1.00	0.250	10/21/2422:15	NA	TCJ003-19	TCJ003-14	TCJ004W	10/02/2408:00	10/03/24
FB10-GW100224MSD	J033-08S	25.5	1	NA	1.00	0.250	10/21/2422:29	NA	TCJ003-20	TCJ003-14	TCJ004W	10/02/2408:00	10/03/24

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : SW9060

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: TCJ004WB	TCJ004WL	TCJ004WC
LAB FILE ID	: TCJ003-06	TCJ003-07	TCJ003-08
DATE PREPARED	: NA	NA	NA
DATE ANALYZED	: 10/21/2419:02	10/21/2419:16	10/21/2419:31
PREP BATCH	: TCJ004W	TCJ004W	TCJ004W
CALIBRATION REF	: TCJ003-02	TCJ003-02	TCJ003-02

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Total Organic Carbon	ND	25.0	25.5	102	25.0	25.6	102	0	80-120	20

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : SW9060

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: FB10-GW100224	FB10-GW100224MS	FB10-GW100224MSD
LAB SAMPLE ID	: J033-08R	J033-08M	J033-08S
LAB FILE ID	: TCJ003-17	TCJ003-19	TCJ003-20
DATE PREPARED	: NA	NA	NA
DATE ANALYZED	: 10/21/2421:45	10/21/2422:15	10/21/2422:29
PREP BATCH	: TCJ004W	TCJ004W	TCJ004W
CALIBRATION REF	: TCJ003-14	TCJ003-14	TCJ003-14

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Total Organic Carbon	0.673	25.0	25.2	98	25.0	25.5	99	1	80-120	20

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

EMAX QUALITY CONTROL DATA
SAMPLE DUPLICATE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24J033
METHOD : SW9060

MATRIX : WATER

DILUTION FACTOR:	1	1
SAMPLE ID :	FB10-GW100224	FB10-GW100224DUP
LAB SAMPLE ID :	J033-08R	J033-08D
LAB FILE ID :	TCJ003-17	TCJ003-18
DATE PREPARED :	NA	NA
DATE ANALYZED :	10/21/2421:45	10/21/2422:00
PREP BATCH :	TCJ004W	TCJ004W
CALIBRATION REF:	TCJ003-14	TCJ003-14

ACCESSION:

PARAMETER	PARENT RESULT (mg/L)	DUP RESULT (mg/L)	RPD (%)	MAX RPD (%)
Total Organic Carbon	0.673	0.695	3	20

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
TOC

	Date	Time
Start	10/21/24	16:12
End	10/22/24	03:11

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

☐ Sample was filtered. Filter ID:

Comments:

TCJ004W: 24J137
24J033
24J125

All samples pH<2

LOD @ 0.3 mg/L
0.03mL ICAL Std. to 100mL
reagent water
LOD @ 0.5 mg/L
0.05mL ICAL Std. to 100mL
reagent water
LOQ @ 1 mg/L
0.1mL ICAL Std. to 100mL MH 10/21/24
reagent water

Reagent Water ID #: SW1A-012-14-02
pH Strips Lot #: HC333774
2 M HCl SWP1-88-45-03

Book #: A62-046
Instrument No.: 62
Micropipette ID: ☐ ~~642780221~~ C42780056
Micropipette ID: ☐ ~~539360056~~ C42761244 MH
Micropipette ID: ☐ ~~942754082~~ B42753544 10/21
Micropipette ID: ☐
Analytical Sequence: TCJ003 MH 10/21/24
Method File: TCJ003
Analytical Batch: TCJ004W

SOP #	Rev. #
☒ EMAX-5310B	5
☒ EMAX-9060	4
☐ EMAX-	

STANDARDS ID	CONC. (mg/L)
S0 SW1A-012-14-02	0
S1 SW7B-02-30-07	1
S2	5
S3	10
S4	40
S5	80
~~S6~~ HCO_3/CO_3 SW7B-02-30-10	1
ICV/LCS SW7B-02-31-03	25
CCV SW7B-02-31-01	50
CCV SW7B-02-30-08	25
CCV SW7B-02-31-02	1

ELECTRONIC DATA ARCHIVAL	
Location	Date
☐ TOC	
☐	

Analyzed By: MH
Date: 10/21/24

	Type	Analysis	Sample Name	Sample ID	Dilution	Result	Comment
1	Standard	NPOC	ICAL - Instrum	TCJ003-01	1.000		
2	Control	NPOC	ICV	TCJ003-02	1.000	NPOC:25.87 mg/L	
3	Unknown	NPOC	ICB	TCJ003-03	1.000	NPOC:0.2362 mg/L	
4	Unknown	NPOC	MRL	TCJ003-04	1.000	NPOC:1.161 mg/L	
5	Unknown	NPOC	HCO3/CO3	TCJ003-05	1.000	NPOC:0.2483 mg/L	
6	Unknown	NPOC	TCJ004WB	TCJ003-06	1.000	NPOC:0.2080 mg/L	
7	Unknown	NPOC	TCJ004WL	TCJ003-07	1.000	NPOC:25.53 mg/L	
8	Unknown	NPOC	TCJ004WC	TCJ003-08	1.000	NPOC:25.62 mg/L	
9	Unknown	NPOC	LOD@0.3	TCJ003-09	1.000	NPOC:0.5716 mg/L	
10	Unknown	NPOC	LOD@0.5	TCJ003-10	1.000	NPOC:0.7185 mg/L	
11	Unknown	NPOC	LOQ@1	TCJ003-11	1.000	NPOC:1.339 mg/L	
12	Unknown	NPOC	J137-01	TCJ003-12	1.000	NPOC:5.667 mg/L	
13	Unknown	NPOC	J137-02	TCJ003-13	1.000	NPOC:1.304 mg/L	
14	Control	NPOC	CCV1	TCJ003-14	1.000	NPOC:51.11 mg/L	
15	Unknown	NPOC	CCB1	TCJ003-15	1.000	NPOC:0.2694 mg/L	
16	Unknown	NPOC	J033-07R	TCJ003-16	1.000	NPOC:0.7307 mg/L	
17	Unknown	NPOC	J033-08R	TCJ003-17	1.000	NPOC:0.6734 mg/L	
18	Unknown	NPOC	J033-08D	TCJ003-18	1.000	NPOC:0.6953 mg/L	
19	Unknown	NPOC	J033-08M	TCJ003-19	1.000	NPOC:25.21 mg/L	
20	Unknown	NPOC	J033-08S	TCJ003-20	1.000	NPOC:25.45 mg/L	
21	Unknown	NPOC	J125-01	TCJ003-21	1.000	NPOC:3.290 mg/L	
22	Unknown	NPOC	J125-02	TCJ003-22	1.000	NPOC:2.166 mg/L	
23	Unknown	NPOC	J125-03	TCJ003-23	1.000	NPOC:3.687 mg/L	
24	Unknown	NPOC	J125-05	TCJ003-24	1.000	NPOC:0.2705 mg/L	
25	Unknown	NPOC	J125-06	TCJ003-25	1.000	NPOC:2.446 mg/L	
26	Control	NPOC	CCV2	TCJ003-26	1.000	NPOC:24.31 mg/L	
27	Unknown	NPOC	CCB2	TCJ003-27	1.000	NPOC:0.2457 mg/L	
28	Unknown	NPOC	J125-07	TCJ003-28	1.000	NPOC:0.6281 mg/L	
29	Unknown	NPOC	J125-08	TCJ003-29	1.000	NPOC:0.2450 mg/L	
30	Unknown	NPOC	J125-09	TCJ003-30	1.000	NPOC:2.027 mg/L	
31	Unknown	NPOC	J125-10	TCJ003-31	1.000	NPOC:0.4340 mg/L	
32	Unknown	NPOC	J125-11	TCJ003-32	1.000	NPOC:0.4973 mg/L	
33	Unknown	NPOC	J125-12	TCJ003-33	1.000	NPOC:3.384 mg/L	
34	Unknown	NPOC	J125-13	TCJ003-34	1.000	NPOC:3.561 mg/L	
35	Unknown	NPOC	J125-13D	TCJ003-35	1.000	NPOC:3.485 mg/L	
36	Unknown	NPOC	J125-13M	TCJ003-36	1.000	NPOC:28.18 mg/L	
37	Unknown	NPOC	J125-13S	TCJ003-37	1.000	NPOC:27.88 mg/L	
38	Control	NPOC	CCV3	TCJ003-38	1.000	NPOC:1.183 mg/L	
39	Unknown	NPOC	CCB3	TCJ003-39	1.000	NPOC:0.1931 mg/L	
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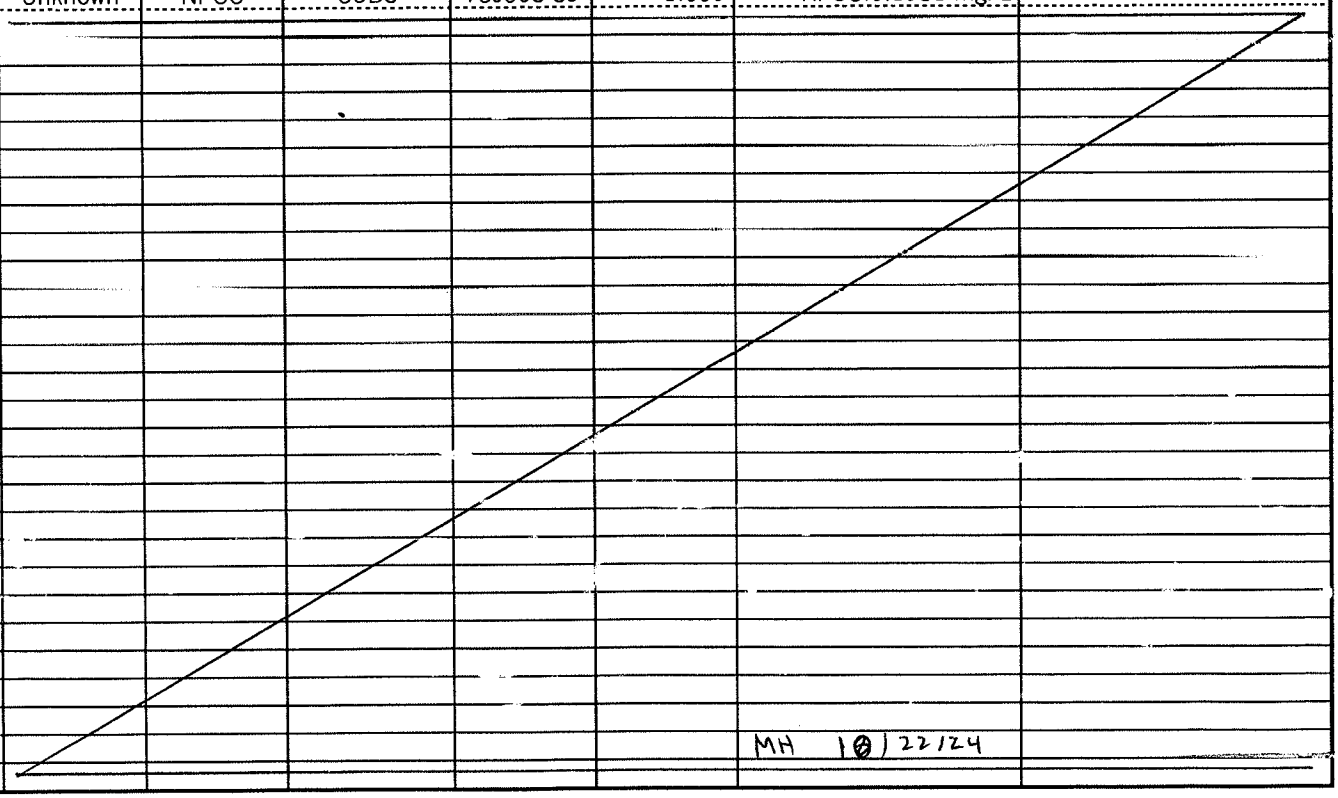


Instr.Information

System	TOC-9060/415.1/5310B
Detector	Combustion
Catalyst	Regular Sensitivity
Cell Length	long

Cal. Curve

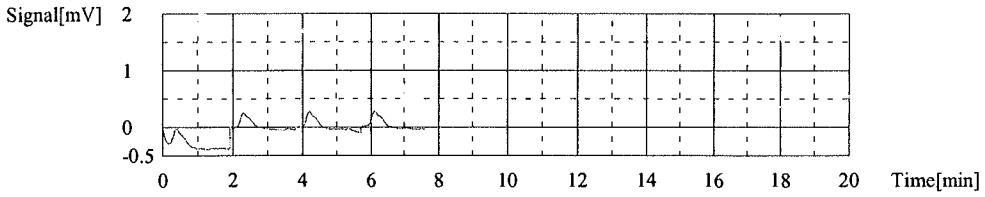
Sample Name:	ICAL - Instrument 62
Sample ID:	TCJ003-01
Cal. Curve:	TCJ003.2024_10_21_16_04_15.cal

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.5050	50uL	1	*******		10/21/24 04:12:37 PM
2	0.4806	50uL	1	*******		10/21/24 04:14:41 PM
3	0.5321	50uL	1	*******		10/21/24 04:16:44 PM
4	0.5347	50uL	1	*******		10/21/24 04:18:48 PM

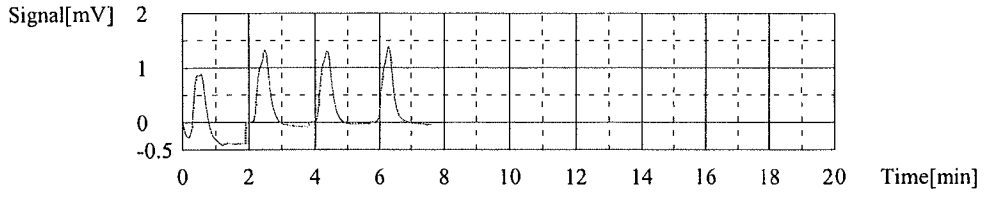
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 0.5131



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.804	50uL	1	*******		10/21/24 04:27:21 PM
2	3.134	50uL	1	*******		10/21/24 04:29:25 PM
3	3.141	50uL	1	*******		10/21/24 04:31:28 PM
4	3.141	50uL	1	*******		10/21/24 04:33:32 PM

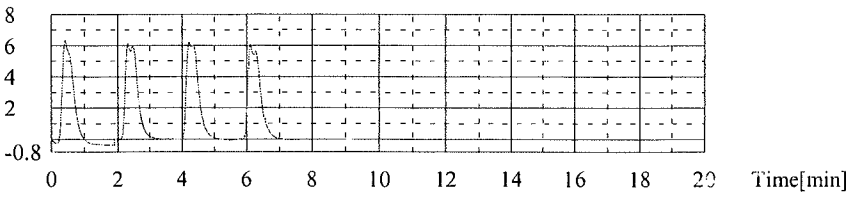
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 3.055



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	15.29	50uL	1	*******		10/21/24 04:42:05 PM
2	16.13	50uL	1	*******		10/21/24 04:44:09 PM
3	16.38	50uL	1	*******		10/21/24 04:46:13 PM
4	16.24	50uL	1	*******		10/21/24 04:48:17 PM

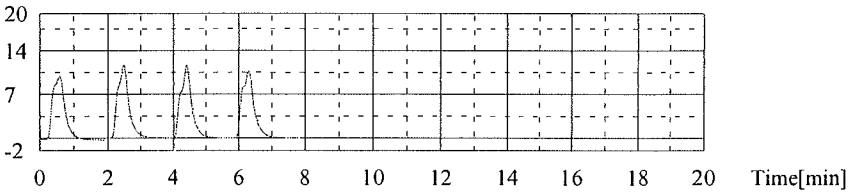
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 16.01



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	25.93	50uL	1	*******		10/21/24 04:56:52 PM
2	28.50	50uL	1	*******		10/21/24 04:58:56 PM
3	28.47	50uL	1	*******		10/21/24 05:01:00 PM
4	28.20	50uL	1	*******		10/21/24 05:03:20 PM

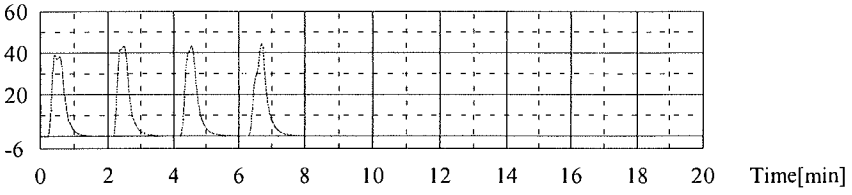
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 27.78



Conc: 40.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	103.4	50uL	1	*******		10/21/24 05:11:59 PM
2	111.6	50uL	1	*******		10/21/24 05:14:13 PM
3	112.4	50uL	1	*******		10/21/24 05:16:28 PM
4	110.0	50uL	1	*******		10/21/24 05:18:50 PM

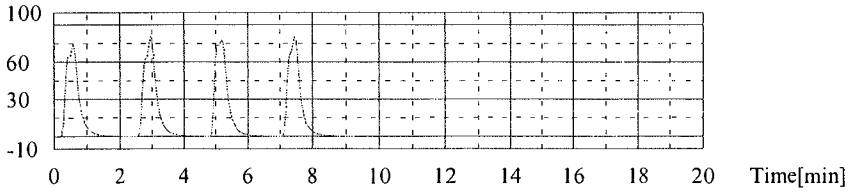
Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 109.3



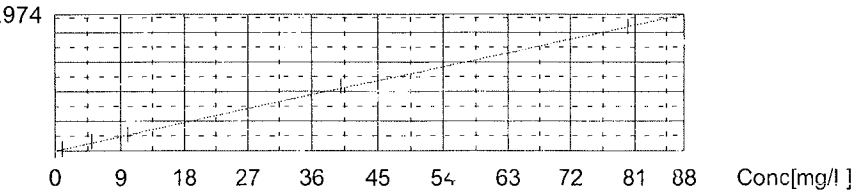
Conc: 80.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	200.4	50uL	1	*******		10/21/24 05:27:55 PM
2	212.7	50uL	1	*******		10/21/24 05:30:19 PM
3	215.0	50uL	1	*******		10/21/24 05:32:44 PM
4	212.9	50uL	1	*******		10/21/24 05:35:16 PM

Acid Add. 2.500%
Sp. Time 90.00sec
Mean Area 210.3



Slope: 2.625
Intercept 0.000
r^2 0.999610



Control Sample

Sample Name: ICV
Sample ID: TCJ003-02
Method: TCJ003.tpl
Chk. Result Control value: 25.87 / Control exceeds range!

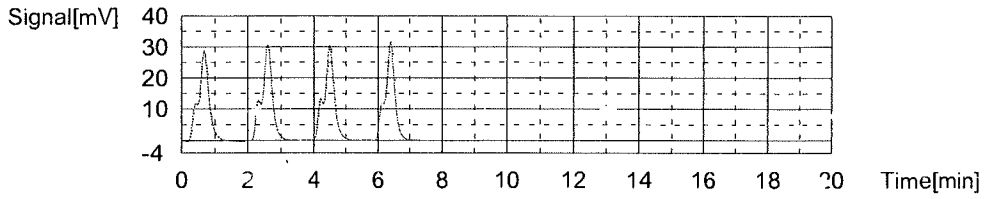
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:25.87 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.63	24.62mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 05:44:00 PM
2	68.82	26.22mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 05:46:04 PM
3	69.17	26.35mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 05:48:07 PM
4	68.94	26.27mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 05:50:11 PM

Mean Area 67.89
Mean Conc. 25.87mg/L



Sample

Sample Name: ICB
Sample ID: TCJ003-03
Origin: TCJ003.cal
Chk. Result

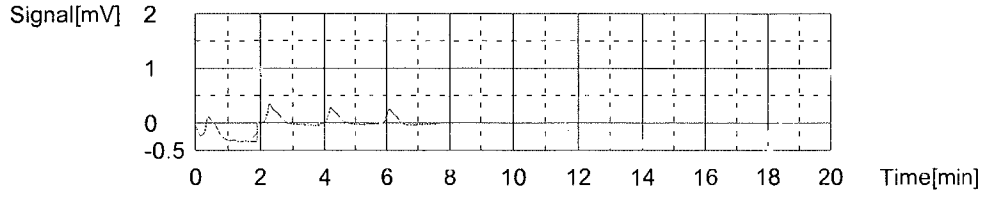
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2362 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7273	0.2771mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 05:58:48 PM
2	0.7010	0.2671mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:00:51 PM
3	0.5513	0.2100mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:02:55 PM
4	0.4997	0.1904mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:04:59 PM

Mean Area 0.6198
Mean Conc. 0.2362mg/L



Sample

Sample Name: MRL
Sample ID: TCJ003-04
Origin: TCJ003.cal
Chk. Result

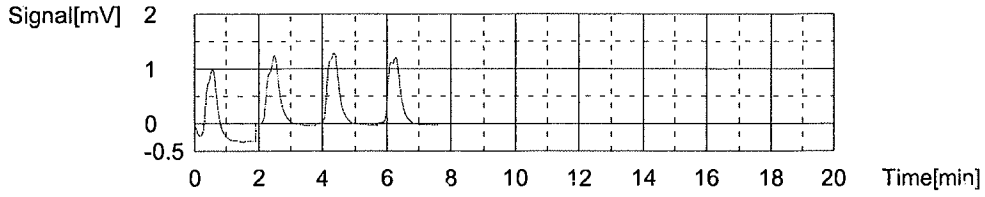
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.161 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.882	1.098mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:13:35 PM
2	3.109	1.185mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:15:39 PM
3	3.050	1.162mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:17:42 PM
4	3.147	1.199mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:19:46 PM

Mean Area 3.047
Mean Conc. 1.161mg/L



Sample

Sample Name: HCO3/CO3
Sample ID: TCJ003-05
Origin: TCJ003.cal
Chk. Result

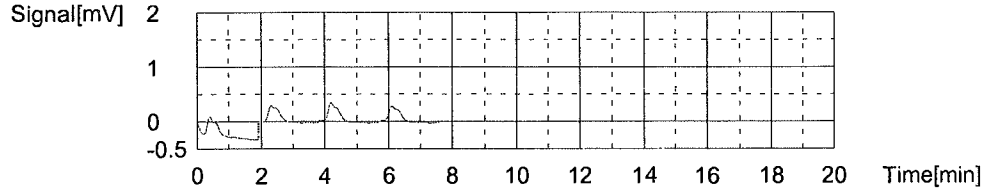
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2483 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6455	0.2459mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:41:04 PM
2	0.6631	0.2526mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:43:08 PM
3	0.6814	0.2596mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:45:12 PM
4	0.6171	0.2351mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:47:16 PM

Mean Area 0.6518
Mean Conc. 0.2483mg/L



Sample

Sample Name: TCJ004WB
Sample ID: TCJ003-06
Origin: TCJ003.cal
Chk. Result

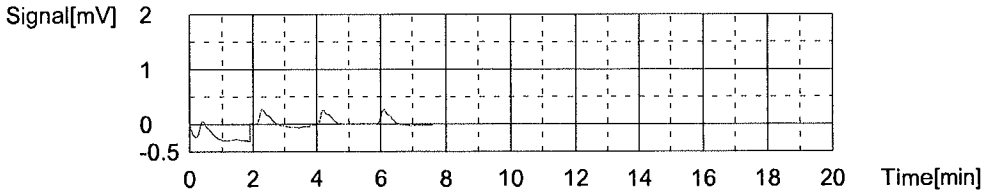
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2080 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5820	0.2217mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:55:49 PM
2	0.5990	0.2282mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 06:58:01 PM
3	0.5131	0.1955mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:00:05 PM
4	0.4900	0.1867mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:02:09 PM

Mean Area 0.5460
Mean Conc. 0.2080mg/L



Sample

Sample Name: TCJ004WL
Sample ID: TCJ003-07
Origin: TCJ003.cal
Chk. Result

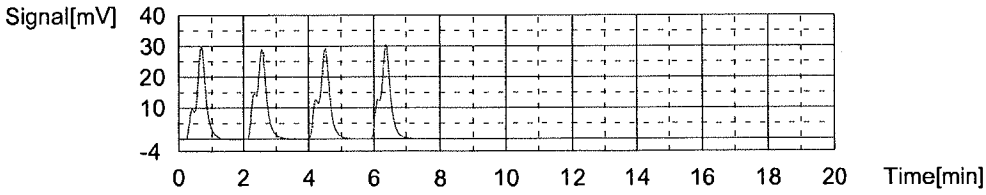
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.53 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.92	23.97mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:10:42 PM
2	67.93	25.88mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:12:46 PM
3	68.68	26.17mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:14:50 PM
4	68.50	26.10mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:16:54 PM

Mean Area 67.01
Mean Conc. 25.53mg/L



Sample

Sample Name: TCJ004WC
Sample ID: TCJ003-08
Origin: TCJ003.cal
Chk. Result

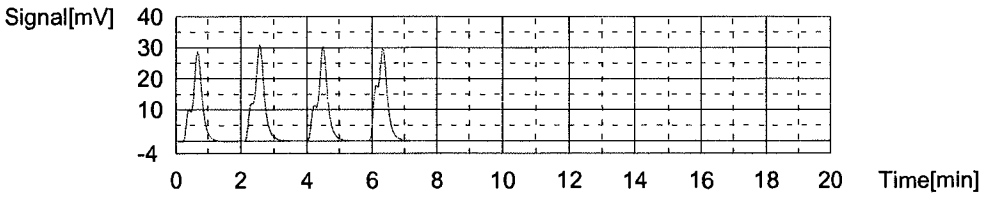
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.62 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.01	24.01mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:25:28 PM
2	68.54	26.11mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:27:32 PM
3	68.68	26.17mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:29:36 PM
4	68.71	26.18mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:31:40 PM

Mean Area 67.24
Mean Conc. 25.62mg/L



Sample

Sample Name: LOD@0.3
Sample ID: TCJ003-09
Origin: TCJ003.cal
Chk. Result

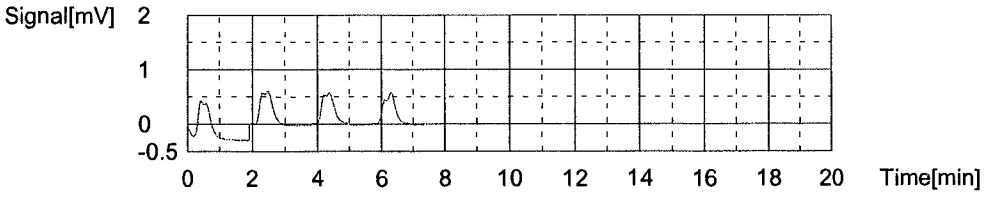
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.5716 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.592	0.6065mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:40:13 PM
2	1.534	0.5844mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:42:17 PM
3	1.500	0.5715mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:44:21 PM
4	1.375	0.5239mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:46:25 PM

Mean Area 1.500
Mean Conc. 0.5716mg/L



Sample

Sample Name: LOD@0.5
Sample ID: TCJ003-10
Origin: TCJ003.cal
Chk. Result

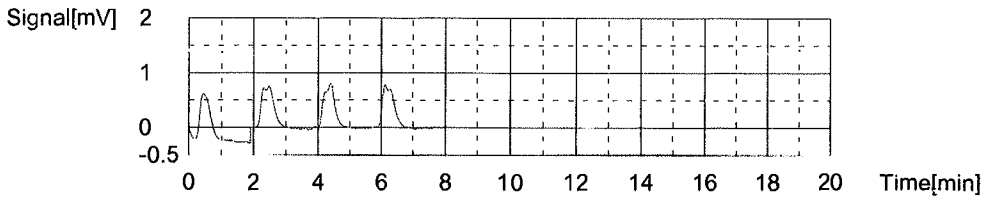
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.7185 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.763	0.6717mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:54:59 PM
2	1.989	0.7578mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:57:03 PM
3	1.853	0.7060mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 07:59:07 PM
4	1.938	0.7384mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:01:11 PM

Mean Area 1.886
Mean Conc. 0.7185mg/L



Sample

Sample Name: LOQ@1
Sample ID: TCJ003-11
Origin: TCJ003.cal
Chk. Result

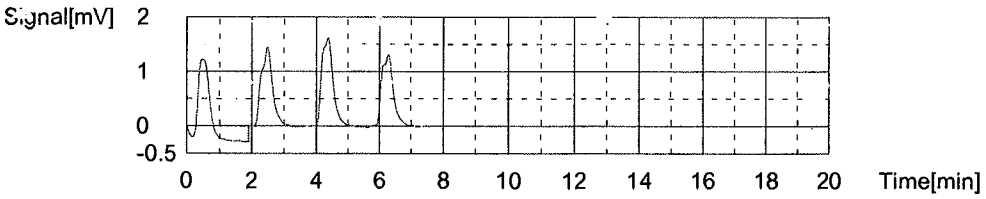
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.339 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.307	1.260mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:09:45 PM
2	3.494	1.331mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:11:49 PM
3	3.983	1.518mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:13:53 PM
4	3.279	1.249mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:15:57 PM

Mean Area 3.516
Mean Conc. 1.339mg/L



Sample

Sample Name: J137-01
Sample ID: TCJ003-12
Origin: TCJ003.cal
Chk. Result

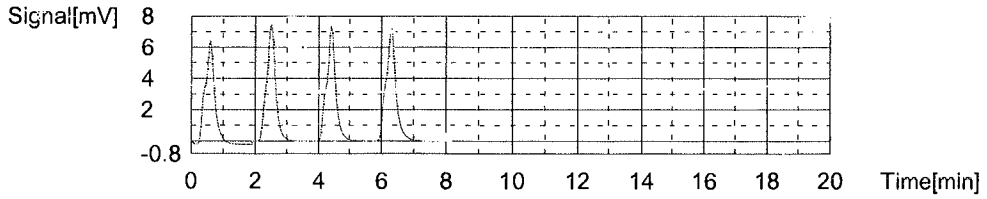
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:5.667 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.05	5.353mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:24:31 PM
2	15.05	5.734mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:26:35 PM
3	15.09	5.749mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:28:39 PM
4	15.31	5.833mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:30:43 PM

Mean Area 14.88
Mean Conc. 5.667mg/L



Sample

Sample Name: J137-02
Sample ID: TCJ003-13
Origin: TCJ003.cal
Chk. Result

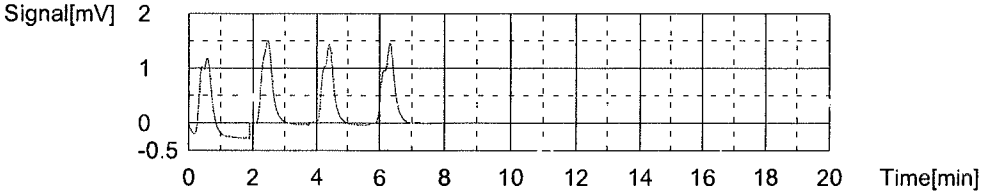
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.304 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.419	1.303mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:39:16 PM
2	3.420	1.303mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:41:20 PM
3	3.393	1.293mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:43:24 PM
4	3.457	1.317mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:45:28 PM

Mean Area 3.422
Mean Conc. 1.304mg/L



Control Sample

Sample Name: CCV1
Sample ID: TCJ003-14
Method: TCJ003.tpl
Chk. Result Control value: 51.11 / Control exceeds range!

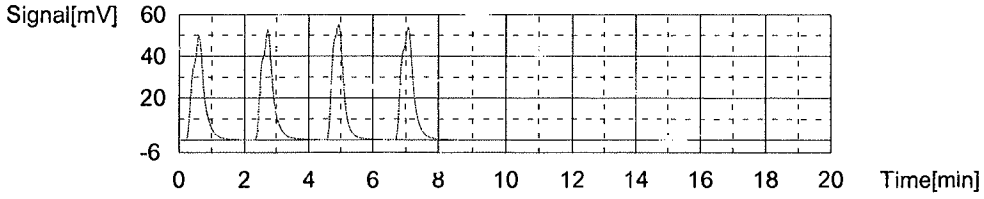
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:51.11 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	126.6	48.23mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:54:16 PM
2	135.7	51.70mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:56:39 PM
3	137.9	52.54mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 08:58:57 PM
4	136.4	51.97mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:01:14 PM

Mean Area 134.2
Mean Conc. 51.11mg/L



Sample

Sample Name: CCB1
Sample ID: TCJ003-15
Origin: TCJ003.cal
Chk. Result

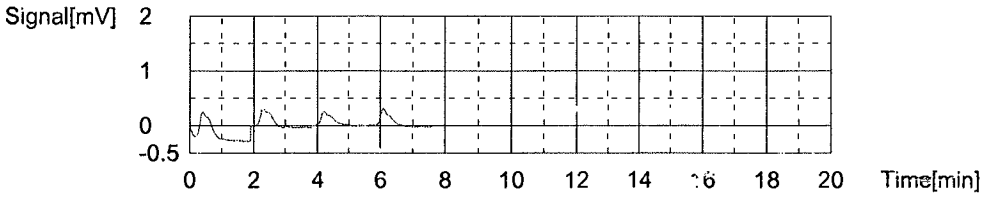
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2694 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.014	0.3863mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:09:48 PM
2	0.6751	0.2572mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:11:52 PM
3	0.5383	0.2051mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:13:56 PM
4	0.6012	0.2291mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:16:00 PM

Mean Area 0.7072
Mean Conc. 0.2694mg/L



Sample

Sample Name: J033-07R
Sample ID: TCJ003-16
Origin: TCJ003.cal
Chk. Result

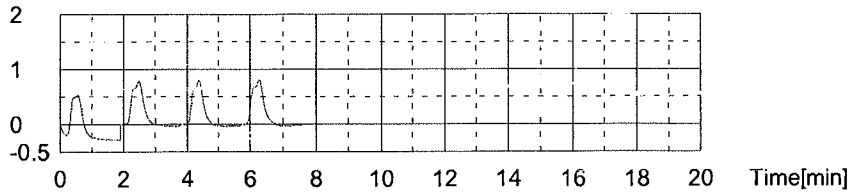
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.7307 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.768	0.6736mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:24:34 PM
2	1.912	0.7285mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:26:40 PM
3	1.936	0.7376mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:28:44 PM
4	2.055	0.7829mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:30:48 PM

Mean Area 1.918
Mean Conc. 0.7307mg/L



Sample

Sample Name: J033-08R
Sample ID: TCJ003-17
Origin: TCJ003.cal
Chk. Result

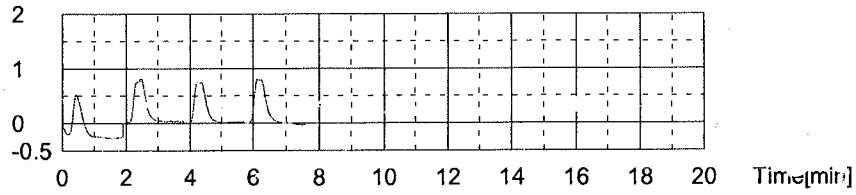
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.6734 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.329	0.5063mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:39:22 PM
2	1.912	0.7285mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:41:26 PM
3	1.883	0.7174mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:43:30 PM
4	1.946	0.7414mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:45:34 PM

Mean Area 1.768
Mean Conc. 0.6734mg/L



Sample

Sample Name: J033-08D
Sample ID: TCJ003-18
Origin: TCJ003.cal
Chk. Result

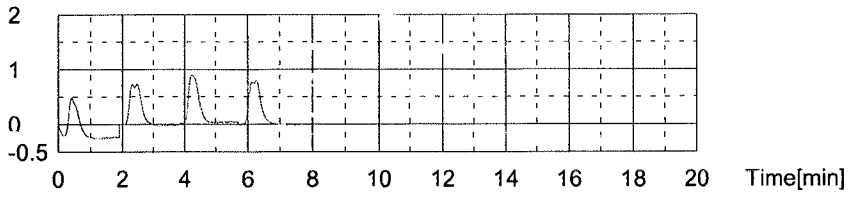
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.6953 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.409	0.5368mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:54:08 PM
2	1.935	0.7372mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:56:12 PM
3	1.973	0.7517mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 09:58:15 PM
4	1.983	0.7555mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:00:19 PM

Mean Area 1.825
Mean Conc. 0.6953mg/L



Sample

Sample Name: J033-08M
Sample ID: TCJ003-19
Origin: TCJ003.cal
Chk. Result

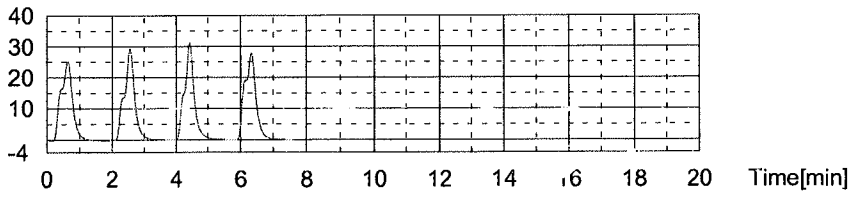
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.21 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.32	24.12mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:08:54 PM
2	67.01	25.53mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:10:58 PM
3	67.11	25.57mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:13:01 PM
4	67.27	25.63mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:15:05 PM

Mean Area 66.18
Mean Conc. 25.21mg/L



Sample

Sample Name: J033-08S
Sample ID: TCJ003-20
Origin: TCJ003.cal
Chk. Result

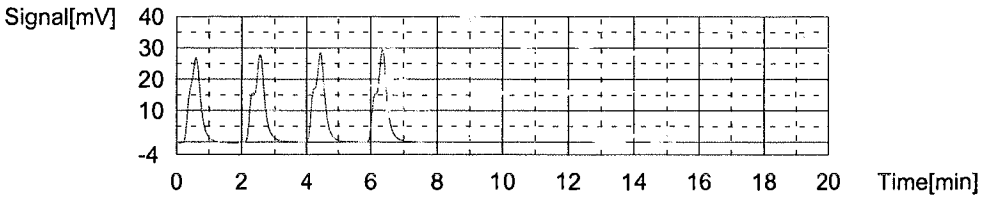
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.45 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.97	24.37mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:23:40 PM
2	67.43	25.69mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:25:43 PM
3	67.75	25.81mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:27:47 PM
4	68.08	25.94mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:29:51 PM

Mean Area 66.81
Mean Conc. 25.45mg/L



Sample

Sample Name: J125-01
Sample ID: TCJ003-21
Origin: TCJ003.cal
Chk. Result

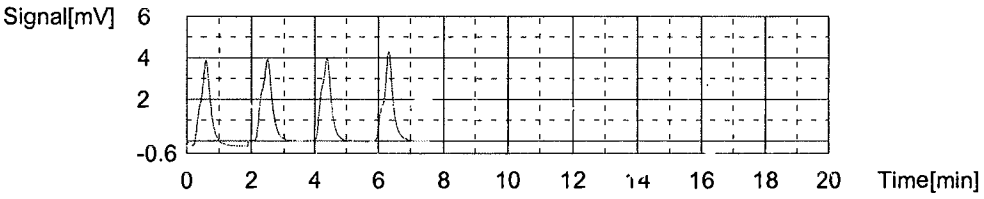
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.290 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.583	3.270mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:38:25 PM
2	8.639	3.291mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:40:29 PM
3	8.574	3.267mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:42:32 PM
4	8.749	3.333mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:44:36 PM

Mean Area 8.636
Mean Conc. 3.290mg/L



Sample

Sample Name: J125-02
Sample ID: TCJ003-22
Origin: TCJ003.cal
Chk. Result

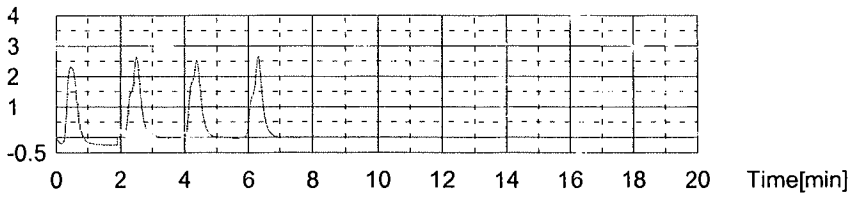
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.166 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.657	2.155mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:53:11 PM
2	5.702	2.172mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:55:14 PM
3	5.652	2.153mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:57:18 PM
4	5.729	2.183mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 10:59:22 PM

Mean Area 5.685
Mean Conc. 2.166mg/L



Sample

Sample Name: J125-03
Sample ID: TCJ003-23
Origin: TCJ003.cal
Chk. Result

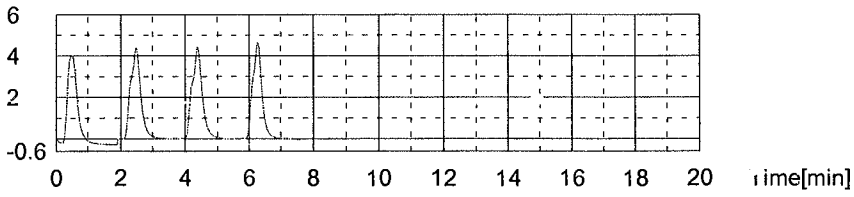
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.687 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.217	3.512mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:07:57 PM
2	9.906	3.774mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:10:00 PM
3	9.834	3.747mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:12:04 PM
4	9.754	3.716mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:14:08 PM

Mean Area 9.678
Mean Conc. 3.687mg/L



Sample

Sample Name: J125-05
Sample ID: TCJ003-24
Origin: TCJ003.cal
Chk. Result

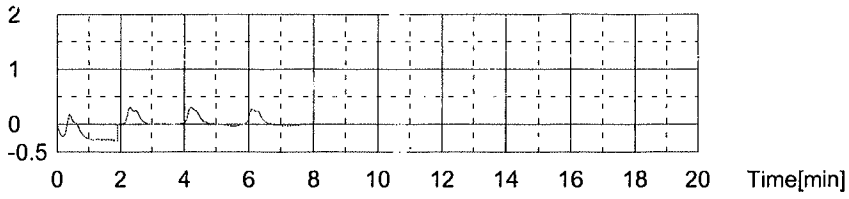
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2705 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8407	0.3203mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:22:42 PM
2	0.6797	0.2590mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:24:46 PM
3	0.6674	0.2543mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:26:50 PM
4	0.6517	0.2483mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:28:54 PM

Mean Area 0.7099
Mean Conc. 0.2705mg/L



Sample

Sample Name: J125-06
Sample ID: TCJ003-25
Origin: TCJ003.cal
Chk. Result

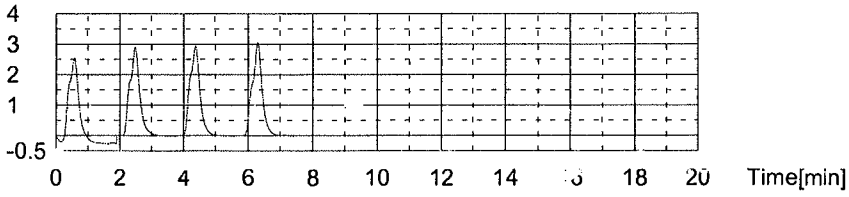
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.446 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.180	2.355mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:37:28 PM
2	6.489	2.472mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:39:32 PM
3	6.485	2.471mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:41:36 PM
4	6.527	2.487mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:43:40 PM

Mean Area 6.420
Mean Conc. 2.446mg/L



Control Sample

Sample Name: CCV2
Sample ID: TCJ003-26
Method: TCJ003.tpl
Chk. Result Control value: 24.31 / Control exceeds range!

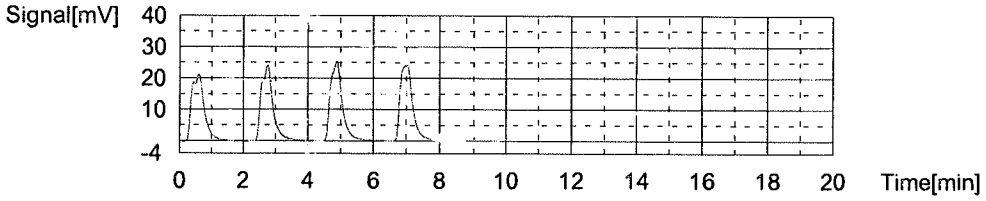
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:24.31 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.43	23.02mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:52:29 PM
2	64.67	24.64mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:54:48 PM
3	65.27	24.87mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:57:07 PM
4	64.87	24.72mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/21/24 11:59:32 PM

Mean Area 63.81
Mean Conc. 24.31mg/L



Sample

Sample Name: CCB2
Sample ID: TCJ003-27
Origin: TCJ003.cal
Chk. Result

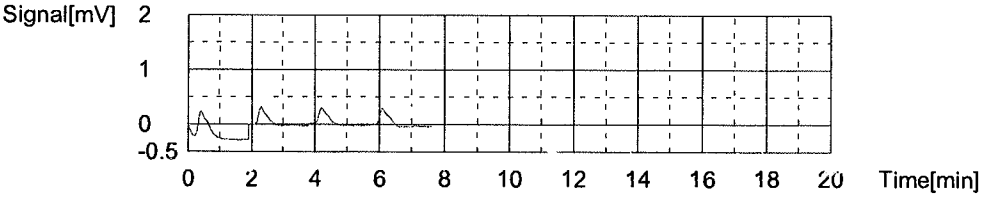
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2457 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8725	0.3324mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:08:05 AM
2	0.5879	0.2240mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:10:09 AM
3	0.5521	0.2103mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:12:13 AM
4	0.5666	0.2159mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:14:17 AM

Mean Area 0.6448
Mean Conc. 0.2457mg/L



Sample

Sample Name: J125-07
Sample ID: TCJ003-28
Origin: TCJ003.cal
Chk. Result

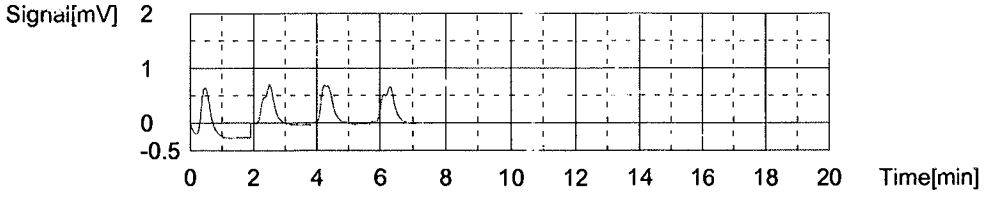
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.6281 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.693	0.6450mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:22:51 AM
2	1.663	0.6336mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:24:55 AM
3	1.640	0.6248mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:26:59 AM
4	1.598	0.6088mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:29:03 AM

Mean Area 1.649
Mean Conc. 0.6281mg/L



Sample

Sample Name: J125-08
Sample ID: TCJ003-29
Origin: TCJ003.cal
Chk. Result

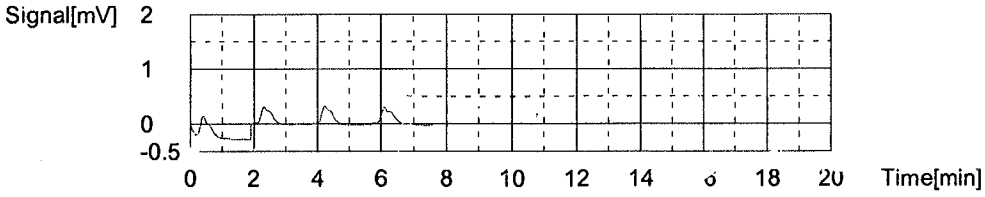
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2450 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6588	0.2510mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:37:37 AM
2	0.6209	0.2366mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:39:41 AM
3	0.6805	0.2593mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:41:45 AM
4	0.6119	0.2331mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:43:49 AM

Mean Area 0.6430
Mean Conc. 0.2450mg/L



Sample

Sample Name: J125-09
Sample ID: TCJ003-30
Origin: TCJ003.cal
Chk. Result

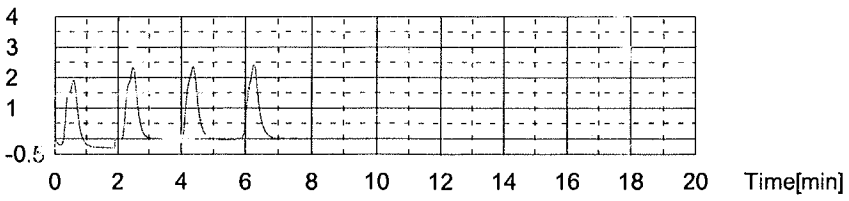
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.027 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.092	1.940mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:52:23 AM
2	5.406	2.060mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:54:27 AM
3	5.400	2.057mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:56:31 AM
4	5.383	2.051mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 12:58:35 AM

Mean Area 5.320
Mean Conc. 2.027mg/L



Sample

Sample Name: J125-10
Sample ID: TCJ003-31
Origin: TCJ003.cal
Chk. Result

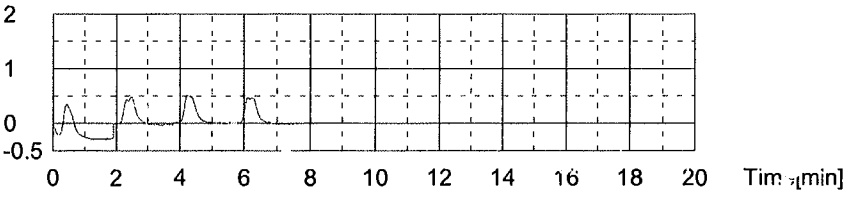
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.4340 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.109	0.4225mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:07:09 AM
2	1.204	0.4587mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:09:13 AM
3	1.134	0.4320mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:11:17 AM
4	1.109	0.4225mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:13:21 AM

Mean Area 1.139
Mean Conc. 0.4340mg/L



Sample

Sample Name: J125-11
Sample ID: TCJ003-32
Origin: TCJ003.cal
Chk. Result

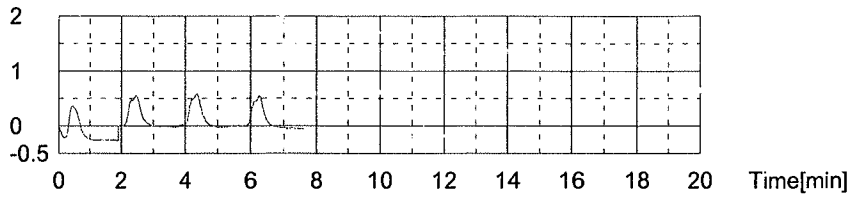
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.4973 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.269	0.4835mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:21:56 AM
2	1.352	0.5151mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:24:00 AM
3	1.349	0.5140mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:26:04 AM
4	1.251	0.4766mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:28:08 AM

Mean Area 1.305
Mean Conc. 0.4973mg/L



Sample

Sample Name: J125-12
Sample ID: TCJ003-33
Origin: TCJ003.cal
Chk. Result

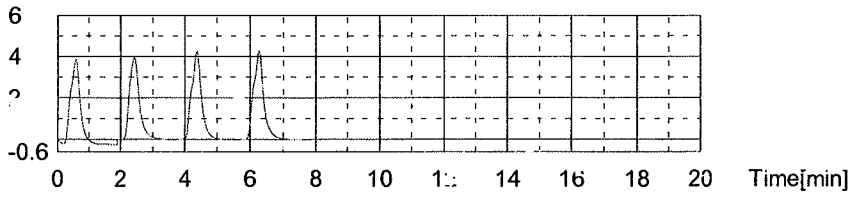
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.384 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.672	3.304mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:36:43 AM
2	8.549	3.257mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:38:47 AM
3	9.166	3.492mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:40:51 AM
4	9.139	3.482mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:42:55 AM

Mean Area 8.882
Mean Conc. 3.384mg/L



Sample

Sample Name: J125-13
Sample ID: TCJ003-34
Origin: TCJ003.cal
Chk. Result

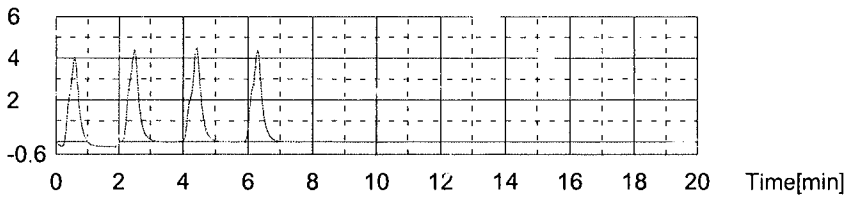
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.561 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.018	3.436mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:51:30 AM
2	9.414	3.587mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:53:34 AM
3	9.592	3.655mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:55:38 AM
4	9.358	3.565mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 01:57:42 AM

Mean Area 9.346
Mean Conc. 3.561mg/L



Sample

Sample Name: J125-13D
Sample ID: TCJ003-35
Origin: TCJ003.cal
Chk. Result

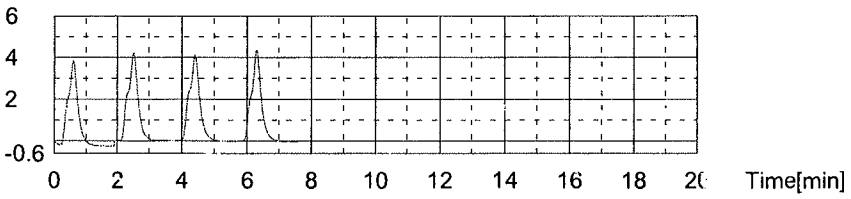
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.485 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.853	3.373mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:06:17 AM
2	9.179	3.497mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:08:21 AM
3	9.252	3.525mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:10:25 AM
4	9.301	3.544mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:12:29 AM

Mean Area 9.146
Mean Conc. 3.485mg/L



Sample

Sample Name: J125-13M
Sample ID: TCJ003-36
Origin: TCJ003.cal
Chk. Result

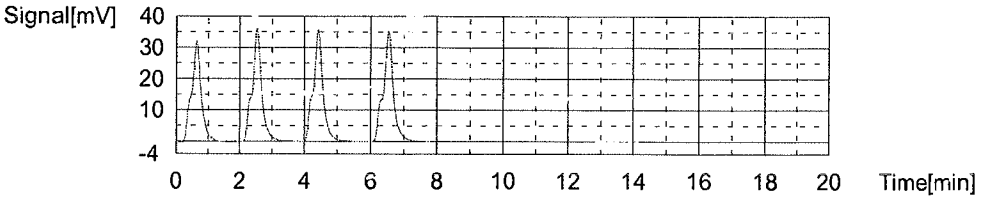
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:28.18 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.25	26.76mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:21:04 AM
2	75.17	28.64mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:23:08 AM
3	75.11	28.62mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:25:23 AM
4	75.34	28.70mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:27:27 AM

Mean Area 73.97
Mean Conc. 28.18mg/L



Sample

Sample Name: J125-13S
Sample ID: TCJ003-37
Origin: TCJ003.cal
Chk. Result

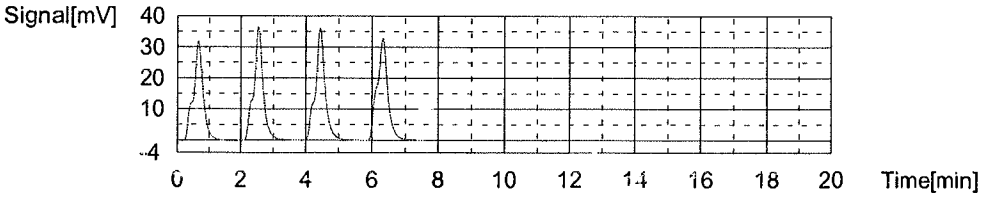
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:27.88 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.46	26.46mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:36:02 AM
2	74.83	28.51mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:38:06 AM
3	74.91	28.54mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:40:10 AM
4	73.50	28.00mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:42:14 AM

Mean Area 73.18
Mean Conc. 27.88mg/L



Control Sample

Sample Name: CCV3
Sample ID: TCJ003-38
Method: TCJ003.tpl
Chk. Result Control value: 1.183 / Control exceeds range!

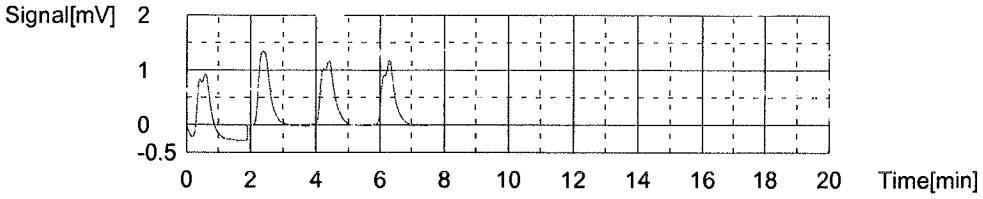
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:1.183 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.067	1.169mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:50:49 AM
2	3.175	1.210mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:52:52 AM
3	3.105	1.183mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:54:56 AM
4	3.077	1.172mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 02:57:00 AM

Mean Area 3.106
Mean Conc. 1.183mg/L



Sample

Sample Name: CCB3
Sample ID: TCJ003-39
Origin: TCJ003.cal
Chk. Result

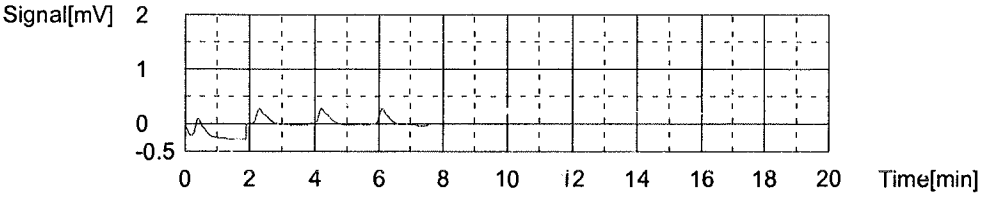
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.1931 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5104	0.1945mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 03:05:35 AM
2	0.5069	0.1931mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 03:07:38 AM
3	0.4999	0.1905mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 03:09:42 AM
4	0.5100	0.1943mg/L	50uL	1		TCJ003.2024_10_21_16_04_15.cal	10/22/24 03:11:46 AM

Mean Area 0.5068
Mean Conc. 0.1931mg/L



EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 11-19-2024
EMAX Batch No.: 24J055

Attn: Cherie Zakowski

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202

Subject: Laboratory Report
Project: VA SALT LAKE CITY

Enclosed is the Laboratory report for samples received on 10/04/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
MW41S-GW100224	J055-01	10/02/24	WATER	VOCS BY 8260C
MW41D-GW100224	J055-02	10/02/24	WATER	VOCS BY 8260C
MW39D-GW100324	J055-03	10/03/24	WATER	VOCS BY 8260C
TB07-GW100324	J055-04	10/03/24	WATER	VOCS BY 8260C
RG01-GW100324	J055-05	10/03/24	WATER	VOCS BY 8260C
RG02-GW100324	J055-06	10/03/24	WATER	VOCS BY 8260C
RG03-GW100324	J055-07	10/03/24	WATER	VOCS BY 8260C
RG04-GW100324	J055-08	10/03/24	WATER	VOCS BY 8260C
RG05-GW100324	J055-09	10/03/24	WATER	VOCS BY 8260C
RG09-GW100324	J055-10	10/03/24	WATER	VOCS BY 8260C
RG08-GW100324	J055-11	10/03/24	WATER	VOCS BY 8260C
RG07-GW100324	J055-12	10/03/24	WATER	VOCS BY 8260C
RG06-GW100324	J055-13	10/03/24	WATER	VOCS BY 8260C
RG10-GW100324	J055-14	10/03/24	WATER	VOCS BY 8260C
RG11-GW100324	J055-15	10/03/24	WATER	VOCS BY 8260C
FD09-GW100324	J055-16	10/03/24	WATER	VOCS BY 8260C
MW39S-GW100324	J055-17	10/03/24	WATER	VOCS BY 8260C

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

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EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912024-26
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

CHAIN OF CUSTODY

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PO NUMBER:
SAMPLE STORAGE
EMAX CONTROL NO. 24J055
PROJECT CODE:

CLIENT : CDM SMITH
PROJECT : 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEl 720-264-1109 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM Raman Singh

MATRIX CODE	PRESERVATIVE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sl	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure P	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=Blanks (trip/rinse/fie	

TAT: ☐ Rush __24__hrs. ☐ Rush __48_hrs ☐ Rush_72_hrs ☐ 7 days ☐ 14 days ☒ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	ANALYSIS REQUIRED: VOCs (8260C)	Anions (Cl, SO4)	Nitrate/Nitrite (SM4500-NO3E)	Alkalinity (SM2320B)	TOC (SW9060)	TDS (SM 2540C)	Dissolved Gases (RSK-175)	PRESERVATIVE CODE	COMMENTS
1	1 MW41S-GW100224	SLC VA	10/2/24	1710	3	40mL	VOA	GW		X							HCl	
2	2 MW41D-GW100224	SLC VA	10/2/24	1905	3	40mL	VOA	GW		X							HCl	
3	3 MW39D-GW100324	SLC VA	10/3/24	1135	3	40mL	VOA	GW		X							HCl	
4	4 TB07-GW100324	SLC VA	10/3/24	1230	3	40mL	VOA	~~GW~~ 10/4 10/3		X							HCl	
5	5 RG01-GW100324	SLC VA	10/3/24	0805	3	40mL	VOA	GW		X							HCl	
6	6 RG02-GW100324	SLC VA	10/3/24	0845	2	40mL	VOA	GW		X							HCl	Only volume for 2 VOAs
7	7 RG03-GW100324	SLC VA	10/3/24	0835	1	40mL	VOA	GW		X							HCl	Not enough volume
8	8 RG04-GW100324	SLC VA	10/3/24	1130	3	40mL	VOA	GW		X							HCl	
9	9 RG05-GW100324	SLC VA	10/3/24	1150	3	40mL	VOA	GW		X							HCl	

Instructions
Please CC Maria Day at dayml@cdmsmith.com w/ lab acknowledgement

Cooler #	Temp. (oC)	Sample #s
1	5.1	

SAMPLER Isaac Nance
COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Isaac Nance	10/3/24	1600	
	10/04/24	0937	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

CHAIN OF CUSTODY

EMAX LABORATORIES, INC.
3051 Fujita St., Torrance, CA 90505
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:

SAMPLE STORAGE

EMAX CONTROL NO. 24J055

PROJECT CODE:

CLIENT CDM Smith
PROJECT 7005 1600E PCE Plume
COORDINATOR Cherie Zakowski
TEL 720-264-1109 FAX EMAIL Zakowski:CA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
EMAX PM: Raman Singh

MATRIX CODE	PRESERVATIVE CODE
DW=Drinking Water	IC = Ice
GW=Ground Water	HC = HCl
WW=Waste Water	HN=HNO3
SD=Solid Waste SL=Sludge	SH=NaO3
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure Products	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=	

ANALYSIS REQUIRED: VOCs 8260C

TAT:
- ☐ Rush __24__hrs.
- ☐ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☒ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	PRESERVATIVE CODE	COMMENTS
10 · 1	RG09-GW100324	SLC VA	10/3/24	0815	3	40mL	VOA	GW		X	
11 · 2	RG08-GW100324	SLC VA	10/3/24	0905	3					X	
12 · 3	RG07-GW100324	SLC VA	10/3/24	0955	3					X	
13 · 4	RG06-GW100324	SLC VA	10/3/24	1015	3					X	
14 · 5	RG10-GW100324	SLC VA	10/3/24	1025	2					X	Only volume for 2 VOAs
15 · 6	RG11-GW100324	SLC VA	10/3/24	1115	2					X	Only volume for 2 VOAs
16 · 7	FD09-GW100324	SLC VA	10/3/24	1150	2	↓	↓	↓		X	Only volume for 2 VOAs
· 8											
· 9											
10											

Instructions

Cooler #	Temp. (°C)	Sample #s

SAMPLER Isaac Nance

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Isaac Nance	10/3/24	1600	
	10/04/24	0937	

NOTICE: Turn-around-time (TAT) for samples shall not begin until all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be $5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.

EMAX LABORATORIES, INC.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 24J055
☑ Fedex ☐ UPS ☐ GSO ☐ Others	779003352340	Recipient Jocelyne Solis-Ramos
☐ EMAX Courier ☐ Client Delivery		Date 10/04/24 Time 0937

COC INSPECTION

☑ Client Name ☑ Client PM/FC ☑ Sampler Name ☑ Sampling Date/Time ☑ Sample ID ☑ Matrix
☑ Address ☑ Tel # / Fax # ☐ Courier Signature ☑ Analysis Required ☑ Preservative (if any) ☑ TAT
Safety Issues (if any) ☐ High concentrations expected ☐ From Superfund Site ☐ Rad screening required
Note:

PACKAGING INSPECTION

Container ☑ Cooler ☐ Box ☐ Other
Condition ☑ Custody Seal ☐ Intact ☐ Damaged
Packaging ☑ Bubble Pack ☐ Styrofoam ☐ Popcorn ☐ Sufficient ☐ _____
Temperatures (Cool, ≤6 °C but not frozen) ☑ Cooler 1 5.1 °C ☐ Cooler 2 ____ °C ☐ Cooler 3 ____ °C ☐ Cooler 4 ____ °C ☐ Cooler 5 ____ °C
☐ Cooler 6 ____ °C ☐ Cooler 7 ____ °C ☐ Cooler 8 ____ °C ☐ Cooler 9 ____ °C ☐ Cooler 10 ____ °C
Thermometer: A - S/N 24041221 B - S/N ____ C - S/N ____ D - S/N 230044057
Comments: ☐ Temperature is out of range. PM was informed IMMEDIATELY.
Note:

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
1-3,5-17	1-9,13-48	D10		R1
7	18	D19	~35mL for VOC (two other vials sec. empty)	R8
9,12,13	23,31,35	D6		R1
17	46-48	D9	ID: MW39S-GW100324, HCl vials 10/3/24 @ 1315 for VOCs	R8, R9

10/4/24

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

NOTES/OBSERVATIONS: samples 14-16 containers # 39, 42, 43 & 16 have limited volume in vial, see comments on COC.

SAMPLE MATRIX IS DRINKING WATER? ☐ YES ☑ NO

LEGEND:

☐ Continue to next page.

Code	Description- Sample Management	Code	Description-Sample Management	Code	Description-Sample Management
D1	Analysis is not indicated in ____	D13	Out of Holding Time	R1	Proceed as indicated in ☐ COC ☐ Label
D2	Analysis mismatch COC vs label	D14	Bubble is >6mm	R2	Refer to attached instruction
D3	Sample ID mismatch COC vs label	D15	No trip blank in cooler	R3	Cancel the analysis
D4	Sample ID is not indicated in ____	D16	Preservation not indicated in ____	R4	Use vial with smallest bubble first
D5	Container -[improper] [leaking] [broken]	D17	Preservation mismatch COC vs label	R5	Log-in with latest sampling date and time+1 min
D6	Date/Time is not indicated in label	D18	Insufficient chemical preservative	R6	Adjust pH as necessary
D7	Date/Time mismatch COC vs label	D19	Insufficient Sample	R7	Filter and preserved as necessary
D8	Sample listed in COC is not received	D20	No filtration info for dissolved analysis	R8	Inform client
D9	Sample received is not listed in COC	D21	No sample for moisture determination	R9	Login for VOC
D10	No initial/date on corrections in COC label	D22		R10	
D11	Container count mismatch COC vs received	D23		R11	
D12	Container size mismatch COC vs received	D24		R12	

REVIEWS:

Sample Labeling Jocelyne Solis-Ramos [signature] Date 10/04/24 10/4/24

SRF [signature] Date 10/4/24

PM [signature] Date 10/7/24

Outlook

RE: SLC 10/2 SamplesDay, Maria L. <dayml@cdmsmith.com>

From Zakowski, Cherie <ZakowskiCA@cdmsmith.com>
Date Thu 10/3/2024 3:46 PM
To Cecilia Chavez <CChavez@emaxlabs.com>; Linh Pham <LPham@emaxlabs.com>
Cc Nance, Isaac B. <nanceib@cdmsmith.com>; Day, Maria L. <dayml@cdmsmith.com>

Hi guys: We just realized one sample is missing from the COC: MW39S-GW100324

We will develop a new COC and send it to you by email for that sample tomorrow.

Thanks

Cherie Zakowski
Project Manager/Scientist
CDM Smith
555 17th Street, Suite 500
Denver, CO 80202
Direct Phone: 720-264-1109
Main Phone: 303-383-2300

From: Day, Maria L. <dayml@cdmsmith.com>
Sent: Thursday, October 3, 2024 4:10 PM
To: Zakowski, Cherie <ZakowskiCA@cdmsmith.com>; Cecilia Chavez <CChavez@emaxlabs.com>; Linh Pham <LPham@emaxlabs.com>
Cc: Nance, Isaac B. <nanceib@cdmsmith.com>
Subject: RE: SLC 10/2 Samples

Hi Cecilia,

We have sent our final cooler with samples for this sampling event. The COCs are attached. FedEx tracking information is 779003352340. Sample RG02-GW100324 and RG03-GW100324 had low water recovery for analysis, and we sent what we could get. Please let me know if you have any questions.

Thank you
Maria Day-Johnson
CDM Smith
555 17th St., Suite 500, Denver, CO 80202
Office: 303.383.2380
Cell: 303.913.8864
dayml@cdmsmith.com

CDM Smith

From: Day, Maria L.
Sent: Wednesday, October 2, 2024 7:10 PM
To: Zakowski, Cherie <ZakowskiCA@cdmsmith.com>; Cecilia Chavez <CChavez@emaxlabs.com>; Linh Pham <LPham@emaxlabs.com>
Cc: Nance, Isaac B. <nanceib@cdmsmith.com>
Subject: SLC 10/2 Samples

Hi Cecilia,

We are finishing up the groundwater sampling out at SLC. This is our first batch this week scheduled to arrive tomorrow morning, we should one more shipment at the end of the week. The FedEx tracking information is 280190860847. The COC is attached.

Thank you!

Maria Day-Johnson
CDM Smith
555 17th St., Suite 500, Denver, CO 80202
Office: 303.383.2380
Cell: 303.913.8864
dayml@cdmsmith.com

ORIGIN ID:NPHA (303) 383-2300
TRACY NEAL
CDM SMITH, INC
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHIP DATE: 030CT24
ACTWGT: 43.55 LB
CAD: 6571361/ROSA2550
DIMS: 24x14x13 IN

BILL THIRD PARTY

Part # 156297-435 RRDB EXP 08/25

TO SAMPLE RECEIVING
EMAX LABS
3051 FUJITA ST

TORRANCE CA 90505
(310) 618-8889
INV:
PO:
REF:
DEPT:

1 A
Sealed
5.1

FedEx Express

TRK# 0201 7790 0335 2340

FRI - 04 OCT 10:30A
PRIORITY OVERNIGHT

WZ HHRA

AHS
90505
CA-US LAX

RT 467
ST 25

2
10:30 A
2340
10.04

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range or estimated value.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

CDM SMITH

VA SALT LAKE CITY

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

SDG#: 24J055

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24J055

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of seventeen(17) water samples were received on 10/04/24 to be analyzed for Volatile Organics by GC/MS in accordance with Method SW5030B/8260C and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Instrument Performance and Calibration
Instrument tune check was performed prior to calibration. Result was within acceptance criteria. Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using secondary source (ICV). Continuing calibration (CCV) was carried out at a frequency required by the project. All project calibration requirements were satisfied. Note that" Minimum Response Factor" for all analytes were within method recommended response factors with the exception of Acetone and 2-Butanone. However, percent recoveries for all target analytes were within 70-130% on all calibration points. Refer to calibration summary forms of ICAL, ICV and CCV for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, two(2) method blanks were analyzed. VO01J18B and VO01J19B were compliant to project requirement. Refer to sample result summary forms for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, two(2) sets of LCS/LCD were analyzed. All analytes were within LCS limits in VO01J18L/VO01J18C and VO01J19L/VO01J19C, except for results qualified with [*]. Refer to LCS summary forms for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met with the exception of those that were discussed within the associated QC parameter.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24J055
Instrument ID : 01

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	VO01J18L	1	NA	10/16/2419:37	10/16/2419:37	RJV429	RJV302	VO01J18	Lab Control Sample (LCS)
MBLK1W	VO01J18B	1	NA	10/16/2420:06	10/16/2420:06	RJV430	RJV302	VO01J18	Method Blank
MW41S-GW100224	24J055-01	1	NA	10/16/2423:04	10/16/2423:04	RJV436	RJV302	VO01J18	Field Sample
MW41D-GW100224	24J055-02	1	NA	10/16/2423:34	10/16/2423:34	RJV437	RJV302	VO01J18	Field Sample
MW39D-GW100324	24J055-03	1	NA	10/17/2401:33	10/17/2401:33	RJV441	RJV302	VO01J18	Field Sample
RG01-GW100324	24J055-05	1	NA	10/17/2402:02	10/17/2402:02	RJV442	RJV302	VO01J18	Field Sample
RG02-GW100324	24J055-06	1	NA	10/17/2402:32	10/17/2402:32	RJV443	RJV302	VO01J18	Field Sample
RG03-GW100324	24J055-07	1	NA	10/17/2403:01	10/17/2403:01	RJV444	RJV302	VO01J18	Field Sample
RG04-GW100324	24J055-08	1	NA	10/17/2403:31	10/17/2403:31	RJV445	RJV302	VO01J18	Field Sample
RG05-GW100324	24J055-09	1	NA	10/17/2404:01	10/17/2404:01	RJV446	RJV302	VO01J18	Field Sample
RG09-GW100324	24J055-10	1	NA	10/17/2404:30	10/17/2404:30	RJV447	RJV302	VO01J18	Field Sample
RG08-GW100324	24J055-11	1	NA	10/17/2405:00	10/17/2405:00	RJV448	RJV302	VO01J18	Field Sample
LCD1W	VO01J18C	1	NA	10/17/2405:29	10/17/2405:29	RJV449	RJV302	VO01J18	LCS Duplicate
LCS2W	VO01J19L	1	NA	10/17/2412:36	10/17/2412:36	RJV456	RJV302	VO01J19	Lab Control Sample (LCS)
LCD2W	VO01J19C	1	NA	10/17/2413:06	10/17/2413:06	RJV457	RJV302	VO01J19	LCS Duplicate
MBLK2W	VO01J19B	1	NA	10/17/2414:06	10/17/2414:06	RJV459	RJV302	VO01J19	Method Blank
TB07-GW100324	24J055-04	1	NA	10/17/2414:36	10/17/2414:36	RJV460	RJV302	VO01J19	Field Sample
RG07-GW100324	24J055-12	1	NA	10/17/2415:06	10/17/2415:06	RJV461	RJV302	VO01J19	Field Sample
RG06-GW100324	24J055-13	1	NA	10/17/2415:36	10/17/2415:36	RJV462	RJV302	VO01J19	Field Sample
RG10-GW100324	24J055-14	1	NA	10/17/2416:06	10/17/2416:06	RJV463	RJV302	VO01J19	Field Sample
RG11-GW100324	24J055-15	1	NA	10/17/2416:36	10/17/2416:36	RJV464	RJV302	VO01J19	Field Sample
FD09-GW100324	24J055-16	1	NA	10/17/2417:06	10/17/2417:06	RJV465	RJV302	VO01J19	Field Sample
MW39S-GW100324	24J055-17	1	NA	10/17/2417:36	10/17/2417:36	RJV466	RJV302	VO01J19	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/02/24 17:10
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/16/24 23:04
Sample ID	: MW41S-GW100224	Date Analyzed:	10/16/24 23:04
Lab Samp ID:	24J055-01	Dilution Factor:	1
Lab File ID:	RJV436	Matrix:	WATER
Ext 8tch ID:	V001J18	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.44J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	6.7	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.13J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	72	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.29J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURRDGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.4	10.0	114	70-130
Bromofluorobenzene	9.85	10.0	99	70-130
Toluene-d8	10.5	10.0	105	70-130
Dibromofluoromethane	11.2	10.0	112	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV436.D Vial: 10
Acq On : 16 Oct 2024 11:04 pm Operator: DNguye/CLingl
Sample : 24J055-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 17:17 2024 Quant Results File: VO01J12.RES

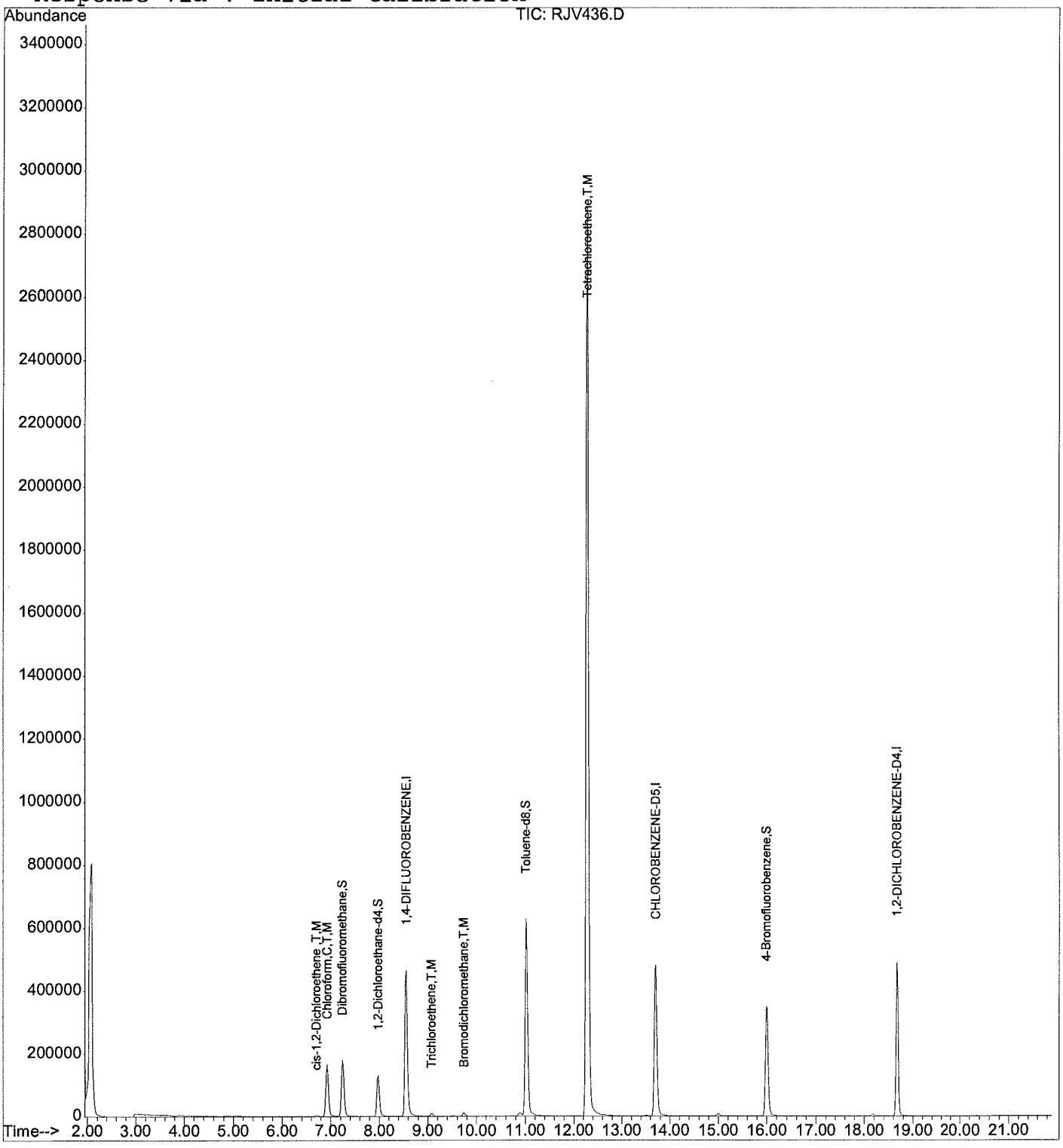
Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

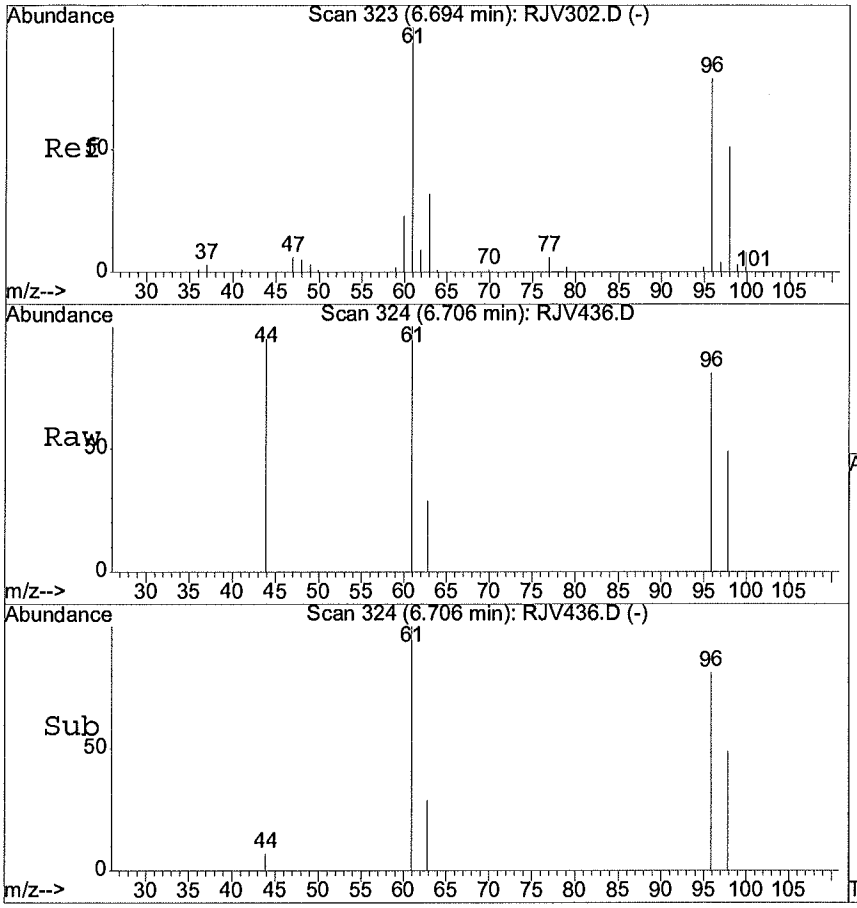
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	742633	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	584503	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.67	152	250116	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	216884	11.18	ug/l	0.01
Spiked Amount 10.000			Recovery =	111.80%		
41) 1,2-Dichloroethane-d4	7.98	65	195239	11.43	ug/l	0.01
Spiked Amount 10.000			Recovery =	114.30%		
54) Toluene-d8	11.02	98	846336	10.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.30%		
76) 4-Bromofluorobenzene	15.99	95	291808	9.85	ug/l	0.01
Spiked Amount 10.000			Recovery =	98.50%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.71	96	3072	0.13	ug/l	82
31) Chloroform	6.93	83	264541	6.65	ug/l	94
44) Trichloroethene	9.08	130	6517	0.29	ug/l	90
47) Bromodichloromethane	9.74	83	11497	0.44	ug/l	87
61) Tetrachloroethene	12.29	164	1444000	72.13	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24J16\RJV436.D Vial: 10
Acq On : 16 Oct 2024 11:04 pm Operator: DNguye/CLing
Sample : 24J055-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 17:17 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

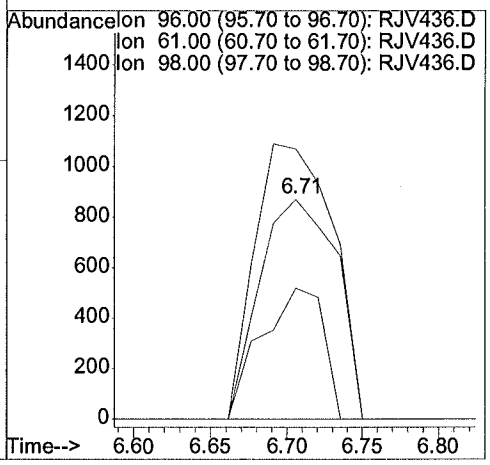


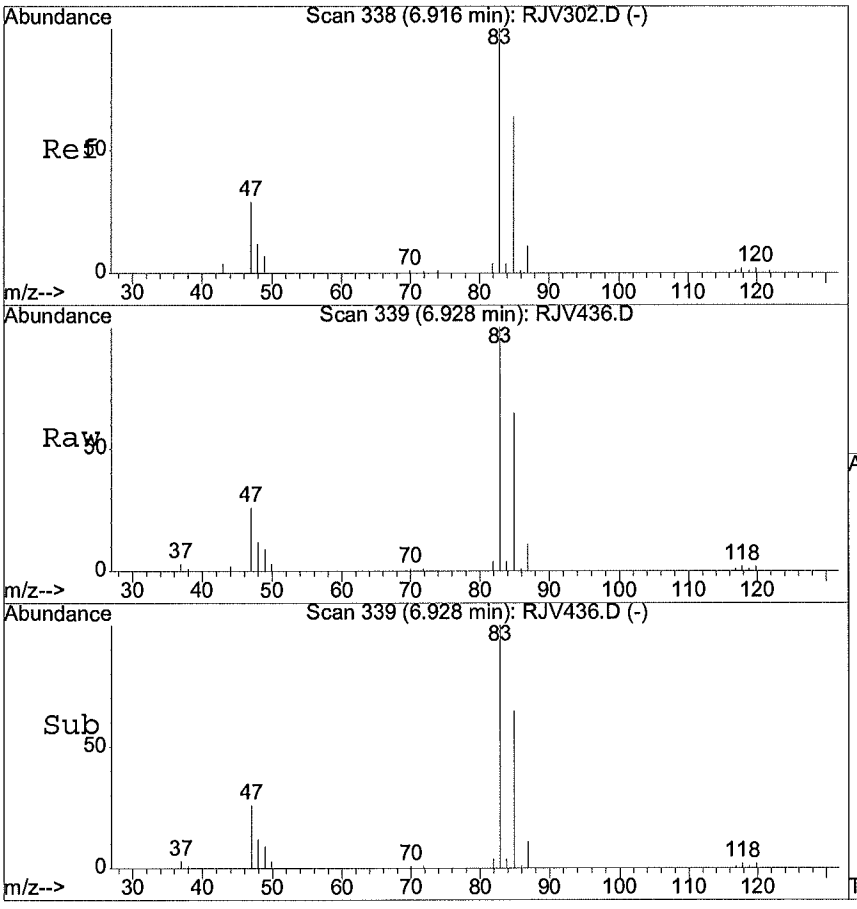


#30
cis-1,2-Dichloroethene
Concen: 0.13 ug/l
RT: 6.71 min Scan# 324
Delta R.T. 0.01 min
Lab File: RJV436.D
Acq: 16 Oct 2024 11:04 pm

Tgt Ion: 96 Resp: 3072

Ion	Ratio	Lower	Upper
96	100		
61	127.1	118.2	178.2
98	48.1	35.6	95.6

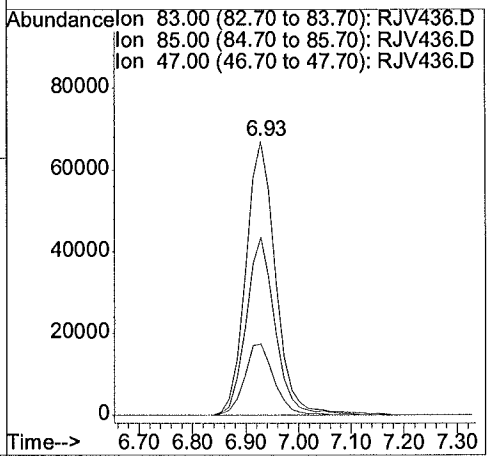


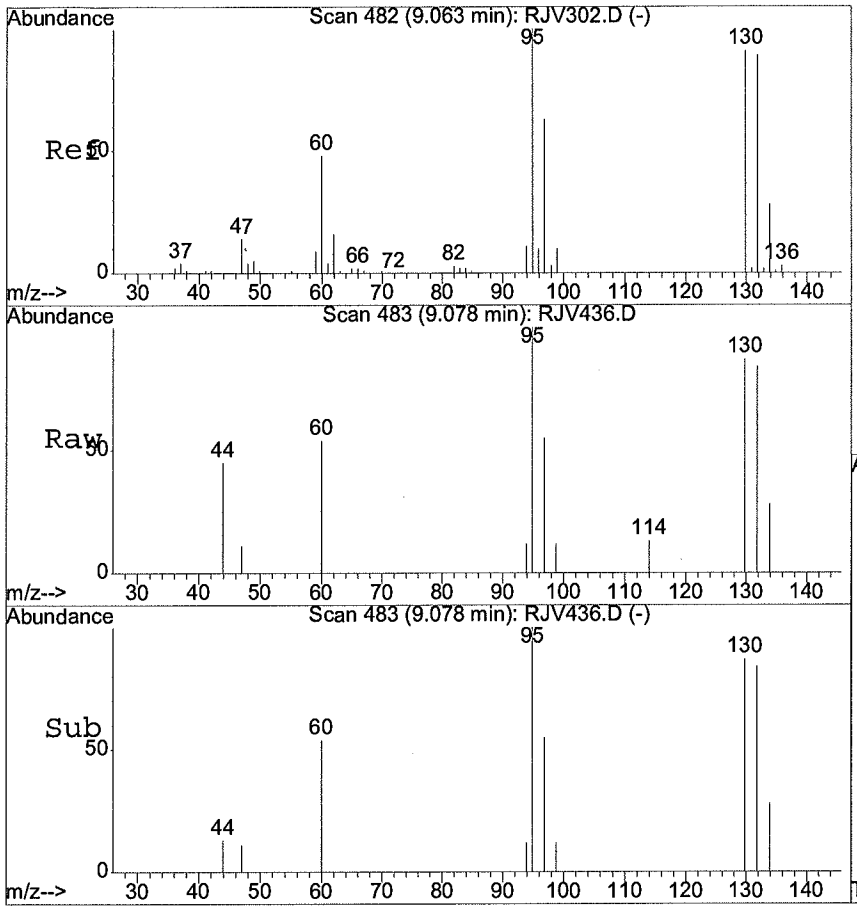


#31
Chloroform
Concen: 6.65 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV436.D
Acq: 16 Oct 2024 11:04 pm

Tgt Ion: 83 Resp: 264541

Ion	Ratio	Lower	Upper
83	100		
85	62.9	37.8	97.8
47	25.7	0.0	59.1

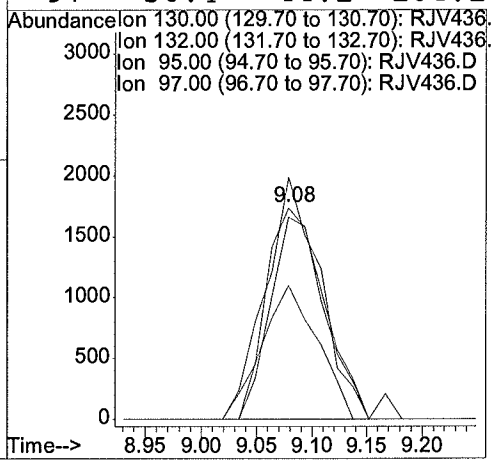


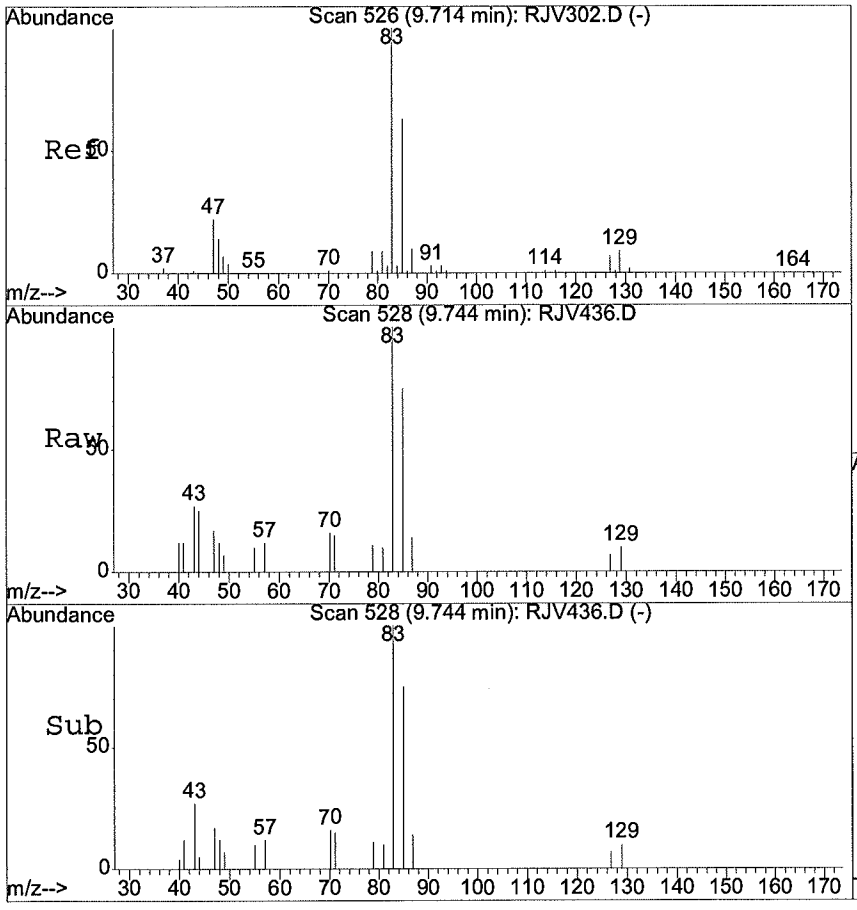


#44
Trichloroethene
Concen: 0.29 ug/l
RT: 9.08 min Scan# 483
Delta R.T. 0.02 min
Lab File: RJV436.D
Acq: 16 Oct 2024 11:04 pm

Tgt Ion:130 Resp: 6517

Ion	Ratio	Lower	Upper
130	100		
132	87.3	67.4	127.4
95	107.4	81.2	141.2
97	56.4	44.1	104.1

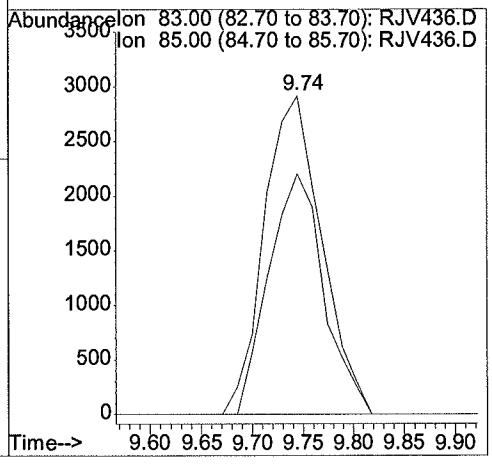


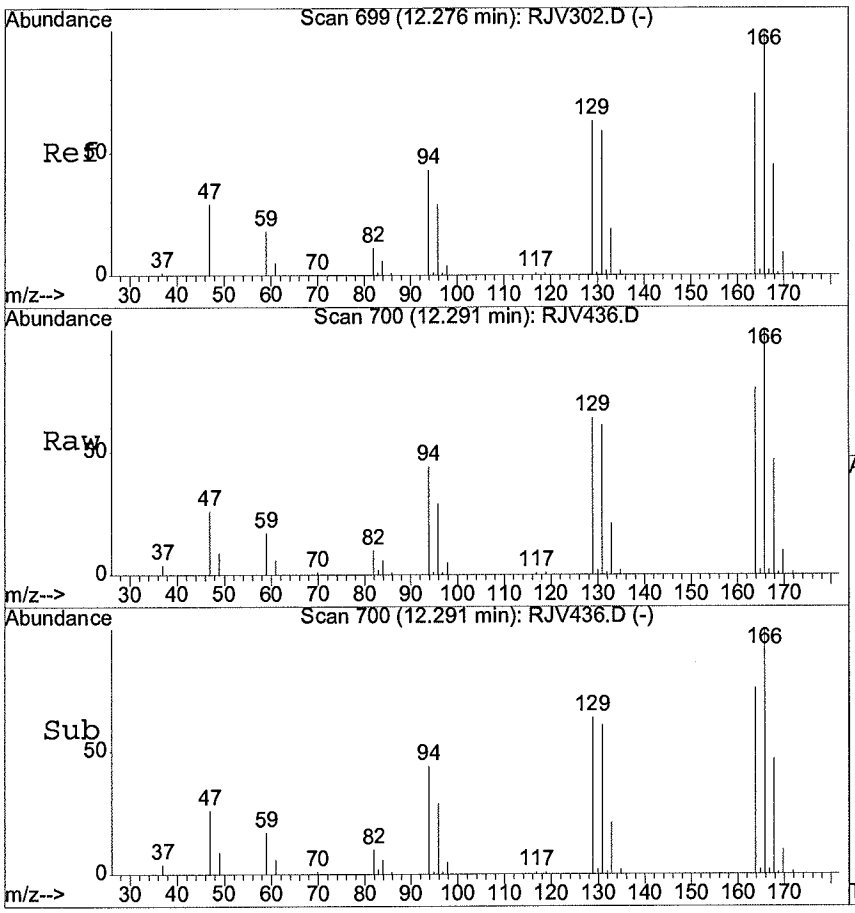


#47
Bromodichloromethane
Concen: 0.44 ug/l
RT: 9.74 min Scan# 528
Delta R.T. 0.03 min
Lab File: RJV436.D
Acq: 16 Oct 2024 11:04 pm

Tgt Ion: 83 Resp: 11497

Ion	Ratio	Lower	Upper
83	100		
85	72.2	32.5	92.5

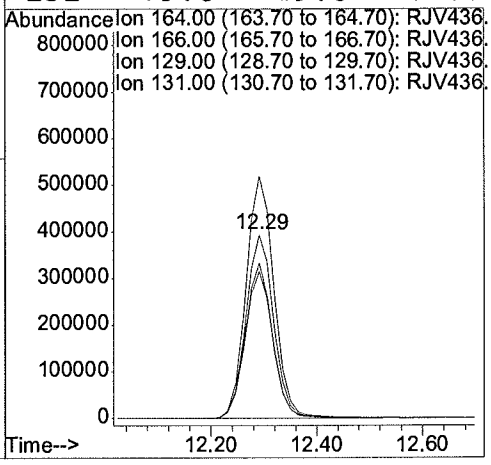




#61
Tetrachloroethene
Concen: 72.13 ug/l
RT: 12.29 min Scan# 700
Delta R.T. 0.01 min
Lab File: RJV436.D
Acq: 16 Oct 2024 11:04 pm

Tgt Ion:164 Resp: 1444000

Ion	Ratio	Lower	Upper
164	100		
166	132.4	101.7	161.7
129	83.1	53.9	113.9
131	79.8	49.8	109.8



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/02/24 19:05
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/16/24 23:34
Sample ID	: MW41D-GW100224	Date Analyzed:	10/16/24 23:34
Lab Samp ID:	24J055-02	Dilution Factor:	1
Lab File ID:	RJV437	Matrix:	WATER
Ext Btch ID:	VQ01J18	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.15J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.7	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.22J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	33	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.21J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.4	10.0	114	70-130
Bromofluorobenzene	10.0	10.0	100	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	11.0	10.0	110	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV437.D Vial: 11
Acq On : 16 Oct 2024 11:34 pm Operator: DNguye/CLingl
Sample : 24J055-02 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 17:17 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	724309	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	559107	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	232827	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	207223	10.95	ug/l	0.01
Spiked Amount 10.000			Recovery =	109.50%		
41) 1,2-Dichloroethane-d4	7.98	65	190187	11.41	ug/l	0.01
Spiked Amount 10.000			Recovery =	114.10%		
54) Toluene-d8	11.03	98	821089	10.68	ug/l	0.01
Spiked Amount 10.000			Recovery =	106.80%		
76) 4-Bromofluorobenzene	15.99	95	276035	10.01	ug/l	0.01
Spiked Amount 10.000			Recovery =	100.10%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.71	96	5232	0.22	ug/l	82
31) Chloroform	6.93	83	64795	1.67	ug/l	93
44) Trichloroethene	9.08	130	4604	0.21	ug/l	91
47) Bromodichloromethane	9.74	83	3842	0.15	ug/l	84
61) Tetrachloroethene	12.29	164	634115	33.11	ug/l	99

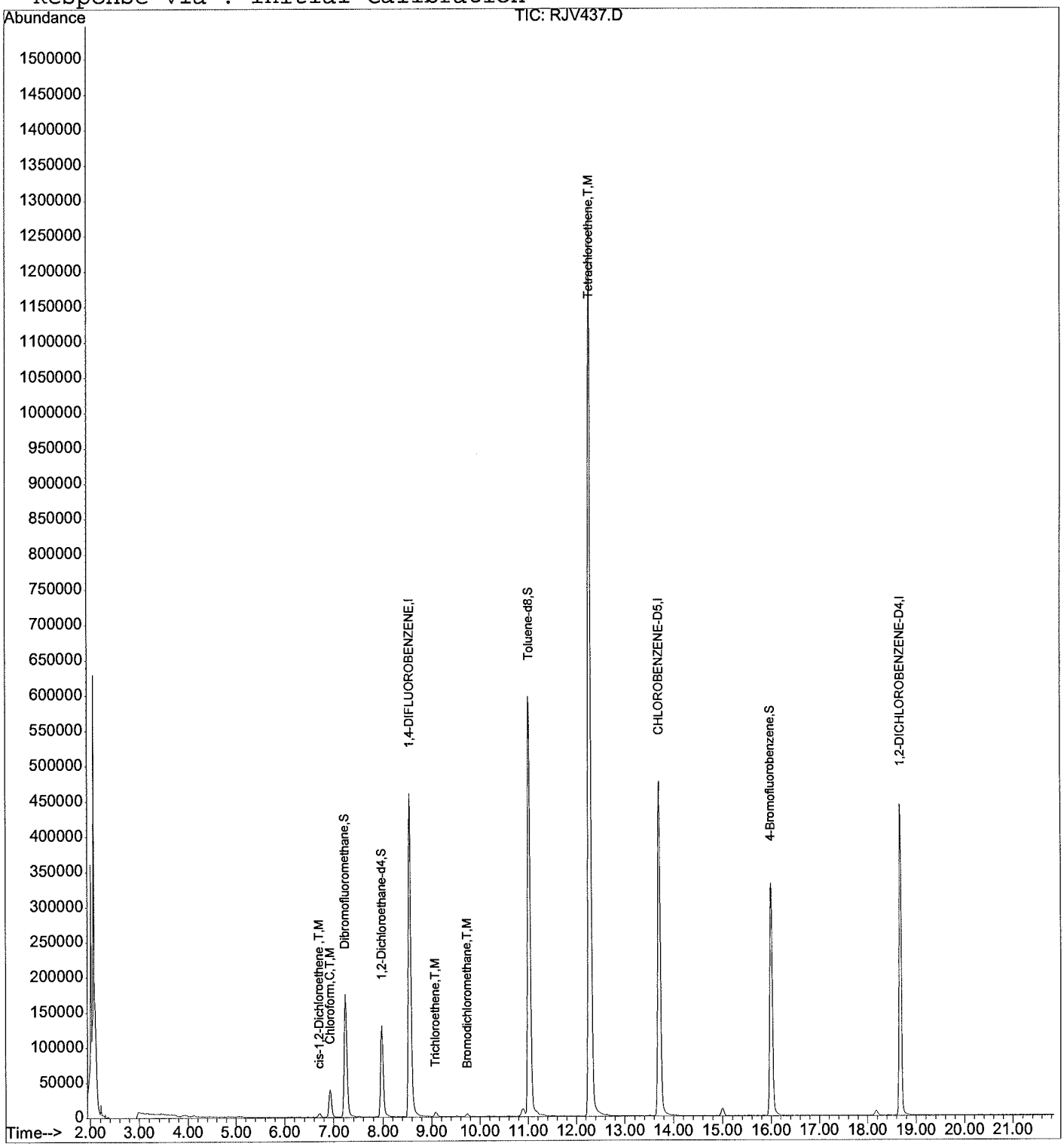
(#) = qualifier out of range (m) = manual integration

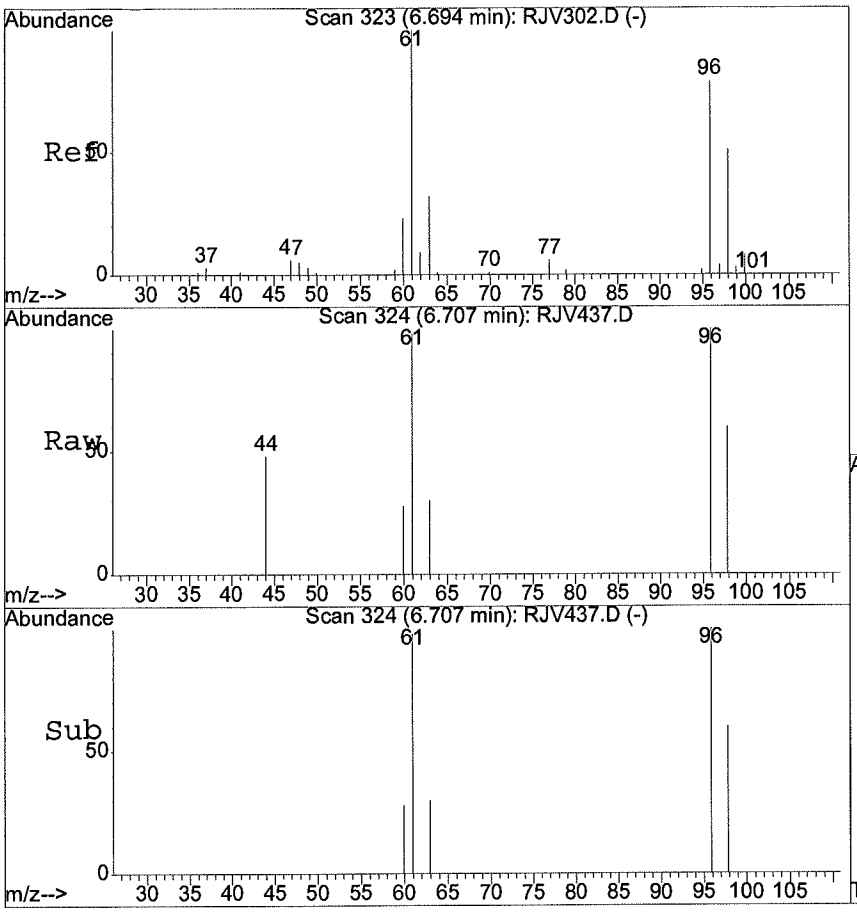
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV437.D
Acq On : 16 Oct 2024 11:34 pm
Sample : 24J055-02
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:17 2024

Vial: 11
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

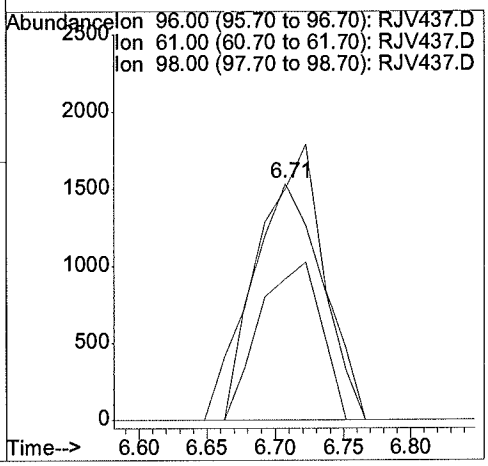


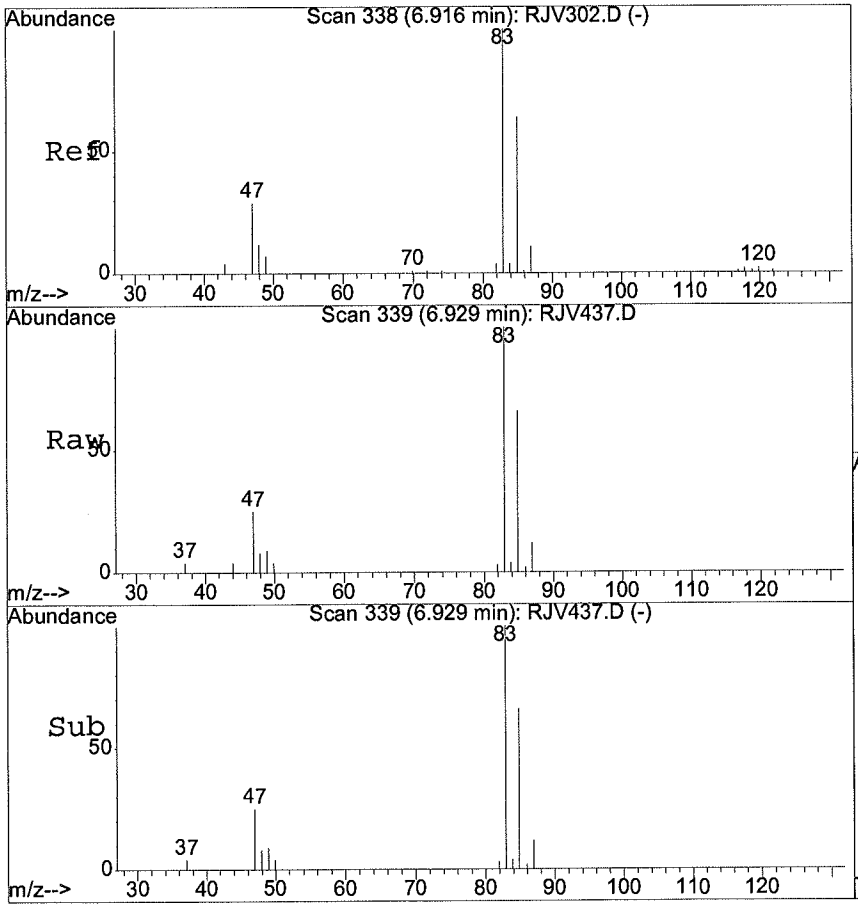


#30
cis-1,2-Dichloroethene
Concen: 0.22 ug/l
RT: 6.71 min Scan# 324
Delta R.T. 0.01 min
Lab File: RJV437.D
Acq: 16 Oct 2024 11:34 pm

Tgt Ion: 96 Resp: 5232

Ion	Ratio	Lower	Upper
96	100		
61	119.1	118.2	178.2
98	61.0	35.6	95.6

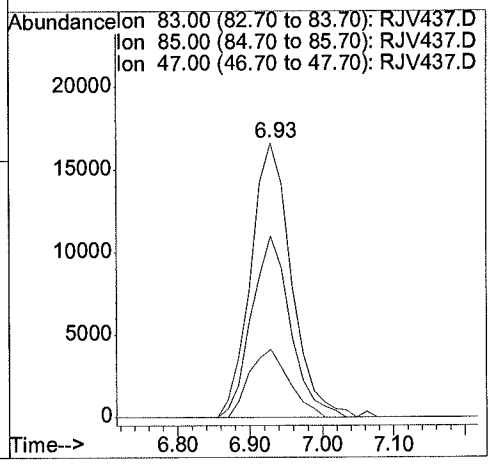


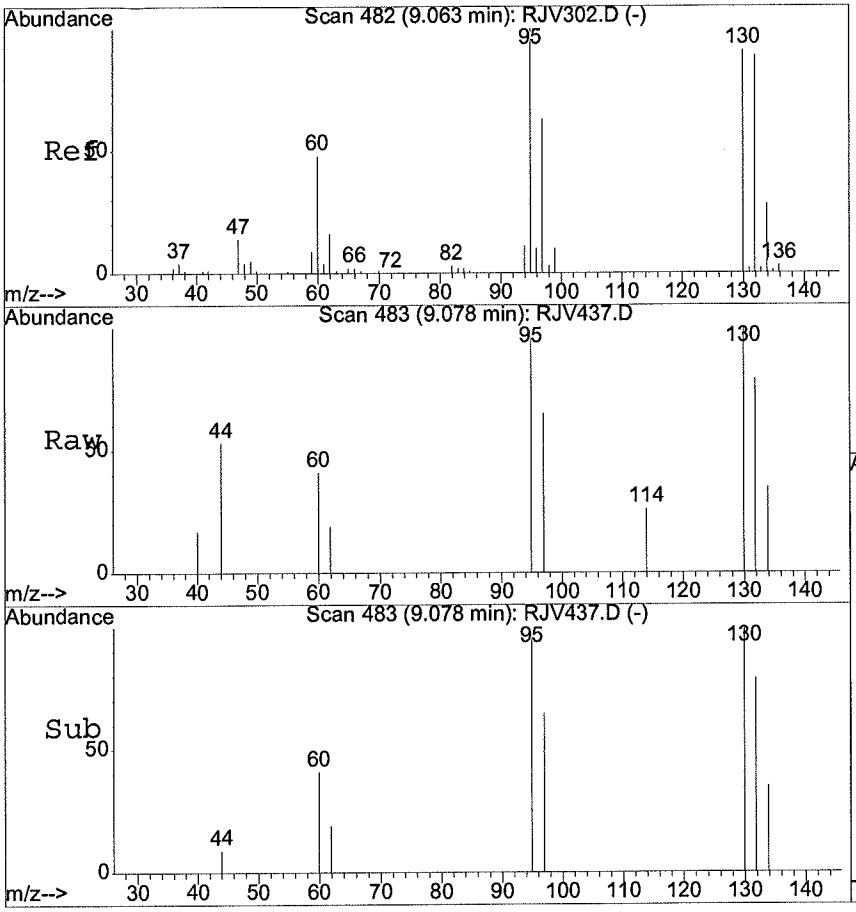


#31
Chloroform
Concen: 1.67 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV437.D
Acq: 16 Oct 2024 11:34 pm

Tgt Ion: 83 Resp: 64795

Ion	Ratio	Lower	Upper
83	100		
85	63.1	37.8	97.8
47	24.3	0.0	59.1

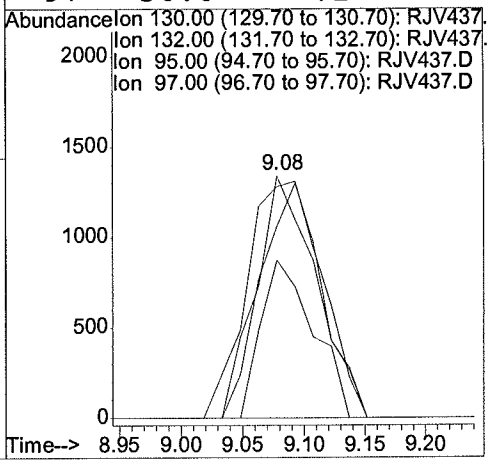


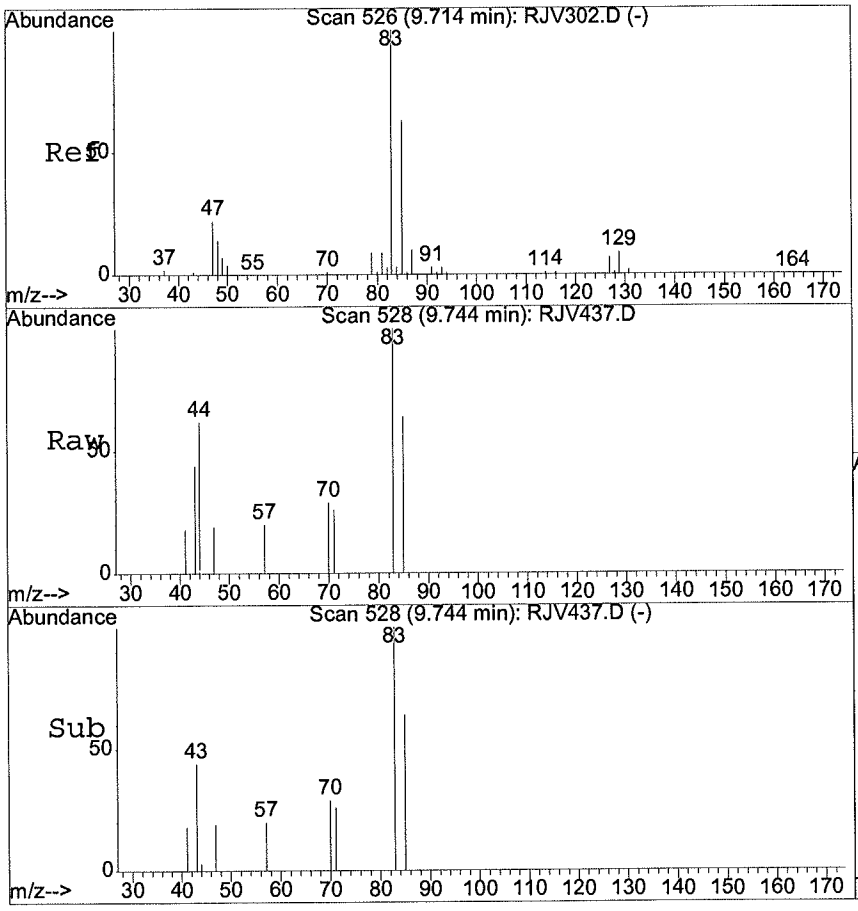


#44
Trichloroethene
Concen: 0.21 ug/l
RT: 9.08 min Scan# 483
Delta R.T. 0.02 min
Lab File: RJV437.D
Acq: 16 Oct 2024 11:34 pm

Tgt Ion:130 Resp: 4604

Ion	Ratio	Lower	Upper
130	100		
132	97.6	67.4	127.4
95	121.2	81.2	141.2
97	56.6	44.1	104.1

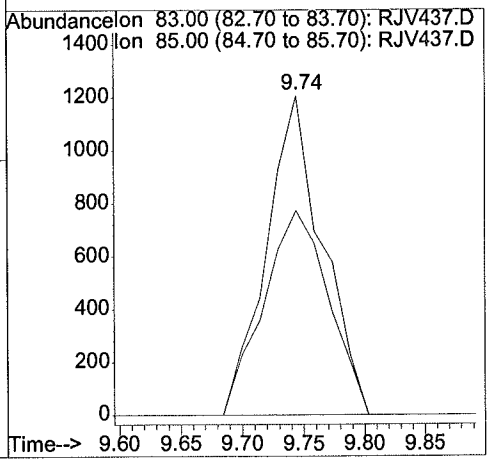


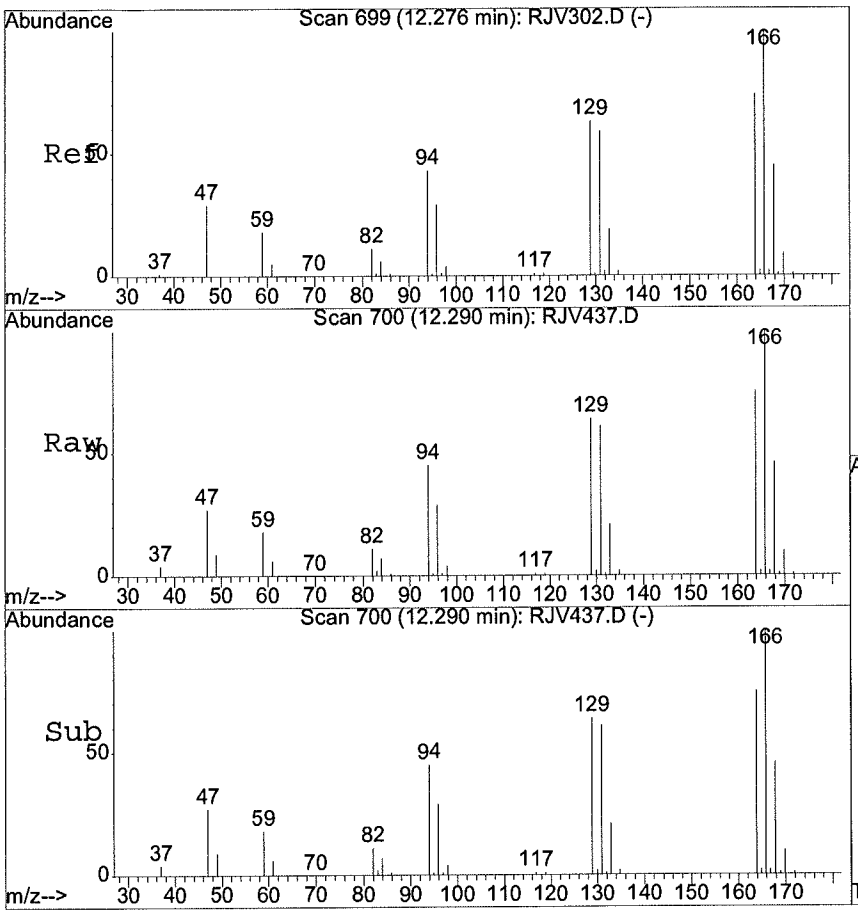


#47
Bromodichloromethane
Concen: 0.15 ug/l
RT: 9.74 min Scan# 528
Delta R.T. 0.03 min
Lab File: RJV437.D
Acq: 16 Oct 2024 11:34 pm

Tgt Ion: 83 Resp: 3842

Ion	Ratio	Lower	Upper
83	100		
85	74.5	32.5	92.5

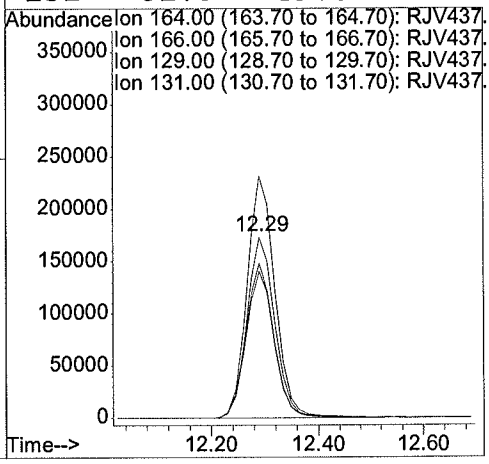




#61
Tetrachloroethene
Concen: 33.11 ug/l
RT: 12.29 min Scan# 700
Delta R.T. 0.01 min
Lab File: RJV437.D
Acq: 16 Oct 2024 11:34 pm

Tgt Ion:164 Resp: 634115

Ion	Ratio	Lower	Upper
164	100		
166	132.9	101.7	161.7
129	84.9	53.9	113.9
131	81.3	49.8	109.8



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 11:35
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 01:33
Sample ID	: MW39D-GW100324	Date Analyzed:	10/17/24 01:33
Lab Samp ID:	24J055-03	Dilution Factor:	1
Lab File ID:	RJV441	Matrix:	WATER
Ext Btch ID:	VO01J1B	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	0.96J	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.9	10.0	119	70-130
Bromofluorobenzene	10.1	10.0	101	70-130
Toluene-dB	10.8	10.0	108	70-130
Dibromofluoromethane	11.4	10.0	114	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV441.D
Acq On : 17 Oct 2024 1:33 am
Sample : 24J055-03
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:24 2024

Vial: 15
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

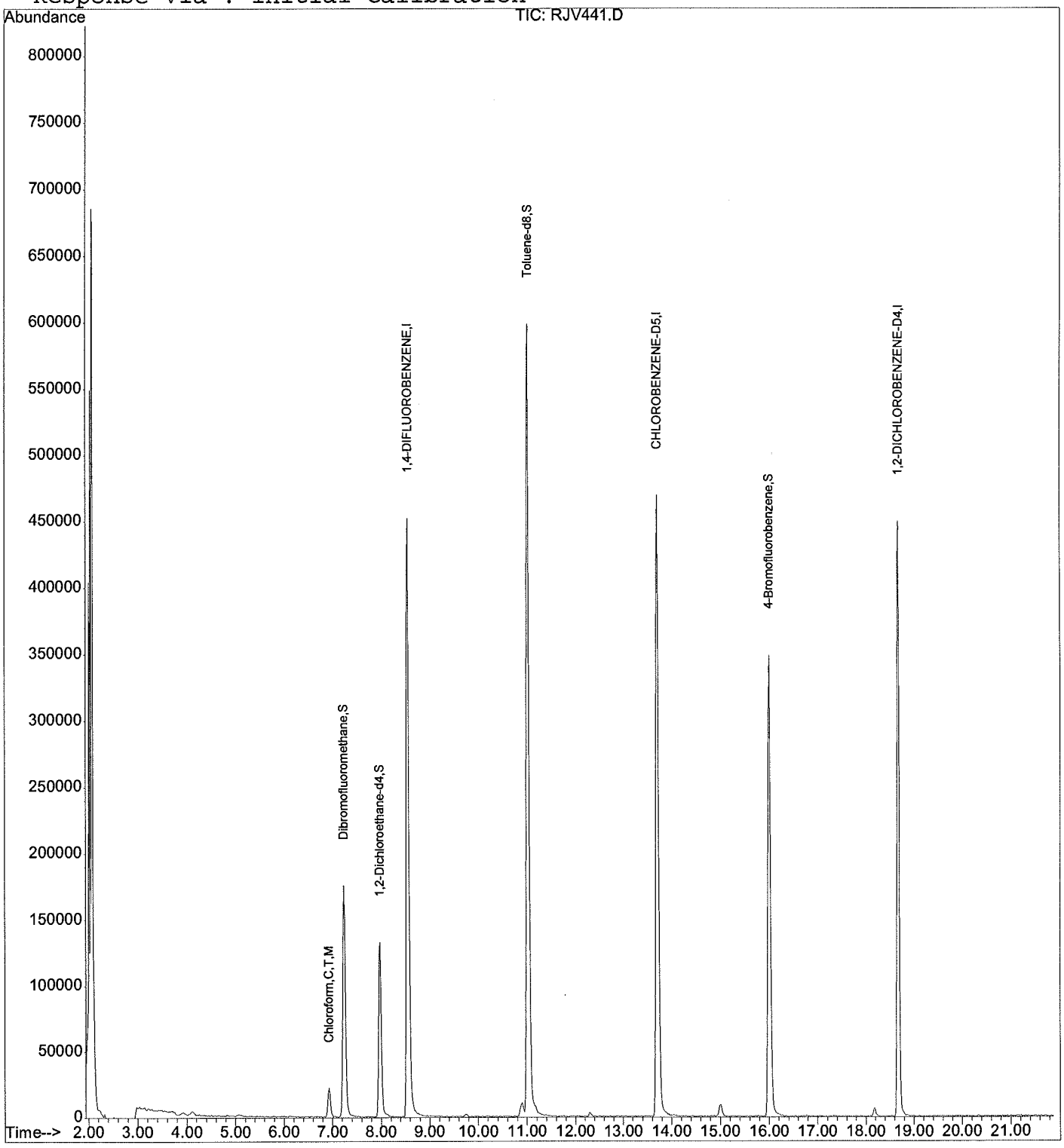
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	707365	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	555663	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	237212	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	211292	11.44	ug/l	0.01
Spiked Amount 10.000			Recovery =	114.40%		
41) 1,2-Dichloroethane-d4	7.98	65	193198	11.87	ug/l	0.01
Spiked Amount 10.000			Recovery =	118.70%		
54) Toluene-d8	11.03	98	828884	10.85	ug/l	0.01
Spiked Amount 10.000			Recovery =	108.50%		
76) 4-Bromofluorobenzene	16.00	95	283447	10.09	ug/l	0.03
Spiked Amount 10.000			Recovery =	100.90%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	36478	0.96	ug/l	94

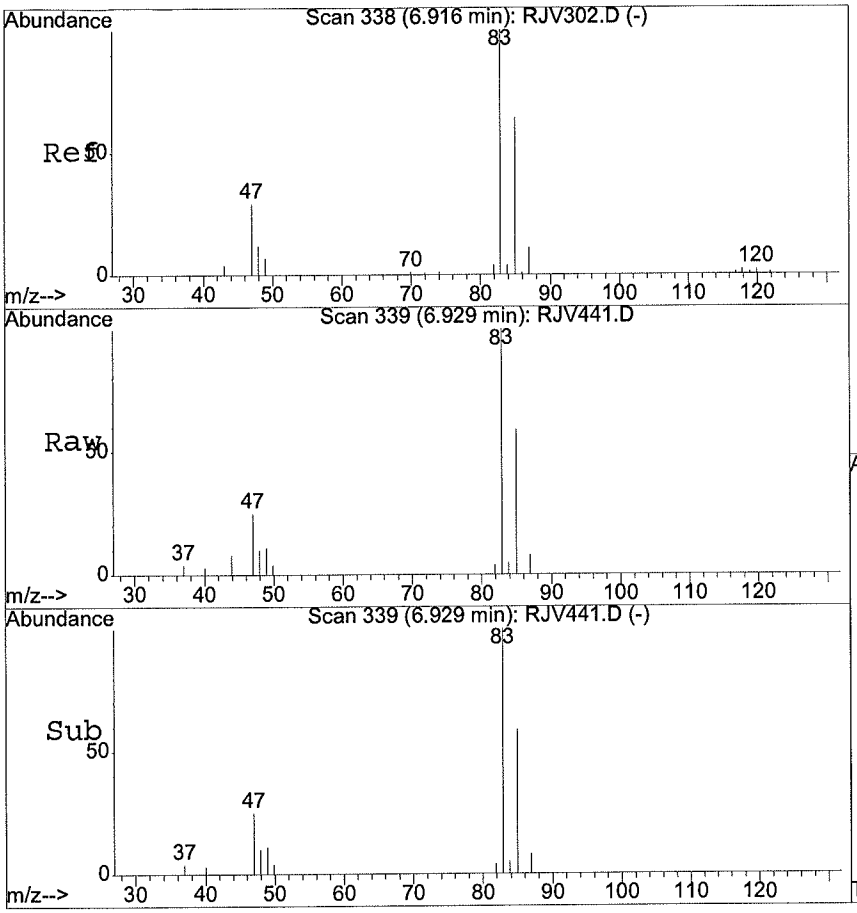
(#) = qualifier out of range (m) = manual integration
RJV441.D VO01J12.M Wed Oct 30 17:24:51 2024 Page 1

Data File : D:\HPCHEM\1\DATA\24J16\RJV441.D
Acq On : 17 Oct 2024 1:33 am
Sample : 24J055-03
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:24 2024

Vial: 15
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

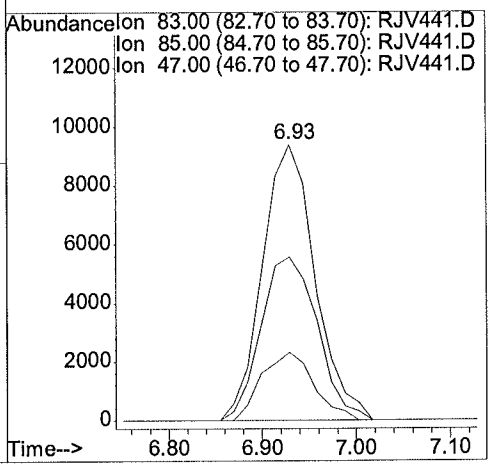




#31
Chloroform
Concen: 0.96 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV441.D
Acq: 17 Oct 2024 1:33 am

Tgt Ion: 83 Resp: 36478

Ion	Ratio	Lower	Upper
83	100		
85	63.4	37.8	97.8
47	24.5	0.0	59.1



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 12:30
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 14:36
Sample ID	: TB07-GW100324	Date Analyzed:	10/17/24 14:36
Lab Samp ID:	24J055-04	Dilution Factor:	1
Lab File ID:	RJV460	Matrix:	WATER
Ext Btch ID:	VO01J19	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.4	10.0	104	70-130
Bromofluorobenzene	10.8	10.0	108	70-130
Toluene-d8	11.0	10.0	110	70-130
Dibromofluoromethane	10.7	10.0	107	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV460.D Vial: 7
Acq On : 17 Oct 2024 2:36 pm Operator: DNguye/CLingl
Sample : 24J055-04 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 17:33 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	910081	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	683131	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	264370	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	255412	10.74	ug/l	0.01
Spiked Amount 10.000			Recovery =	107.40%		
41) 1,2-Dichloroethane-d4	7.98	65	218217	10.42	ug/l	0.02
Spiked Amount 10.000			Recovery =	104.20%		
54) Toluene-d8	11.03	98	1032915	10.99	ug/l	0.02
Spiked Amount 10.000			Recovery =	109.90%		
76) 4-Bromofluorobenzene	16.01	95	339508	10.85	ug/l	0.03
Spiked Amount 10.000			Recovery =	108.50%		

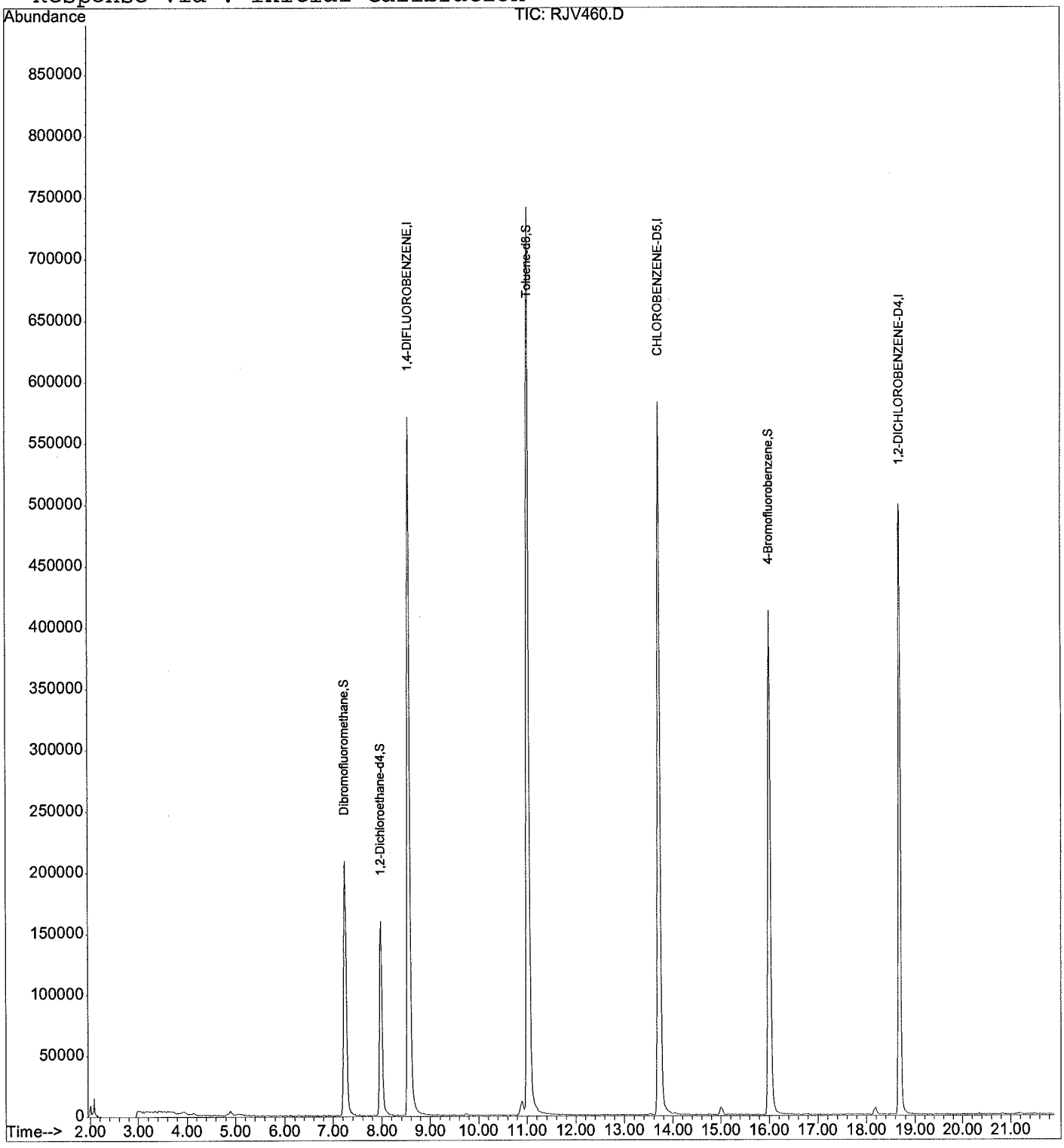
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RJV460.D VO01J12.M Wed Oct 30 17:33:38 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV460.D Vial: 7
Acq On : 17 Oct 2024 2:36 pm Operator: DNguye/CLing
Sample : 24J055-04 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 17:33 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 08:05
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 02:02
Sample ID	: RG01-GW100324	Date Analyzed:	10/17/24 02:02
Lab Samp ID:	24J055-05	Dilution Factor:	1
Lab File ID:	RJV442	Matrix:	WATER
Ext Btch ID:	VO01J1B	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	0.19J	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	7.5	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.50J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.9	10.0	119	70-130
Bromofluorobenzene	9.85	10.0	98	70-130
Toluene-d8	10.9	10.0	109	70-130
Dibromofluoromethane	11.5	10.0	115	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV442.D
Acq On : 17 Oct 2024 2:02 am
Sample : 24J055-05
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:25 2024

Vial: 16
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01J12.RES

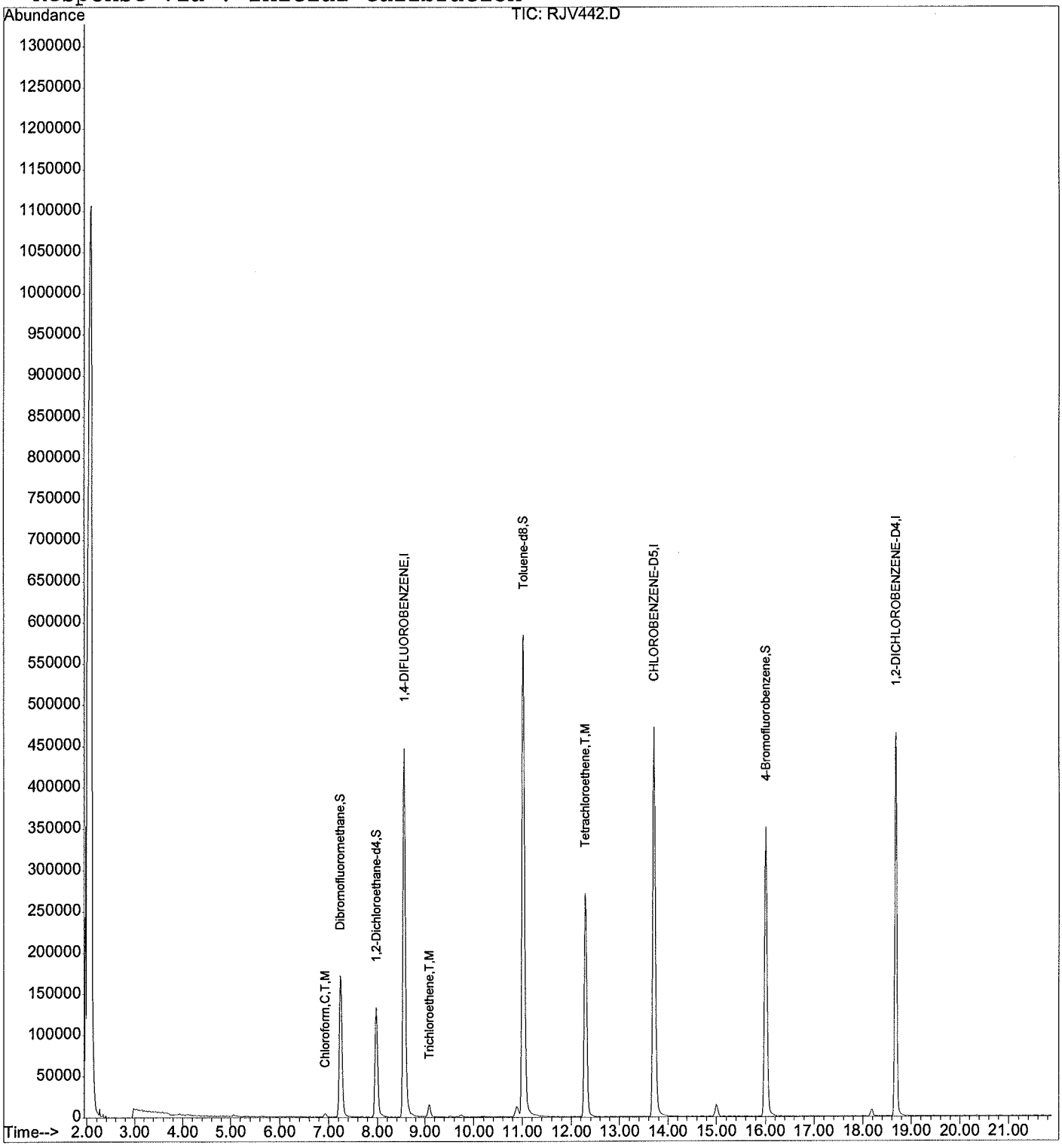
Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

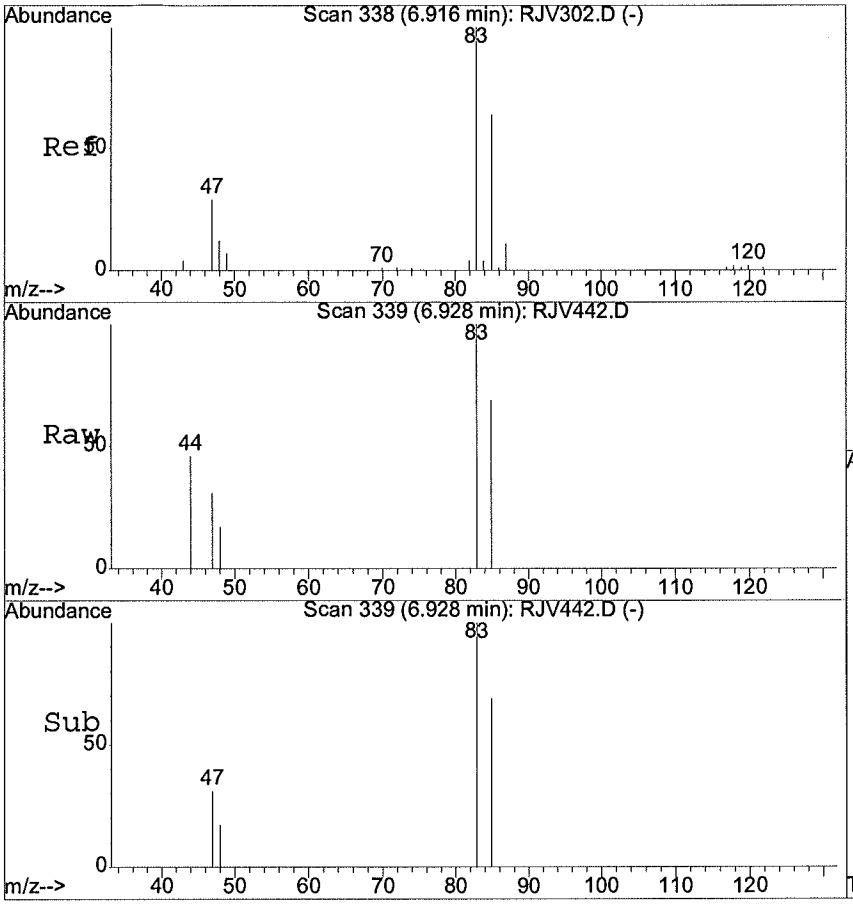
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	709008	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	550713	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	245734	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	212705	11.49	ug/l	0.01
Spiked Amount 10.000			Recovery =	114.90%		
41) 1,2-Dichloroethane-d4	7.98	65	194628	11.93	ug/l	0.01
Spiked Amount 10.000			Recovery =	119.30%		
54) Toluene-d8	11.03	98	823777	10.88	ug/l	0.02
Spiked Amount 10.000			Recovery =	108.80%		
76) 4-Bromofluorobenzene	16.01	95	286569	9.85	ug/l	0.03
Spiked Amount 10.000			Recovery =	98.50%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	7204	0.19	ug/l	93
44) Trichloroethene	9.09	130	10784	0.50	ug/l	91
61) Tetrachloroethene	12.29	164	142240	7.54	ug/l	99

(#) = qualifier out of range (m) = manual integration
RJV442.D VO01J12.M Wed Oct 30 17:25:52 2024 Page 1

Data File : D:\HPCHEM\1\DATA\24J16\RJV442.D Vial: 16
Acq On : 17 Oct 2024 2:02 am Operator: DNguye/CLing
Sample : 24J055-05 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 17:25 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

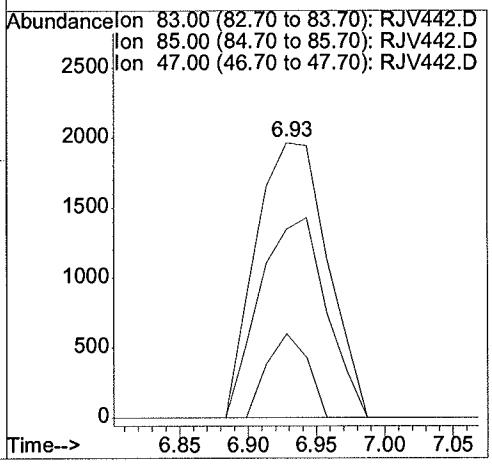


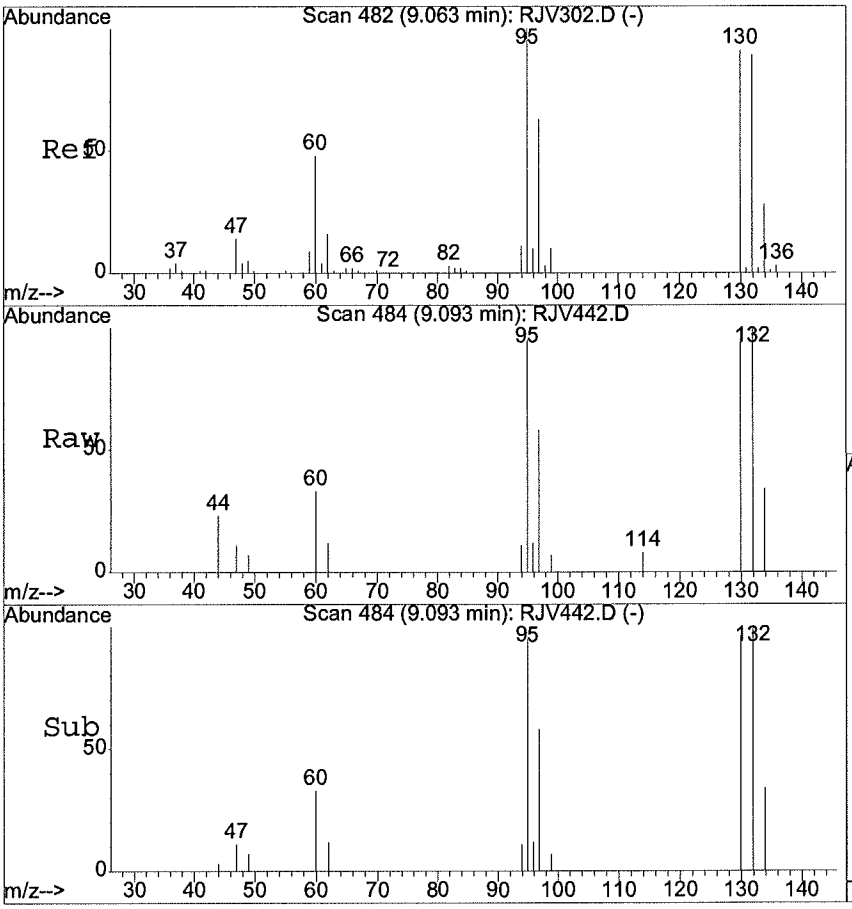


#31
Chloroform
Concen: 0.19 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV442.D
Acq: 17 Oct 2024 2:02 am

Tgt Ion: 83 Resp: 7204

Ion	Ratio	Lower	Upper
83	100		
85	67.6	37.8	97.8
47	17.4	0.0	59.1

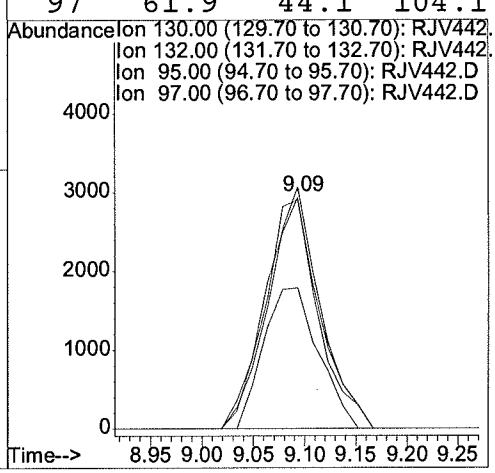


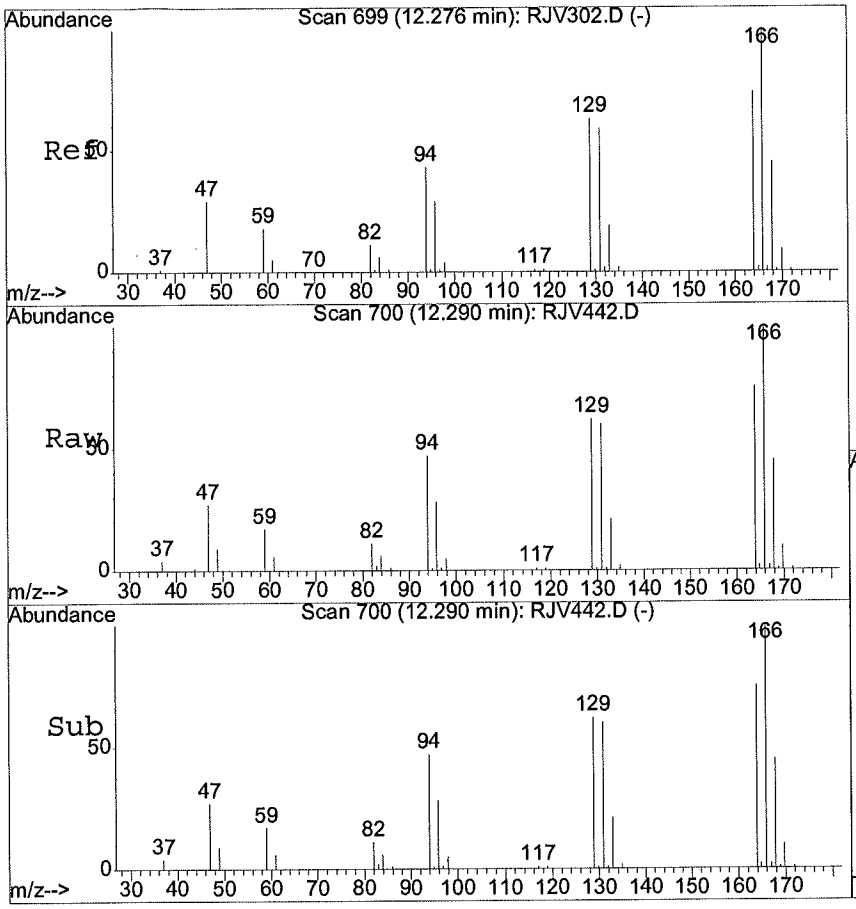


#44
Trichloroethene
Concen: 0.50 ug/l
RT: 9.09 min Scan# 484
Delta R.T. 0.03 min
Lab File: RJV442.D
Acq: 17 Oct 2024 2:02 am

Tgt Ion:130 Resp: 10784

Ion	Ratio	Lower	Upper
130	100		
132	99.9	67.4	127.4
95	98.5	81.2	141.2
97	61.9	44.1	104.1

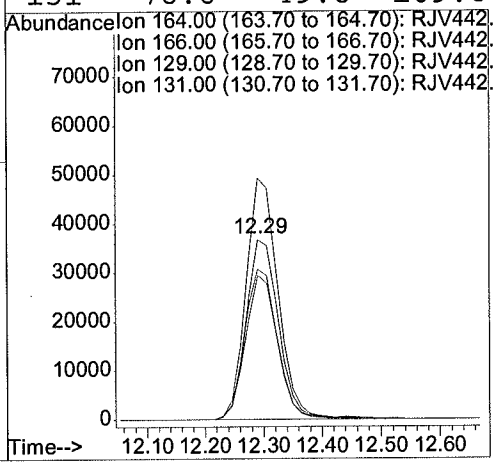




#61
Tetrachloroethene
Concen: 7.54 ug/l
RT: 12.29 min Scan# 700
Delta R.T. 0.01 min
Lab File: RJV442.D
Acq: 17 Oct 2024 2:02 am

Tgt Ion:164 Resp: 142240

Ion	Ratio	Lower	Upper
164	100		
166	130.7	101.7	161.7
129	83.3	53.9	113.9
131	78.6	49.8	109.8



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 08:45
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 02:32
Sample ID	: RG02-GW100324	Date Analyzed:	10/17/24 02:32
Lab Samp ID:	24J055-06	Dilution Factor:	1
Lab File ID:	RJV443	Matrix:	WATER
Ext Btch ID:	VO01J1B	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.2	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.85J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	14	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.61J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.9	10.0	119	70-130
Bromofluorobenzene	10.1	10.0	101	70-130
Toluene-dB	10.7	10.0	107	70-130
Dibromofluoromethane	11.2	10.0	112	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV443.D
Acq On : 17 Oct 2024 2:32 am
Sample : 24J055-06
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:26 2024

Vial: 17
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	708394	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	554372	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	235160	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	207821	11.23	ug/l	0.01
Spiked Amount 10.000			Recovery =	112.30%		
41) 1,2-Dichloroethane-d4	7.98	65	193815	11.89	ug/l	0.01
Spiked Amount 10.000			Recovery =	118.90%		
54) Toluene-d8	11.03	98	816150	10.71	ug/l	0.02
Spiked Amount 10.000			Recovery =	107.10%		
76) 4-Bromofluorobenzene	16.01	95	281912	10.13	ug/l	0.03
Spiked Amount 10.000			Recovery =	101.30%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.71	96	19469	0.85	ug/l	88
31) Chloroform	6.93	83	82117	2.16	ug/l	94
44) Trichloroethene	9.08	130	13128	0.61	ug/l	94
61) Tetrachloroethene	12.29	164	272140	14.33	ug/l	99

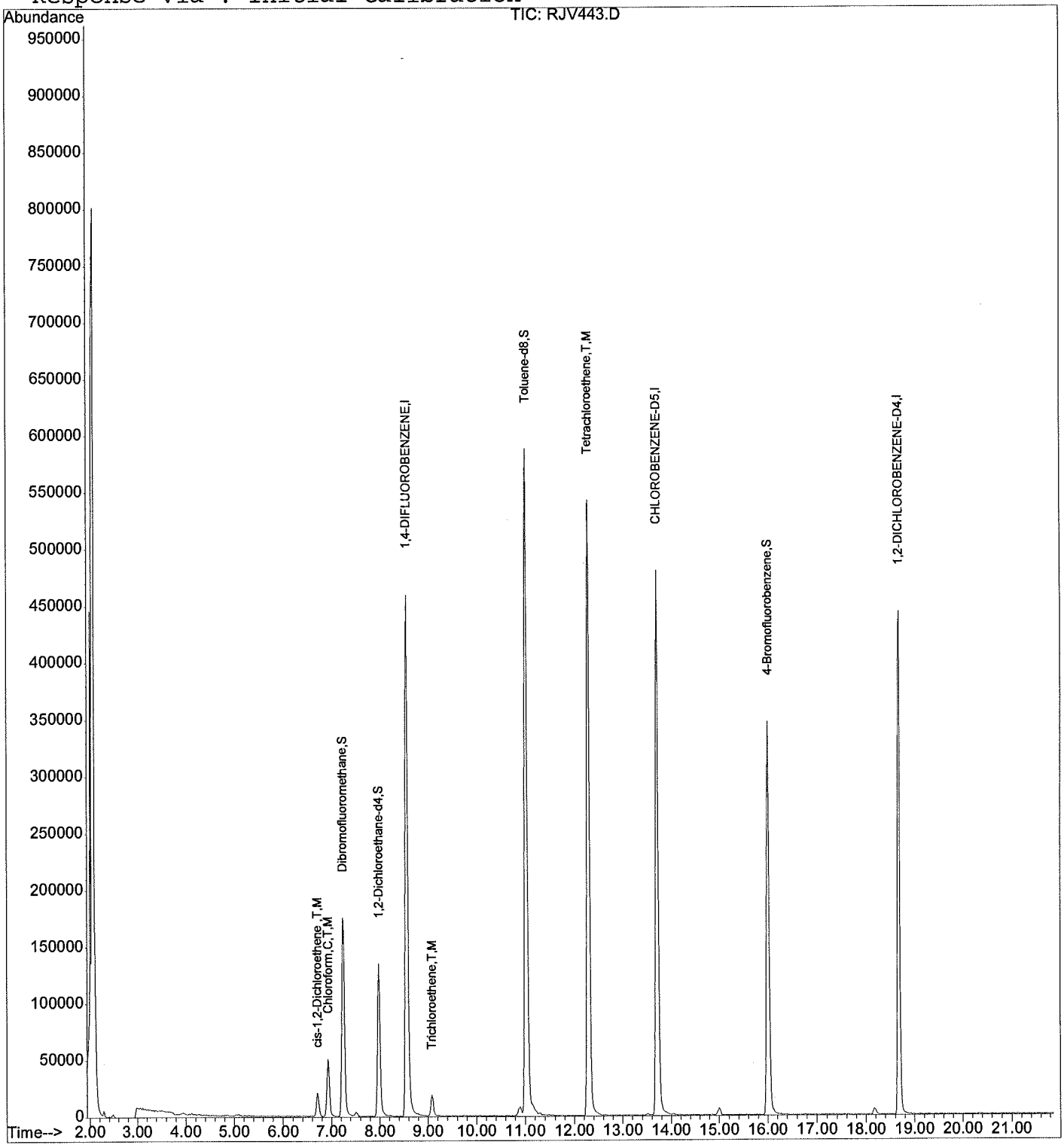
(#) = qualifier out of range (m) = manual integration

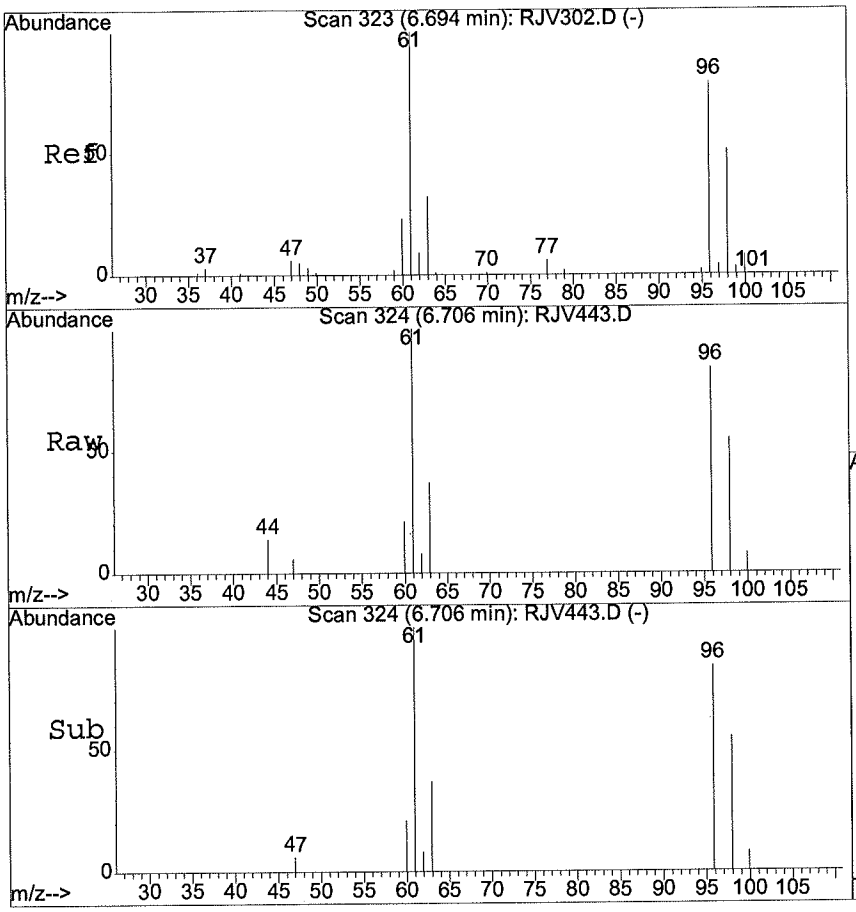
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV443.D
Acq On : 17 Oct 2024 2:32 am
Sample : 24J055-06
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:26 2024

Vial: 17
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

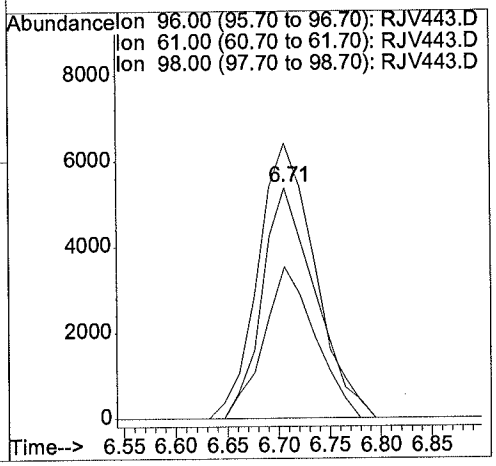


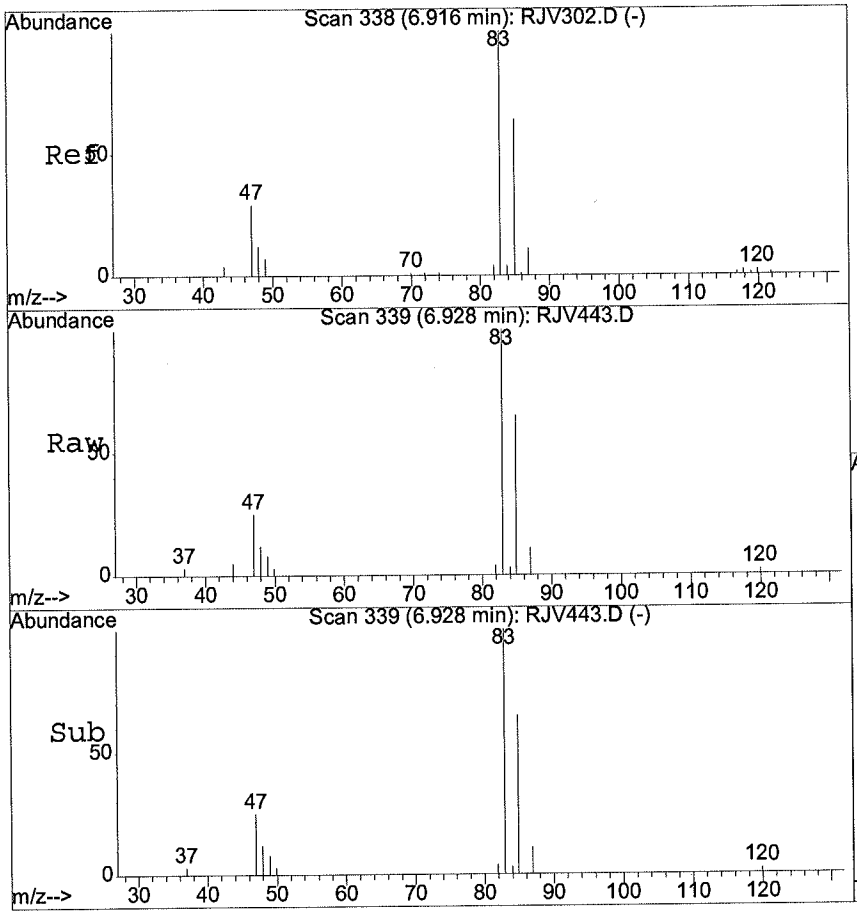


#30
cis-1,2-Dichloroethene
Concen: 0.85 ug/l
RT: 6.71 min Scan# 324
Delta R.T. 0.01 min
Lab File: RJV443.D
Acq: 17 Oct 2024 2:32 am

Tgt Ion: 96 Resp: 19469

Ion	Ratio	Lower	Upper
96	100		
61	127.8	118.2	178.2
98	63.5	35.6	95.6

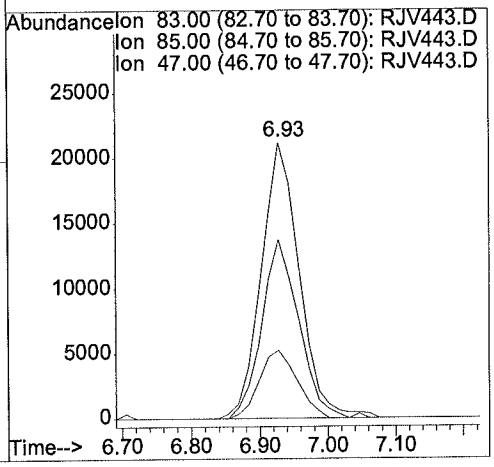


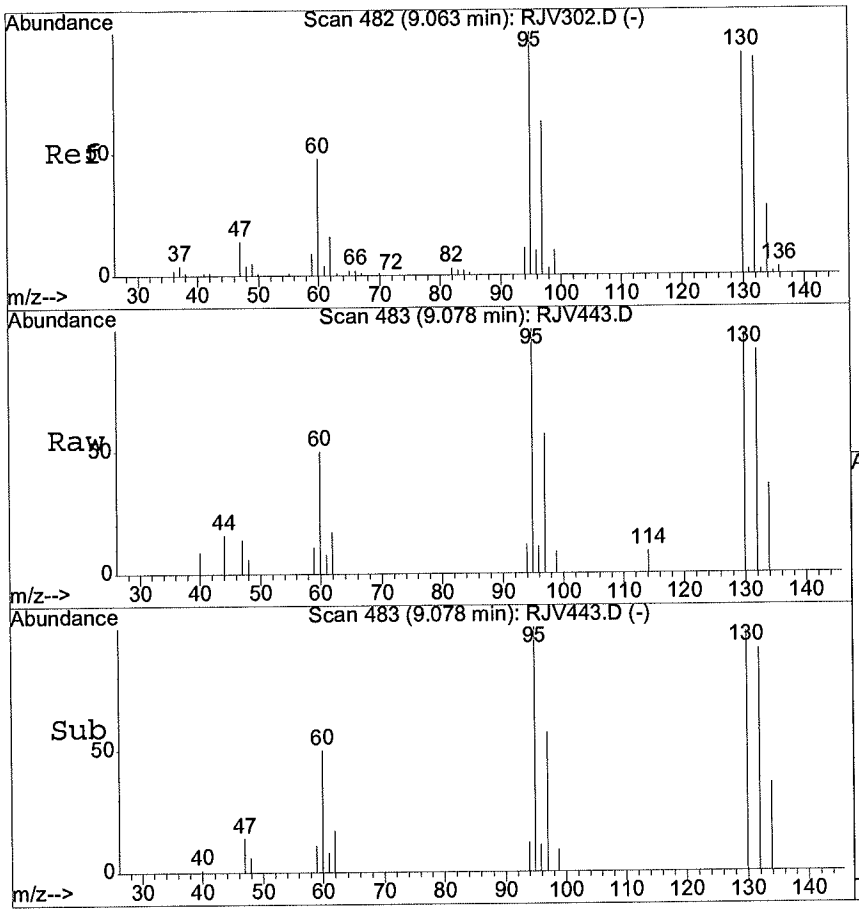


#31
Chloroform
Concen: 2.16 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV443.D
Acq: 17 Oct 2024 2:32 am

Tgt Ion: 83 Resp: 82117

Ion	Ratio	Lower	Upper
83	100		
85	63.3	37.8	97.8
47	24.6	0.0	59.1

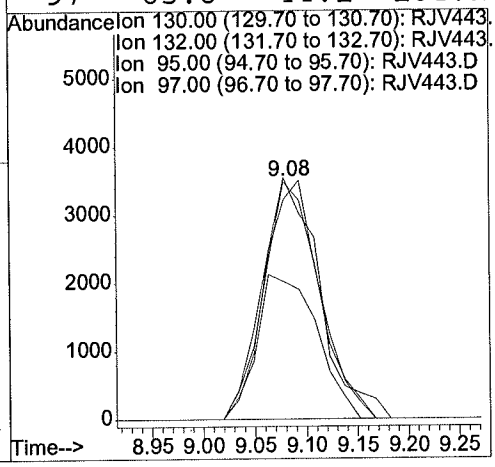


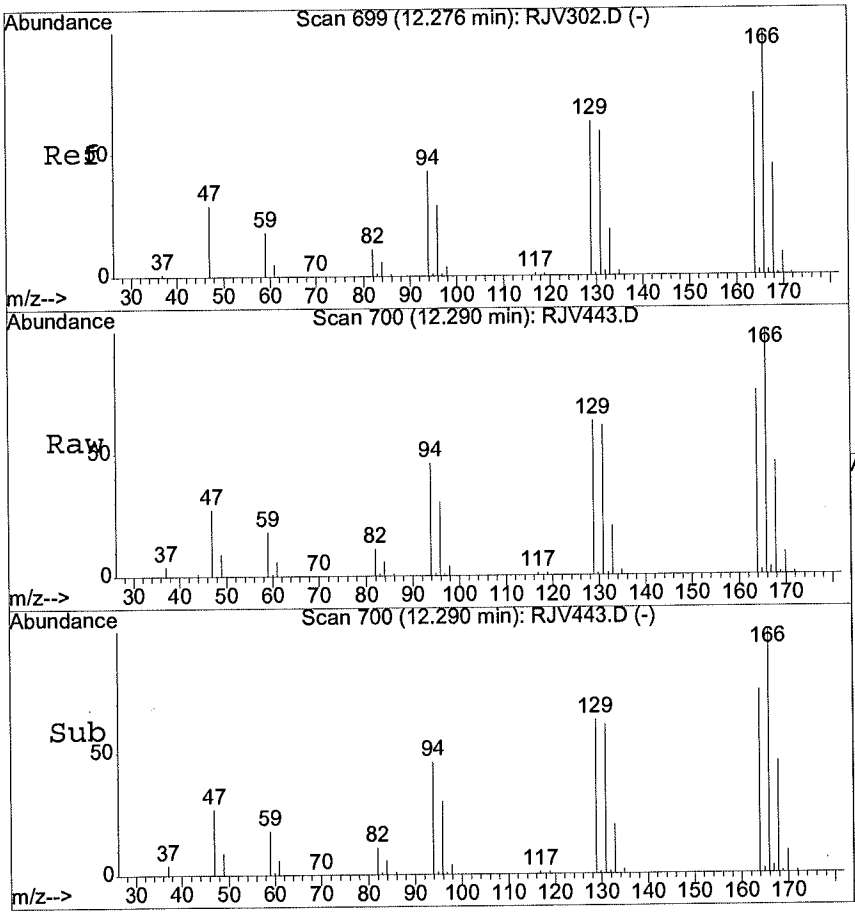


#44
Trichloroethene
Concen: 0.61 ug/l
RT: 9.08 min Scan# 483
Delta R.T. 0.02 min
Lab File: RJV443.D
Acq: 17 Oct 2024 2:32 am

Tgt Ion:130 Resp: 13128

Ion	Ratio	Lower	Upper
130	100		
132	99.9	67.4	127.4
95	104.9	81.2	141.2
97	65.8	44.1	104.1

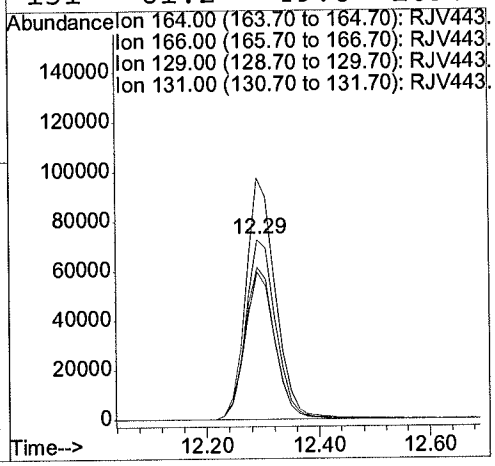




#61
Tetrachloroethene
Concen: 14.33 ug/l
RT: 12.29 min Scan# 700
Delta R.T. 0.01 min
Lab File: RJV443.D
Acq: 17 Oct 2024 2:32 am

Tgt Ion:164 Resp: 272140

Ion	Ratio	Lower	Upper
164	100		
166	131.2	101.7	161.7
129	83.9	53.9	113.9
131	81.2	49.8	109.8



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 08:35
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 03:01
Sample ID	: RG03-GW100324	Date Analyzed:	10/17/24 03:01
Lab Samp ID:	24J055-07	Dilution Factor:	1
Lab File ID:	RJV444	Matrix:	WATER
Ext Btch ID:	VO01J1B	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.37J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.6	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	2.0	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	51	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	1.6	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	12.1	10.0	121	70-130
Bromofluorobenzene	10.2	10.0	102	70-130
Toluene-dB	10.6	10.0	106	70-130
Dibromofluoromethane	11.3	10.0	113	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV444.D
Acq On : 17 Oct 2024 3:01 am
Sample : 24J055-07
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:26 2024

Vial: 18
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	694602	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	552129	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	232117	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	204717	11.28	ug/l	0.01
Spiked Amount 10.000			Recovery =	112.80%		
41) 1,2-Dichloroethane-d4	7.98	65	192639	12.05	ug/l	0.01
Spiked Amount 10.000			Recovery =	120.50%		
54) Toluene-d8	11.03	98	802757	10.57	ug/l	0.02
Spiked Amount 10.000			Recovery =	105.70%		
76) 4-Bromofluorobenzene	16.01	95	279777	10.18	ug/l	0.03
Spiked Amount 10.000			Recovery =	101.80%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.71	96	44893	2.01	ug/l	87
31) Chloroform	6.93	83	97789	2.63	ug/l	96
35) 1,1,1-Trichloroethane	7.52	97	12373	0.37	ug/l	94
44) Trichloroethene	9.08	130	32907	1.56	ug/l	96
61) Tetrachloroethene	12.29	164	973134	51.46	ug/l	99

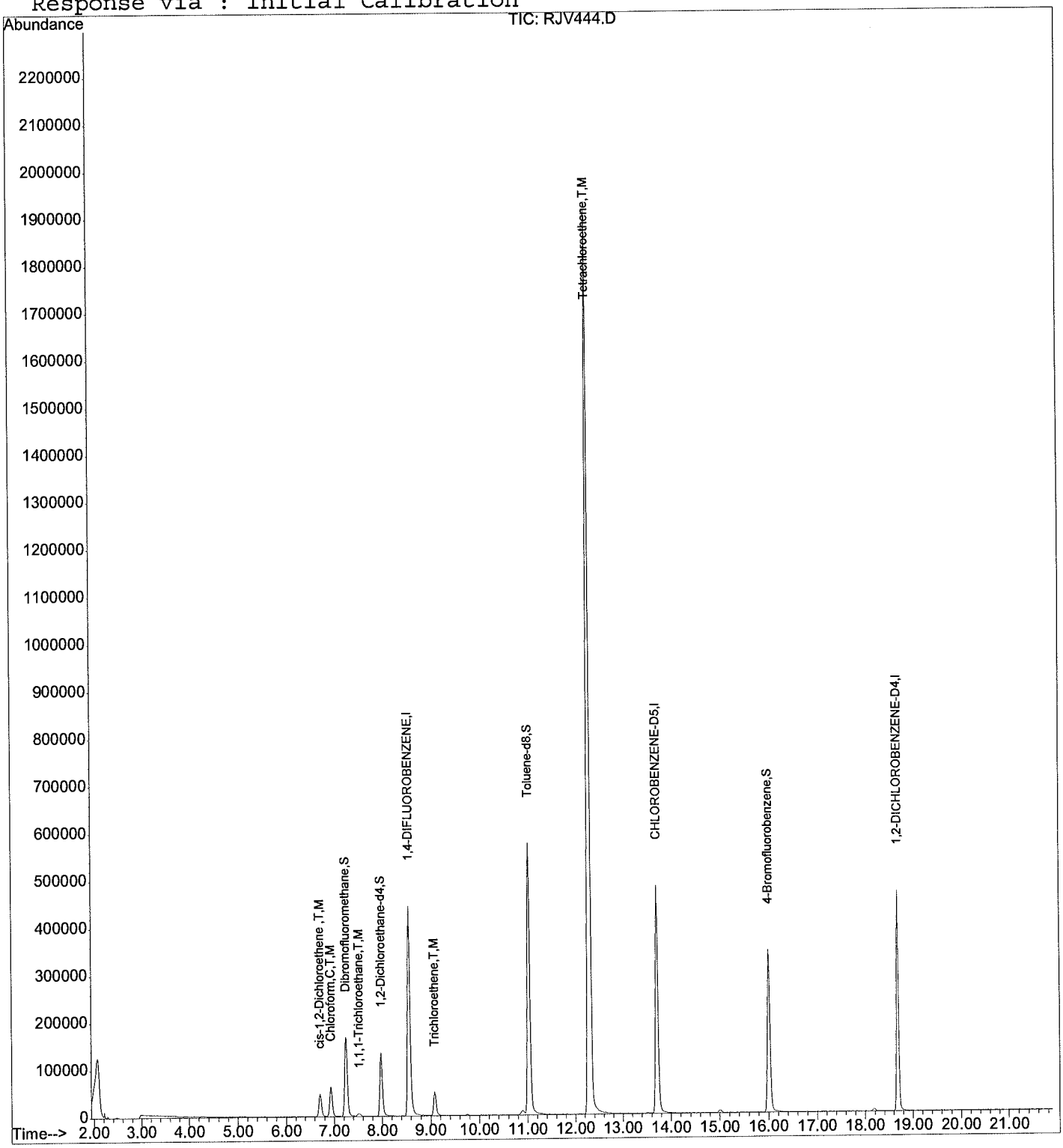
(#) = qualifier out of range (m) = manual integration
RJV444.D VO01J12.M Wed Oct 30 17:27:11 2024

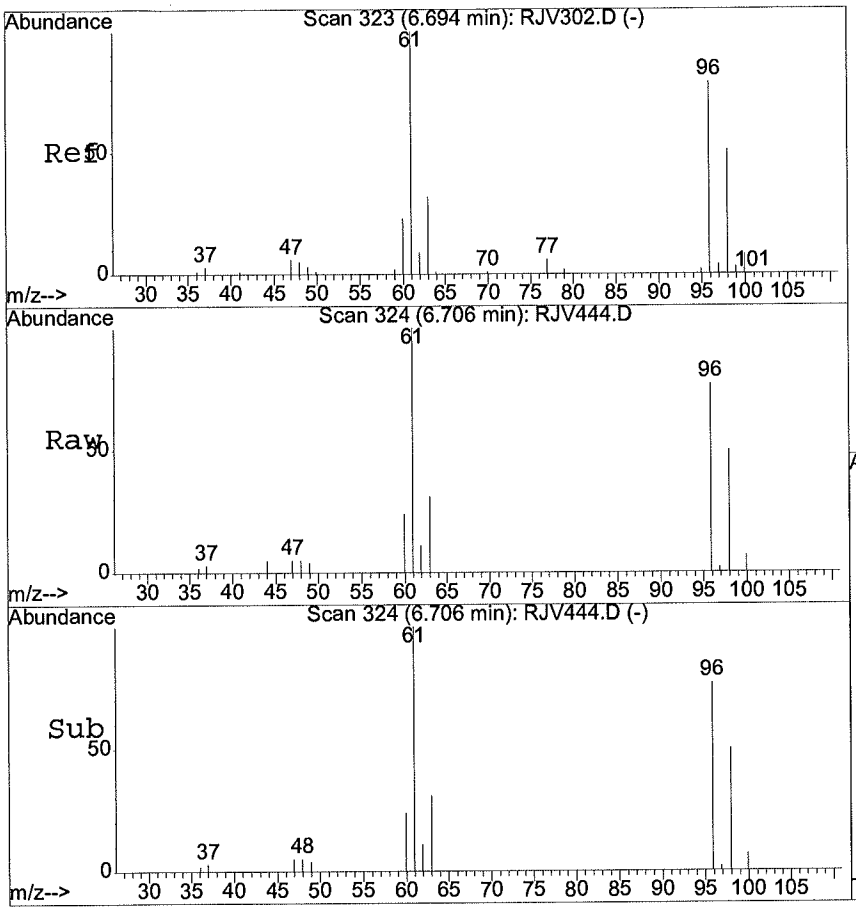
Data File : D:\HPCHEM\1\DATA\24J16\RJV444.D
Acq On : 17 Oct 2024 3:01 am
Sample : 24J055-07
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:26 2024

Vial: 18
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

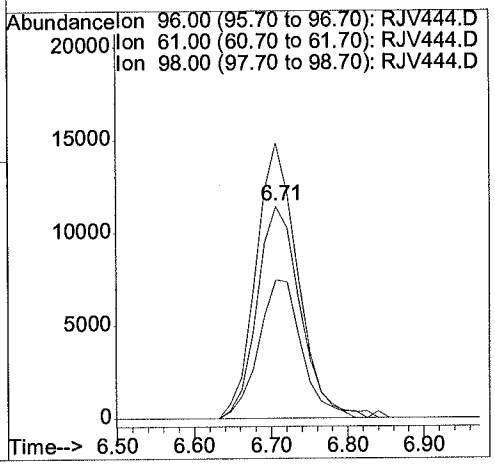


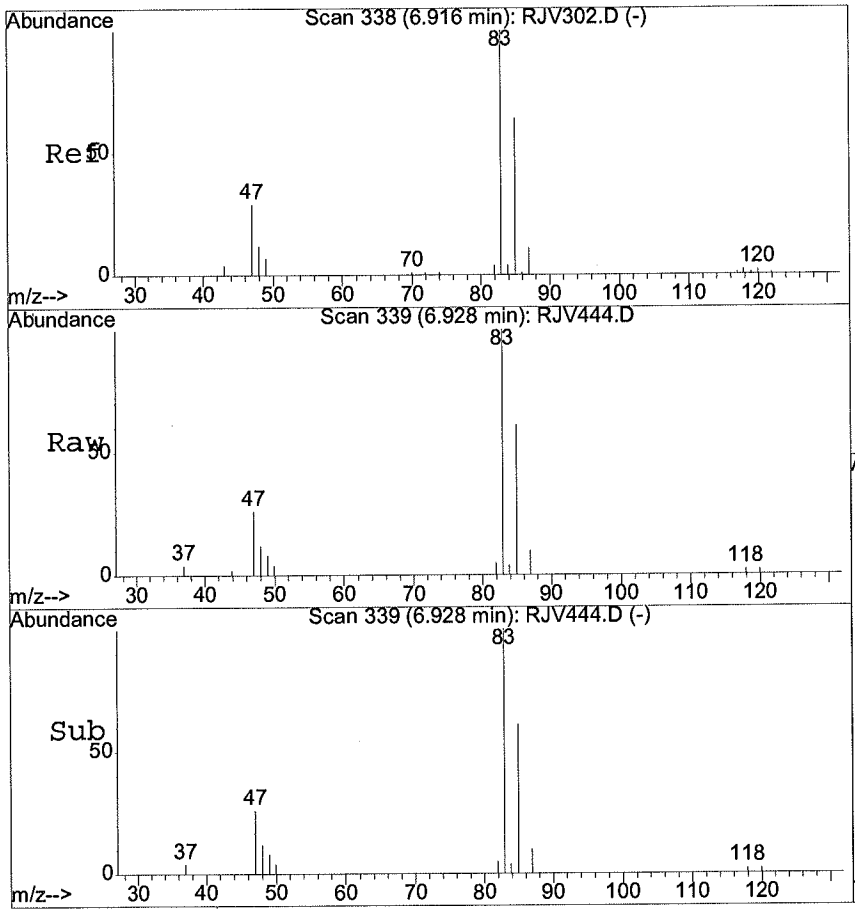


#30
cis-1,2-Dichloroethene
Concen: 2.01 ug/l
RT: 6.71 min Scan# 324
Delta R.T. 0.01 min
Lab File: RJV444.D
Acq: 17 Oct 2024 3:01 am

Tgt Ion: 96 Resp: 44893

Ion	Ratio	Lower	Upper
96	100		
61	125.4	118.2	178.2
98	64.9	35.6	95.6

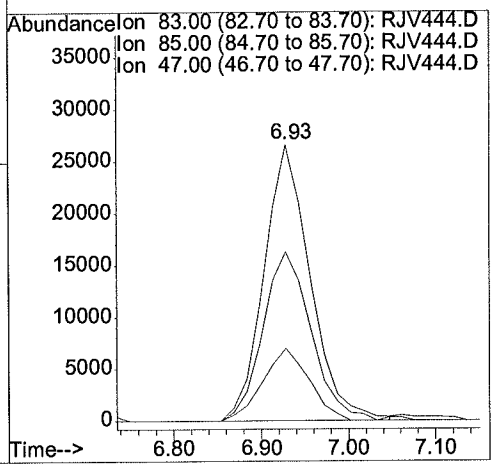


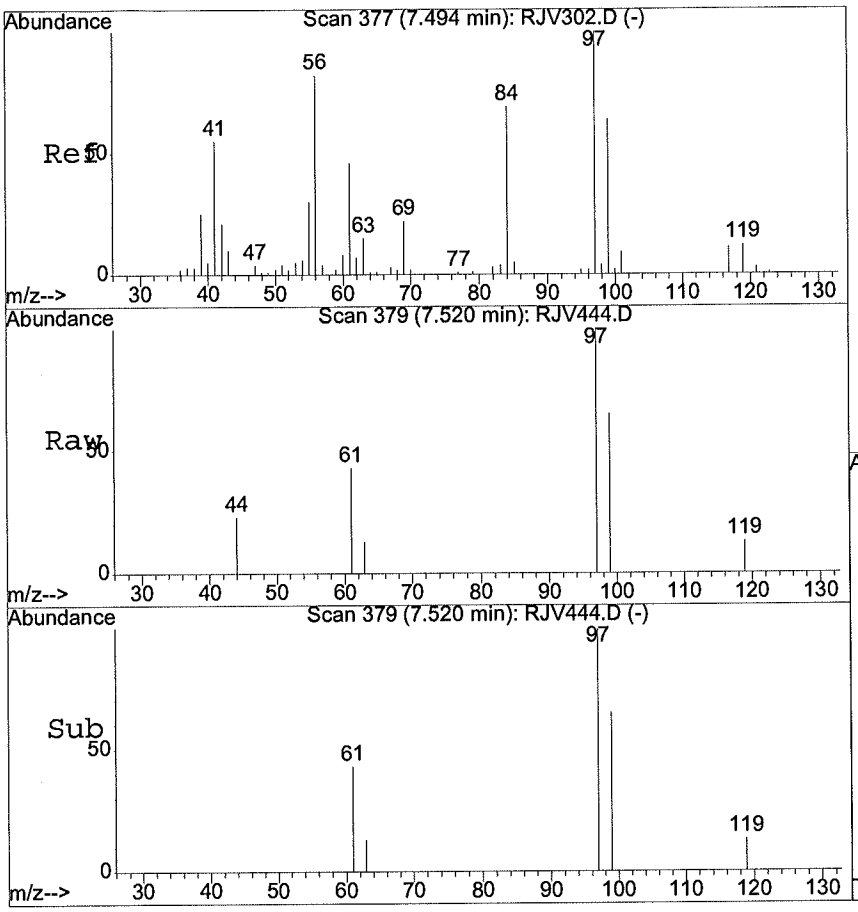


#31
Chloroform
Concen: 2.63 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV444.D
Acq: 17 Oct 2024 3:01 am

Tgt Ion: 83 Resp: 97789

Ion	Ratio	Lower	Upper
83	100		
85	64.4	37.8	97.8
47	26.4	0.0	59.1

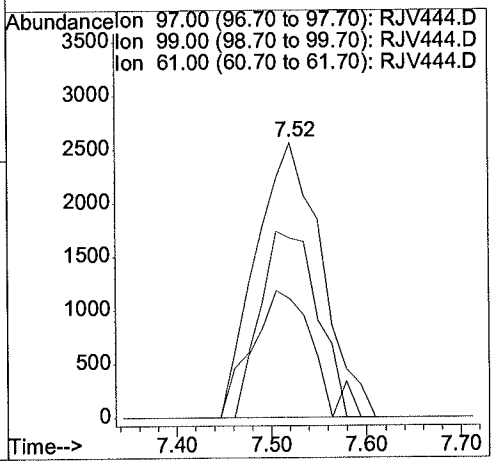


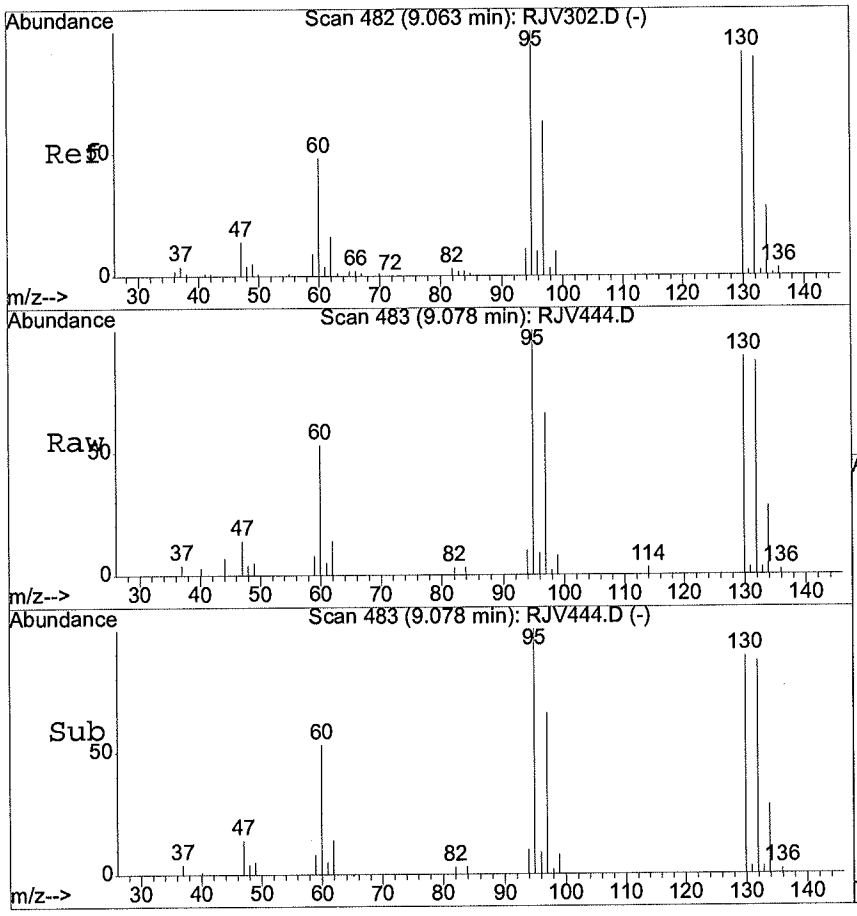


#35
1,1,1-Trichloroethane
Concen: 0.37 ug/l
RT: 7.52 min Scan# 379
Delta R.T. 0.03 min
Lab File: RJV444.D
Acq: 17 Oct 2024 3:01 am

Tgt Ion: 97 Resp: 12373

Ion	Ratio	Lower	Upper
97	100		
99	62.9	35.2	95.2
61	39.8	16.5	76.5

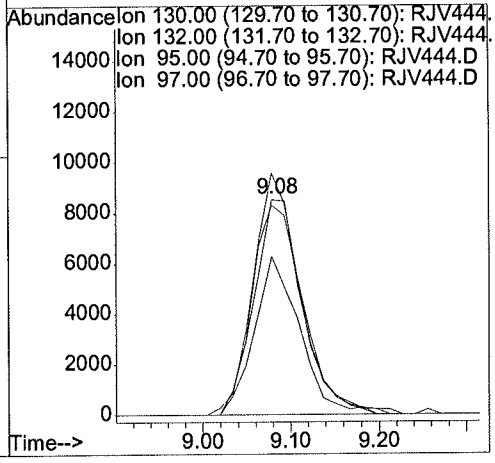


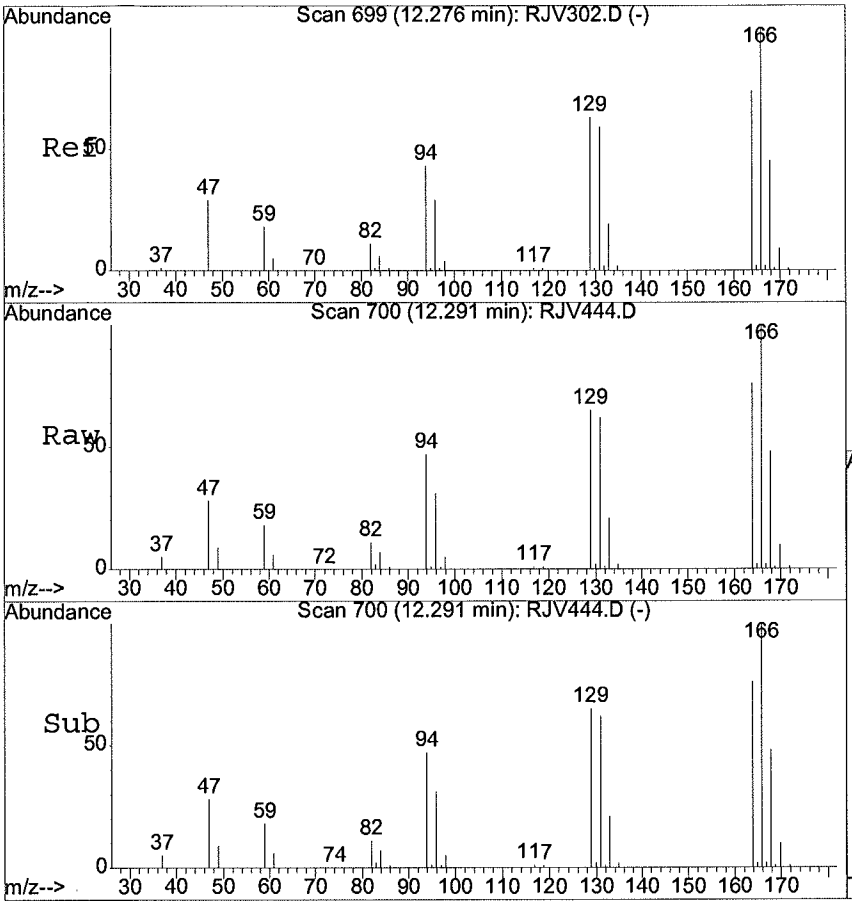


#44
Trichloroethene
Concen: 1.56 ug/l
RT: 9.08 min Scan# 483
Delta R.T. 0.02 min
Lab File: RJV444.D
Acq: 17 Oct 2024 3:01 am

Tgt Ion:130 Resp: 32907

Ion	Ratio	Lower	Upper
130	100		
132	102.5	67.4	127.4
95	110.4	81.2	141.2
97	68.7	44.1	104.1

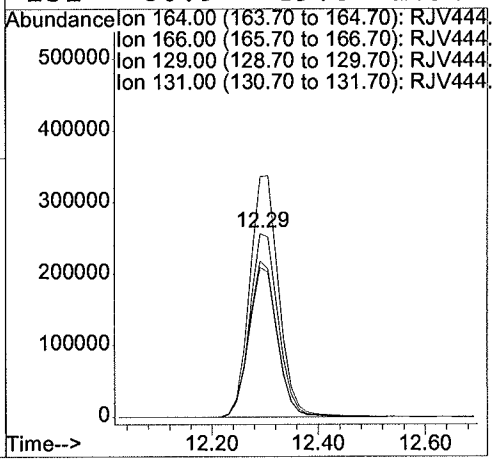




#61
Tetrachloroethene
Concen: 51.46 ug/l
RT: 12.29 min Scan# 700
Delta R.T. 0.01 min
Lab File: RJV444.D
Acq: 17 Oct 2024 3:01 am

Tgt Ion:164 Resp: 973134

Ion	Ratio	Lower	Upper
164	100		
166	132.7	101.7	161.7
129	84.3	53.9	113.9
131	80.9	49.8	109.8



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 11:30
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 03:31
Sample ID	: RG04-GW100324	Date Analyzed:	10/17/24 03:31
Lab Samp ID:	24J055-08	Dilution Factor:	1
Lab File ID:	RJV445	Matrix:	WATER
Ext Btch ID:	V001J1B	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	1.6	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	11	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.46J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.B	10.0	11B	70-130
Bromofluorobenzene	10.1	10.0	101	70-130
Toluene-dB	10.7	10.0	107	70-130
Dibromofluoromethane	11.3	10.0	113	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV445.D
Acq On : 17 Oct 2024 3:31 am
Sample : 24J055-08
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:28 2024

Vial: 19
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	705657	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	553088	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	233918	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	207367	11.25	ug/l	0.01
Spiked Amount 10.000			Recovery =	112.50%		
41) 1,2-Dichloroethane-d4	7.98	65	191002	11.76	ug/l	0.01
Spiked Amount 10.000			Recovery =	117.60%		
54) Toluene-d8	11.03	98	814783	10.71	ug/l	0.02
Spiked Amount 10.000			Recovery =	107.10%		
76) 4-Bromofluorobenzene	16.01	95	279728	10.10	ug/l	0.03
Spiked Amount 10.000			Recovery =	101.00%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	61819	1.64	ug/l	94
44) Trichloroethene	9.08	130	9726	0.46	ug/l	89
61) Tetrachloroethene	12.29	164	216523	11.43	ug/l	99

(#) = qualifier out of range (m) = manual integration
RJV445.D VO01J12.M Wed Oct 30 17:28:18 2024 Page 1

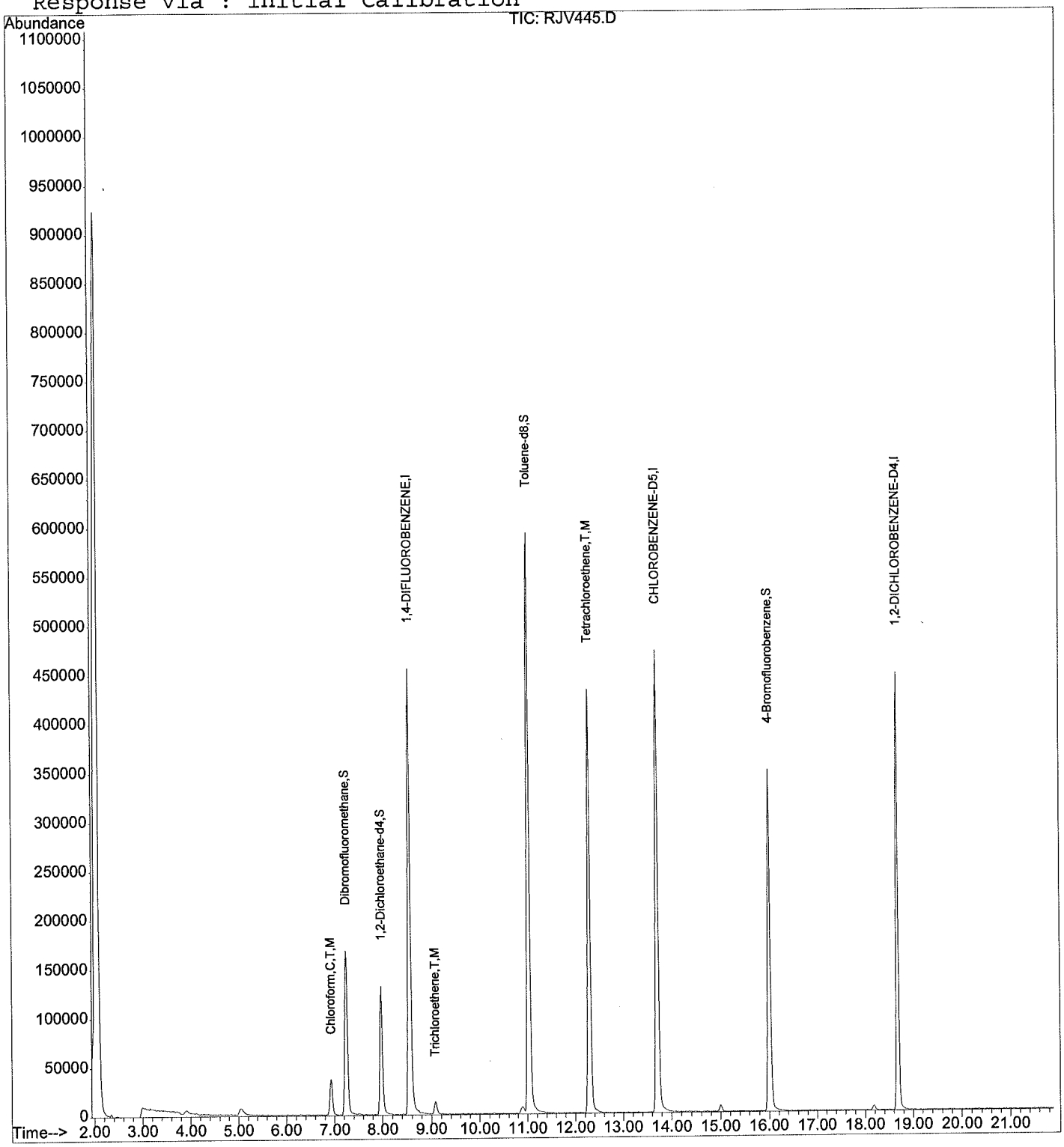
Quantitation Report

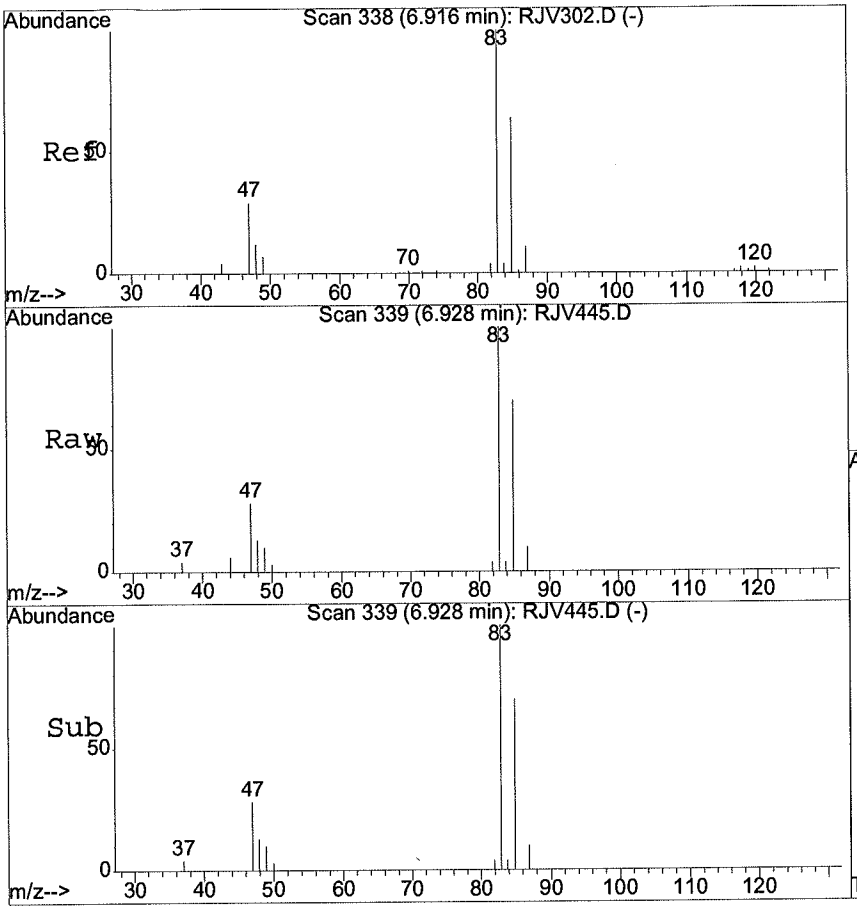
Data File : D:\HPCHEM\1\DATA\24J16\RJV445.D
Acq On : 17 Oct 2024 3:31 am
Sample : 24J055-08
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:28 2024

Vial: 19
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

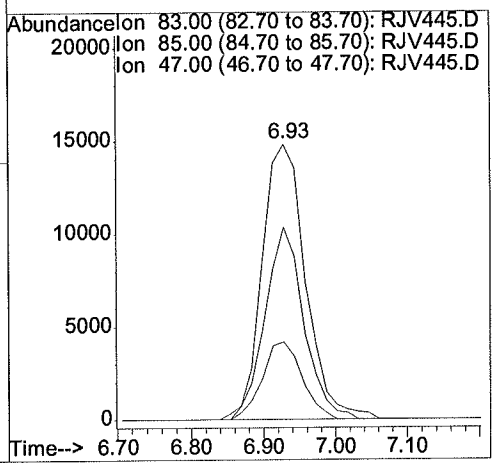


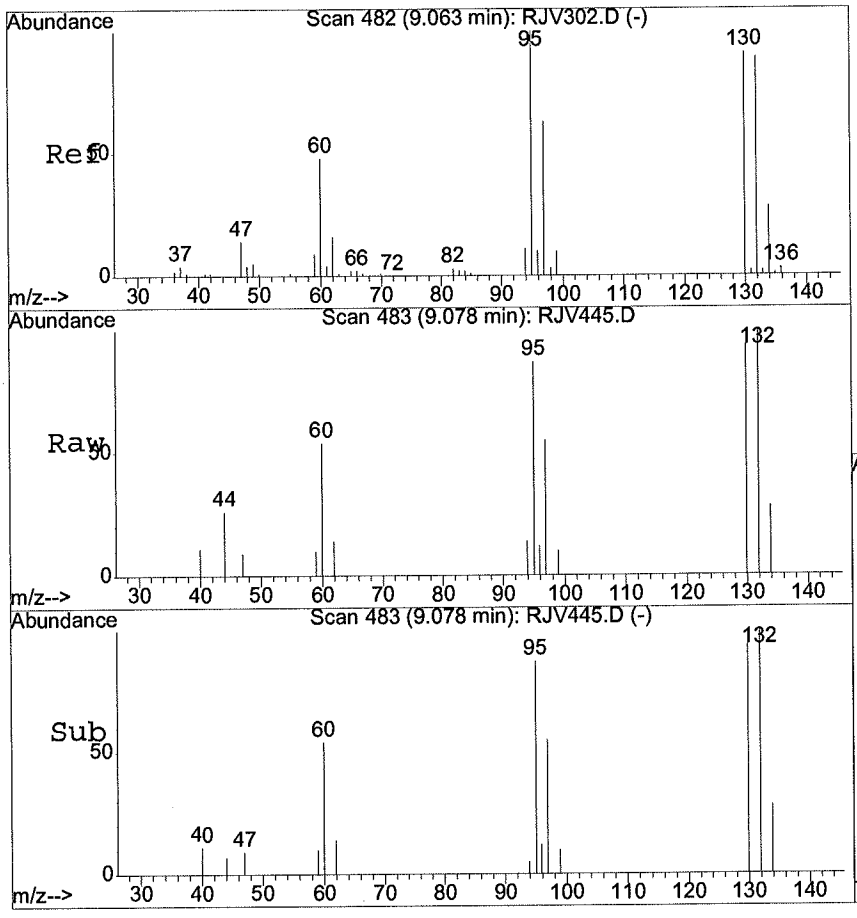


#31
Chloroform
Concen: 1.64 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV445.D
Acq: 17 Oct 2024 3:31 am

Tgt Ion: 83 Resp: 61819

Ion	Ratio	Lower	Upper
83	100		
85	62.6	37.8	97.8
47	26.0	0.0	59.1

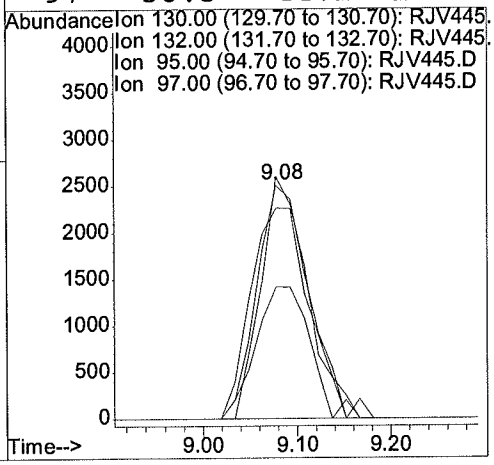


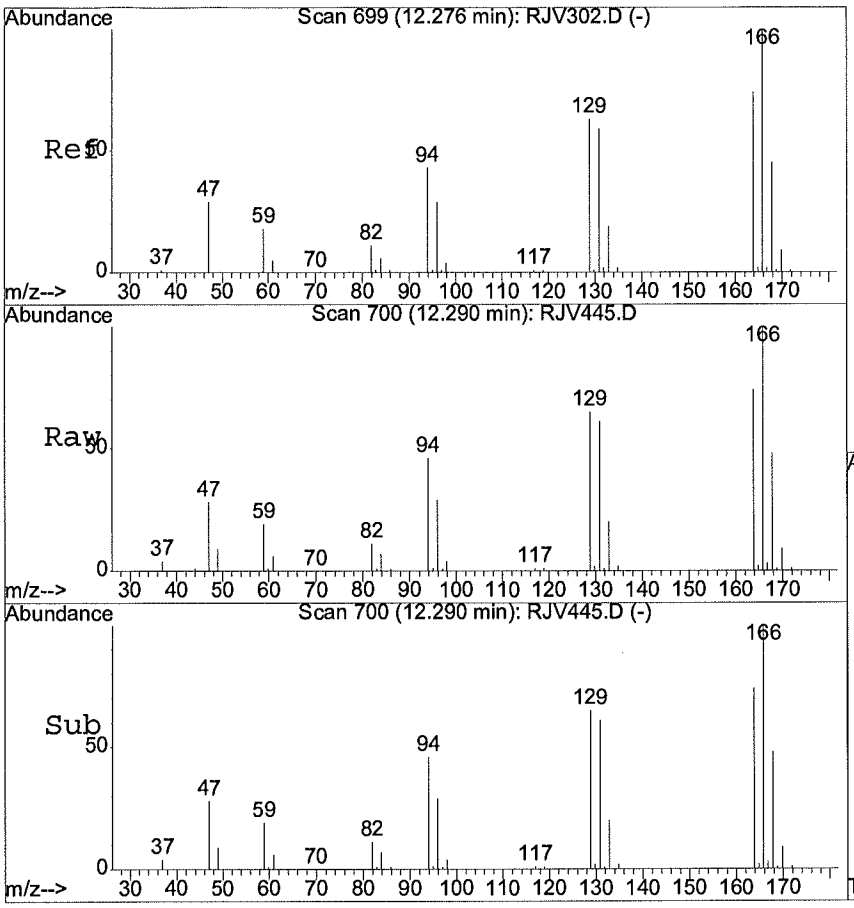


#44
Trichloroethene
Concen: 0.46 ug/l
RT: 9.08 min Scan# 483
Delta R.T. 0.02 min
Lab File: RJV445.D
Acq: 17 Oct 2024 3:31 am

Tgt Ion:130 Resp: 9726

Ion	Ratio	Lower	Upper
130	100		
132	92.2	67.4	127.4
95	99.1	81.2	141.2
97	58.5	44.1	104.1

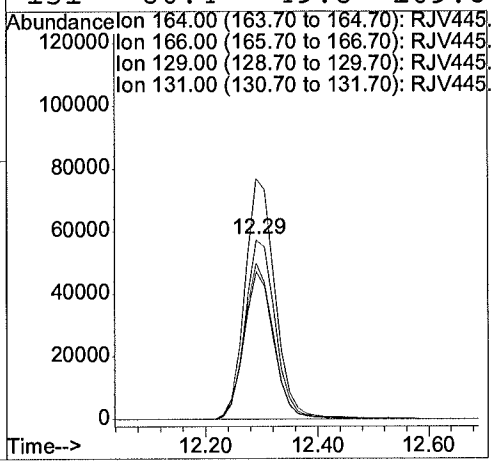




#61
Tetrachloroethene
Concen: 11.43 ug/l
RT: 12.29 min Scan# 700
Delta R.T. 0.01 min
Lab File: RJV445.D
Acq: 17 Oct 2024 3:31 am

Tgt Ion:164 Resp: 216523

Ion	Ratio	Lower	Upper
164	100		
166	133.2	101.7	161.7
129	84.4	53.9	113.9
131	80.4	49.8	109.8



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 11:50
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 04:01
Sample ID	: RG05-GW100324	Date Analyzed:	10/17/24 04:01
Lab Samp ID:	24J055-09	Dilution Factor:	1
Lab File ID:	RJV446	Matrix:	WATER
Ext Btch ID:	VO01J18	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.1	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	8.9	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.14J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.9	10.0	119	70-130
Bromofluorobenzene	9.63	10.0	96	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	11.5	10.0	115	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV446.D
Acq On : 17 Oct 2024 4:01 am
Sample : 24J055-09
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:28 2024

Vial: 20
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	673483	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	526196	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	235049	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	201771	11.47	ug/l	0.01
Spiked Amount 10.000			Recovery =	114.70%		
41) 1,2-Dichloroethane-d4	7.98	65	183690	11.85	ug/l	0.01
Spiked Amount 10.000			Recovery =	118.50%		
54) Toluene-d8	11.03	98	772826	10.68	ug/l	0.01
Spiked Amount 10.000			Recovery =	106.80%		
76) 4-Bromofluorobenzene	16.01	95	268084	9.63	ug/l	0.03
Spiked Amount 10.000			Recovery =	96.30%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	110556	3.07	ug/l	95
44) Trichloroethene	9.09	130	2930	0.14	ug/l	85
61) Tetrachloroethene	12.30	164	160259	8.89	ug/l	97

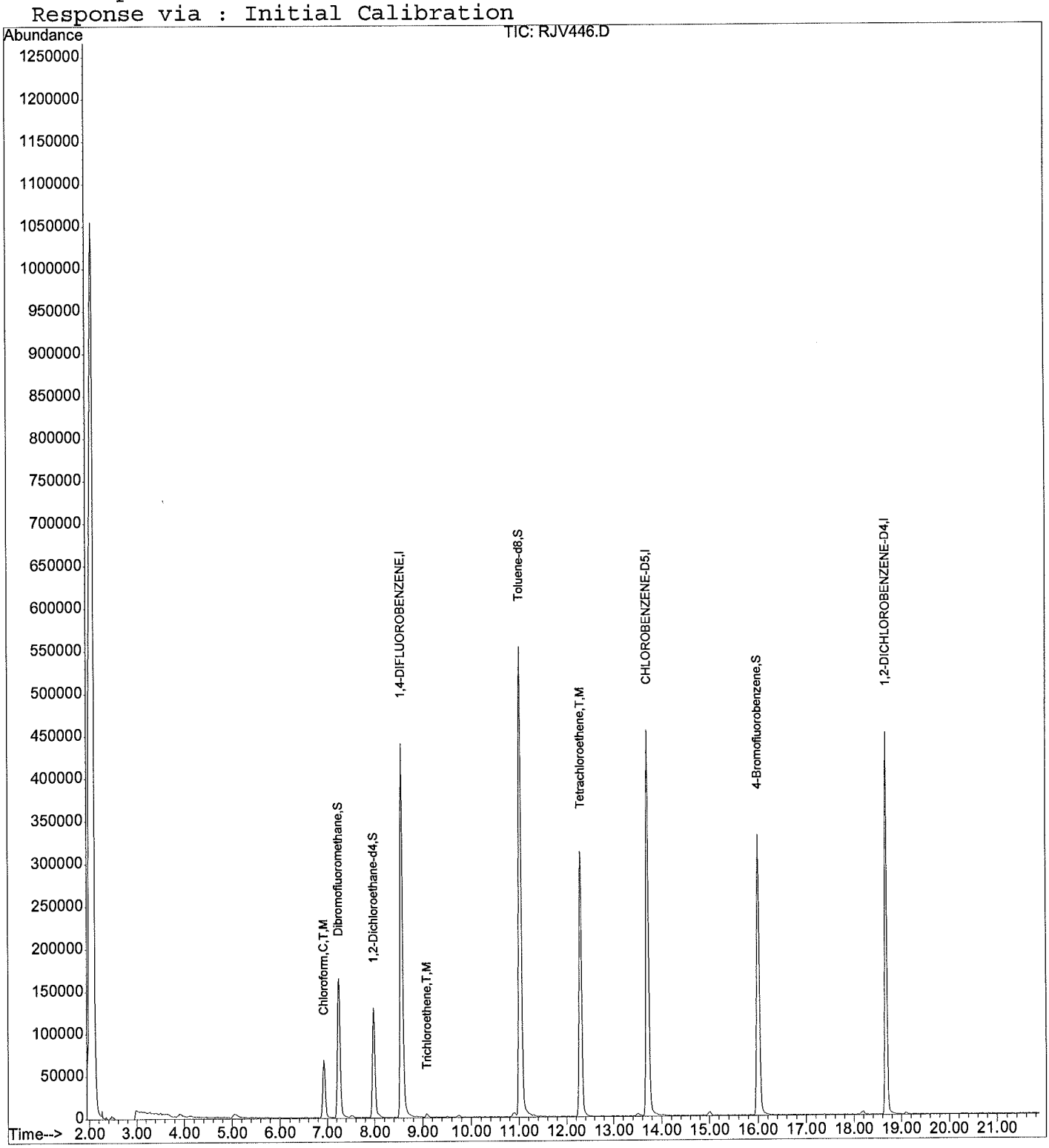
(#) = qualifier out of range (m) = manual integration

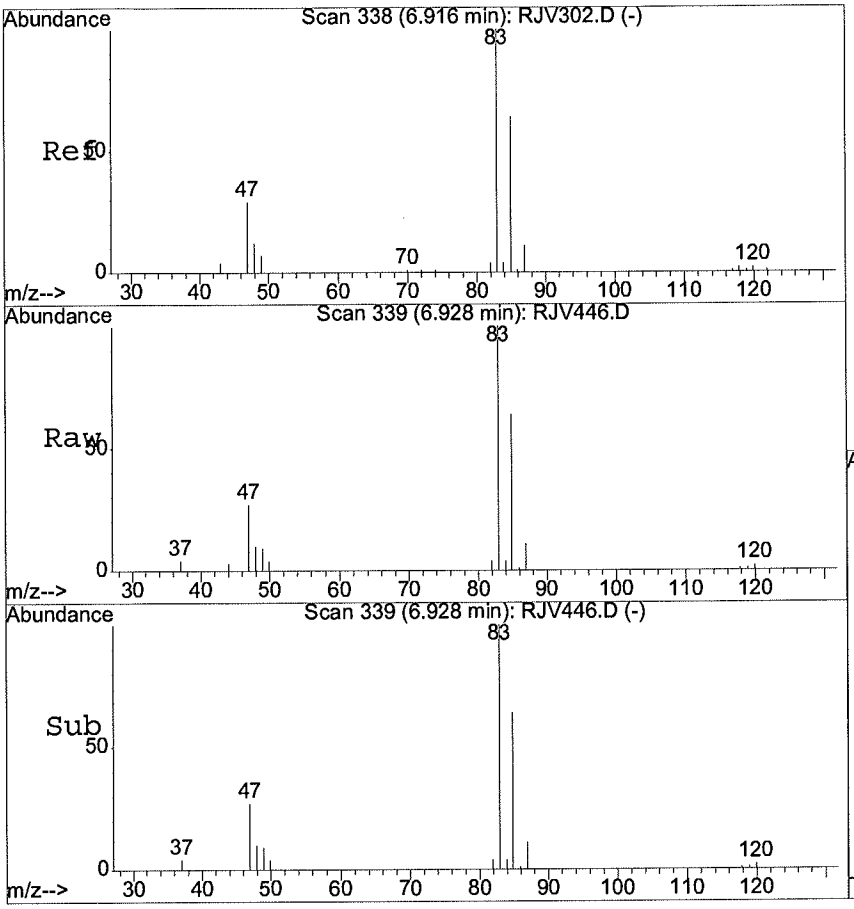
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV446.D
Acq On : 17 Oct 2024 4:01 am
Sample : 24J055-09
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:28 2024

Vial: 20
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

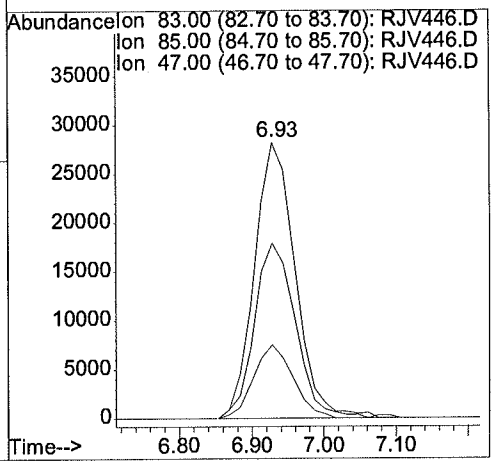


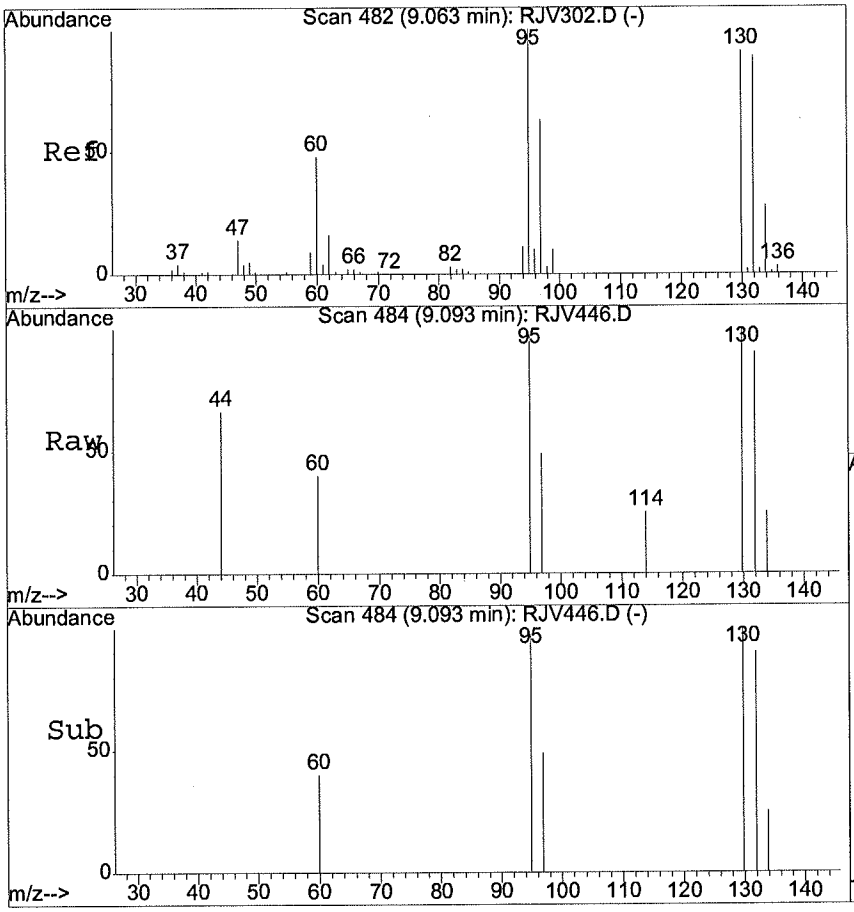


#31
Chloroform
Concen: 3.07 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV446.D
Acq: 17 Oct 2024 4:01 am

Tgt Ion: 83 Resp: 110556

Ion	Ratio	Lower	Upper
83	100		
85	64.0	37.8	97.8
47	25.8	0.0	59.1

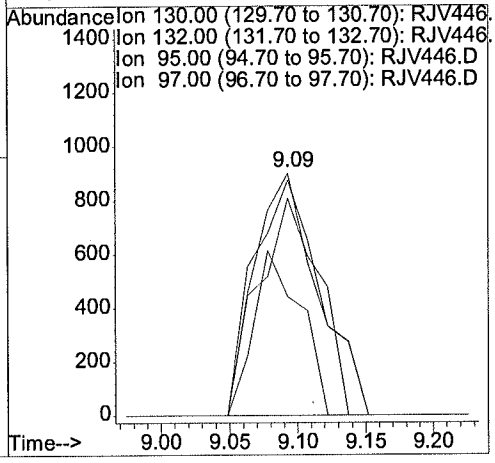


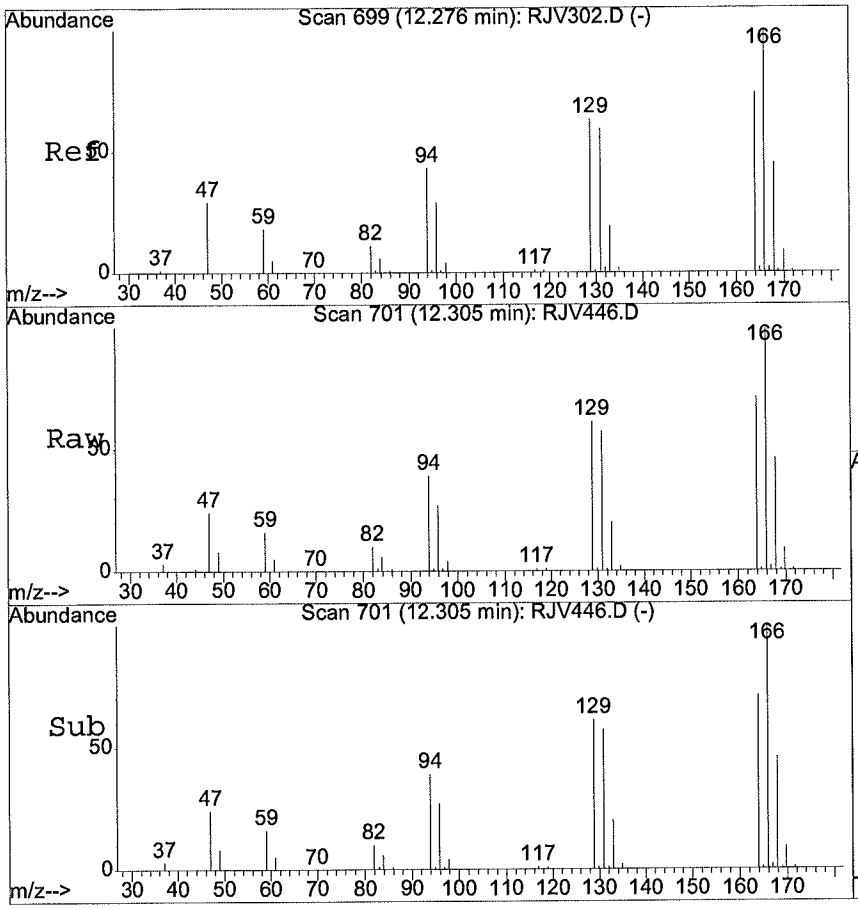


#44
Trichloroethene
Concen: 0.14 ug/l
RT: 9.09 min Scan# 484
Delta R.T. 0.03 min
Lab File: RJV446.D
Acq: 17 Oct 2024 4:01 am

Tgt Ion:130 Resp: 2930

Ion	Ratio	Lower	Upper
130	100		
132	86.2	67.4	127.4
95	102.0	81.2	141.2
97	50.6	44.1	104.1

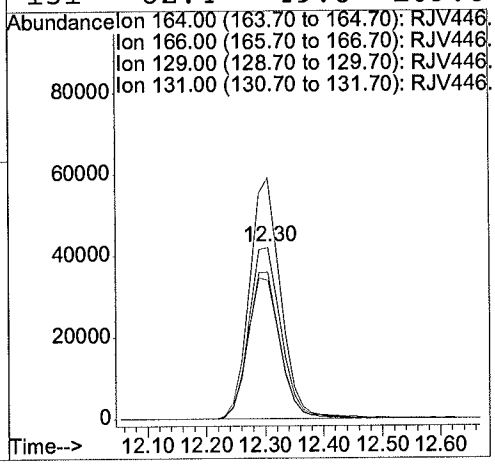




#61
Tetrachloroethene
Concen: 8.89 ug/l
RT: 12.30 min Scan# 701
Delta R.T. 0.03 min
Lab File: RJV446.D
Acq: 17 Oct 2024 4:01 am

Tgt Ion:164 Resp: 160259

Ion	Ratio	Lower	Upper
164	100		
166	135.8	101.7	161.7
129	84.7	53.9	113.9
131	82.4	49.8	109.8



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 08:15
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 04:30
Sample ID	: RG09-GW100324	Date Analyzed:	10/17/24 04:30
Lab Samp ID:	24J055-10	Dilution Factor:	1
Lab File ID:	RJV447	Matrix:	WATER
Ext Btch ID:	V001J1B	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	0.57J	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	14	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.25J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	12.1	10.0	121	70-130
Bromofluorobenzene	9.83	10.0	98	70-130
Toluene-d8	10.5	10.0	105	70-130
Dibromofluoromethane	11.4	10.0	114	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV447.D
Acq On : 17 Oct 2024 4:30 am
Sample : 24J055-10
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:28 2024

Vial: 21
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	675637	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	544438	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	230393	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	200843	11.38	ug/l	0.01
Spiked Amount 10.000			Recovery =	113.80%		
41) 1,2-Dichloroethane-d4	7.98	65	188646	12.13	ug/l	0.01
Spiked Amount 10.000			Recovery =	121.30%		
54) Toluene-d8	11.03	98	784464	10.48	ug/l	0.01
Spiked Amount 10.000			Recovery =	104.80%		
76) 4-Bromofluorobenzene	16.00	95	268090	9.83	ug/l	0.03
Spiked Amount 10.000			Recovery =	98.30%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	20800	0.57	ug/l	96
44) Trichloroethene	9.09	130	5015	0.25	ug/l	93
61) Tetrachloroethene	12.30	164	266425	14.29	ug/l	99

(#) = qualifier out of range (m) = manual integration

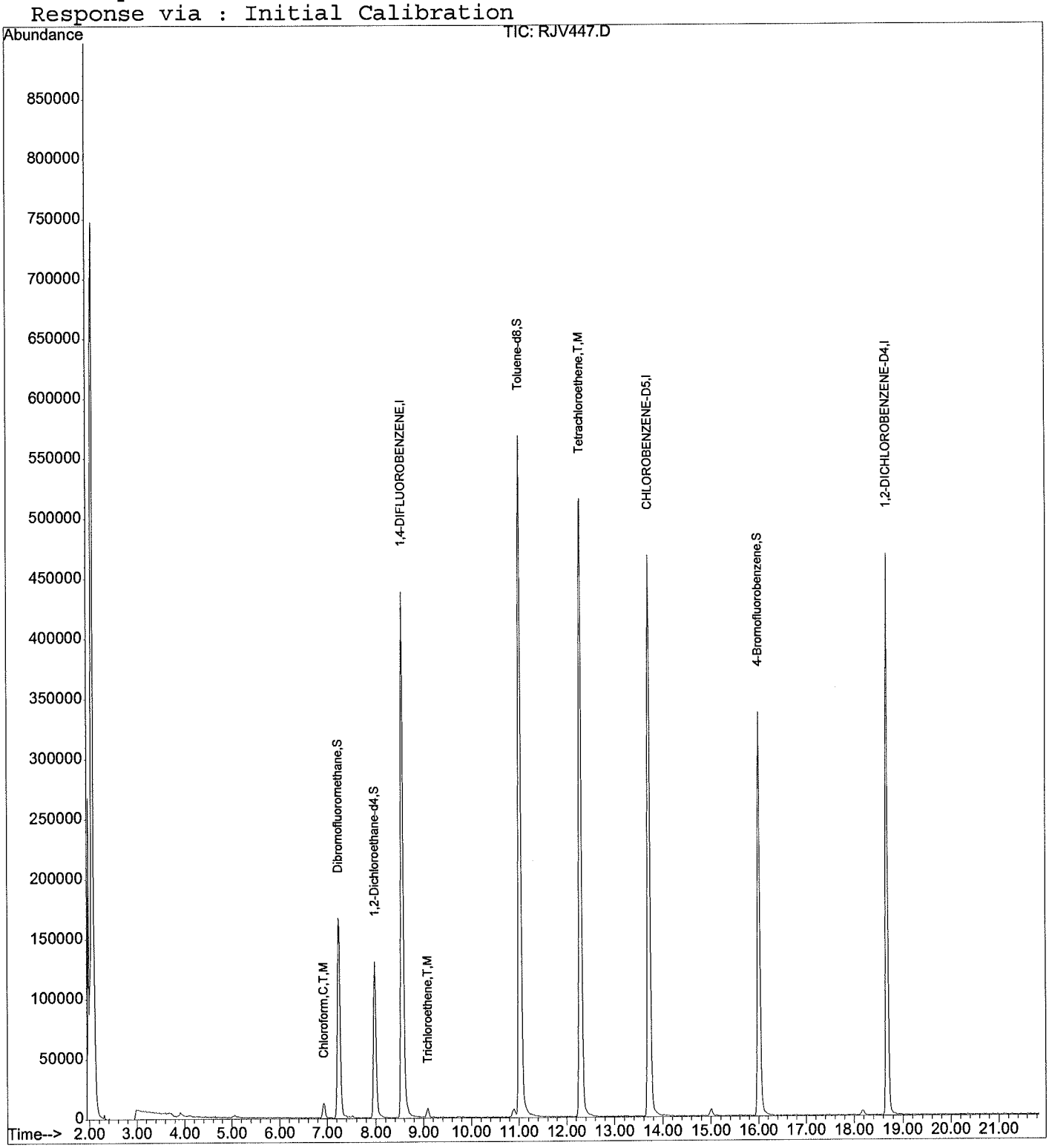
Quantitation Report

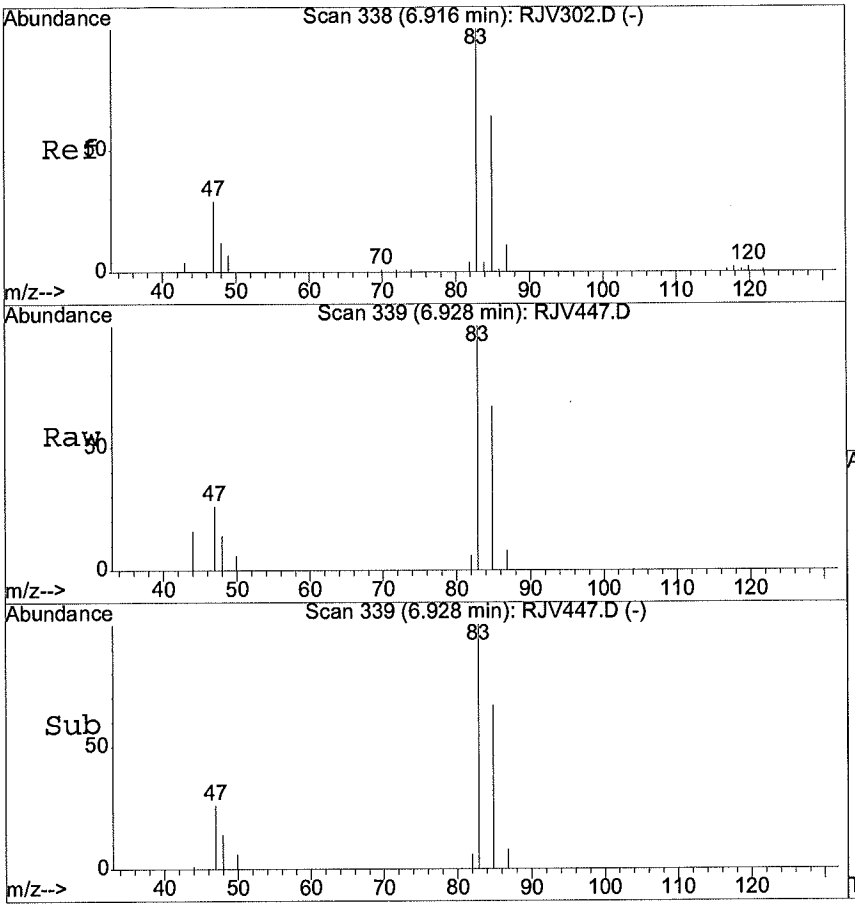
Data File : D:\HPCHEM\1\DATA\24J16\RJV447.D
Acq On : 17 Oct 2024 4:30 am
Sample : 24J055-10
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:28 2024

Vial: 21
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

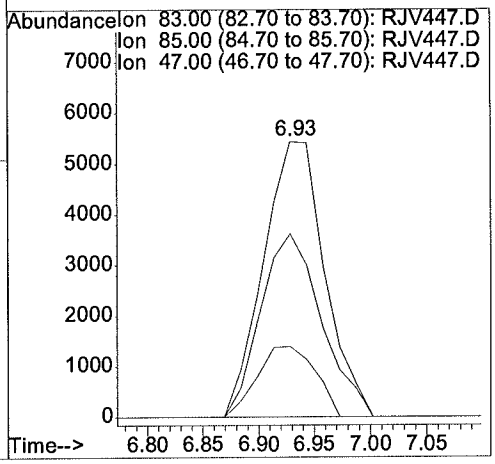


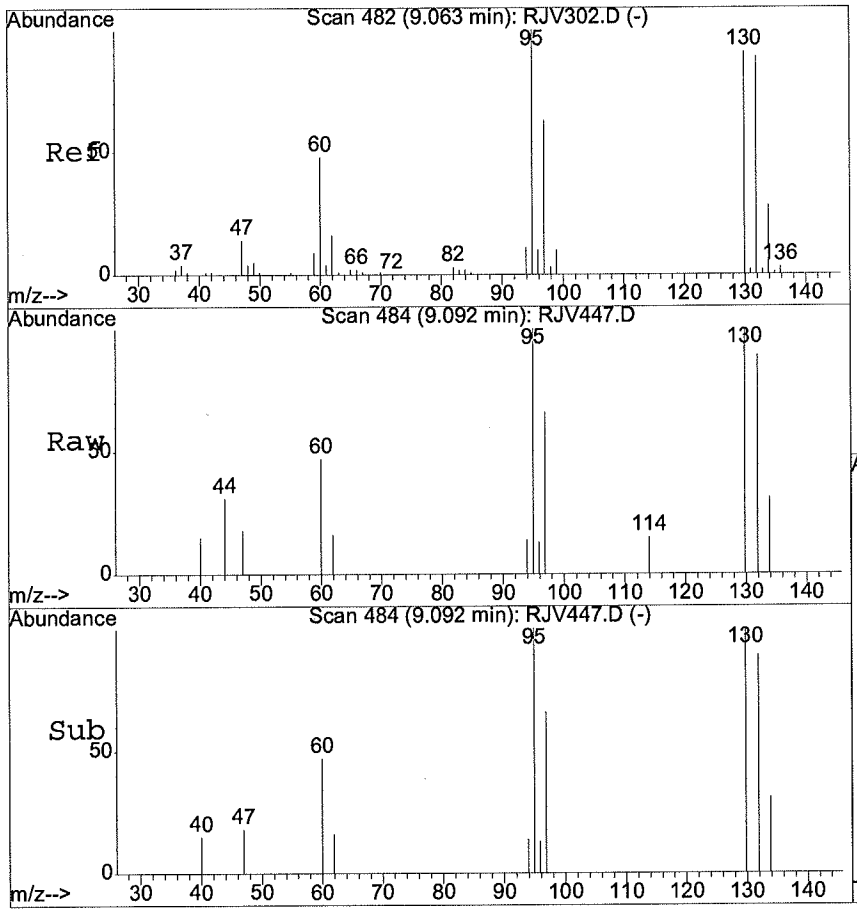


#31
Chloroform
Concen: 0.57 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV447.D
Acq: 17 Oct 2024 4:30 am

Tgt Ion: 83 Resp: 20800

Ion	Ratio	Lower	Upper
83	100		
85	66.0	37.8	97.8
47	24.4	0.0	59.1

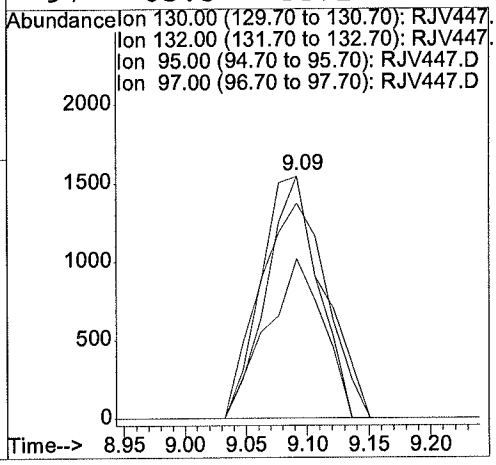


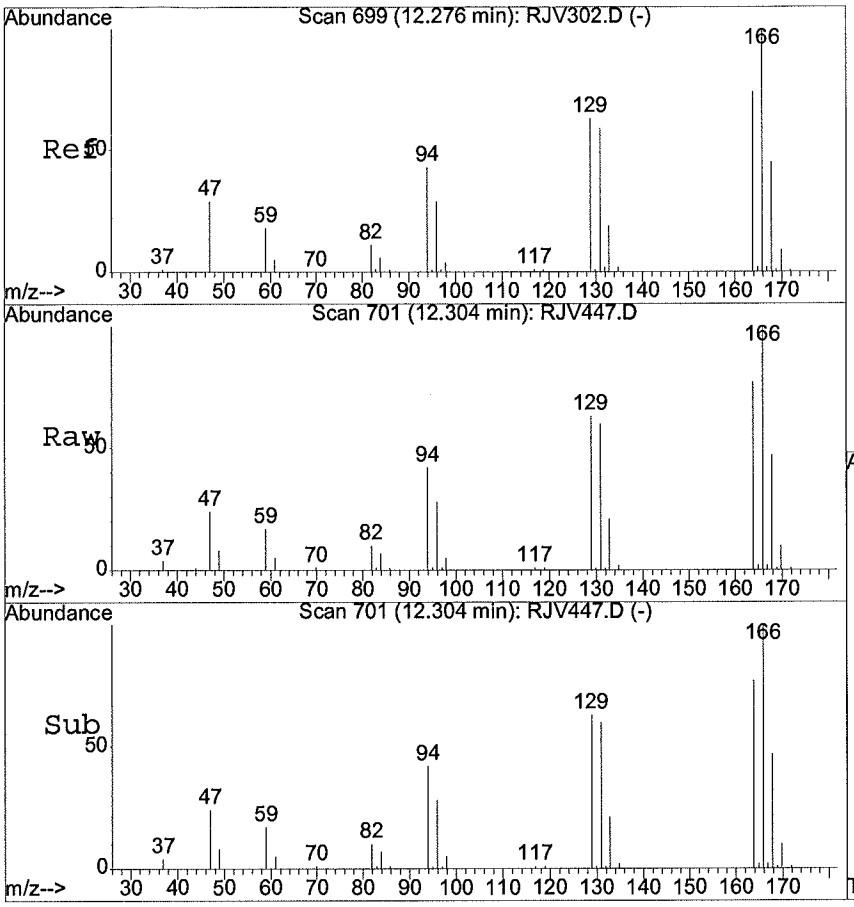


#44
Trichloroethene
Concen: 0.25 ug/l
RT: 9.09 min Scan# 484
Delta R.T. 0.03 min
Lab File: RJV447.D
Acq: 17 Oct 2024 4:30 am

Tgt Ion:130 Resp: 5015

Ion	Ratio	Lower	Upper
130	100		
132	102.4	67.4	127.4
95	103.1	81.2	141.2
97	65.3	44.1	104.1

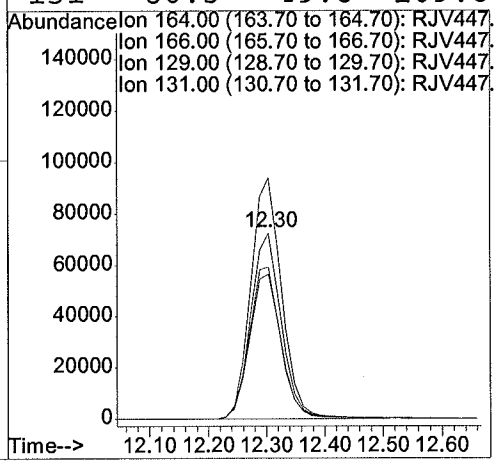




#61
Tetrachloroethene
Concen: 14.29 ug/l
RT: 12.30 min Scan# 701
Delta R.T. 0.03 min
Lab File: RJV447.D
Acq: 17 Oct 2024 4:30 am

Tgt Ion:164 Resp: 266425

Ion	Ratio	Lower	Upper
164	100		
166	131.3	101.7	161.7
129	84.7	53.9	113.9
131	80.5	49.8	109.8



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 09:05
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 05:00
Sample ID	: RG08-GW100324	Date Analyzed:	10/17/24 05:00
Lab Samp ID:	24J055-11	Dilution Factor:	1
Lab File ID:	RJV448	Matrix:	WATER
Ext Btch ID:	VO01J1B	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.27J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.3	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	50	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.46J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	12.2	10.0	122	70-130
Bromofluorobenzene	10.0	10.0	100	70-130
Toluene-dB	10.5	10.0	105	70-130
Dibromofluoromethane	11.6	10.0	116	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV448.D
Acq On : 17 Oct 2024 5:00 am
Sample : 24J055-11
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:29 2024

Vial: 22
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

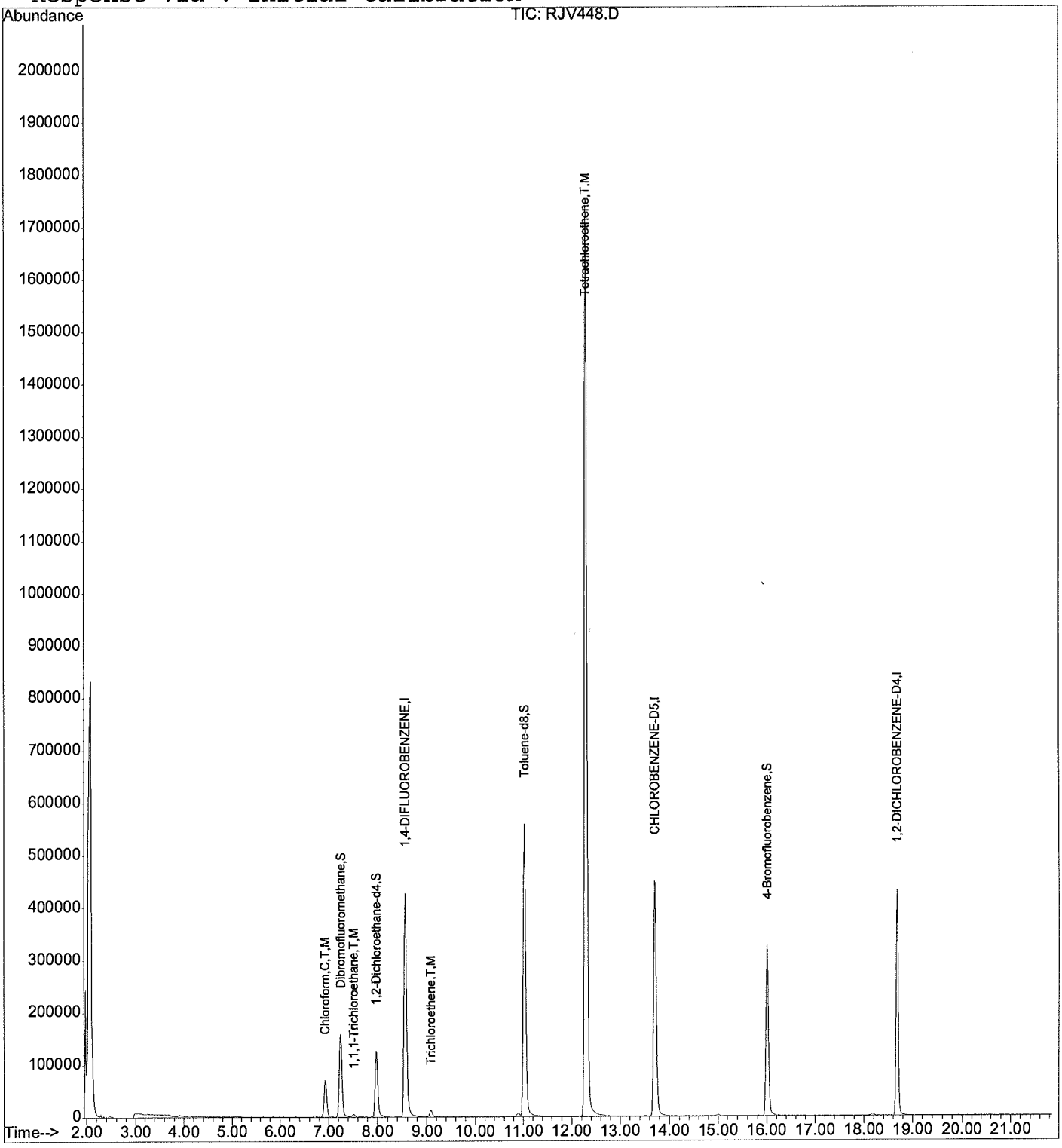
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	658227	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	517171	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	222841	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.25	111	199026	11.58	ug/l	0.03
Spiked Amount 10.000			Recovery =	115.80%		
41) 1,2-Dichloroethane-d4	7.98	65	185298	12.23	ug/l	0.01
Spiked Amount 10.000			Recovery =	122.30%		
54) Toluene-d8	11.03	98	746143	10.49	ug/l	0.02
Spiked Amount 10.000			Recovery =	104.90%		
76) 4-Bromofluorobenzene	16.01	95	265079	10.05	ug/l	0.03
Spiked Amount 10.000			Recovery =	100.50%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	115705	3.28	ug/l	95
35) 1,1,1-Trichloroethane	7.52	97	8597	0.27	ug/l	94
44) Trichloroethene	9.09	130	9130	0.46	ug/l	91
61) Tetrachloroethene	12.29	164	884817	49.95	ug/l	99

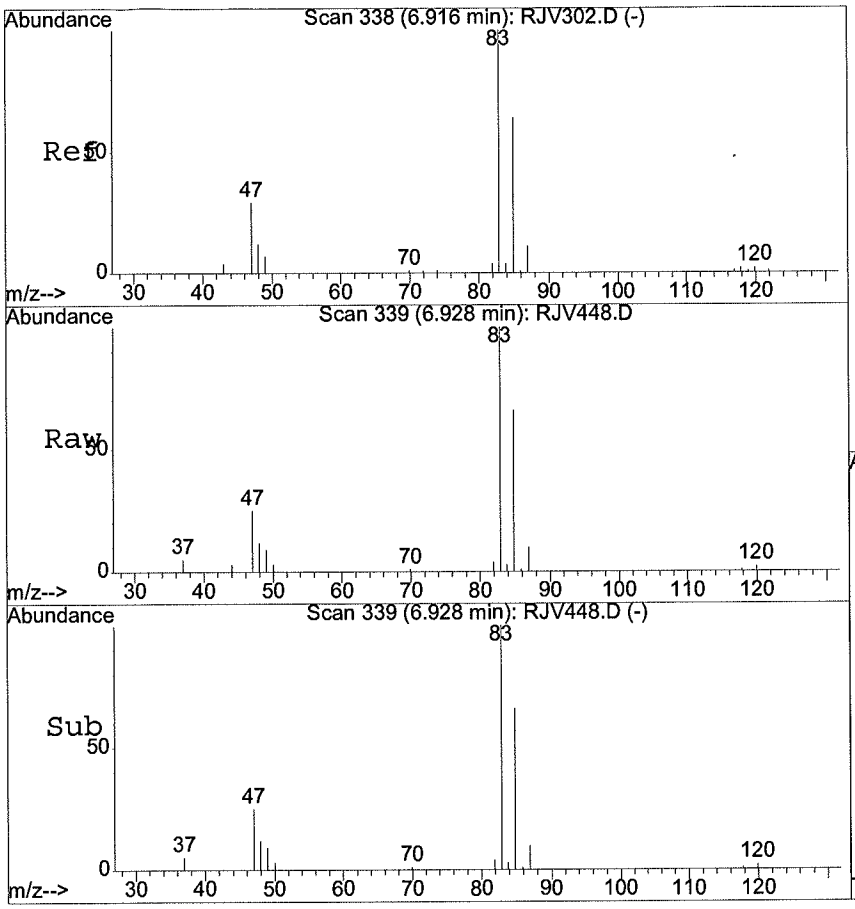
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV448.D Vial: 22
Acq On : 17 Oct 2024 5:00 am Operator: DNguye/CLing
Sample : 24J055-11 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 17:29 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

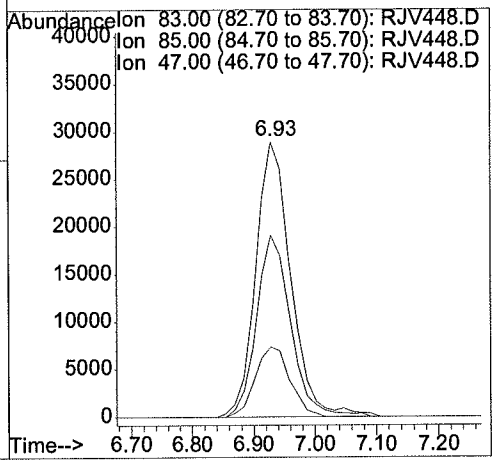


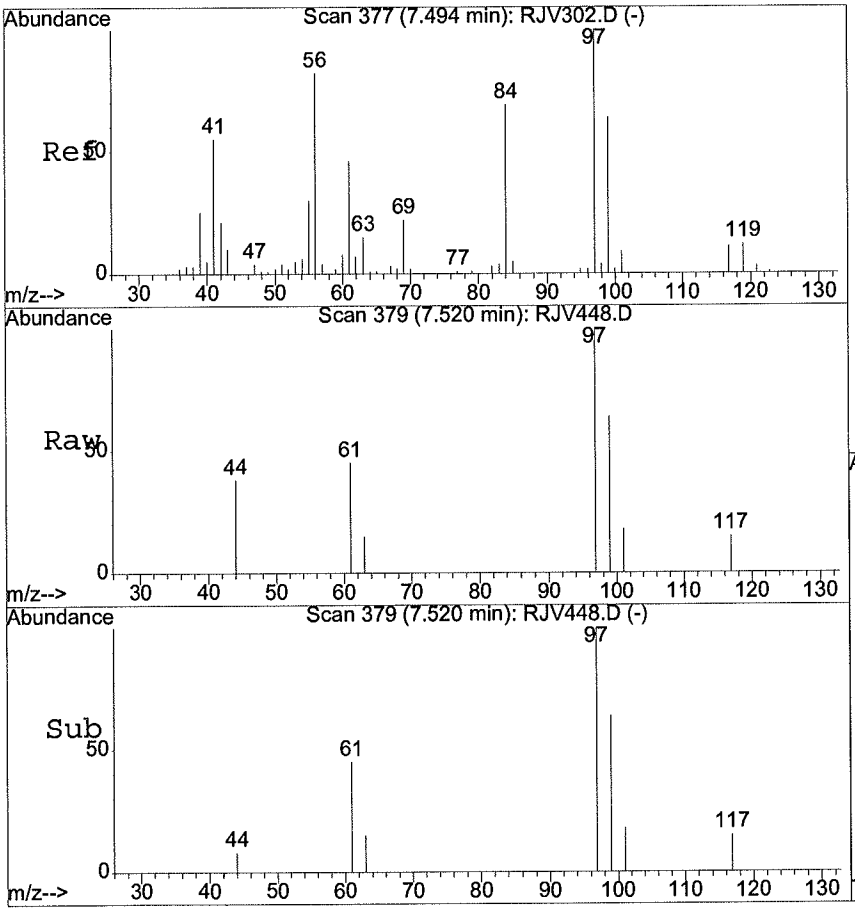


#31
Chloroform
Concen: 3.28 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV448.D
Acq: 17 Oct 2024 5:00 am

Tgt Ion: 83 Resp: 115705

Ion	Ratio	Lower	Upper
83	100		
85	64.5	37.8	97.8
47	25.3	0.0	59.1

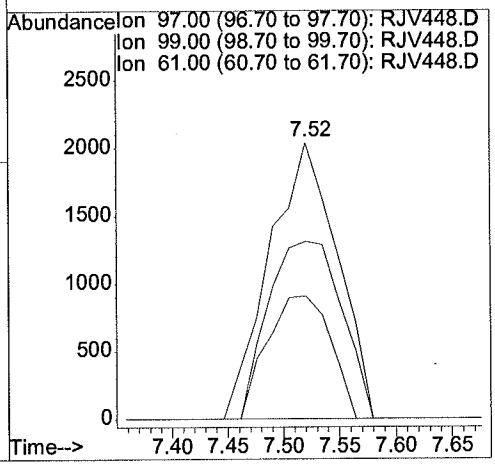


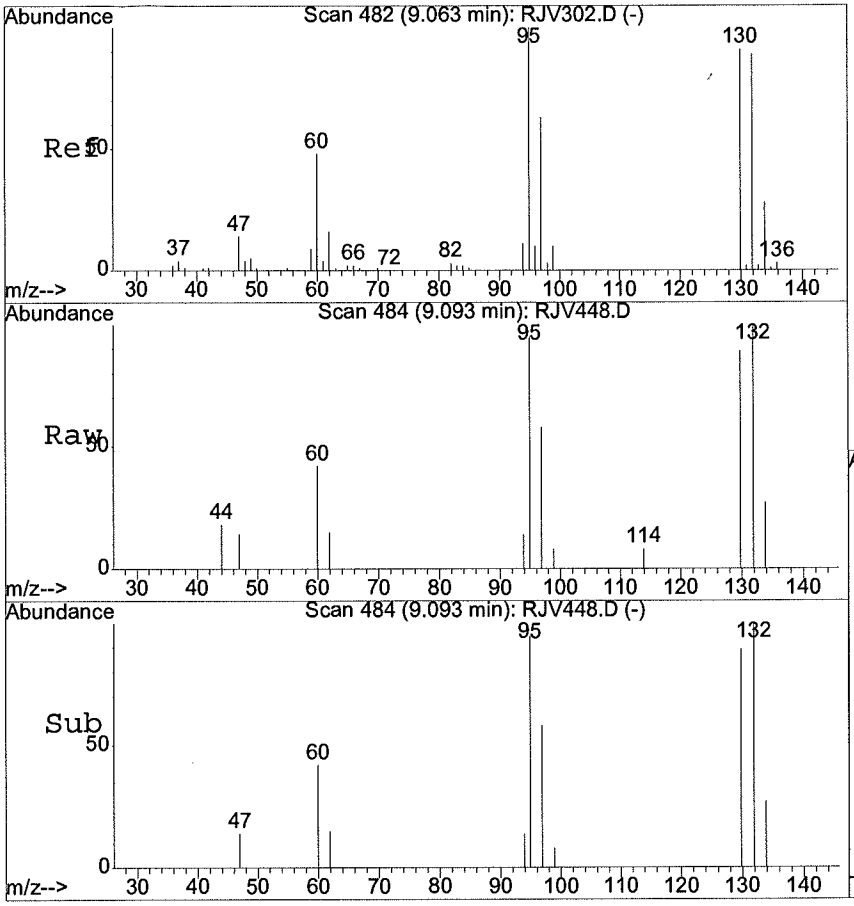


#35
1,1,1-Trichloroethane
Concen: 0.27 ug/l
RT: 7.52 min Scan# 379
Delta R.T. 0.03 min
Lab File: RJV448.D
Acq: 17 Oct 2024 5:00 am

Tgt Ion: 97 Resp: 8597

Ion	Ratio	Lower	Upper
97	100		
99	70.0	35.2	95.2
61	41.9	16.5	76.5

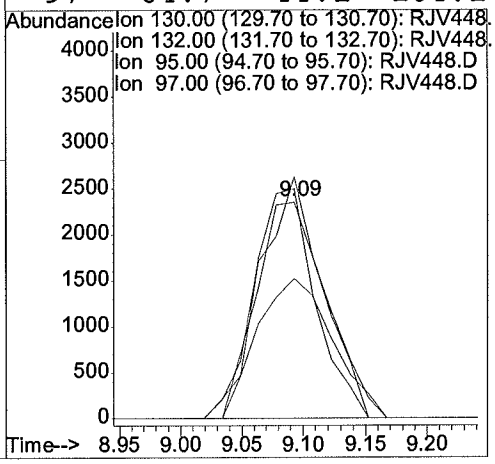


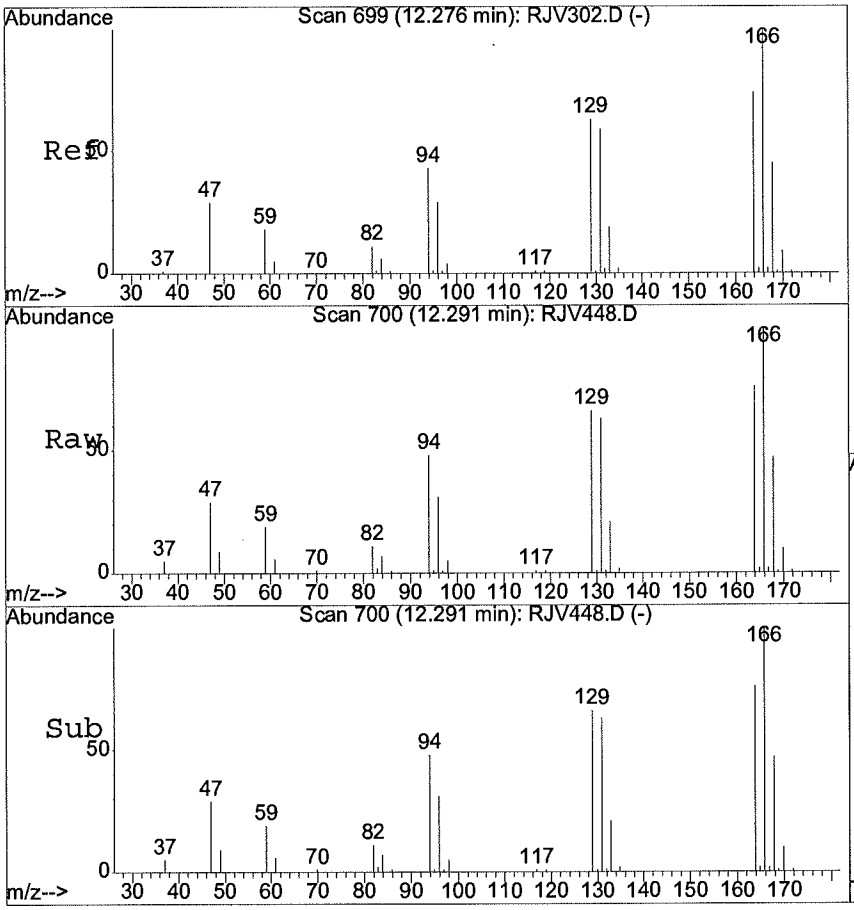


#44
Trichloroethene
Concen: 0.46 ug/l
RT: 9.09 min Scan# 484
Delta R.T. 0.03 min
Lab File: RJV448.D
Acq: 17 Oct 2024 5:00 am

Tgt Ion:130 Resp: 9130

Ion	Ratio	Lower	Upper
130	100		
132	104.8	67.4	127.4
95	101.7	81.2	141.2
97	64.7	44.1	104.1

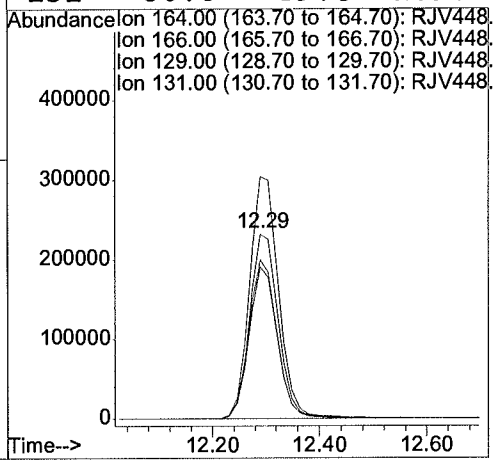




#61
Tetrachloroethene
Concen: 49.95 ug/l
RT: 12.29 min Scan# 700
Delta R.T. 0.01 min
Lab File: RJV448.D
Acq: 17 Oct 2024 5:00 am

Tgt Ion:164 Resp: 884817

Ion	Ratio	Lower	Upper
164	100		
166	132.1	101.7	161.7
129	84.6	53.9	113.9
131	80.8	49.8	109.8



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 09:55
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 15:06
Sample ID	: RG07-GW100324	Date Analyzed:	10/17/24 15:06
Lab Samp ID:	24J055-12	Dilution Factor:	1
Lab File ID:	RJV461	Matrix:	WATER
Ext Btch ID:	VOO1J19	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.23J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	2.4	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	38	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.27J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.4	10.0	104	70-130
Bromofluorobenzene	10.8	10.0	108	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	10.7	10.0	107	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV461.D Vial: 8
Acq On : 17 Oct 2024 3:06 pm Operator: DNguye/CLingl
Sample : 24J055-12 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 17:33 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	880535	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	670803	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	256607	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	246938	10.74	ug/l	0.01
Spiked Amount 10.000			Recovery =	107.40%		
41) 1,2-Dichloroethane-d4	7.98	65	210243	10.38	ug/l	0.01
Spiked Amount 10.000			Recovery =	103.80%		
54) Toluene-d8	11.03	98	986264	10.69	ug/l	0.02
Spiked Amount 10.000			Recovery =	106.90%		
76) 4-Bromofluorobenzene	16.01	95	327987	10.80	ug/l	0.03
Spiked Amount 10.000			Recovery =	108.00%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	114812	2.43	ug/l	94
35) 1,1,1-Trichloroethane	7.52	97	9553	0.23	ug/l	99
44) Trichloroethene	9.09	130	7081	0.27	ug/l	95
61) Tetrachloroethene	12.31	164	868786	37.81	ug/l	99

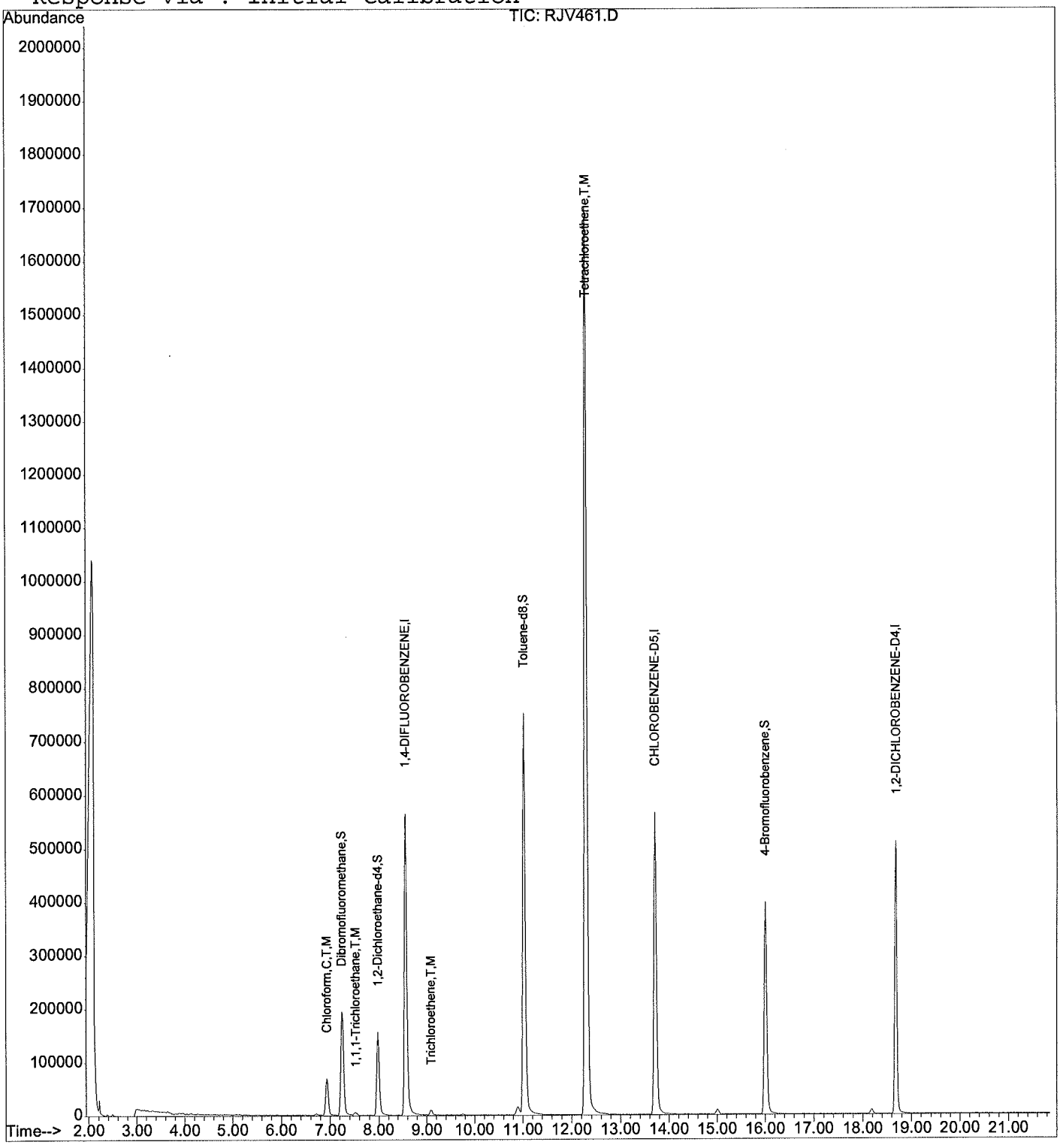
(#) = qualifier out of range (m) = manual integration

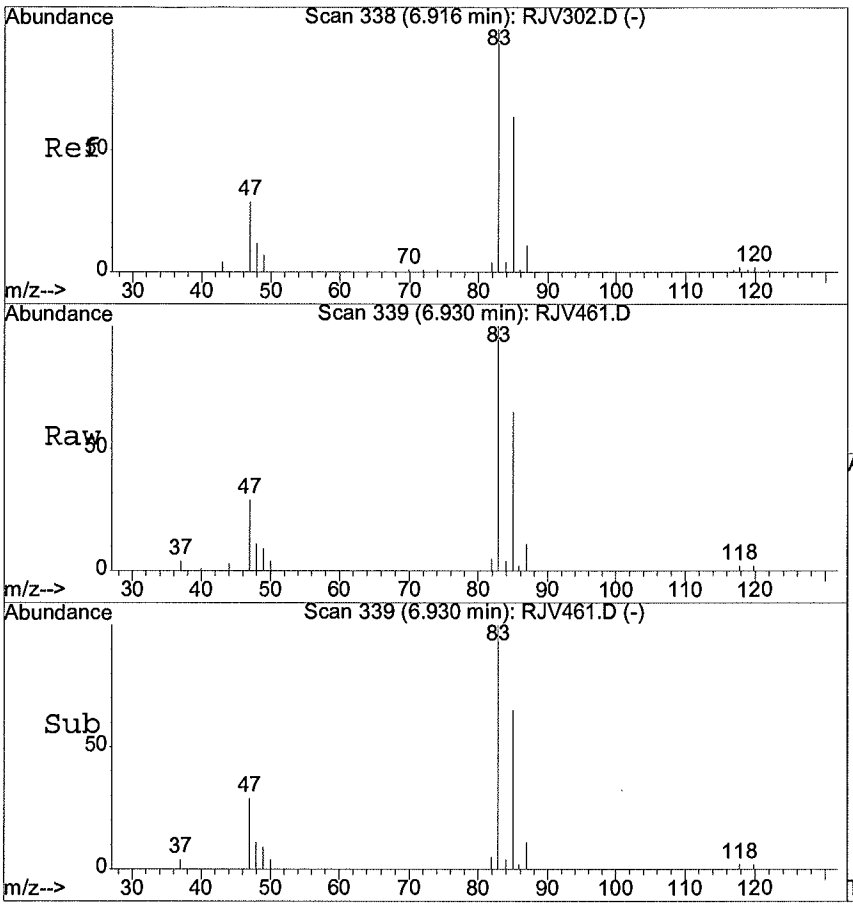
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV461.D
Acq On : 17 Oct 2024 3:06 pm
Sample : 24J055-12
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:33 2024

Vial: 8
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

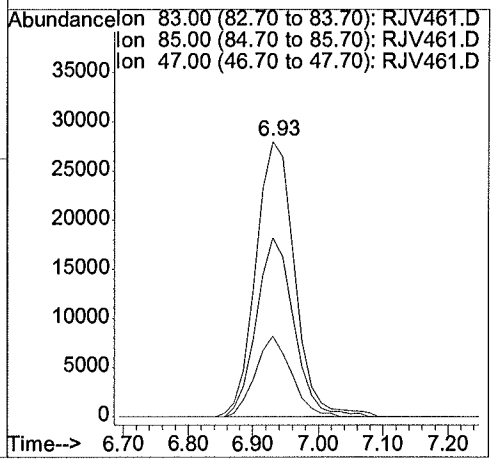


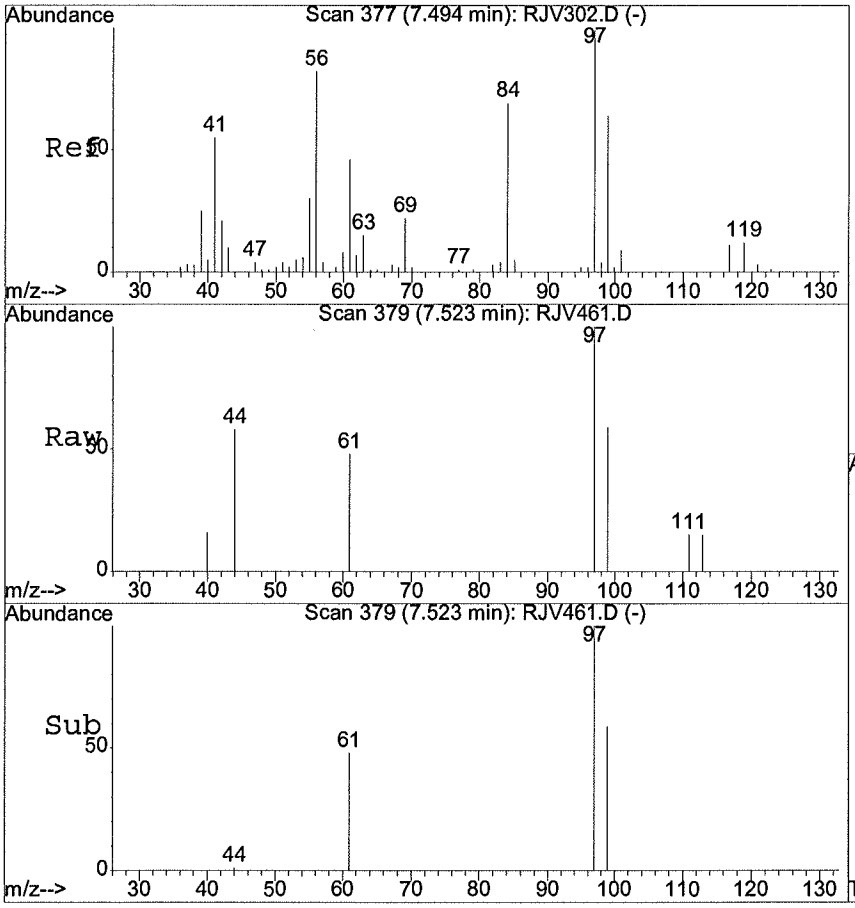


#31
Chloroform
Concen: 2.43 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV461.D
Acq: 17 Oct 2024 3:06 pm

Tgt Ion: 83 Resp: 114812

Ion	Ratio	Lower	Upper
83	100		
85	62.6	37.8	97.8
47	27.1	0.0	59.1

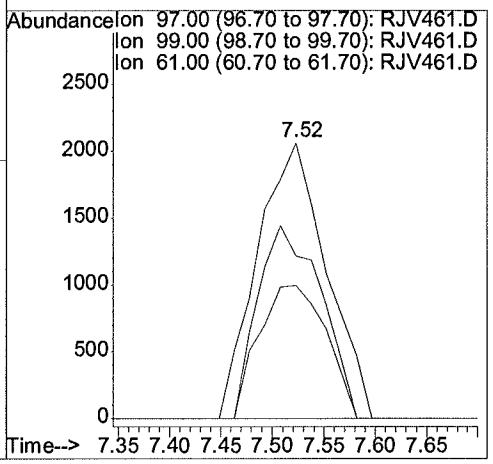


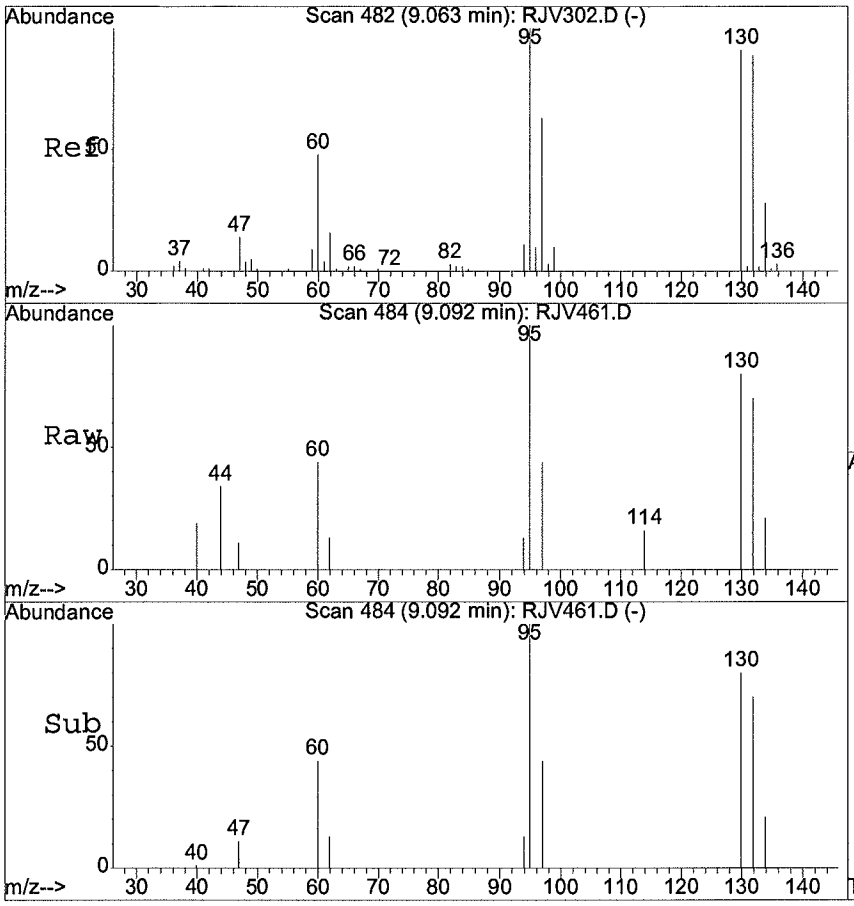


#35
1,1,1-Trichloroethane
Concen: 0.23 ug/l
RT: 7.52 min Scan# 379
Delta R.T. 0.03 min
Lab File: RJV461.D
Acq: 17 Oct 2024 3:06 pm

Tgt Ion: 97 Resp: 9553

Ion	Ratio	Lower	Upper
97	100		
99	64.2	35.2	95.2
61	47.0	16.5	76.5

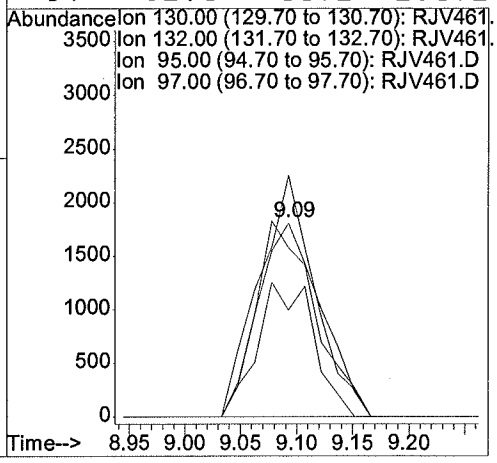


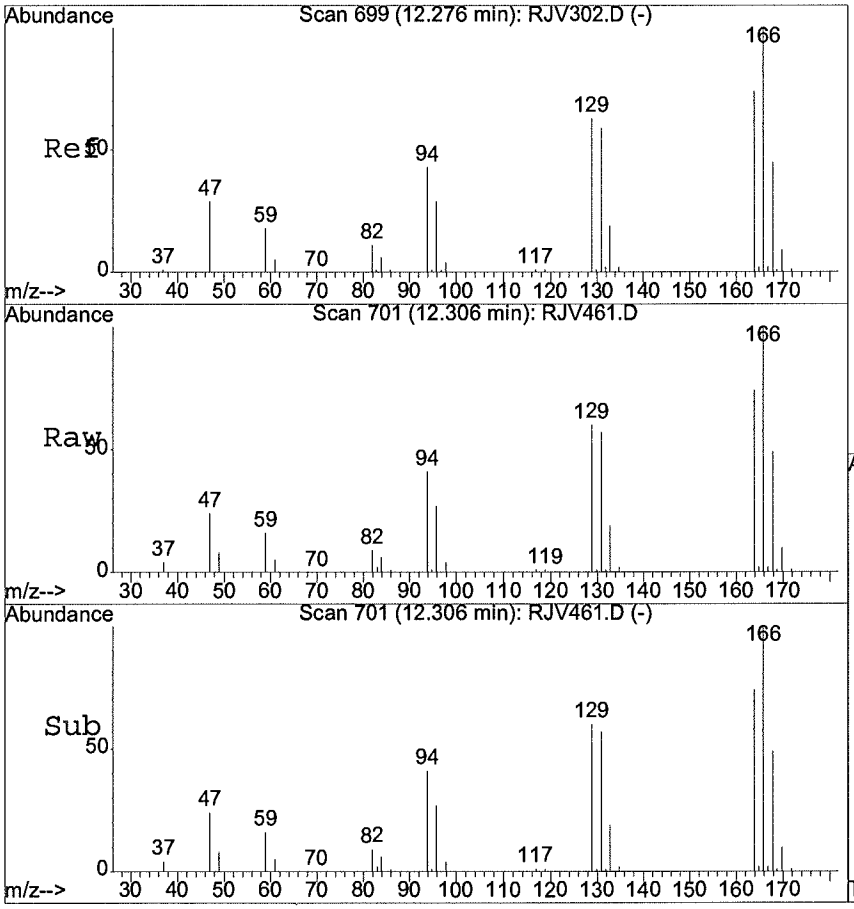


#44
Trichloroethene
Concen: 0.27 ug/l
RT: 9.09 min Scan# 484
Delta R.T. 0.03 min
Lab File: RJV461.D
Acq: 17 Oct 2024 3:06 pm

Tgt Ion:130 Resp: 7081

Ion	Ratio	Lower	Upper
130	100		
132	94.3	67.4	127.4
95	110.6	81.2	141.2
97	61.4	44.1	104.1

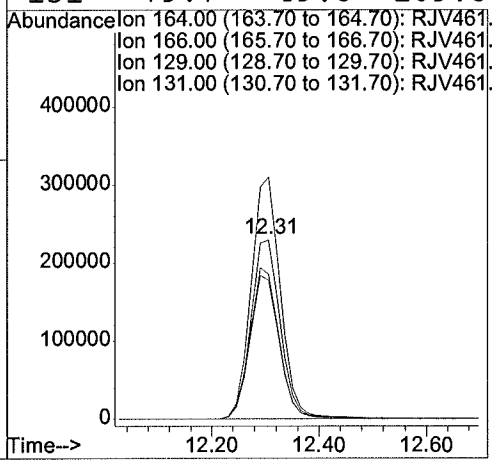




#61
Tetrachloroethene
Concen: 37.81 ug/l
RT: 12.31 min Scan# 701
Delta R.T. 0.03 min
Lab File: RJV461.D
Acq: 17 Oct 2024 3:06 pm

Tgt Ion:164 Resp: 868786

Ion	Ratio	Lower	Upper
164	100		
166	133.5	101.7	161.7
129	83.5	53.9	113.9
131	79.7	49.8	109.8



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 10:15
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 15:36
Sample ID	: RG06-GW100324	Date Analyzed:	10/17/24 15:36
Lab Samp ID:	24J055-13	Dilution Factor:	1
Lab File ID:	RJV462	Matrix:	WATER
Ext Btch ID:	VO01J19	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	6.0	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.26J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.9	10.0	109	70-130
Bromofluorobenzene	10.6	10.0	106	70-130
Toluene-d8	10.6	10.0	106	70-130
Dibromofluoromethane	11.0	10.0	110	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV462.D Vial: 9
Acq On : 17 Oct 2024 3:36 pm Operator: DNguye/CLingl
Sample : 24J055-13 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 17:35 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	846635	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	650842	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	254988	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	243586	11.01	ug/l	0.01
Spiked Amount 10.000			Recovery =	110.10%		
41) 1,2-Dichloroethane-d4	7.98	65	213003	10.93	ug/l	0.01
Spiked Amount 10.000			Recovery =	109.30%		
54) Toluene-d8	11.03	98	952341	10.64	ug/l	0.02
Spiked Amount 10.000			Recovery =	106.40%		
76) 4-Bromofluorobenzene	16.01	95	318641	10.55	ug/l	0.03
Spiked Amount 10.000			Recovery =	105.50%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.71	96	162432	5.96	ug/l	88
44) Trichloroethene	9.09	130	6738	0.26	ug/l	95
61) Tetrachloroethene	12.32	164	3060	0.14	ug/l	88

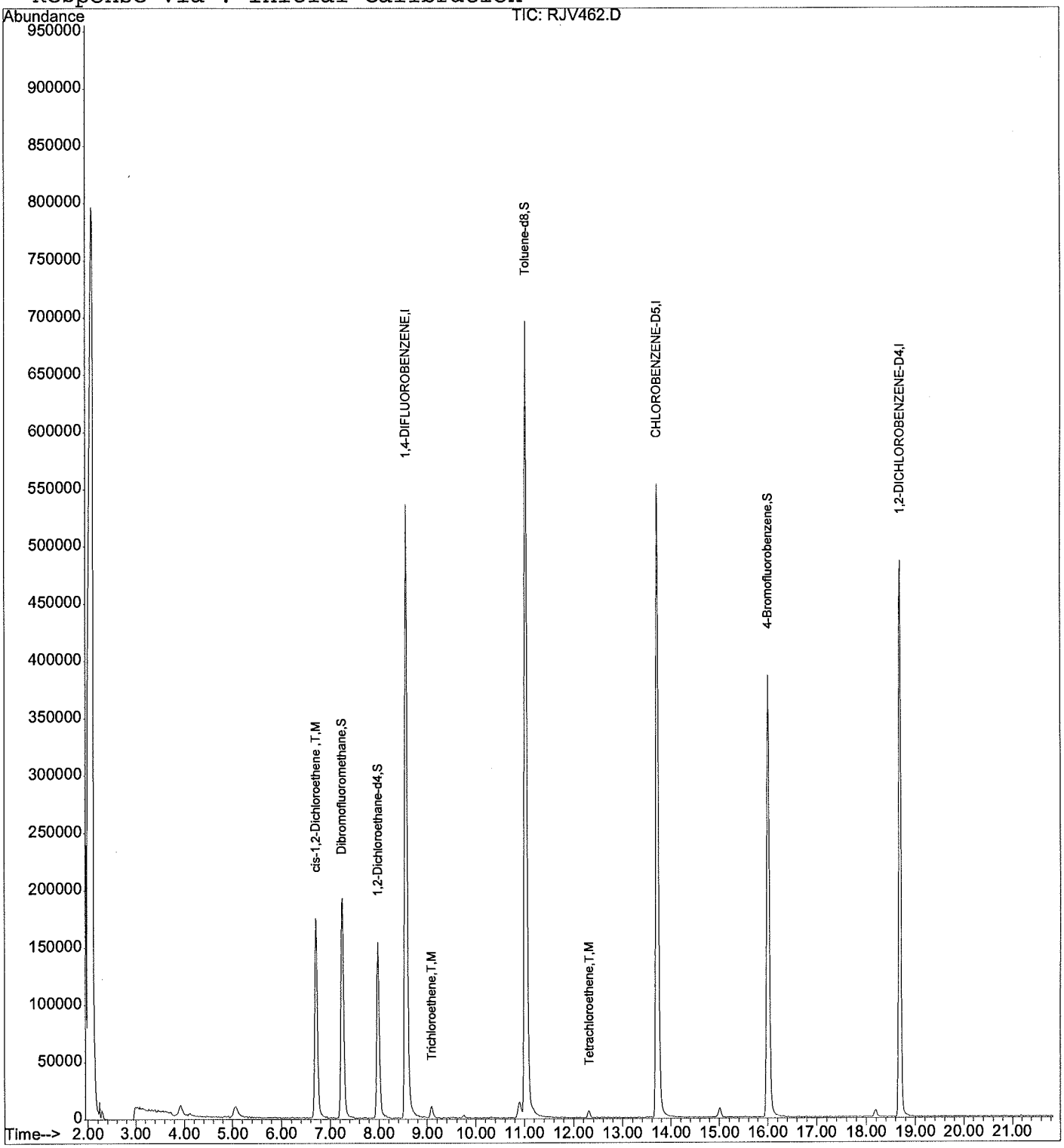
(#) = qualifier out of range (m) = manual integration
RJV462.D VO01J12.M Wed Oct 30 17:35:25 2024 Page 1

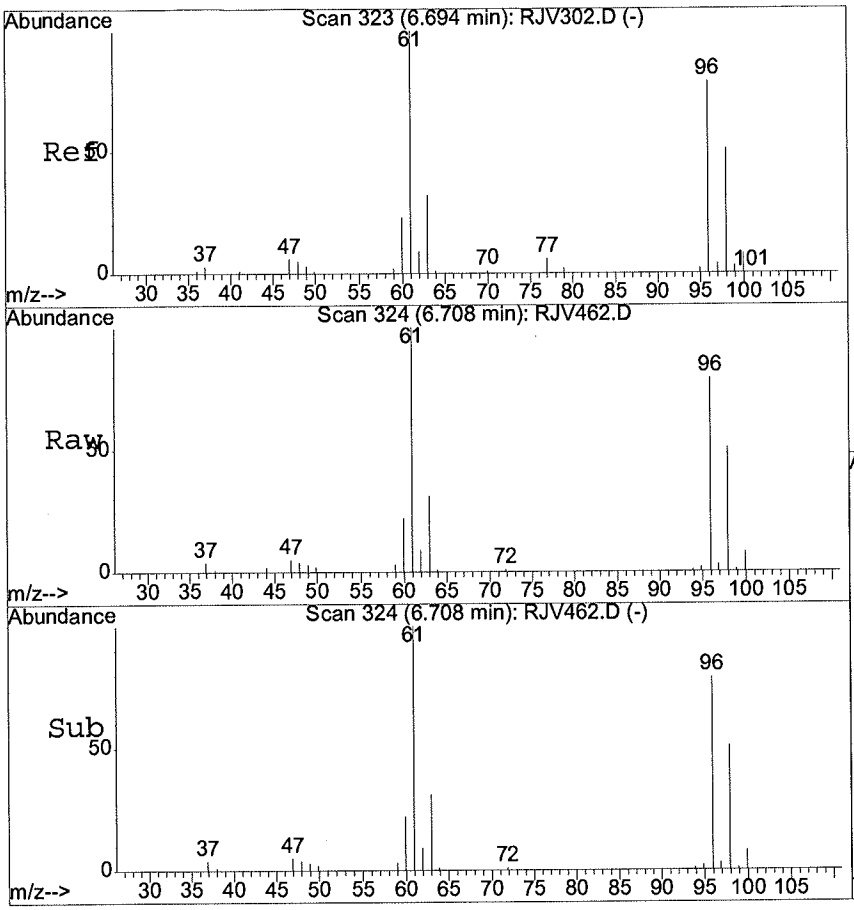
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV462.D
Acq On : 17 Oct 2024 3:36 pm
Sample : 24J055-13
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:35 2024

Vial: 9
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

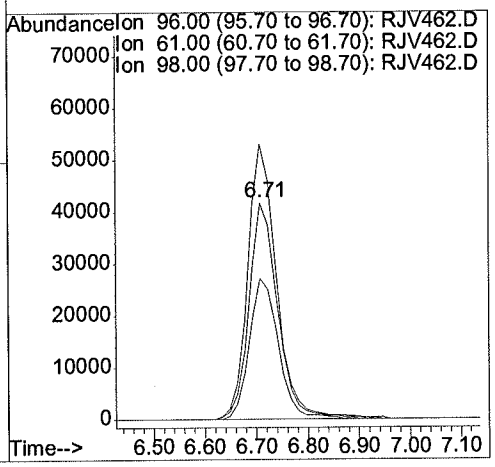


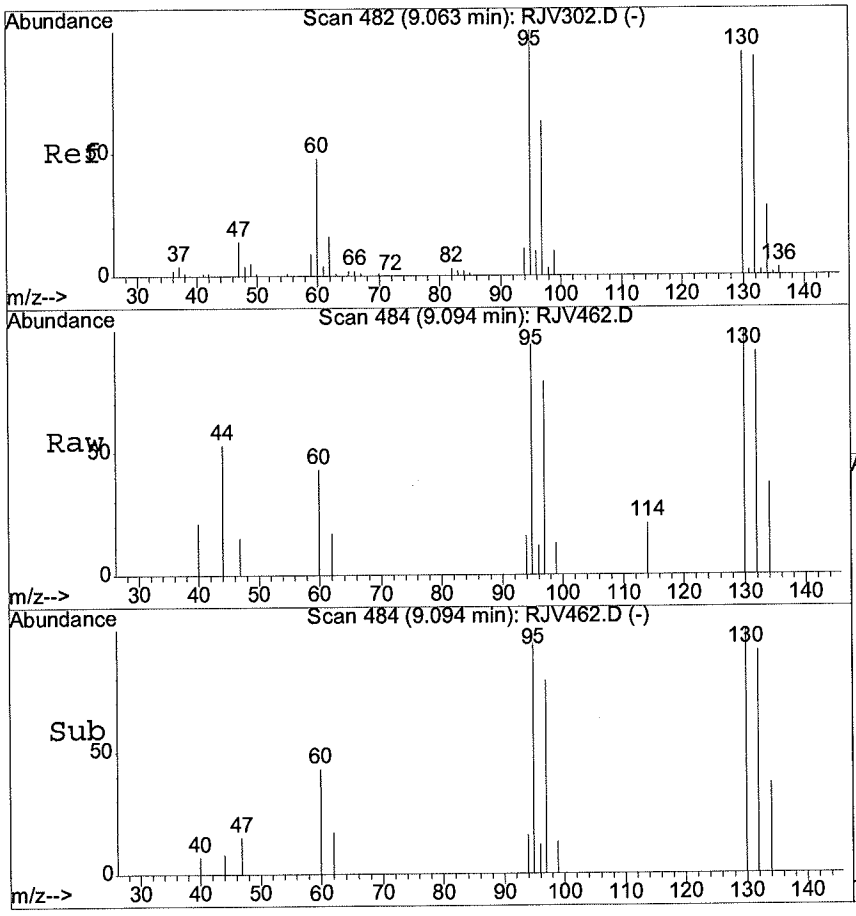


#30
cis-1,2-Dichloroethene
Concen: 5.96 ug/l
RT: 6.71 min Scan# 324
Delta R.T. 0.01 min
Lab File: RJV462.D
Acq: 17 Oct 2024 3:36 pm

Tgt Ion: 96 Resp: 162432

Ion	Ratio	Lower	Upper
96	100		
61	126.4	118.2	178.2
98	65.5	35.6	95.6

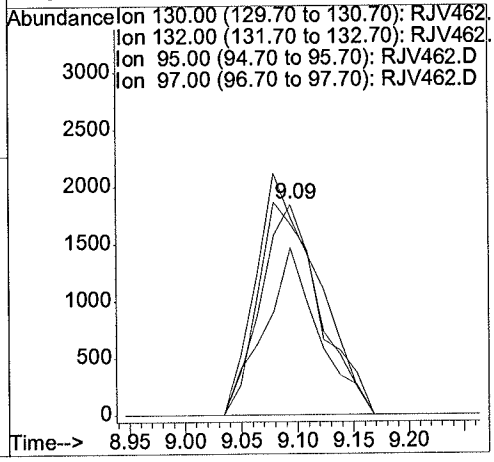


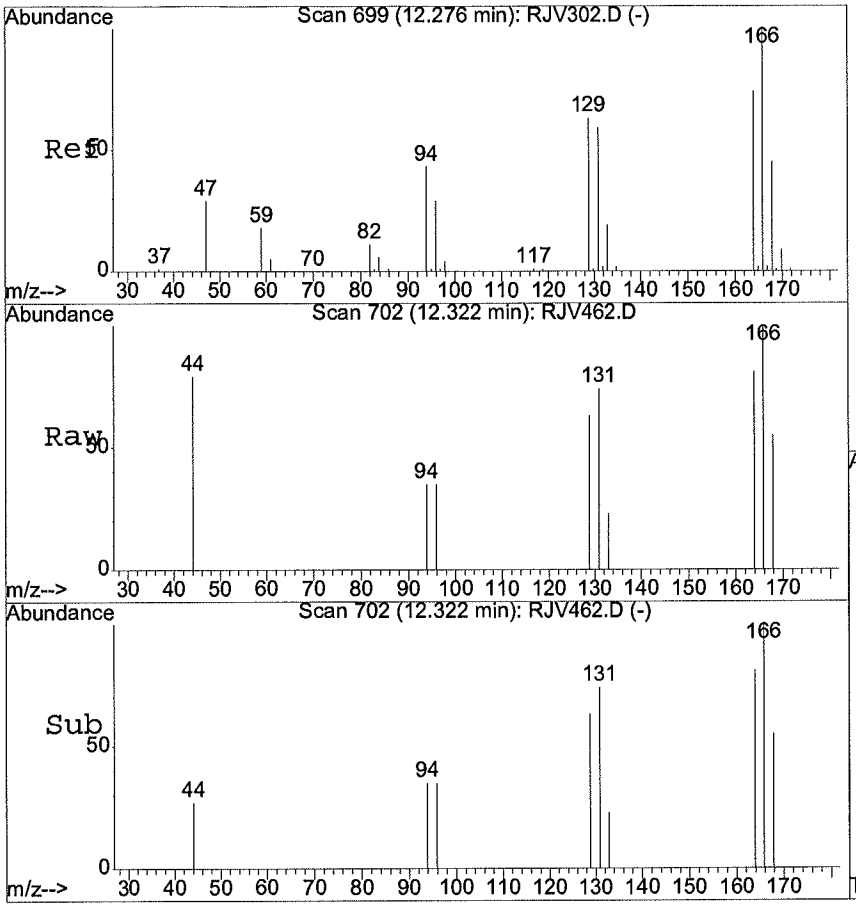


#44
Trichloroethene
Concen: 0.26 ug/l
RT: 9.09 min Scan# 484
Delta R.T. 0.03 min
Lab File: RJV462.D
Acq: 17 Oct 2024 3:36 pm

Tgt Ion:130 Resp: 6738

Ion	Ratio	Lower	Upper
130	100		
132	103.7	67.4	127.4
95	118.7	81.2	141.2
97	73.5	44.1	104.1

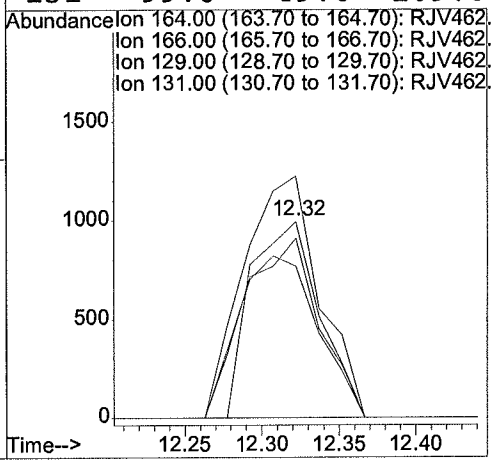




#61
Tetrachloroethene
Concen: 0.14 ug/l
RT: 12.32 min Scan# 702
Delta R.T. 0.05 min
Lab File: RJV462.D
Acq: 17 Oct 2024 3:36 pm

Tgt Ion:164 Resp: 3060

Ion	Ratio	Lower	Upper
164	100		
166	136.2	101.7	161.7
129	95.9	53.9	113.9
131	99.6	49.8	109.8



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 10:25
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 16:06
Sample ID	: RG10-GW100324	Date Analyzed:	10/17/24 16:06
Lab Samp ID:	24J055-14	Dilution Factor:	1
Lab File ID:	RJV463	Matrix:	WATER
Ext Btch ID:	V001J19	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	4.1J	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	0.30J	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.5	10.0	115	70-130
Bromofluorobenzene	11.0	10.0	110	70-130
Toluene-d8	11.0	10.0	110	70-130
Dibromofluoromethane	11.3	10.0	113	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV463.D
Acq On : 17 Oct 2024 4:06 pm
Sample : 24J055-14
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:35 2024

Vial: 10
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	731053	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	555344	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	216312	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	215902	11.31	ug/l	0.01
Spiked Amount 10.000			Recovery =	113.10%		
41) 1,2-Dichloroethane-d4	7.98	65	194100	11.54	ug/l	0.01
Spiked Amount 10.000			Recovery =	115.40%		
54) Toluene-d8	11.03	98	837995	10.97	ug/l	0.02
Spiked Amount 10.000			Recovery =	109.70%		
76) 4-Bromofluorobenzene	16.01	95	281625	11.00	ug/l	0.03
Spiked Amount 10.000			Recovery =	110.00%		
Target Compounds						Qvalue
13) Acetone	4.12	43	11014	4.08	ug/l	94
61) Tetrachloroethene	12.31	164	5786	0.30	ug/l	92

(#) = qualifier out of range (m) = manual integration

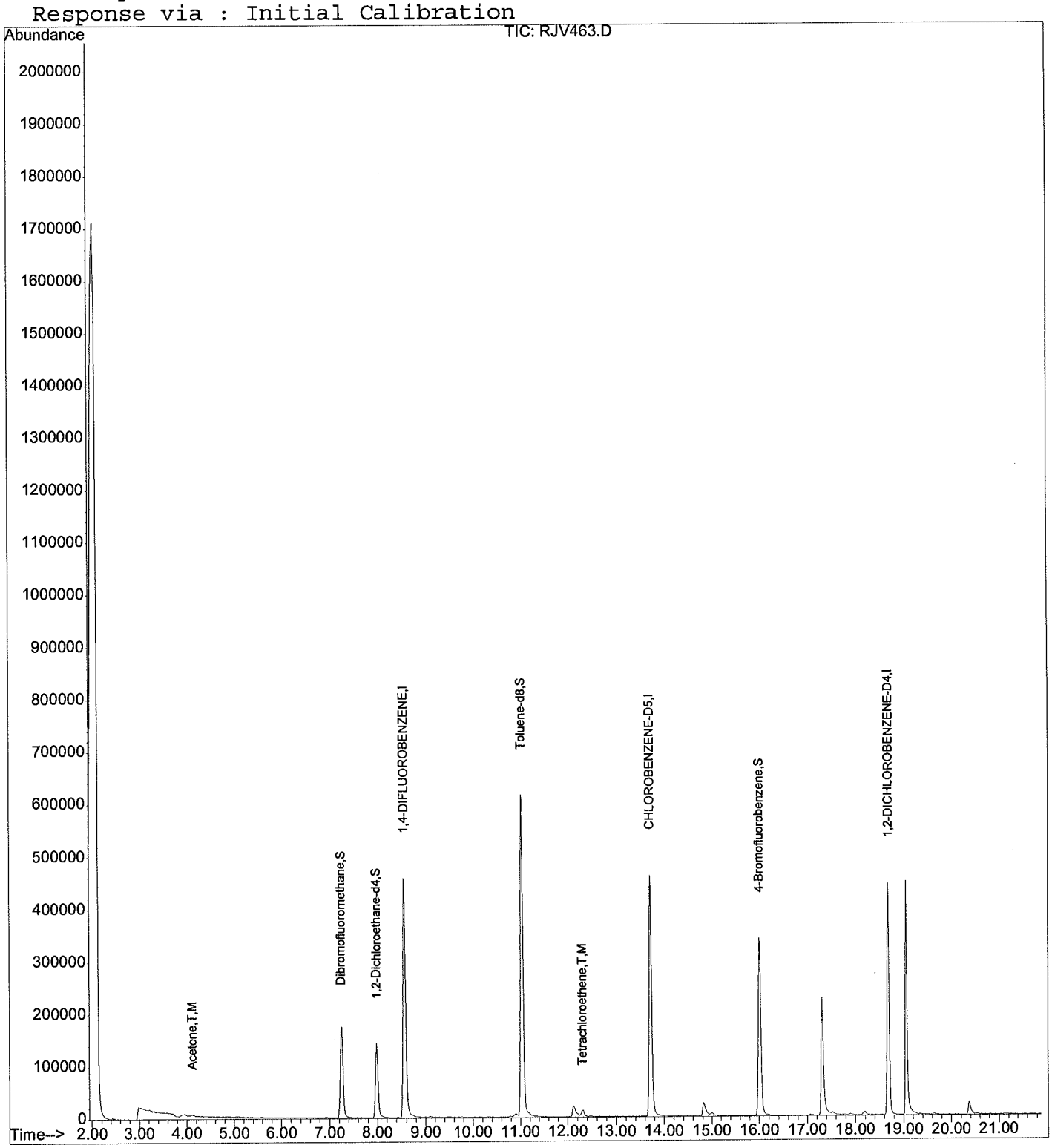
Quantitation Report

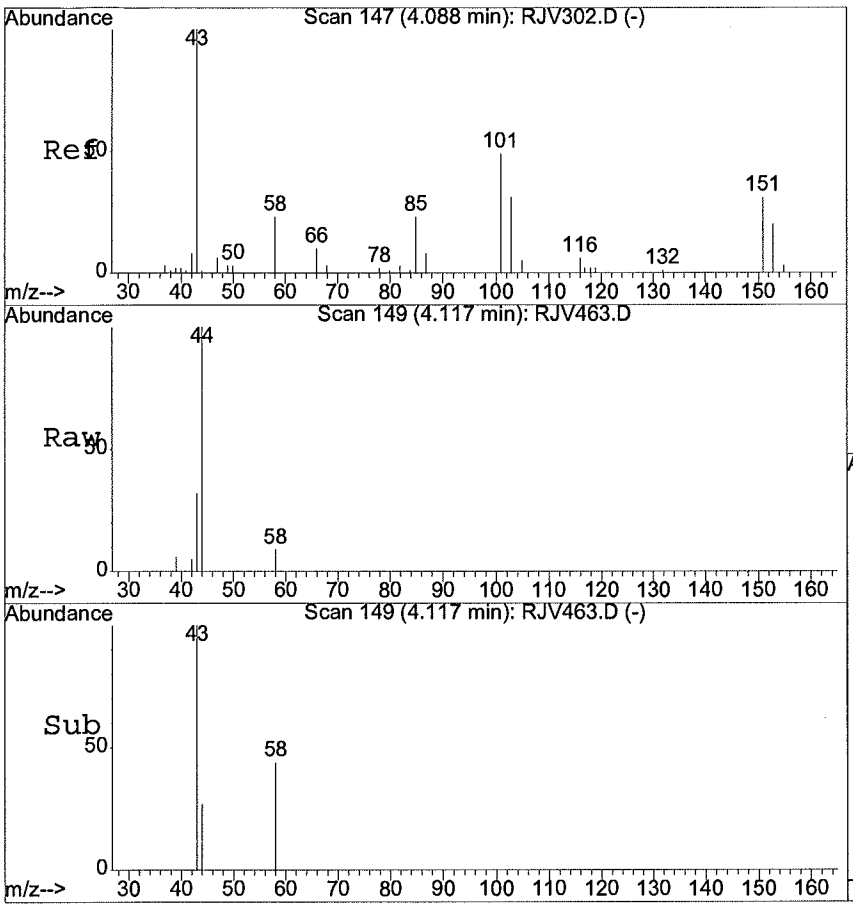
Data File : D:\HPCHEM\1\DATA\24J17\RJV463.D
Acq On : 17 Oct 2024 4:06 pm
Sample : 24J055-14
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:35 2024

Vial: 10
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

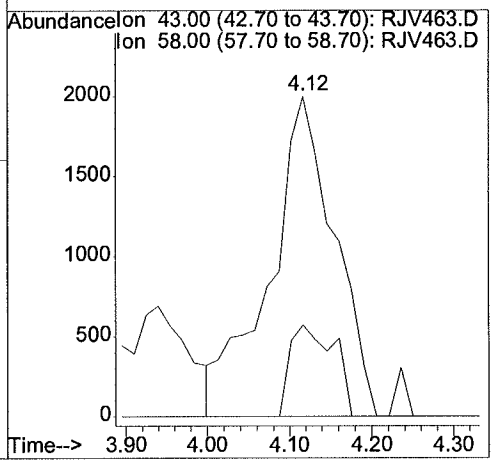


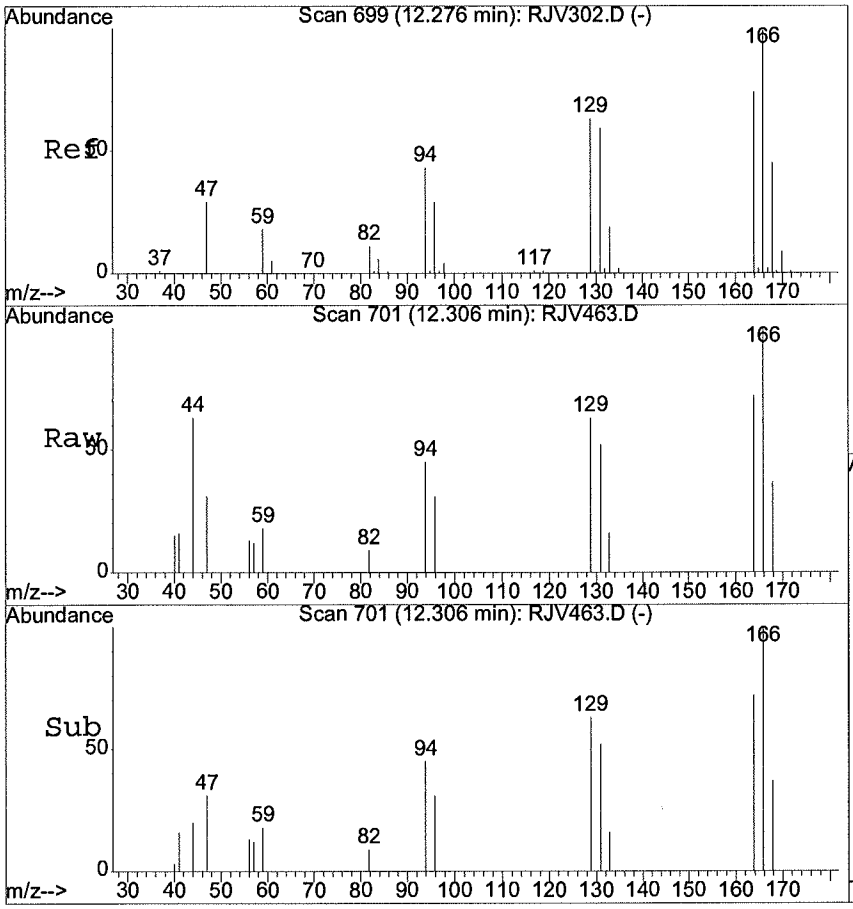


#13
Acetone
Concen: 4.08 ug/l
RT: 4.12 min Scan# 149
Delta R.T. 0.03 min
Lab File: RJV463.D
Acq: 17 Oct 2024 4:06 pm

Tgt Ion: 43 Resp: 11014

Ion	Ratio	Lower	Upper
43	100		
58	19.6	0.0	52.7

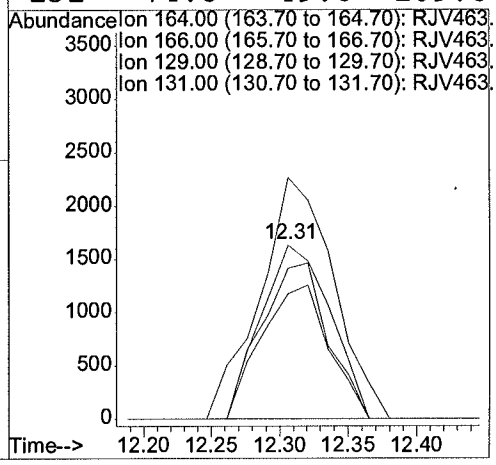




#61
Tetrachloroethene
Concen: 0.30 ug/l
RT: 12.31 min Scan# 701
Delta R.T. 0.03 min
Lab File: RJV463.D
Acq: 17 Oct 2024 4:06 pm

Tgt Ion:164 Resp: 5786

Ion	Ratio	Lower	Upper
164	100		
166	147.1	101.7	161.7
129	86.2	53.9	113.9
131	74.8	49.8	109.8



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 11:15
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 16:36
Sample ID	: RG11-GW100324	Date Analyzed:	10/17/24 16:36
Lab Samp ID:	24J055-15	Dilution Factor:	1
Lab File ID:	RJV464	Matrix:	WATER
Ext Btch ID:	VOO1J19	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.16J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.3	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	12	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.11J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.8	10.0	108	70-130
Bromofluorobenzene	10.9	10.0	109	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	10.8	10.0	108	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV464.D
Acq On : 17 Oct 2024 4:36 pm
Sample : 24J055-15
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:38 2024

Vial: 11
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	844289	10.00	ug/l	0.03
53) CHLOROBENZENE-D5	13.73	117	645069	10.00	ug/l	0.03
72) 1,2-DICHLOROBENZENE-D4	18.69	152	245845	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	238827	10.83	ug/l	0.03
Spiked Amount 10.000			Recovery =	108.30%		
41) 1,2-Dichloroethane-d4	7.98	65	208864	10.75	ug/l	0.01
Spiked Amount 10.000			Recovery =	107.50%		
54) Toluene-d8	11.03	98	945374	10.66	ug/l	0.02
Spiked Amount 10.000			Recovery =	106.60%		
76) 4-Bromofluorobenzene	16.01	95	316868	10.89	ug/l	0.03
Spiked Amount 10.000			Recovery =	108.90%		
Target Compounds						Qvalue
31) Chloroform	6.93	83	196669	4.35	ug/l	95
35) 1,1,1-Trichloroethane	7.54	97	6666	0.16	ug/l	91
44) Trichloroethene	9.09	130	2742	0.11	ug/l	84
61) Tetrachloroethene	12.31	164	273136	12.36	ug/l	99

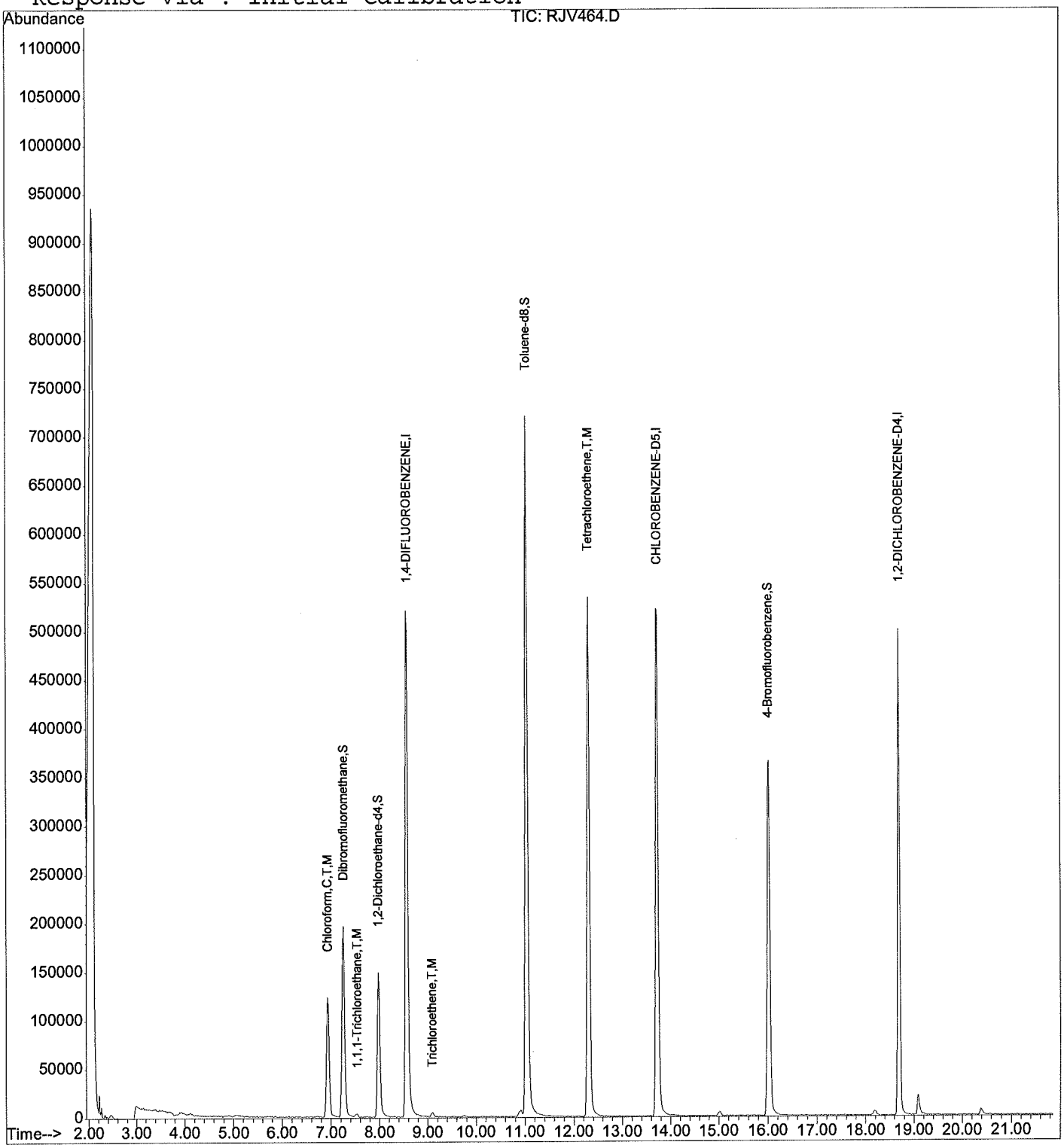
(#) = qualifier out of range (m) = manual integration

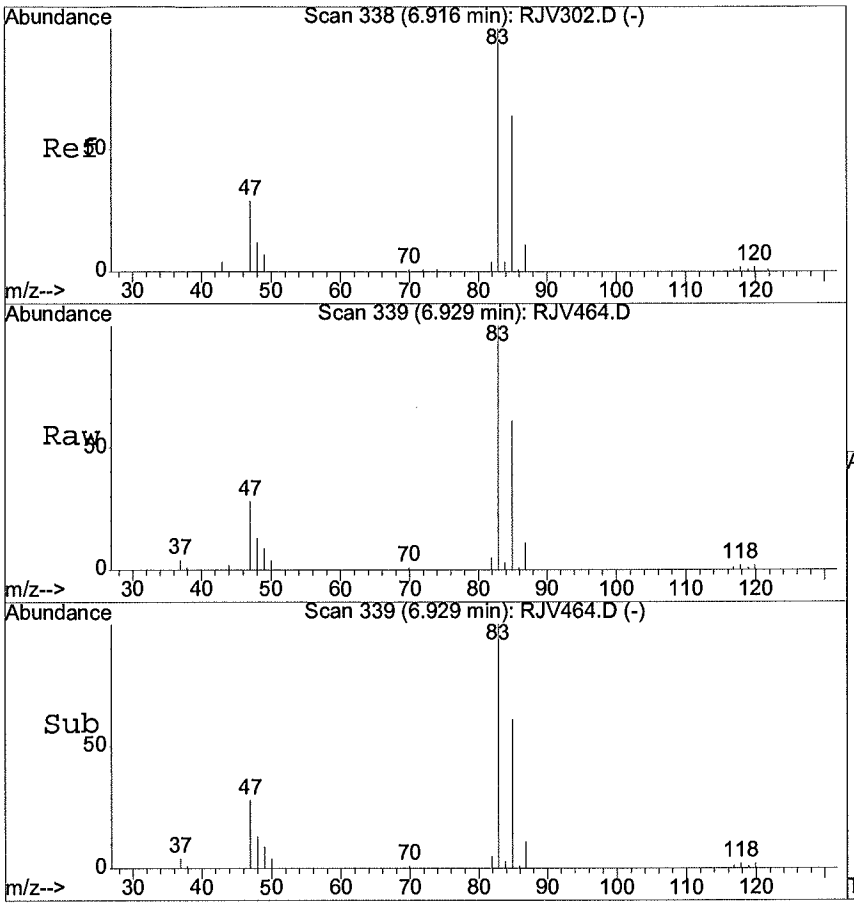
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV464.D
Acq On : 17 Oct 2024 4:36 pm
Sample : 24J055-15
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:38 2024

Vial: 11
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

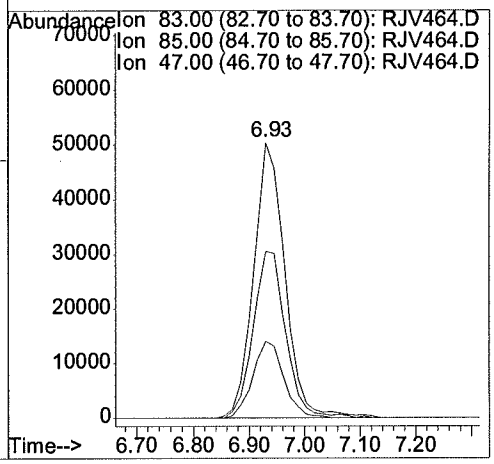


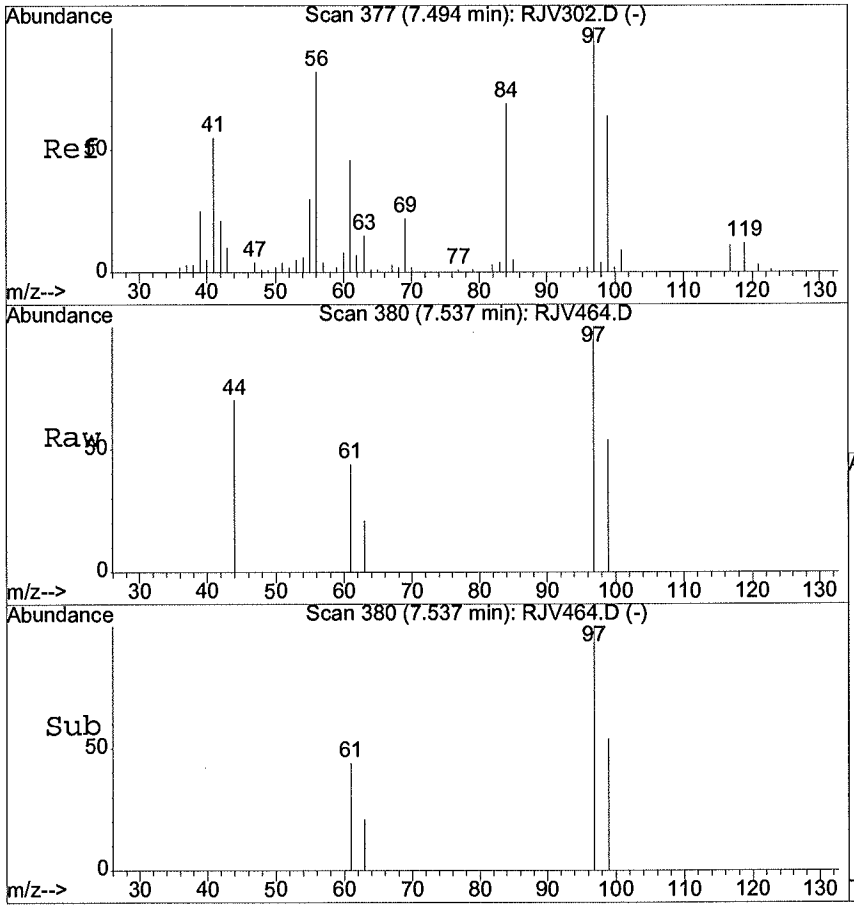


#31
Chloroform
Concen: 4.35 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV464.D
Acq: 17 Oct 2024 4:36 pm

Tgt Ion: 83 Resp: 196669

Ion	Ratio	Lower	Upper
83	100		
85	62.7	37.8	97.8
47	27.6	0.0	59.1

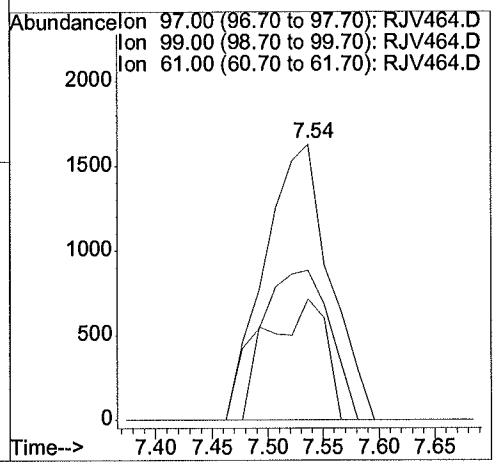


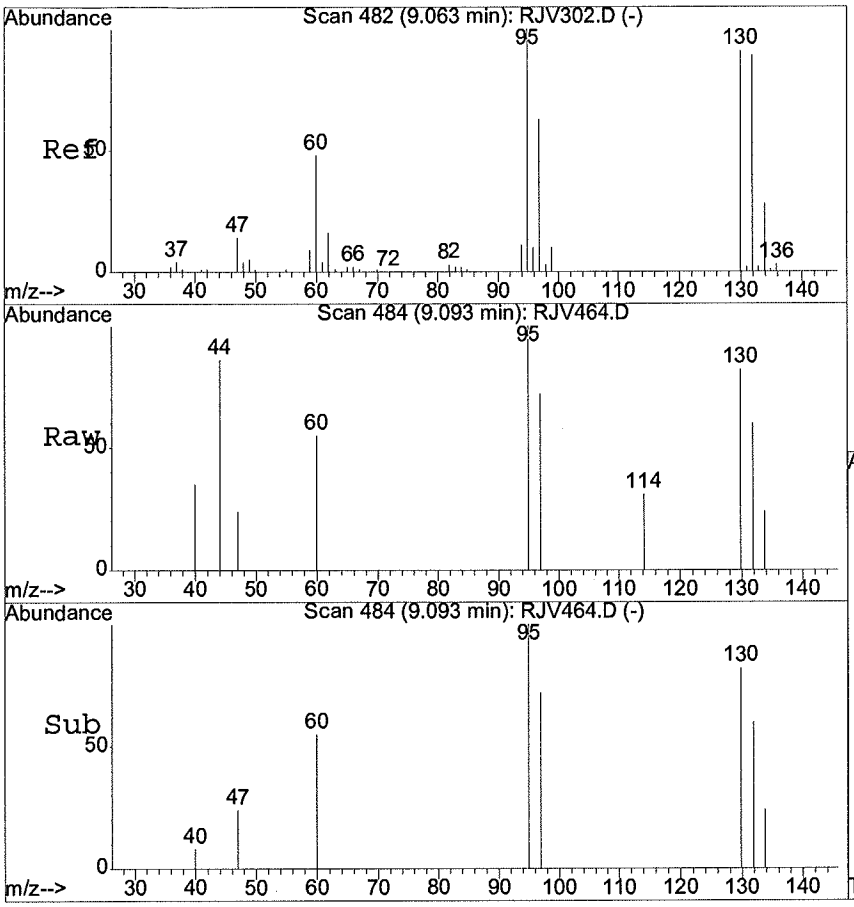


#35
1,1,1-Trichloroethane
Concen: 0.16 ug/l
RT: 7.54 min Scan# 380
Delta R.T. 0.04 min
Lab File: RJV464.D
Acq: 17 Oct 2024 4:36 pm

Tgt Ion: 97 Resp: 6666

Ion	Ratio	Lower	Upper
97	100		
99	60.2	35.2	95.2
61	38.3	16.5	76.5

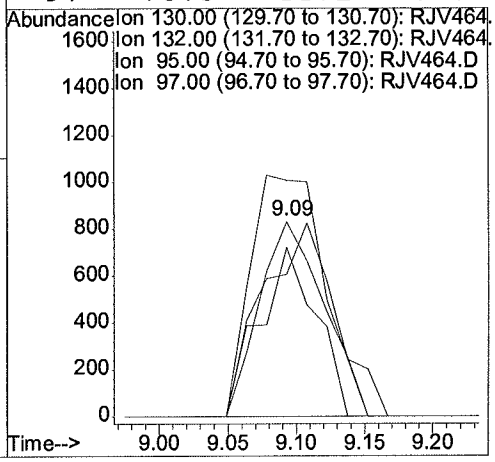


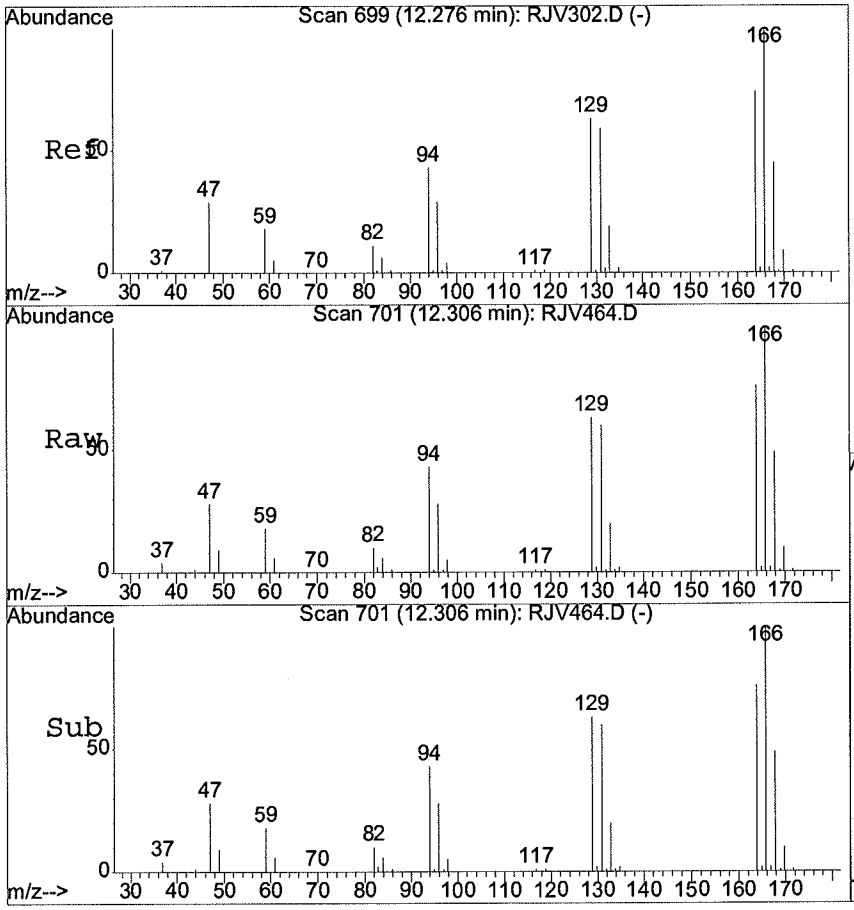


#44
Trichloroethene
Concen: 0.11 ug/l
RT: 9.09 min Scan# 484
Delta R.T. 0.03 min
Lab File: RJV464.D
Acq: 17 Oct 2024 4:36 pm

Tgt Ion:130 Resp: 2742

Ion	Ratio	Lower	Upper
130	100		
132	111.8	67.4	127.4
95	140.2	81.2	141.2
97	76.3	44.1	104.1

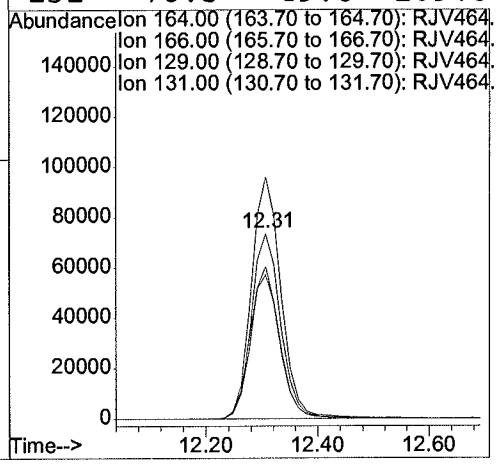




#61
Tetrachloroethene
Concen: 12.36 ug/l
RT: 12.31 min Scan# 701
Delta R.T. 0.03 min
Lab File: RJV464.D
Acq: 17 Oct 2024 4:36 pm

Tgt Ion:164 Resp: 273136

Ion	Ratio	Lower	Upper
164	100		
166	131.5	101.7	161.7
129	82.8	53.9	113.9
131	78.5	49.8	109.8



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 11:50
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 17:06
Sample ID	: FD09-GW100324	Date Analyzed:	10/17/24 17:06
Lab Samp ID:	24J055-16	Dilution Factor:	1
Lab File ID:	RJV465	Matrix:	WATER
Ext Btch ID:	VOO1J19	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	0.18J	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	3.1	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	9.0	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.15J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	11.0	10.0	110	70-130
Bromofluorobenzene	10.5	10.0	105	70-130
Toluene-dB	10.7	10.0	107	70-130
Dibromofluoromethane	11.2	10.0	112	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV465.D
Acq On : 17 Oct 2024 5:06 pm
Sample : 24J055-16
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:39 2024

Vial: 12
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.57	114	803980	10.00	ug/l	0.03
53) CHLOROBENZENE-D5	13.71	117	621191	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	248134	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	234474	11.16	ug/l	0.03
Spiked Amount 10.000			Recovery =	111.60%		
41) 1,2-Dichloroethane-d4	7.98	65	202739	10.96	ug/l	0.01
Spiked Amount 10.000			Recovery =	109.60%		
54) Toluene-d8	11.03	98	913296	10.69	ug/l	0.02
Spiked Amount 10.000			Recovery =	106.90%		
76) 4-Bromofluorobenzene	16.01	95	307417	10.46	ug/l	0.03
Spiked Amount 10.000			Recovery =	104.60%		
Target Compounds						Qvalue
31) Chloroform	6.94	83	131933	3.06	ug/l	95
35) 1,1,1-Trichloroethane	7.52	97	7071	0.18	ug/l	80
44) Trichloroethene	9.09	130	3566	0.15	ug/l	93
61) Tetrachloroethene	12.31	164	190550	8.96	ug/l	98

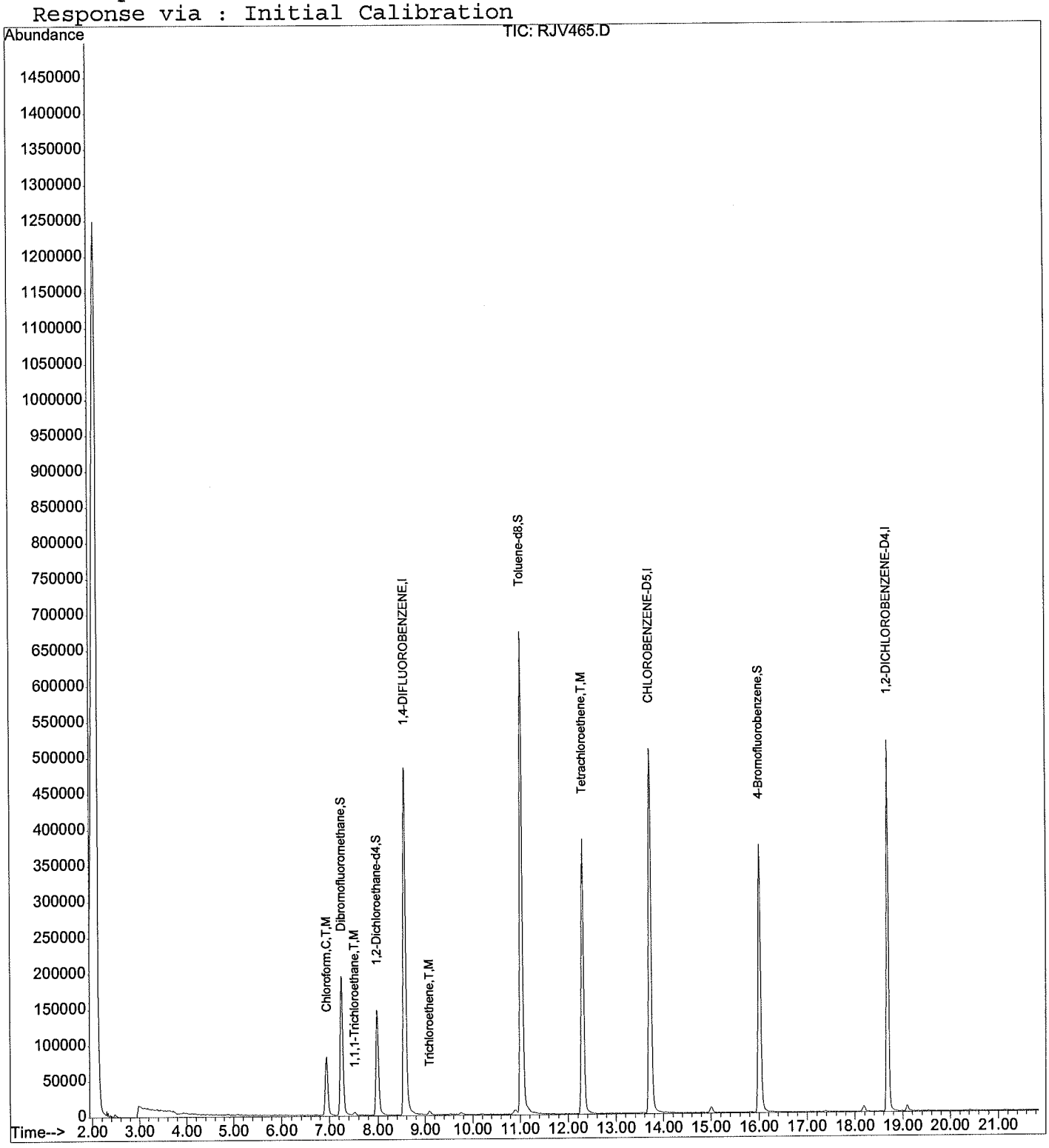
(#) = qualifier out of range (m) = manual integration

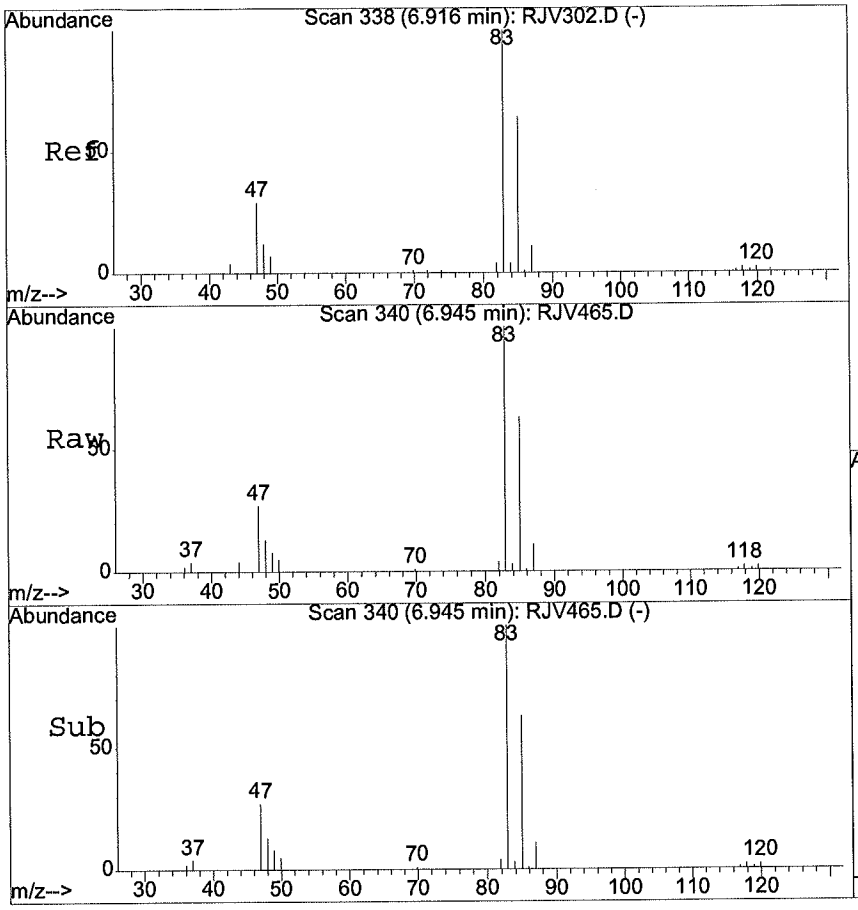
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV465.D
Acq On : 17 Oct 2024 5:06 pm
Sample : 24J055-16
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:39 2024

Vial: 12
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

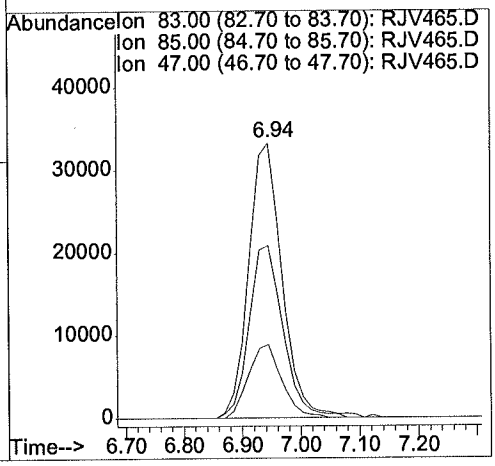


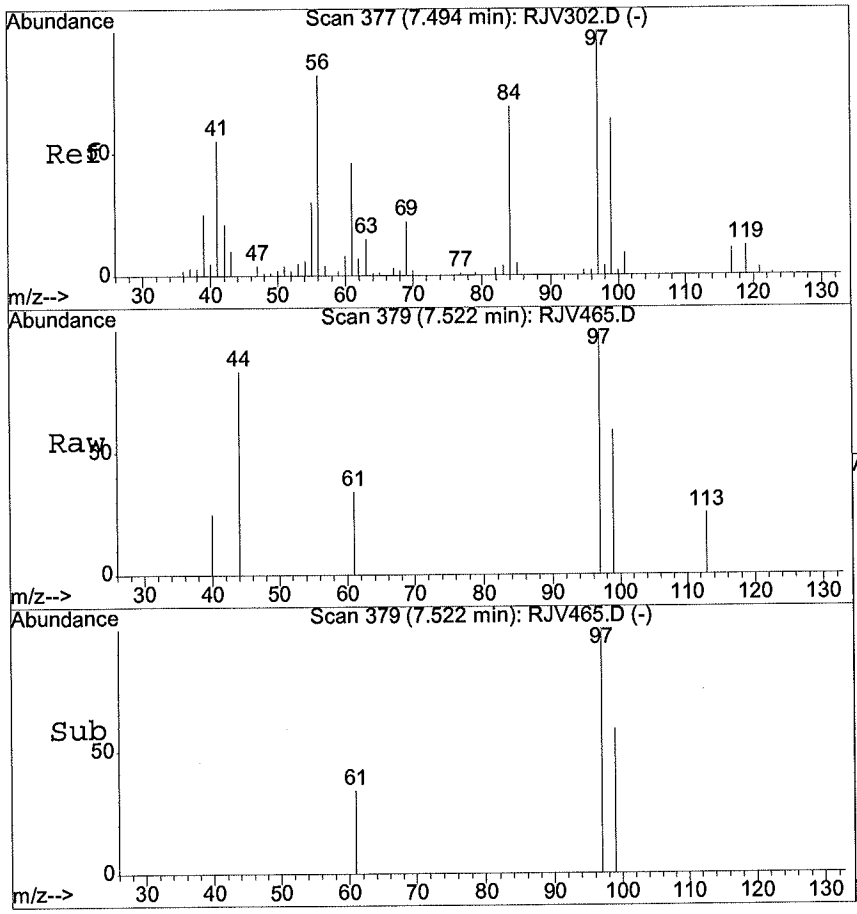


#31
Chloroform
Concen: 3.06 ug/l
RT: 6.94 min Scan# 340
Delta R.T. 0.03 min
Lab File: RJV465.D
Acq: 17 Oct 2024 5:06 pm

Tgt Ion: 83 Resp: 131933

Ion	Ratio	Lower	Upper
83	100		
85	63.5	37.8	97.8
47	26.6	0.0	59.1

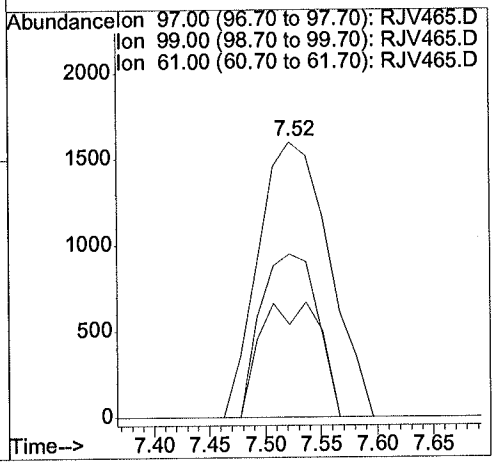


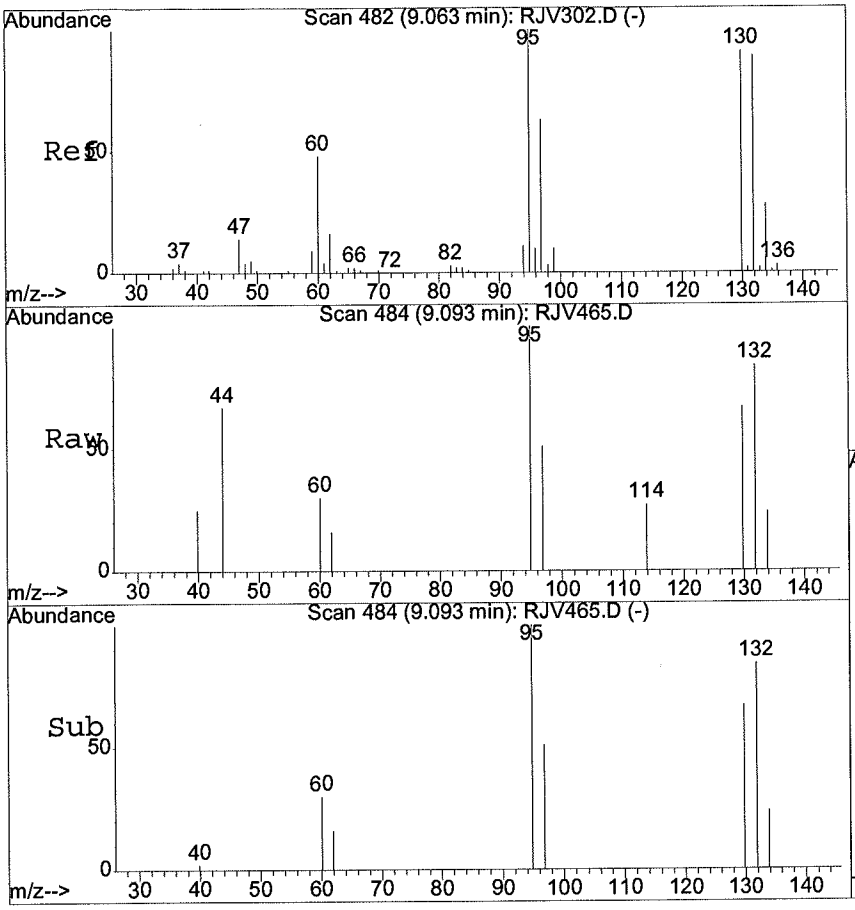


#35
1,1,1-Trichloroethane
Concen: 0.18 ug/l
RT: 7.52 min Scan# 379
Delta R.T. 0.03 min
Lab File: RJV465.D
Acq: 17 Oct 2024 5:06 pm

Tgt Ion: 97 Resp: 7071

Ion	Ratio	Lower	Upper
97	100		
99	47.6	35.2	95.2
61	35.5	16.5	76.5

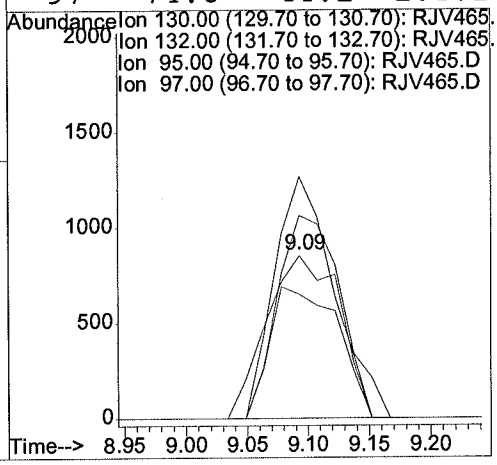


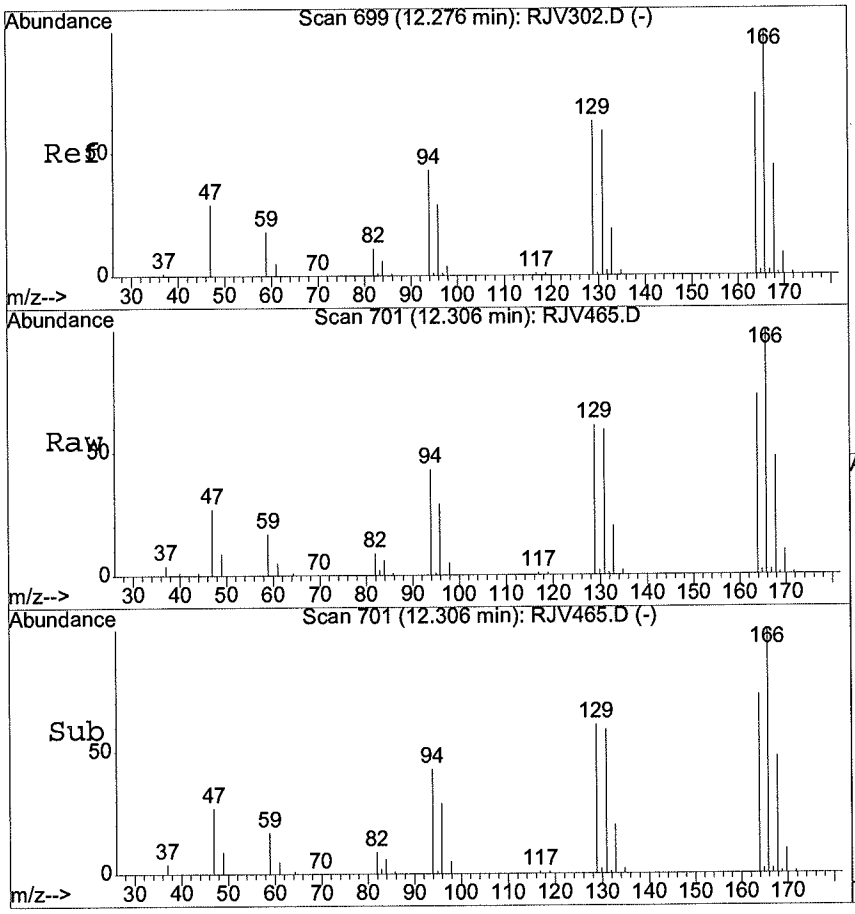


#44
Trichloroethene
Concen: 0.15 ug/l
RT: 9.09 min Scan# 484
Delta R.T. 0.03 min
Lab File: RJV465.D
Acq: 17 Oct 2024 5:06 pm

Tgt Ion:130 Resp: 3566

Ion	Ratio	Lower	Upper
130	100		
132	111.1	67.4	127.4
95	116.7	81.2	141.2
97	74.8	44.1	104.1

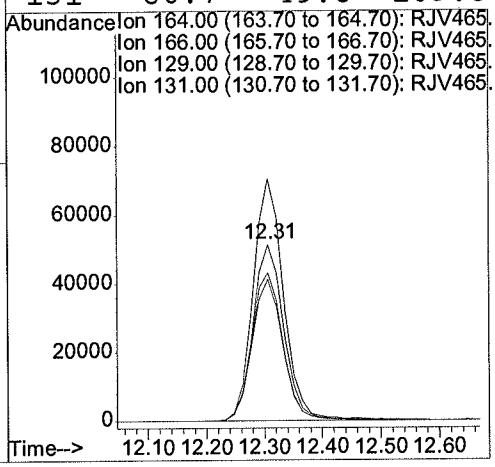




#61
Tetrachloroethene
Concen: 8.96 ug/l
RT: 12.31 min Scan# 701
Delta R.T. 0.03 min
Lab File: RJV465.D
Acq: 17 Oct 2024 5:06 pm

Tgt Ion:164 Resp: 190550

Ion	Ratio	Lower	Upper
164	100		
166	135.5	101.7	161.7
129	84.7	53.9	113.9
131	80.7	49.8	109.8



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/03/24 13:15
Project	: VA SALT LAKE CITY	Date Received:	10/04/24
Batch No.	: 24J055	Date Extracted:	10/17/24 17:36
Sample ID	: MW39S-GW100324	Date Analyzed:	10/17/24 17:36
Lab Samp ID:	24J055-17	Dilution Factor:	1
Lab File ID:	RJV466	Matrix:	WATER
Ext Btch ID:	VO01J19	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.54J	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	4.B	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.24J	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	21	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	0.34J	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.B	10.0	10B	70-130
Bromofluorobenzene	10.7	10.0	107	70-130
Toluene-dB	10.6	10.0	106	70-130
Dibromofluoromethane	10.B	10.0	10B	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV466.D
Acq On : 17 Oct 2024 5:36 pm
Sample : 24J055-17
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:39 2024

Vial: 13
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	796961	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	620994	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	241934	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	225411	10.83	ug/l	0.03
Spiked Amount 10.000			Recovery =	108.30%		
41) 1,2-Dichloroethane-d4	7.98	65	198076	10.80	ug/l	0.02
Spiked Amount 10.000			Recovery =	108.00%		
54) Toluene-d8	11.03	98	906824	10.62	ug/l	0.02
Spiked Amount 10.000			Recovery =	106.20%		
76) 4-Bromofluorobenzene	16.01	95	305201	10.65	ug/l	0.03
Spiked Amount 10.000			Recovery =	106.50%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.72	96	6046	0.24	ug/l	88
31) Chloroform	6.93	83	206970	4.85	ug/l	95
44) Trichloroethene	9.11	130	8282	0.34	ug/l	87
47) Bromodichloromethane	9.74	83	15133	0.54	ug/l	96
61) Tetrachloroethene	12.31	164	438819	20.63	ug/l	100

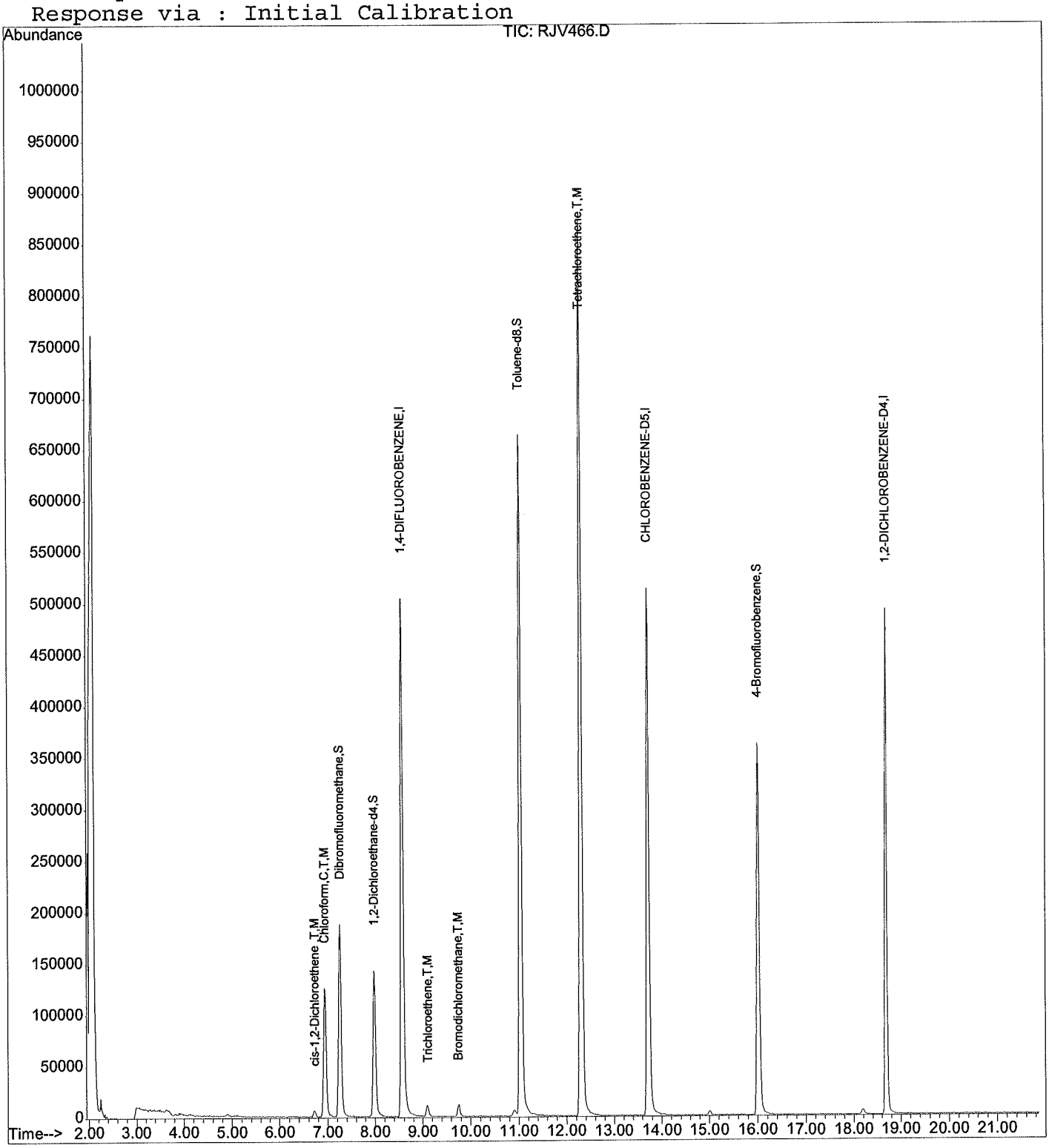
(#) = qualifier out of range (m) = manual integration

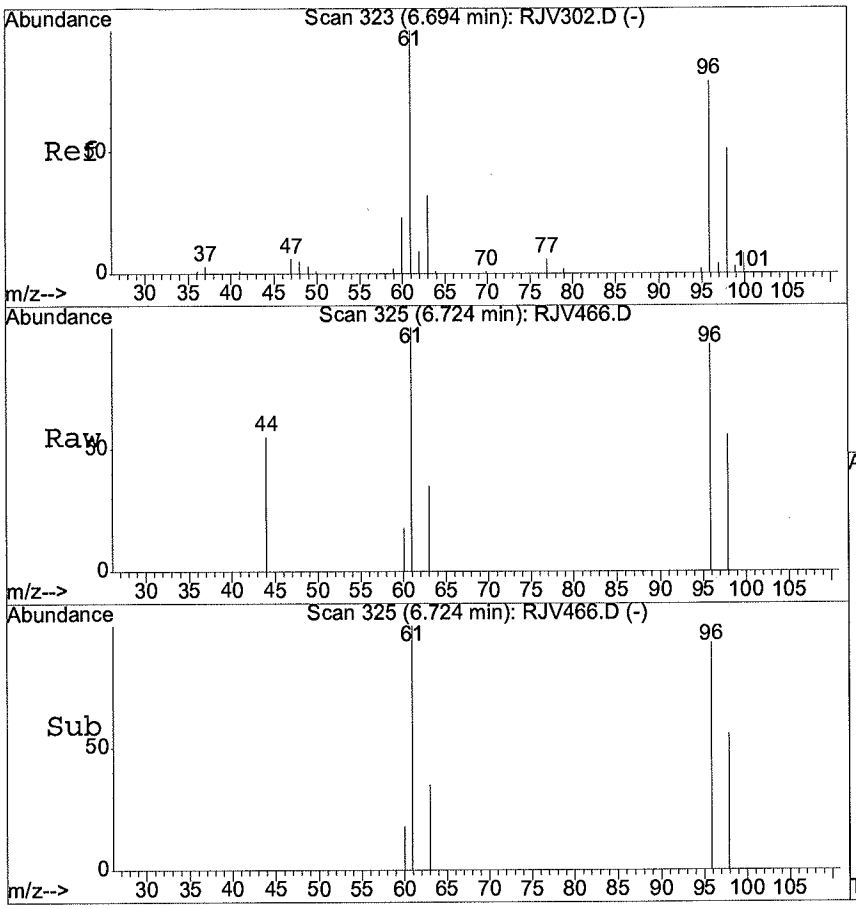
Data File : D:\HPCHEM\1\DATA\24J17\RJV466.D
Acq On : 17 Oct 2024 5:36 pm
Sample : 24J055-17
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:39 2024

Vial: 13
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration

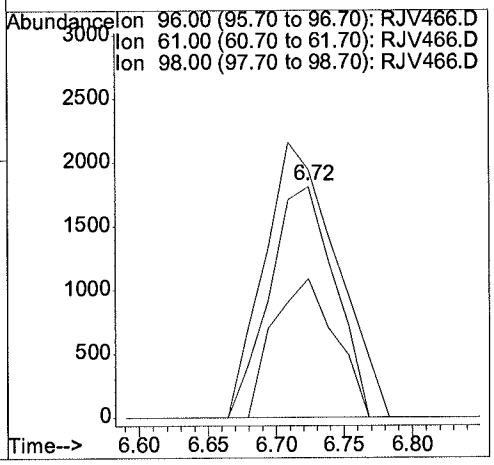


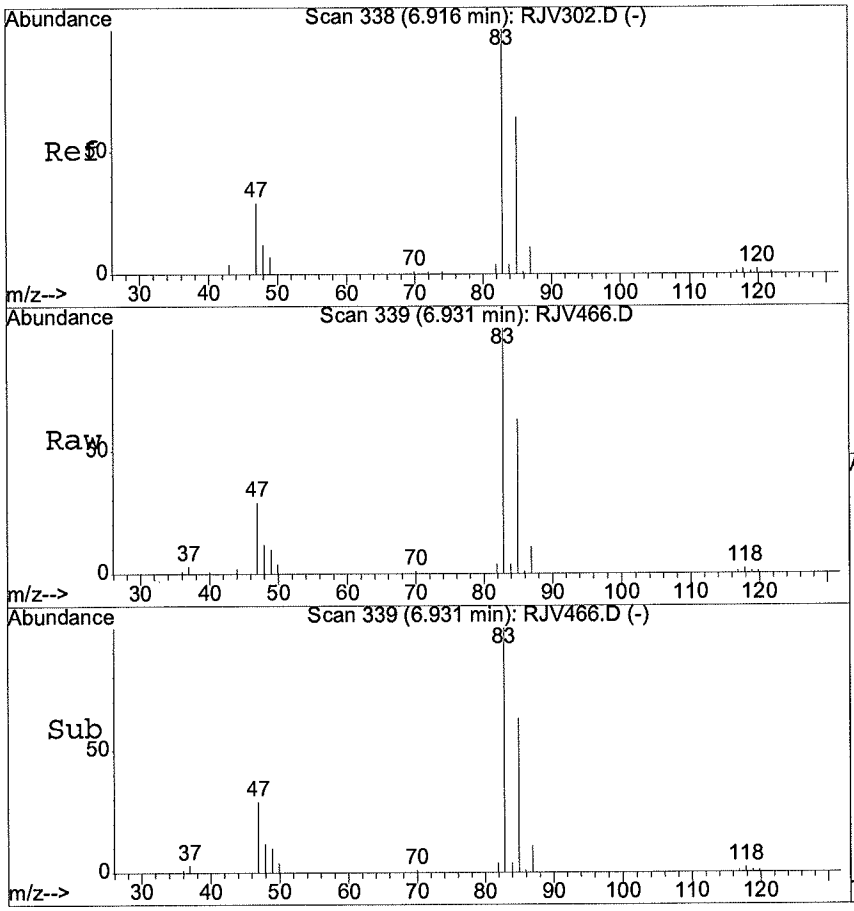


#30
cis-1,2-Dichloroethene
Concen: 0.24 ug/l
RT: 6.72 min Scan# 325
Delta R.T. 0.03 min
Lab File: RJV466.D
Acq: 17 Oct 2024 5:36 pm

Tgt Ion: 96 Resp: 6046

Ion	Ratio	Lower	Upper
96	100		
61	132.1	118.2	178.2
98	57.3	35.6	95.6

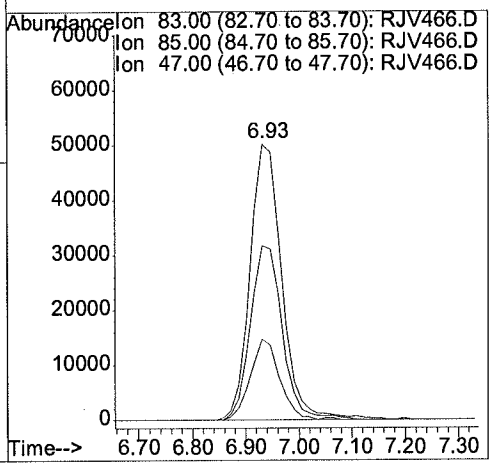


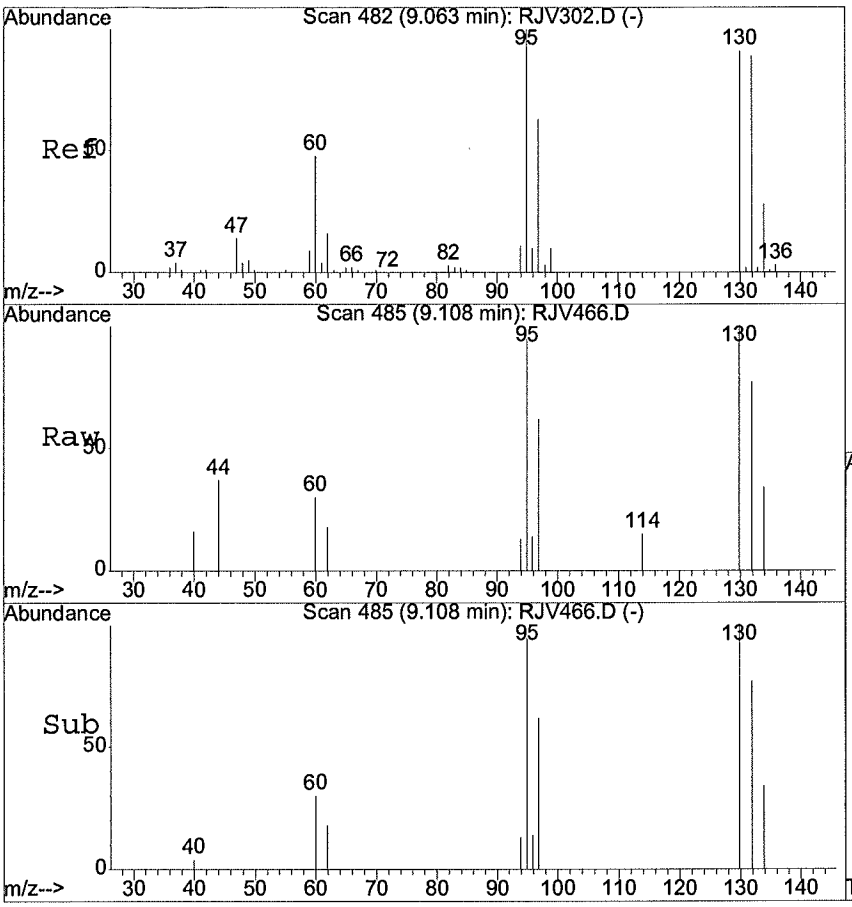


#31
Chloroform
Concen: 4.85 ug/l
RT: 6.93 min Scan# 339
Delta R.T. 0.01 min
Lab File: RJV466.D
Acq: 17 Oct 2024 5:36 pm

Tgt Ion: 83 Resp: 206970

Ion	Ratio	Lower	Upper
83	100		
85	63.3	37.8	97.8
47	26.9	0.0	59.1

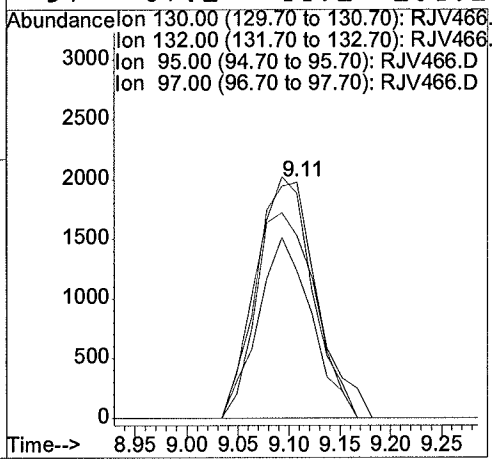


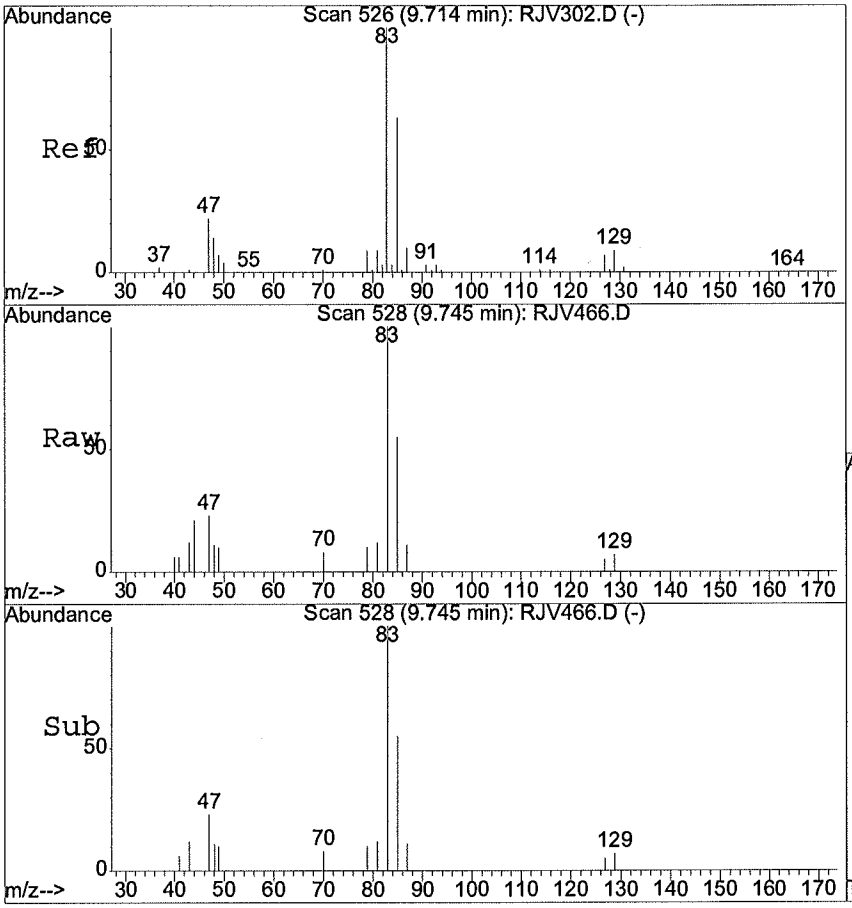


#44
Trichloroethene
Concen: 0.34 ug/l
RT: 9.11 min Scan# 485
Delta R.T. 0.05 min
Lab File: RJV466.D
Acq: 17 Oct 2024 5:36 pm

Tgt Ion:130 Resp: 8282

Ion	Ratio	Lower	Upper
130	100		
132	83.8	67.4	127.4
95	95.0	81.2	141.2
97	67.1	44.1	104.1

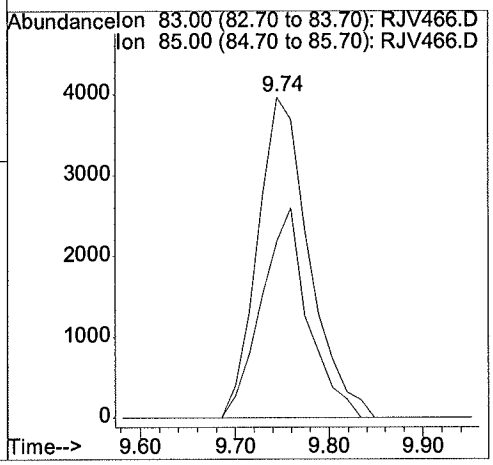


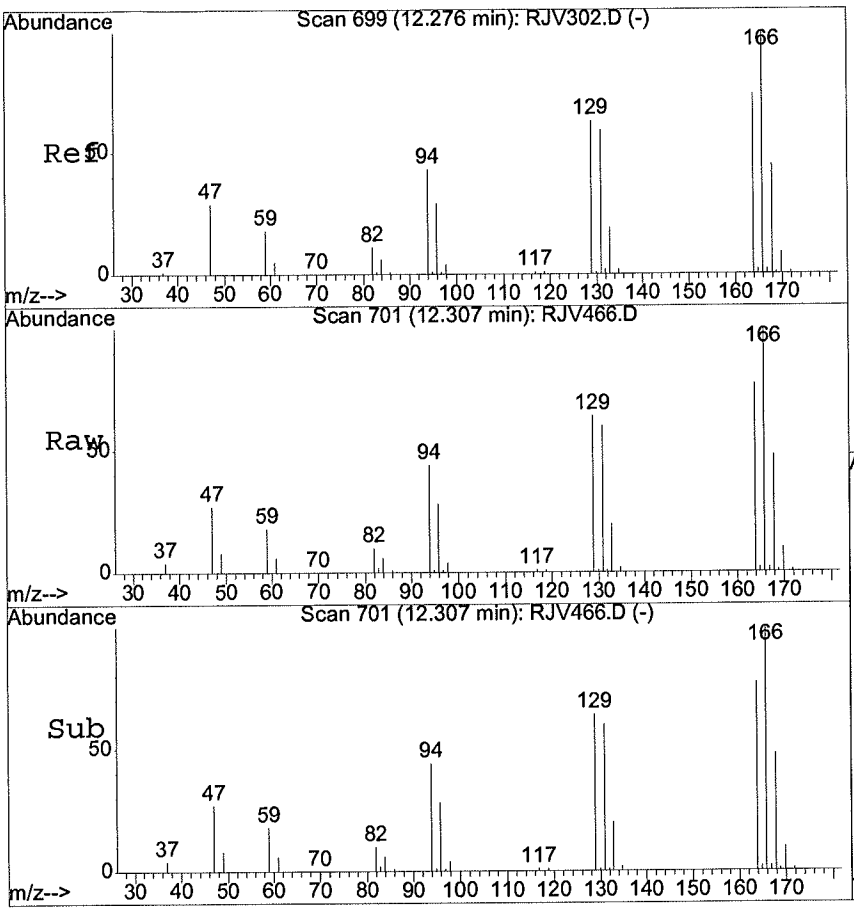


#47
Bromodichloromethane
Concen: 0.54 ug/l
RT: 9.74 min Scan# 528
Delta R.T. 0.03 min
Lab File: RJV466.D
Acq: 17 Oct 2024 5:36 pm

Tgt Ion: 83 Resp: 15133

Ion	Ratio	Lower	Upper
83	100		
85	59.2	32.5	92.5

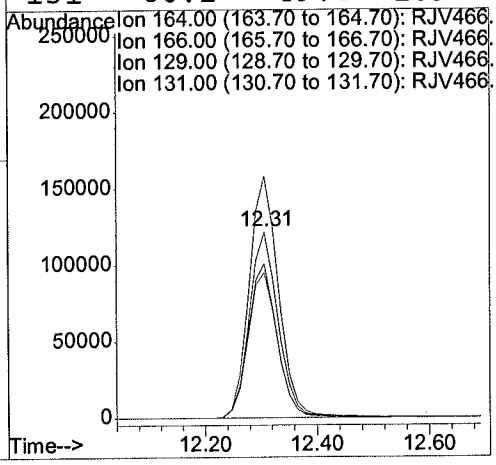




#61
Tetrachloroethene
Concen: 20.63 ug/l
RT: 12.31 min Scan# 701
Delta R.T. 0.03 min
Lab File: RJV466.D
Acq: 17 Oct 2024 5:36 pm

Tgt Ion:164 Resp: 438819

Ion	Ratio	Lower	Upper
164	100		
166	132.2	101.7	161.7
129	83.2	53.9	113.9
131	80.2	49.8	109.8



QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/16/24 20:06
Project	: VA SALT LAKE CITY	Date Received:	10/16/24
Batch No.	: 24J055	Date Extracted:	10/16/24 20:06
Sample ID	: MBLK1W	Date Analyzed:	10/16/24 20:06
Lab Samp ID:	VO01J18B	Dilution Factor:	1
Lab File ID:	RJV430	Matrix:	WATER
Ext Btch ID:	VO01J18	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.3	10.0	103	70-130
Bromofluorobenzene	9.56	10.0	96	70-130
Toluene-d8	10.7	10.0	107	70-130
Dibromofluoromethane	10.8	10.0	108	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DNguye Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
8ATCH NO. : 24J055
METHOO : SW50308/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCO1W
LAB SAMPLE IO	: V001J188	V001J18L	V001J18C
LAB FILE ID	: RJV430	RJV429	RJV449
DATE PREPAREO	: 10/16/24 20:06	10/16/24 19:37	10/17/24 05:29
DATE ANALYZEO	: 10/16/24 20:06	10/16/24 19:37	10/17/24 05:29
PREP BATCH	: V001J18	V001J18	V001J18
CALIBRATION REF:	RJV302	RJV302	RJV302

ACCESSION:

PARAMETERS	M8Result (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCOResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	NO	10.0	10.7	107	10.0	11.2	112	5	74-131	20
1,1,2,2-Tetrachloroethane	NO	10.0	9.91	99	10.0	9.33	93	6	71-121	20
1,1,2-Trichloroethane	NO	10.0	11.1	111	10.0	11.0	110	1	80-119	20
1,1-Dichloroethane	NO	10.0	10.5	105	10.0	10.7	107	2	77-125	20
1,1-Dichloroethene	NO	10.0	10.3	103	10.0	10.0	100	3	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	10.8	108	10.0	9.80	98	10	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	10.3	103	10.0	9.68	97	6	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	10.2	102	10.0	9.41	94	8	76-124	20
1,2-Oibromo-3-chloropropane	ND	10.0	10.3	103	10.0	10.1	101	2	62-138	20
1,2-Oichlorobenzene	ND	10.0	10.8	108	10.0	10.9	109	1	80-119	20
1,2-Oichloroethane	ND	10.0	11.1	111	10.0	12.5	125	12	73-128	20
1,2-Dichloropropane	ND	10.0	10.2	102	10.0	10.4	104	2	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	9.61	96	10.0	9.03	90	6	75-124	20
1,3-Oichlorobenzene	ND	10.0	10.9	109	10.0	10.8	108	1	80-119	20
1,4-Oichlorobenzene	ND	10.0	10.7	107	10.0	10.5	105	2	79-118	20
2-8utanone	NO	50.0	48.0	96	50.0	45.6	91	5	56-143	20
2-Hexanone	NO	50.0	51.4	103	50.0	50.7	101	1	57-139	20
Acetone	NO	50.0	50.4	101	50.0	51.5	103	2	39-160	20
8enzene	NO	10.0	10.6	106	10.0	10.8	108	2	79-120	20
8romochloromethane	NO	10.0	10.1	101	10.0	10.1	101	0	78-120	20
8romodichloromethane	NO	10.0	10.7	107	10.0	11.9	119	11	79-125	20
8romoform	NO	10.0	8.99	90	10.0	7.40	74	19	66-130	20
8romomethane	ND	10.0	10.0	100	10.0	9.43	94	6	53-141	20
Carbon Oisulfide	NO	10.0	10.5	105	10.0	10.2	102	3	64-133	20
Carbon Tetrachloride	NO	10.0	10.9	109	10.0	11.7	117	7	72-136	20
Chlorobenzene	NO	10.0	10.8	108	10.0	10.7	107	1	82-118	20
Chloroethane	NO	10.0	9.72	97	10.0	9.00	90	8	60-138	20
Chloroform	ND	10.0	10.8	108	10.0	11.7	117	8	79-124	20
Chloromethane	ND	10.0	8.78	88	10.0	8.10	81	8	50-139	20
cis-1,2-Oichloroethylene	ND	10.0	10.5	105	10.0	11.0	110	5	78-123	20
Oibromochloromethane	ND	10.0	11.9	119	10.0	12.2	122	2	74-126	20
Oichlorodifluoromethane	ND	10.0	9.55	96	10.0	8.94	89	7	32-152	20
Ethylbenzene	ND	10.0	11.1	111	10.0	11.0	110	1	79-121	20
Isopropylbenzene	ND	10.0	11.7	117	10.0	10.2	102	14	72-131	20
m,p-Xylene	ND	20.0	20.7	104	20.0	21.0	105	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	49.7	99	50.0	50.7	101	2	67-130	20
Methylene Chloride	ND	10.0	9.99	100	10.0	10.1	101	1	74-124	20
tert-8utyl Methyl Ether	ND	10.0	10.9	109	10.0	11.4	114	4	71-124	20
o-Xylene	ND	10.0	12.1	121	10.0	10.9	109	10	78-122	20
Styrene	ND	10.0	12.1	121	10.0	10.7	107	12	78-123	20
Tetrachloroethene	ND	10.0	11.2	112	10.0	10.5	105	6	74-129	20
Toluene	ND	10.0	11.1	111	10.0	10.6	106	5	80-121	20
Trans-1,2-OCE	ND	10.0	10.4	104	10.0	10.1	101	3	75-124	20
cis-1,3-Oichloropropene	NO	10.0	11.1	111	10.0	10.9	109	2	75-124	20
Trans-1,3-Oichloropropene	NO	10.0	11.8	118	10.0	11.5	115	3	73-127	20
TCE	NO	10.0	11.3	113	10.0	11.6	116	3	79-123	20
Trichlorofluoromethane	NO	10.0	9.72	97	10.0	10.1	101	4	65-141	20
Vinyl Chloride	NO	10.0	9.72	97	10.0	8.78	88	10	58-137	20
1,2-Oibromoethane	ND	10.0	11.1	111	10.0	10.8	108	3	77-121	20
Vinyl Acetate	ND	10.0	9.13	91	10.0	5.42	54	51*	54-146	20
Trichlorotrifluoroethane	ND	10.0	11.9	119	10.0	11.6	116	3	70-136	20
Methyl Acetate	ND	10.0	8.83	88	10.0	9.11	91	3	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCOResult (ug/L)	LCORec (%)	QCLimit (%)
1,2-Oichloroethane-d4	10.0	10.3	103	10.0	11.9	119	70-130
Bromofluorobenzene	10.0	9.68	97	10.0	8.98	90	70-130
Toluene-d8	10.0	10.7	107	10.0	10.1	101	70-130
Dibromofluoromethane	10.0	10.6	106	10.0	11.2	112	70-130

M8: Method 8lank sample LCS: Lab Control Sample LCO: Lab Control Sample Duplicate
* Out of QC Limit

METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	10/17/24 14:06
Project	: VA SALT LAKE CITY	Date Received:	10/17/24
Batch No.	: 24J055	Date Extracted:	10/17/24 14:06
Sample ID	: MBLK2W	Date Analyzed:	10/17/24 14:06
Lab Samp ID:	VO01J19B	Dilution Factor:	1
Lab File ID:	RJV459	Matrix:	WATER
Ext Btch ID:	VO01J19	% Moisture:	NA
Calib. Ref.:	RJV302	Instrument ID:	01

PARAMETER(S)	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-Trichloroethane	ND	1.0	0.10
1,1,2,2-Tetrachloroethane	ND	1.0	0.11
1,1,2-Trichloroethane	ND	1.0	0.10
1,1-Dichloroethane	ND	1.0	0.10
1,1-Dichloroethene	ND	1.0	0.10
1,2,3-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trichlorobenzene	ND	1.0	0.15
1,2,4-Trimethylbenzene	ND	1.0	0.11
1,2-Dibromo-3-chloropropane	ND	2.0	0.25
1,2-Dichlorobenzene	ND	1.0	0.10
1,2-Dichloroethane	ND	1.0	0.10
1,2-Dichloropropane	ND	1.0	0.10
1,3,5-Trimethylbenzene	ND	1.0	0.12
1,3-Dichlorobenzene	ND	1.0	0.11
1,4-Dichlorobenzene	ND	1.0	0.10
2-Butanone	ND	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	ND	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	ND	1.0	0.10
Bromoform	ND	1.0	0.15
Bromomethane	ND	1.0	0.16
Carbon Disulfide	ND	1.0	0.25
Carbon Tetrachloride	ND	1.0	0.10
Chlorobenzene	ND	1.0	0.10
Chloroethane	ND	1.0	0.27
Chloroform	ND	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	ND	1.0	0.10
Dibromochloromethane	ND	1.0	0.10
Dichlorodifluoromethane	ND	1.0	0.15
Ethylbenzene	ND	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	ND	2.0	0.21
4-Methyl-2-Pentanone	ND	20	2.5
Methylene Chloride	ND	2.0	0.50
tert-Butyl Methyl Ether	ND	1.0	0.13
o-Xylene	ND	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	ND	1.0	0.15
Toluene	ND	1.0	0.10
Trans-1,2-DCE	ND	1.0	0.10
cis-1,3-Dichloropropene	ND	1.0	0.10
Trans-1,3-Dichloropropene	ND	1.0	0.11
TCE	ND	1.0	0.10
Trichlorofluoromethane	ND	1.0	0.15
Vinyl Chloride	ND	1.0	0.12
1,2-Dibromoethane	ND	1.0	0.10
Vinyl Acetate	ND	2.0	0.25
Trichlorotrifluoroethane	ND	1.0	0.15
Methyl Acetate	ND	2.0	0.25

SURROGATE PARAMETER(S)	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
1,2-Dichloroethane-d4	10.0	10.0	100	70-130
Bromofluorobenzene	10.B	10.0	10B	70-130
Toluene-d8	11.2	10.0	112	70-130
Dibromofluoromethane	10.7	10.0	107	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : DNguye
Analyzed by : DNguye
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
8ATCH NO. : 24J055
METHOD : SW50308/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: M8LK2W	LCS2W	LCD2W
LAB SAMPLE ID	: VO01J198	VO01J19L	VO01J19C
LAB FILE ID	: RJV459	RJV456	RJV457
DATE PREPARED	: 10/17/24 14:06	10/17/24 12:36	10/17/24 13:06
DATE ANALYZED	: 10/17/24 14:06	10/17/24 12:36	10/17/24 13:06
PREP 8ATCH	: VO01J19	VO01J19	VO01J19
CALI8RATION REF	: RJV302	RJV302	RJV302

ACCESSION:

PARAMETERS	M8Result (ug/L)	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
1,1,1-Trichloroethane	ND	10.0	10.9	109	10.0	10.6	106	3	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	10.0	100	10.0	11.2	112	11	71-121	20
1,1,2-Trichloroethane	ND	10.0	10.9	109	10.0	11.4	114	4	80-119	20
1,1-Dichloroethane	ND	10.0	10.9	109	10.0	10.8	108	1	77-125	20
1,1-Dichloroethene	ND	10.0	10.7	107	10.0	10.6	106	1	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	11.0	110	10.0	11.6	116	5	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	10.7	107	10.0	11.2	112	5	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	10.8	108	10.0	10.9	109	1	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	10.0	100	10.0	10.5	105	5	62-138	20
1,2-Dichlorobenzene	ND	10.0	10.5	105	10.0	10.8	108	3	80-119	20
1,2-Dichloroethane	ND	10.0	10.8	108	10.0	10.9	109	1	73-128	20
1,2-Dichloropropane	ND	10.0	10.5	105	10.0	10.6	106	1	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	9.95	100	10.0	10.9	109	9	75-124	20
1,3-Dichlorobenzene	ND	10.0	10.9	109	10.0	11.0	110	1	80-119	20
1,4-Dichlorobenzene	ND	10.0	10.4	104	10.0	10.6	106	2	79-118	20
2-Butanone	ND	50.0	54.9	110	50.0	55.1	110	0	56-143	20
2-Hexanone	ND	50.0	56.4	113	50.0	58.2	116	3	57-139	20
Acetone	ND	50.0	56.0	112	50.0	56.2	112	0	39-160	20
Benzene	ND	10.0	10.7	107	10.0	10.7	107	0	79-120	20
8romochloromethane	ND	10.0	10.7	107	10.0	10.8	108	1	78-120	20
8romodichloromethane	ND	10.0	10.7	107	10.0	10.7	107	0	79-125	20
8romoform	ND	10.0	8.99	90	10.0	9.50	95	6	66-130	20
8romomethane	ND	10.0	10.8	108	10.0	10.1	101	7	53-141	20
Carbon Disulfide	ND	10.0	11.2	112	10.0	11.2	112	0	64-133	20
Carbon Tetrachloride	ND	10.0	10.9	109	10.0	10.9	109	0	72-136	20
Chlorobenzene	ND	10.0	10.8	108	10.0	11.0	110	2	82-118	20
Chloroethane	ND	10.0	10.8	108	10.0	10.4	104	4	60-138	20
Chloroform	ND	10.0	10.7	107	10.0	10.4	104	3	79-124	20
Chloromethane	ND	10.0	10.8	108	10.0	10.1	101	7	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	10.9	109	10.0	11.1	111	2	78-123	20
Dibromochloromethane	ND	10.0	10.8	108	10.0	11.3	113	5	74-126	20
Dichlorodifluoromethane	ND	10.0	10.3	103	10.0	9.58	96	7	32-152	20
Ethylbenzene	ND	10.0	10.7	107	10.0	10.9	109	2	79-121	20
Isopropylbenzene	ND	10.0	11.7	117	10.0	11.3	113	3	72-131	20
m,p-Xylene	ND	20.0	20.6	103	20.0	20.9	105	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	57.1	114	50.0	56.9	114	0	67-130	20
Methylene Chloride	ND	10.0	10.6	106	10.0	10.5	105	1	74-124	20
tert-8utyl Methyl Ether	ND	10.0	11.1	111	10.0	11.1	111	0	71-124	20
o-Xylene	ND	10.0	10.5	105	10.0	11.5	115	9	78-122	20
Styrene	ND	10.0	10.5	105	10.0	11.9	119	12	78-123	20
Tetrachloroethene	ND	10.0	10.5	105	10.0	10.8	108	3	74-129	20
Toluene	ND	10.0	10.9	109	10.0	11.1	111	2	80-121	20
Trans-1,2-DCE	ND	10.0	10.5	105	10.0	10.7	107	2	75-124	20
cis-1,3-Dichloropropene	ND	10.0	11.0	110	10.0	11.0	110	0	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	11.2	112	10.0	11.6	116	4	73-127	20
TCE	ND	10.0	10.8	108	10.0	10.9	109	1	79-123	20
Trichlorofluoromethane	ND	10.0	10.4	104	10.0	9.65	97	7	65-141	20
Vinyl Chloride	ND	10.0	11.0	110	10.0	10.6	106	4	58-137	20
1,2-Dibromoethane	ND	10.0	10.9	109	10.0	11.1	111	2	77-121	20
Vinyl Acetate	ND	10.0	10.6	106	10.0	10.1	101	5	54-146	20
Trichlorotrifluoroethane	ND	10.0	11.3	113	10.0	11.4	114	1	70-136	20
Methyl Acetate	ND	10.0	10.3	103	10.0	10.5	105	2	50-136	20

SURROGATE PARAMETERS	SpikeAmt (ug/L)	LCSResult (ug/L)	LCSRec (%)	SpikeAmt (ug/L)	LCDResult (ug/L)	LCDRec (%)	QCLimit (%)
1,2-Dichloroethane-d4	10.0	10.6	106	10.0	10.2	102	70-130
8romofluorobenzene	10.0	10.0	100	10.0	10.6	106	70-130
Toluene-d8	10.0	10.9	109	10.0	10.8	108	70-130
Dibromofluoromethane	10.0	11.1	111	10.0	10.8	108	70-130

M8: Method 8lank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV430.D Vial: 4
Acq On : 16 Oct 2024 8:06 pm Operator: DNguye/CLingl
Sample : VO01J18B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 17:02 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	944374	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	726301	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	312798	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	267085	10.83	ug/l	0.01
Spiked Amount 10.000			Recovery =	108.30%		
41) 1,2-Dichloroethane-d4	7.98	65	222788	10.25	ug/l	0.01
Spiked Amount 10.000			Recovery =	102.50%		
54) Toluene-d8	11.02	98	1070074	10.71	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.10%		
76) 4-Bromofluorobenzene	16.00	95	354154	9.56	ug/l	0.03
Spiked Amount 10.000			Recovery =	95.60%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

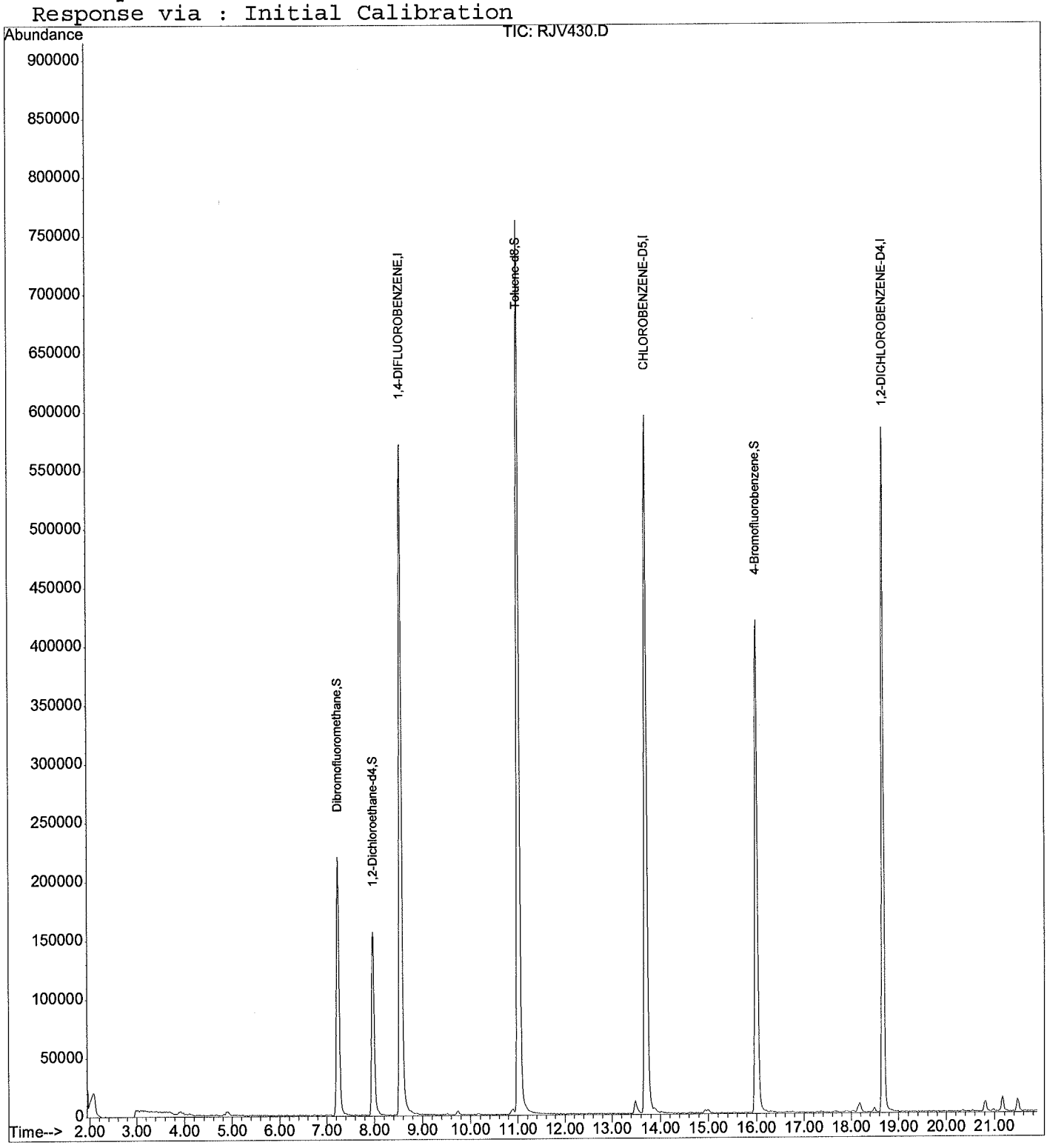
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV430.D
Acq On : 16 Oct 2024 8:06 pm
Sample : VO01J18B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Oct 30 17:02 2024

Vial: 4
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00

Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV429.D
Acq On : 16 Oct 2024 7:37 pm
Sample : VO01J18L
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Oct 29 16:22 2024

Vial: 3
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	877825	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	664943	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	343050	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	243172	10.61	ug/l	0.01
Spiked Amount 10.000			Recovery =	106.10%		
41) 1,2-Dichloroethane-d4	7.98	65	208546	10.33	ug/l	0.01
Spiked Amount 10.000			Recovery =	103.30%		
54) Toluene-d8	11.03	98	981125	10.73	ug/l	0.01
Spiked Amount 10.000			Recovery =	107.30%		
76) 4-Bromofluorobenzene	16.01	95	393148	9.68	ug/l	0.03
Spiked Amount 10.000			Recovery =	96.80%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	344241	9.55	ug/l	100
5) Chloromethane	2.57	50	239024	8.78	ug/l	100
6) Vinyl chloride	2.70	62	233259	9.72	ug/l	100
7) Bromomethane	3.26	94	173553	10.03	ug/l	97
8) Chloroethane	3.26	64	176816	9.72	ug/l	99
9) Dichlorofluoromethane	3.38	67	365549	10.97	ug/l	100
10) Trichlorofluoromethane	3.64	101	379387	9.72	ug/l	100
11) Acrolein	4.03	56	36217	53.96	ug/l	72
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	191018	11.88	ug/l	98
13) Acetone	4.12	43	163434	50.42	ug/l	95
14) 1,1-Dichloroethene	4.26	61	422786	10.32	ug/l	79
15) tert-Butyl alcohol	4.38	59	215405	265.61	ug/l	97
16) Iodomethane	4.68	142	409555	11.77	ug/l	98
17) Methyl acetate	4.69	43	73855	8.83	ug/l	93
18) Methylene chloride	4.90	49	295071	9.99	ug/l	91
19) Carbon disulfide	4.92	76	901156	10.52	ug/l	99
20) Acrylonitrile	5.06	53	159651	52.43	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	443745	10.94	ug/l	97
22) trans-1,2-Dichloroethene	5.29	61	410860	10.45	ug/l	99
23) Isopropyl ether (DIPE)	5.68	45	815059	9.90	ug/l	94
24) Vinyl acetate	5.86	43	240730	9.13	ug/l	95
25) 1,1-Dichloroethane	5.85	63	483109	10.47	ug/l	99
26) 2-Butanol	6.17	45	176591	259.87	ug/l	88
27) tert-Butyl ethyl ether (ET	6.26	59	608253	10.16	ug/l	97
28) 2-Butanone	6.44	43	238724	48.03	ug/l	95
29) 2,2-Dichloropropane	6.65	77	436937	11.07	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	296685	10.50	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV429.D Vial: 3
Acq On : 16 Oct 2024 7:37 pm Operator: DNguye/CLingl
Sample : VO01J18L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:22 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
31)	Chloroform	6.93	83	505647	10.76	ug/l		97
32)	Bromochloromethane	7.17	49	176391	10.09	ug/l		88
33)	Tetrahydrofuran	7.22	42	23578	8.54	ug/l		94
35)	1,1,1-Trichloroethane	7.51	97	452915	10.73	ug/l		99
36)	Cyclohexane	7.54	84	478555	10.99	ug/l		100
37)	2,2,4-Trimethylpentane	7.52	57	21936	10.41	ug/l	#	100
38)	1,1-Dichloropropene	7.73	110	135545	10.60	ug/l		98
39)	Carbon tetrachloride	7.89	119	349582	10.94	ug/l		100
40)	tert-Amyl methyl ether (TA	7.91	73	469979	10.21	ug/l		100
42)	Benzene	8.14	78	1060766	10.55	ug/l		98
43)	1,2-Dichloroethane	8.11	62	247821	11.06	ug/l		97
44)	Trichloroethene	9.08	130	299528	11.27	ug/l		95
45)	Methylcyclohexane	9.17	83	531721	10.32	ug/l		95
46)	1,2-Dichloropropane	9.36	63	231482	10.23	ug/l		95
47)	Bromodichloromethane	9.73	83	332447	10.74	ug/l		98
48)	1,4-Dioxane	9.77	88	17999	208.15	ug/l		96
49)	Dibromomethane	9.82	93	103111	10.49	ug/l		96
50)	2-Chloroethyl vinyl ether	10.23	63	12972	7.89	ug/l		96
51)	4-Methyl-2-pentanone	10.26	43	552734	49.73	ug/l		96
52)	cis-1,3-Dichloropropene	10.62	75	376141	11.09	ug/l		99
55)	Toluene	11.16	91	1164507	11.05	ug/l		100
56)	Ethyl methacrylate	11.45	69	169577	11.23	ug/l		93
57)	trans-1,3-Dichloropropene	11.48	75	282277	11.83	ug/l		97
58)	1,1,2-Trichloroethane	11.74	97	143924	11.09	ug/l		98
59)	2-Hexanone	11.76	43	354487	51.41	ug/l		94
60)	1,3-Dichloropropane	12.19	76	266998	10.93	ug/l		99
61)	Tetrachloroethene	12.29	164	254287	11.16	ug/l		99
62)	Dibromochloromethane	12.66	129	183798	11.89	ug/l		100
63)	1,2-Dibromoethane	13.03	107	136353	11.09	ug/l		98
64)	1-Chlorohexane	13.30	91	505356	10.26	ug/l		99
65)	Chlorobenzene	13.78	112	682037	10.81	ug/l		100
66)	1,1,1,2-Tetrachloroethane	13.86	131	235821	12.24	ug/l		99
67)	Ethylbenzene	13.87	91	1384065	11.10	ug/l		99
68)	m-Xylene & p-Xylene	14.01	91	2038661	20.70	ug/l		100
69)	o-Xylene	14.84	91	1181622	12.15	ug/l		99
70)	Styrene	14.90	104	857718	12.06	ug/l		98
71)	Isopropylbenzene	15.52	105	1547833	11.72	ug/l		99
73)	Bromoform	15.56	173	88400	8.99	ug/l		99
74)	trans-1,4-Dichloro-2-buten	15.62	53	44358	8.40	ug/l		85
75)	1,1,2,2-Tetrachloroethane	15.86	83	179416	9.91	ug/l		99
77)	1,2,3-Trichloropropane	16.14	110	49405	9.72	ug/l		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV429.D Vial: 3
Acq On : 16 Oct 2024 7:37 pm Operator: DNguye/CLingl
Sample : VO01J18L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:22 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

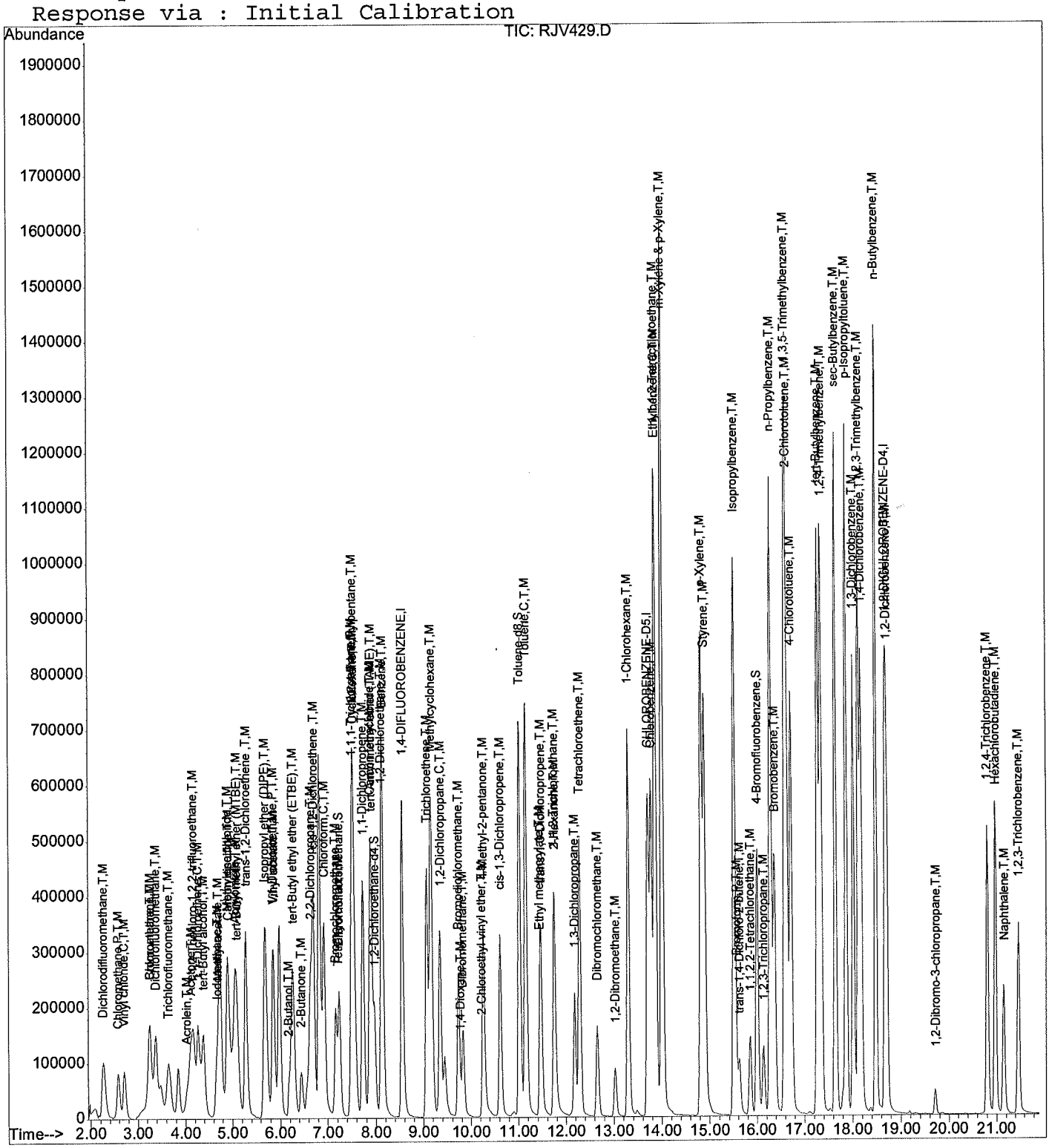
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.29	91	1964237	9.67	ug/l	99
79)	Bromobenzene	16.38	156	308169	10.47	ug/l	99
80)	1,3,5-Trimethylbenzene	16.60	105	1207725	9.61	ug/l	98
81)	2-Chlorotoluene	16.63	91	1164498	9.43	ug/l	97
82)	4-Chlorotoluene	16.72	91	1069374	9.71	ug/l	96
83)	tert-Butylbenzene	17.28	134	306355	10.82	ug/l	95
84)	1,2,4-Trimethylbenzene	17.35	105	1256096	10.22	ug/l	98
85)	sec-Butylbenzene	17.65	105	1765924	9.98	ug/l	97
86)	p-Isopropyltoluene	17.87	119	1411021	10.22	ug/l	99
87)	1,3-Dichlorobenzene	18.02	146	644729	10.90	ug/l	97
88)	1,2,3-Trimethylbenzene	18.12	105	1127231	10.08	ug/l	97
89)	1,4-Dichlorobenzene	18.18	146	627356	10.67	ug/l	97
90)	n-Butylbenzene	18.48	91	1426834	9.45	ug/l	98
91)	1,2-Dichlorobenzene	18.71	146	519451	10.77	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	24881	10.28	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	337941	10.35	ug/l	98
94)	Hexachlorobutadiene	20.98	225	228682	10.92	ug/l	99
95)	Naphthalene	21.16	128	414369	10.31	ug/l	99
96)	1,2,3-Trichlorobenzene	21.47	180	255828	10.81	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24J16\RJV429.D
Acq On : 16 Oct 2024 7:37 pm
Sample : VO01J18L
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Oct 29 16:22 2024

Vial: 3
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV449.D Vial: 23
Acq On : 17 Oct 2024 5:29 am Operator: DNguye/CLingl
Sample : VO01J18C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:24 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	686637	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	551200	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	320184	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	200751	11.19	ug/l	0.01
Spiked Amount 10.000			Recovery =	111.90%		
41) 1,2-Dichloroethane-d4	7.98	65	188294	11.92	ug/l	0.01
Spiked Amount 10.000			Recovery =	119.20%		
54) Toluene-d8	11.03	98	766628	10.11	ug/l	0.01
Spiked Amount 10.000			Recovery =	101.10%		
76) 4-Bromofluorobenzene	16.01	95	340345	8.98	ug/l	0.03
Spiked Amount 10.000			Recovery =	89.80%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	252086	8.94	ug/l	98
5) Chloromethane	2.57	50	172318	8.10	ug/l	100
6) Vinyl chloride	2.70	62	164869	8.78	ug/l	99
7) Bromomethane	3.24	94	127614	9.43	ug/l	97
8) Chloroethane	3.24	64	128072	9.00	ug/l	87
9) Dichlorofluoromethane	3.37	67	279653	10.73	ug/l	97
10) Trichlorofluoromethane	3.64	101	307413	10.07	ug/l	97
11) Acrolein	4.03	56	18631	35.49	ug/l	87
12) 1,1,2-Trichloro-1,2,2-trif	4.14	151	145476	11.57	ug/l	100
13) Acetone	4.10	43	130585	51.50	ug/l	96
14) 1,1-Dichloroethene	4.26	61	320904	10.02	ug/l	81
15) tert-Butyl alcohol	4.37	59	165528	260.94	ug/l	98
16) Iodomethane	4.66	142	329106	12.09	ug/l	99
17) Methyl acetate	4.69	43	59552	9.11	ug/l	96
18) Methylene chloride	4.88	49	232110	10.05	ug/l	89
19) Carbon disulfide	4.90	76	685508	10.23	ug/l	100
20) Acrylonitrile	5.06	53	118151	49.61	ug/l	98
21) tert-Butyl methyl ether (M	5.09	73	362964	11.44	ug/l	100
22) trans-1,2-Dichloroethene	5.27	61	312249	10.15	ug/l	99
23) Isopropyl ether (DIPE)	5.68	45	610474	9.48	ug/l	92
24) Vinyl acetate	5.85	43	111690	5.42	ug/l	93
25) 1,1-Dichloroethane	5.85	63	386069	10.70	ug/l	99
26) 2-Butanol	6.17	45	143163	269.34	ug/l	86
27) tert-Butyl ethyl ether (ET	6.26	59	497396	10.62	ug/l	96
28) 2-Butanone	6.44	43	177215	45.58	ug/l	93
29) 2,2-Dichloropropane	6.65	77	309595	10.03	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	243810	11.03	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV449.D Vial: 23
Acq On : 17 Oct 2024 5:29 am Operator: DNguye/CLingl
Sample : VO01J18C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:24 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
31)	Chloroform	6.93	83	431645	11.74	ug/l		96
32)	Bromochloromethane	7.16	49	137647	10.07	ug/l		85
33)	Tetrahydrofuran	7.22	42	20881	9.66	ug/l		95
35)	1,1,1-Trichloroethane	7.52	97	368284	11.15	ug/l		99
36)	Cyclohexane	7.53	84	334463	9.82	ug/l		99
37)	2,2,4-Trimethylpentane	7.52	57	14297	8.67	ug/l	#	100
38)	1,1-Dichloropropene	7.73	110	102043	10.21	ug/l		98
39)	Carbon tetrachloride	7.89	119	291301	11.65	ug/l		98
40)	tert-Amyl methyl ether (TA	7.90	73	389676	10.82	ug/l		100
42)	Benzene	8.14	78	851484	10.83	ug/l		98
43)	1,2-Dichloroethane	8.11	62	219824	12.54	ug/l		99
44)	Trichloroethene	9.08	130	240470	11.57	ug/l		96
45)	Methylcyclohexane	9.17	83	385768	9.57	ug/l		95
46)	1,2-Dichloropropane	9.36	63	183316	10.36	ug/l		86
47)	Bromodichloromethane	9.73	83	287052	11.85	ug/l		98
48)	1,4-Dioxane	9.77	88	14350	212.16	ug/l		93
49)	Dibromomethane	9.83	93	89156	11.60	ug/l		99
50)	2-Chloroethyl vinyl ether	10.23	63	11503	8.81	ug/l		97
51)	4-Methyl-2-pentanone	10.28	43	440910	50.72	ug/l		97
52)	cis-1,3-Dichloropropene	10.62	75	287944	10.85	ug/l		100
55)	Toluene	11.17	91	929058	10.64	ug/l		99
56)	Ethyl methacrylate	11.46	69	137886	11.02	ug/l		93
57)	trans-1,3-Dichloropropene	11.48	75	226777	11.46	ug/l		98
58)	1,1,2-Trichloroethane	11.74	97	118121	10.98	ug/l		98
59)	2-Hexanone	11.76	43	289835	50.71	ug/l		95
60)	1,3-Dichloropropane	12.19	76	225231	11.12	ug/l		99
61)	Tetrachloroethene	12.29	164	198555	10.52	ug/l		99
62)	Dibromochloromethane	12.66	129	156337	12.20	ug/l		98
63)	1,2-Dibromoethane	13.03	107	110506	10.84	ug/l		100
64)	1-Chlorohexane	13.31	91	373398	9.15	ug/l		98
65)	Chlorobenzene	13.79	112	560798	10.72	ug/l		99
66)	1,1,1,2-Tetrachloroethane	13.86	131	201228	12.60	ug/l		100
67)	Ethylbenzene	13.87	91	1141541	11.04	ug/l		100
68)	m-Xylene & p-Xylene	14.02	91	1718242	21.05	ug/l		98
69)	o-Xylene	14.84	91	881506	10.93	ug/l		96
70)	Styrene	14.91	104	631931	10.72	ug/l		96
71)	Isopropylbenzene	15.52	105	1121043	10.24	ug/l		99
73)	Bromoform	15.56	173	67480	7.40	ug/l		98
74)	trans-1,4-Dichloro-2-buten	15.64	53	29513	5.99	ug/l		78
75)	1,1,2,2-Tetrachloroethane	15.86	83	157691	9.33	ug/l		98
77)	1,2,3-Trichloropropane	16.14	110	45060	9.50	ug/l		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV449.D Vial: 23
Acq On : 17 Oct 2024 5:29 am Operator: DNguye/CLingl
Sample : VO01J18C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:24 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.29	91	1710905	9.02	ug/l	99
79)	Bromobenzene	16.38	156	276487	10.07	ug/l	100
80)	1,3,5-Trimethylbenzene	16.60	105	1059478	9.03	ug/l	100
81)	2-Chlorotoluene	16.64	91	1083324	9.40	ug/l	98
82)	4-Chlorotoluene	16.73	91	914535	8.90	ug/l	97
83)	tert-Butylbenzene	17.28	134	253988	9.61	ug/l	98
84)	1,2,4-Trimethylbenzene	17.35	105	1078973	9.41	ug/l	100
85)	sec-Butylbenzene	17.65	105	1460481	8.84	ug/l	97
86)	p-Isopropyltoluene	17.87	119	1157871	8.99	ug/l	98
87)	1,3-Dichlorobenzene	18.02	146	593472	10.75	ug/l	98
88)	1,2,3-Trimethylbenzene	18.14	105	1047842	10.03	ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	577244	10.52	ug/l	97
90)	n-Butylbenzene	18.49	91	1217902	8.64	ug/l	99
91)	1,2-Dichlorobenzene	18.71	146	490335	10.89	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.72	157	22814	10.10	ug/l	99
93)	1,2,4-Trichlorobenzene	20.82	180	295195	9.68	ug/l	98
94)	Hexachlorobutadiene	20.98	225	202677	10.37	ug/l	99
95)	Naphthalene	21.16	128	359504	9.58	ug/l	100
96)	1,2,3-Trichlorobenzene	21.47	180	216612	9.80	ug/l	99

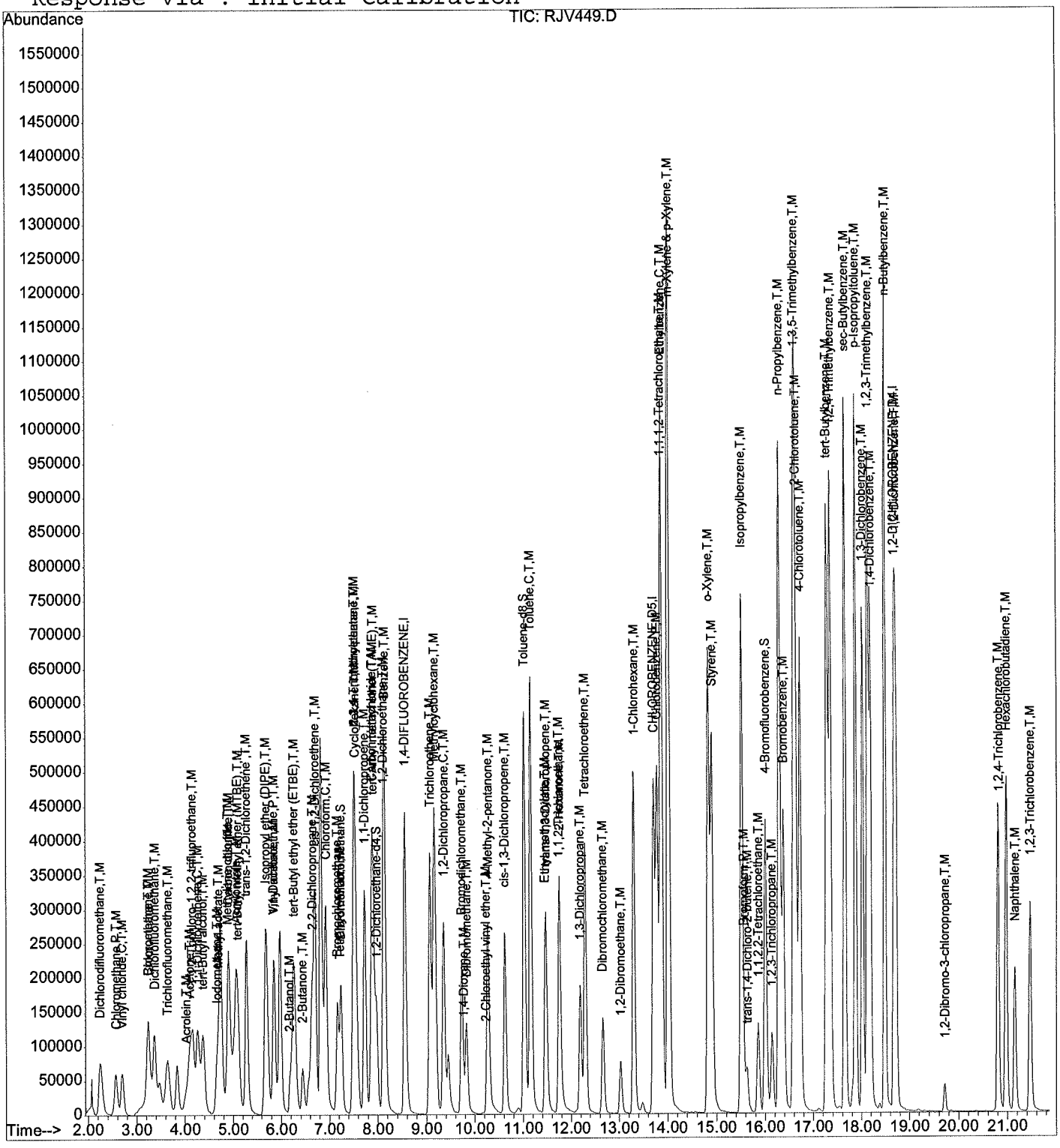
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV449.D
Acq On : 17 Oct 2024 5:29 am
Sample : VO01J18C
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Oct 29 16:24 2024

Vial: 23
Operator: DNguye/CLing
Inst : 01
Multiplr: 1.00
Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV459.D Vial: 6
Acq On : 17 Oct 2024 2:06 pm Operator: DNguye/CLingl
Sample : VO01J19B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 25 12:55 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

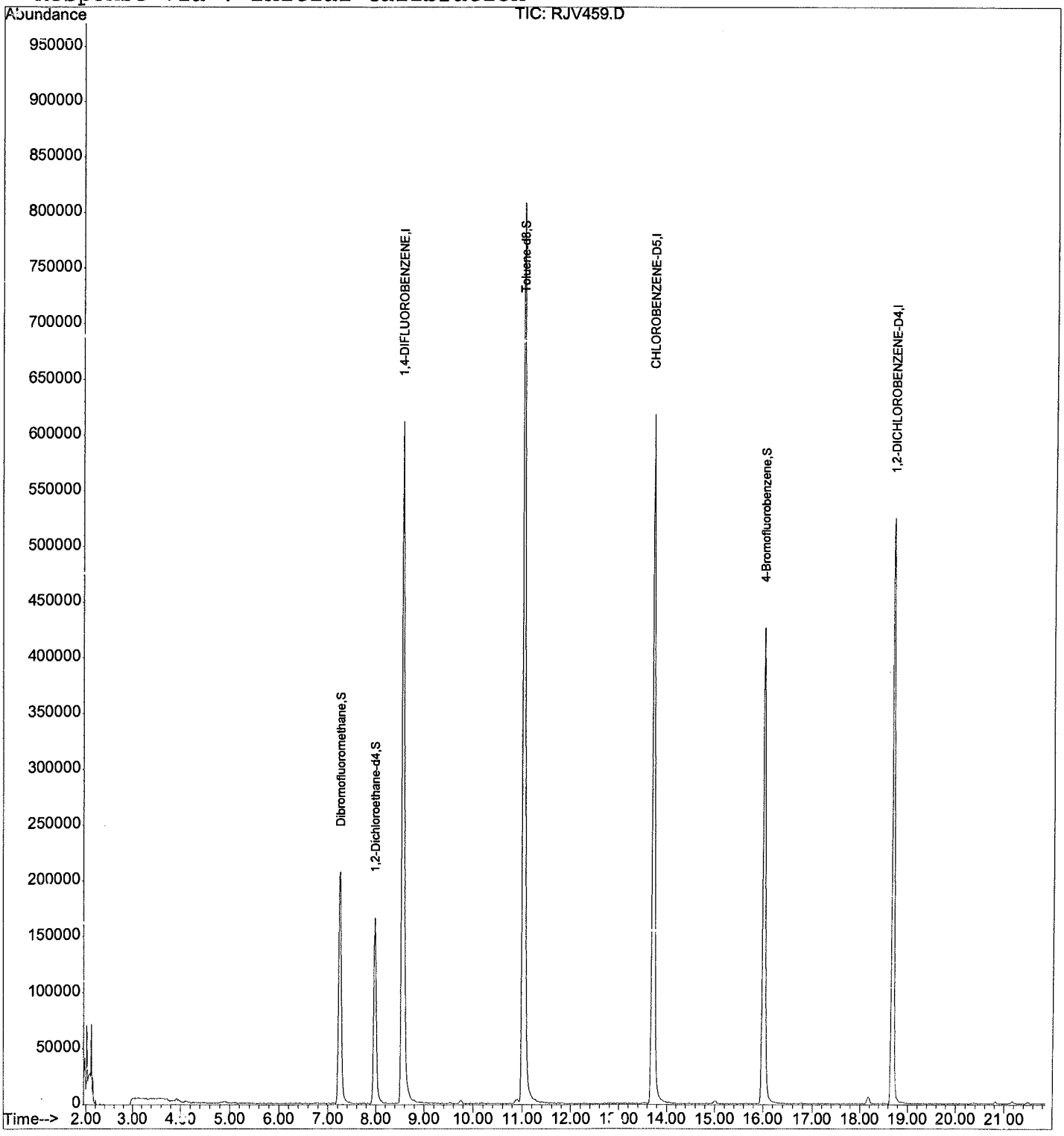
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	962529	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	731483	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	276304	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.26	111	268485	10.68	ug/l	0.03
Spiked Amount 10.000			Recovery =	106.80%		
41) 1,2-Dichloroethane-d4	7.98	65	222325	10.04	ug/l	0.02
Spiked Amount 10.000			Recovery =	100.40%		
54) Toluene-d8	11.03	98	1121752	11.15	ug/l	0.02
Spiked Amount 10.000			Recovery =	111.50%		
76) 4-Bromofluorobenzene	16.01	95	352409	10.77	ug/l	0.03
Spiked Amount 10.000			Recovery =	107.70%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV459.D Vial: 6
Acq On : 17 Oct 2024 2:06 pm Operator: DNguye/CLing
Sample : VO01J19B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 25 12:55 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV456.D Vial: 3
Acq On : 17 Oct 2024 12:36 pm Operator: DNguye/CLingl
Sample : VO01J19L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 25 12:47 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	867364	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	688415	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	330750	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	250655	11.06	ug/l	0.01
Spiked Amount 10.000			Recovery =	110.60%		
41) 1,2-Dichloroethane-d4	7.97	65	211223	10.58	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.80%		
54) Toluene-d8	11.02	98	1028287	10.86	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.60%		
76) 4-Bromofluorobenzene	16.01	95	391584	10.00	ug/l	0.03
Spiked Amount 10.000			Recovery =	100.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	367913	10.33	ug/l	99
5) Chloromethane	2.57	50	290085	10.79	ug/l	99
6) Vinyl chloride	2.70	62	261352	11.02	ug/l	98
7) Bromomethane	3.26	94	185225	10.83	ug/l	96
8) Chloroethane	3.26	64	194615	10.83	ug/l	99
9) Dichlorofluoromethane	3.38	67	368763	11.20	ug/l	100
10) Trichlorofluoromethane	3.66	101	400284	10.38	ug/l	100
11) Acrolein	4.04	56	40067	60.42	ug/l	71
12) 1,1,2-Trichloro-1,2,2-trif	4.18	151	178730	11.25	ug/l	99
13) Acetone	4.10	43	179448	56.03	ug/l	96
14) 1,1-Dichloroethene	4.27	61	434081	10.73	ug/l	78
15) tert-Butyl alcohol	4.38	59	216936	270.73	ug/l	100
16) Iodomethane	4.67	142	385757	11.22	ug/l	99
17) Methyl acetate	4.69	43	85327	10.33	ug/l	95
18) Methylene chloride	4.90	49	310330	10.64	ug/l	97
19) Carbon disulfide	4.92	76	946268	11.18	ug/l	98
20) Acrylonitrile	5.07	53	175702	58.40	ug/l	100
21) tert-Butyl methyl ether (M	5.09	73	443870	11.08	ug/l	99
22) trans-1,2-Dichloroethene	5.27	61	409214	10.53	ug/l	97
23) Isopropyl ether (DIPE)	5.69	45	865155	10.63	ug/l	98
24) Vinyl acetate	5.85	43	275805	10.59	ug/l	97
25) 1,1-Dichloroethane	5.85	63	497600	10.92	ug/l	99
26) 2-Butanol	6.18	45	194290	289.36	ug/l	94
27) tert-Butyl ethyl ether (ET	6.26	59	640648	10.83	ug/l	99
28) 2-Butanone	6.44	43	269683	54.91	ug/l	98
29) 2,2-Dichloropropane	6.65	77	436930	11.21	ug/l	100
30) cis-1,2-Dichloroethene	6.71	96	304888	10.92	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24J17\RJV456.D Vial: 3
Acq On : 17 Oct 2024 12:36 pm Operator: DNguye/CLingl
Sample : VO01J19L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 25 12:47 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
31)	Chloroform	6.93	83	494841	10.65	ug/l		98
32)	Bromochloromethane	7.17	49	184375	10.68	ug/l		97
33)	Tetrahydrofuran	7.23	42	24771	9.08	ug/l		95
35)	1,1,1-Trichloroethane	7.51	97	454050	10.89	ug/l		99
36)	Cyclohexane	7.54	84	504497	11.72	ug/l		100
37)	2,2,4-Trimethylpentane	7.52	57	23669	11.37	ug/l	#	100
38)	1,1-Dichloropropene	7.73	110	137263	10.87	ug/l		100
39)	Carbon tetrachloride	7.89	119	345736	10.95	ug/l		99
40)	tert-Amyl methyl ether (TA	7.91	73	463433	10.19	ug/l		99
42)	Benzene	8.13	78	1061381	10.69	ug/l		99
43)	1,2-Dichloroethane	8.12	62	239622	10.82	ug/l		99
44)	Trichloroethene	9.08	130	284519	10.83	ug/l		98
45)	Methylcyclohexane	9.17	83	579824	11.39	ug/l		98
46)	1,2-Dichloropropane	9.34	63	234558	10.49	ug/l		100
47)	Bromodichloromethane	9.73	83	328002	10.72	ug/l		98
48)	1,4-Dioxane	9.77	88	18129	212.18	ug/l		99
49)	Dibromomethane	9.83	93	102585	10.57	ug/l		98
50)	2-Chloroethyl vinyl ether	10.23	63	16456	9.85	ug/l		98
51)	4-Methyl-2-pentanone	10.26	43	627568	57.15	ug/l		99
52)	cis-1,3-Dichloropropene	10.62	75	370260	11.05	ug/l		98
55)	Toluene	11.17	91	1184531	10.86	ug/l		99
56)	Ethyl methacrylate	11.45	69	170471	10.91	ug/l		99
57)	trans-1,3-Dichloropropene	11.48	75	276430	11.19	ug/l		99
58)	1,1,2-Trichloroethane	11.74	97	146794	10.93	ug/l		100
59)	2-Hexanone	11.76	43	402856	56.43	ug/l		98
60)	1,3-Dichloropropane	12.19	76	270506	10.69	ug/l		99
61)	Tetrachloroethene	12.29	164	246769	10.47	ug/l		99
62)	Dibromochloromethane	12.66	129	172068	10.75	ug/l		98
63)	1,2-Dibromoethane	13.03	107	138184	10.86	ug/l		99
64)	1-Chlorohexane	13.30	91	508982	9.98	ug/l		100
65)	Chlorobenzene	13.77	112	704742	10.79	ug/l		99
66)	1,1,1,2-Tetrachloroethane	13.86	131	223344	11.20	ug/l		97
67)	Ethylbenzene	13.88	91	1379747	10.69	ug/l		99
68)	m-Xylene & p-Xylene	14.01	91	2100825	20.60	ug/l		100
69)	o-Xylene	14.82	91	1055542	10.48	ug/l		99
70)	Styrene	14.90	104	771808	10.48	ug/l		99
71)	Isopropylbenzene	15.50	105	1597853	11.69	ug/l		100
73)	Bromoform	15.55	173	85185	8.99	ug/l		99
74)	trans-1,4-Dichloro-2-buten	15.62	53	46760	9.19	ug/l		98
75)	1,1,2,2-Tetrachloroethane	15.85	83	175444	10.05	ug/l		99
77)	1,2,3-Trichloropropane	16.14	110	49473	10.09	ug/l		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV456.D Vial: 3
Acq On : 17 Oct 2024 12:36 pm Operator: DNguye/CLingl
Sample : VO01J19L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 25 12:47 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

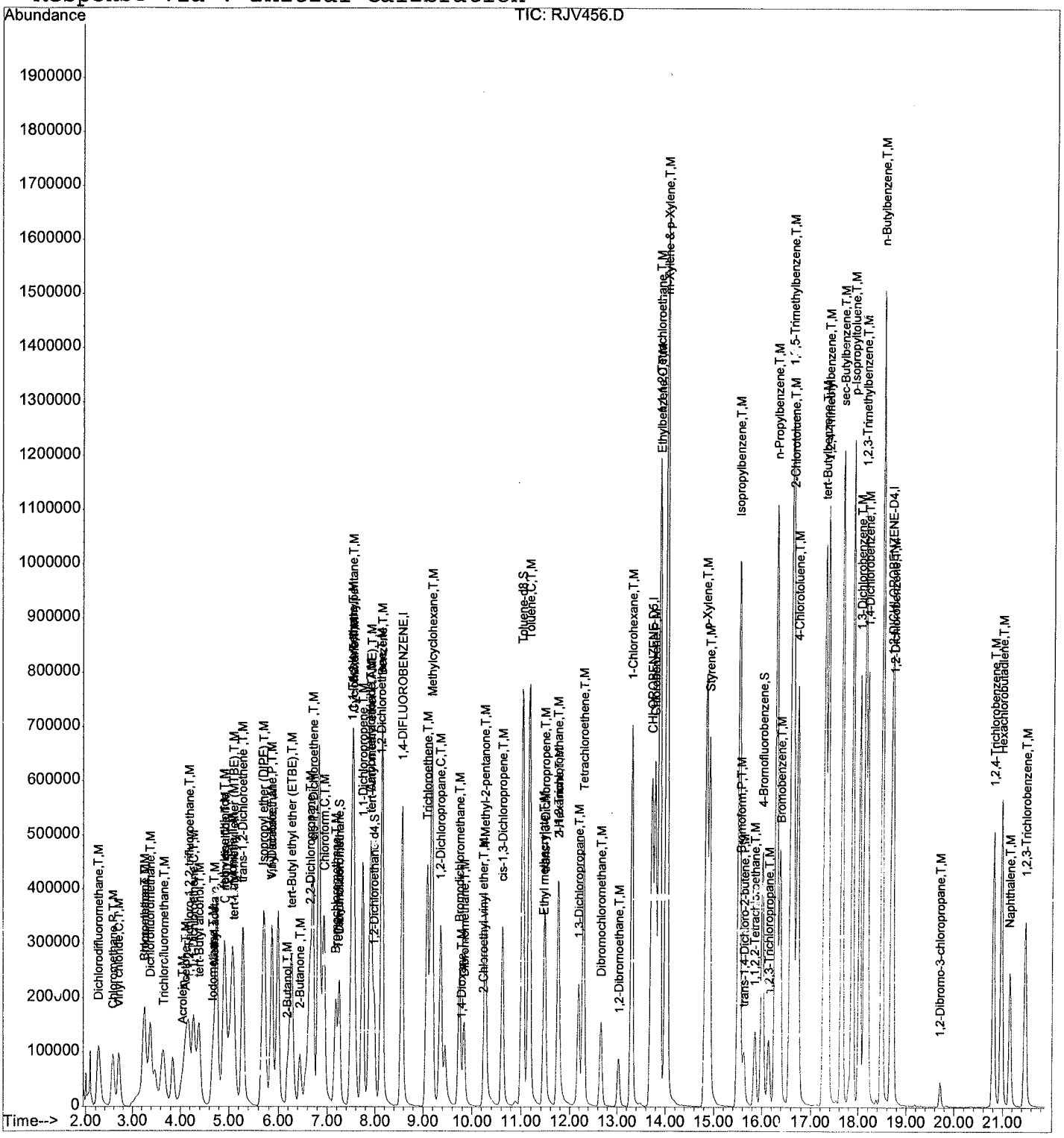
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.29	91	1950701	9.96	ug/l	99
79)	Bromobenzene	16.38	156	285629	10.07	ug/l	100
80)	1,3,5-Trimethylbenzene	16.60	105	1205098	9.95	ug/l	99
81)	2-Chlorotoluene	16.63	91	1173131	9.86	ug/l	98
82)	4-Chlorotoluene	16.72	91	1057007	9.95	ug/l	98
83)	tert-Butylbenzene	17.28	134	295303	10.81	ug/l	100
84)	1,2,4-Trimethylbenzene	17.34	105	1276812	10.77	ug/l	99
85)	sec-Butylbenzene	17.65	105	1823212	10.69	ug/l	100
86)	p-Isopropyltoluene	17.87	119	1409627	10.59	ug/l	99
87)	1,3-Dichlorobenzene	18.02	146	621304	10.90	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	1147436	10.64	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	591068	10.43	ug/l	98
90)	n-Butylbenzene	18.48	91	1454629	9.99	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	486176	10.45	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.71	157	23407	10.03	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	336015	10.67	ug/l	99
94)	Hexachlorobutadiene	20.97	225	217290	10.77	ug/l	99
95)	Naphthalene	21.15	128	407736	10.52	ug/l	100
96)	1,2,3-Trichlorobenzene	21.47	180	251888	11.04	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV456.D Vial: 3
Acq On : 17 Oct 2024 12:36 pm Operator: DNguye/CLing
Sample : VO01J19L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 25 12:47 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV457.D Vial: 4
Acq On : 17 Oct 2024 1:06 pm Operator: DNguye/CLingl
Sample : VO01J19C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 25 12:47 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	938401	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	718004	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.67	152	336232	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	264830	10.80	ug/l	0.01
Spiked Amount 10.000			Recovery = 108.00%			
47) 1,2-Dichloroethane-d4	7.97	65	219761	10.18	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.80%			
54) Toluene-d8	11.02	98	1069624	10.83	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.30%			
76) 4-Bromofluorobenzene	15.99	95	422425	10.61	ug/l	0.01
Spiked Amount 10.000			Recovery = 106.10%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	369123	9.58	ug/l	99
5) Chloromethane	2.57	50	293927	10.10	ug/l	99
6) Vinyl chloride	2.70	62	271076	10.57	ug/l	100
7) Bromomethane	3.24	94	186683	10.09	ug/l	97
8) Chloroethane	3.24	64	202567	10.42	ug/l	97
9) Dichlorofluoromethane	3.38	67	372295	10.45	ug/l	97
10) Trichlorofluoromethane	3.64	101	402680	9.65	ug/l	99
11) Acrolein	4.03	56	43209	60.23	ug/l	75
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	195625	11.38	ug/l	98
13) Acetone	4.10	43	194773	56.21	ug/l	98
14) 1,1-Dichloroethene	4.26	61	462920	10.57	ug/l	84
15) tert-Butyl alcohol	4.37	59	244282	281.78	ug/l	98
16) Iodomethane	4.66	142	418301	11.25	ug/l	98
17) Methyl acetate	4.68	43	93912	10.51	ug/l	94
18) Methylene chloride	4.89	49	331025	10.49	ug/l	96
19) Carbon disulfide	4.90	76	1024836	11.19	ug/l	99
20) Acrylonitrile	5.06	53	189463	58.21	ug/l	97
21) tert-Butyl methyl ether (M	5.09	73	479857	11.07	ug/l	97
22) trans-1,2-Dichloroethene	5.27	61	447897	10.65	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	955240	10.85	ug/l	98
24) Vinyl acetate	5.85	43	283566	10.07	ug/l	97
25) 1,1-Dichloroethane	5.85	63	531013	10.77	ug/l	99
26) 2-Butanol	6.18	45	222165	305.83	ug/l	94
27) tert-Butyl ethyl ether (ET	6.26	59	678301	10.60	ug/l	99
28) 2-Butanone	6.44	43	292806	55.10	ug/l	97
29) 2,2-Dichloropropane	6.63	77	459669	10.90	ug/l	99
30) cis-1,2-Dichloroethene	6.71	96	333901	11.06	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24J17\RJV457.D Vial: 4
Acq On : 17 Oct 2024 1:06 pm Operator: DNguye/CLingl
Sample : VO01J19C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 25 12:47 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
31)	Chloroform	6.93	83	524310	10.43 ug/l		98
32)	Bromochloromethane	7.17	49	202552	10.84 ug/l		95
33)	Tetrahydrofuran	7.21	42	27226	9.22 ug/l		97
35)	1,1,1-Trichloroethane	7.51	97	478673	10.61 ug/l		99
36)	Cyclohexane	7.54	84	555657	11.93 ug/l		99
37)	2,2,4-Trimethylpentane	7.52	57	27736	12.31 ug/l	#	100
38)	1,1-Dichloropropene	7.73	110	149070	10.91 ug/l		100
39)	Carbon tetrachloride	7.89	119	372131	10.89 ug/l		99
40)	tert-Amyl methyl ether (TA	7.91	73	507346	10.31 ug/l		100
42)	Benzene	8.13	78	1148631	10.69 ug/l		99
43)	1,2-Dichloroethane	8.12	62	260090	10.86 ug/l		100
44)	Trichloroethene	9.08	130	308805	10.87 ug/l		97
45)	Methylcyclohexane	9.17	83	630547	11.45 ug/l		98
46)	1,2-Dichloropropane	9.34	63	257210	10.64 ug/l		98
47)	Bromodichloromethane	9.73	83	352653	10.66 ug/l		98
48)	1,4-Dioxane	9.77	88	21015	227.34 ug/l		99
49)	Dibromomethane	9.82	93	109680	10.44 ug/l		95
50)	2-Chloroethyl vinyl ether	10.23	63	18287	10.09 ug/l		98
51)	4-Methyl-2-pentanone	10.26	43	675821	56.88 ug/l		99
52)	cis-1,3-Dichloropropene	10.62	75	399345	11.01 ug/l		99
55)	Toluene	11.17	91	1264879	11.12 ug/l		100
56)	Ethyl methacrylate	11.45	69	187203	11.49 ug/l		100
57)	trans-1,3-Dichloropropene	11.48	75	299054	11.60 ug/l		100
58)	1,1,2-Trichloroethane	11.74	97	160096	11.43 ug/l		99
59)	2-Hexanone	11.76	43	433291	58.19 ug/l		97
60)	1,3-Dichloropropane	12.19	76	290163	11.00 ug/l		99
61)	Tetrachloroethene	12.29	164	264462	10.75 ug/l		99
62)	Dibromochloromethane	12.66	129	187923	11.26 ug/l		100
63)	1,2-Dibromoethane	13.03	107	147301	11.10 ug/l		100
64)	1-Chlorohexane	13.30	91	559268	10.52 ug/l		99
65)	Chlorobenzene	13.79	112	751758	11.03 ug/l		100
66)	1,1,1,2-Tetrachloroethane	13.86	131	241907	11.63 ug/l		96
67)	Ethylbenzene	13.88	91	1470507	10.92 ug/l		99
68)	m-Xylene & p-Xylene	14.01	91	2225576	20.93 ug/l		98
69)	o-Xylene	14.82	91	1202853	11.45 ug/l		100
70)	Styrene	14.90	104	913588	11.89 ug/l		99
71)	Isopropylbenzene	15.52	105	1611485	11.30 ug/l		100
73)	Bromoform	15.55	173	91656	9.50 ug/l		99
74)	trans-1,4-Dichloro-2-buten	15.62	53	49047	9.48 ug/l		90
75)	1,1,2,2-Tetrachloroethane	15.86	83	198138	11.16 ug/l		99
77)	1,2,3-Trichloropropane	16.14	110	54351	10.91 ug/l		95

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24J17\RJV457.D Vial: 4
Acq On : 17 Oct 2024 1:06 pm Operator: DNguye/CLingl
Sample : VO01J19C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 25 12:47 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

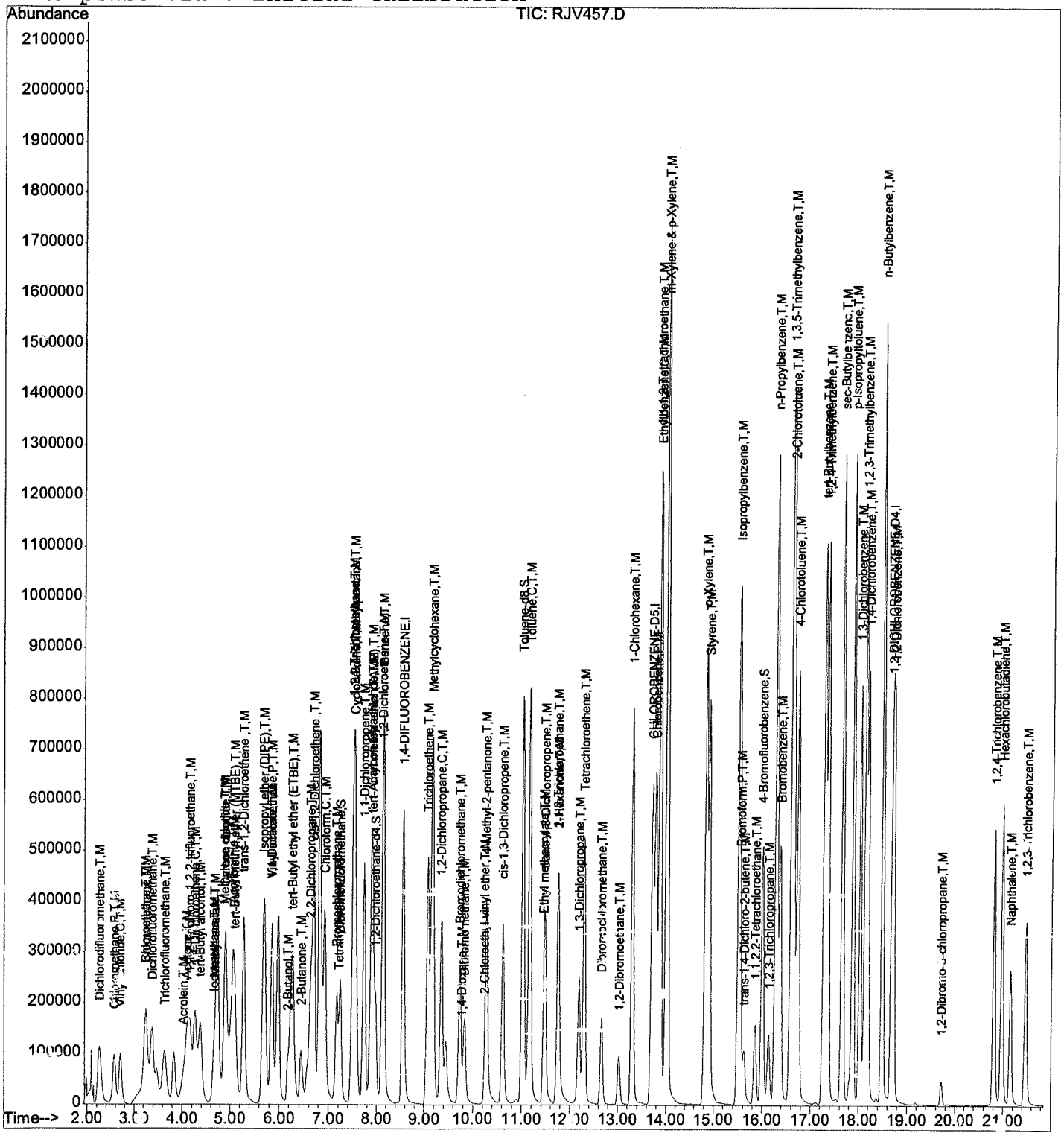
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.29	91	2170801	10.90	ug/l	99
79)	Bromobenzene	16.38	156	320331	11.11	ug/l	100
80)	1,3,5-Trimethylbenzene	16.60	105	1342193	10.90	ug/l	99
81)	2-Chlorotoluene	16.63	91	1283222	10.61	ug/l	97
82)	4-Chlorotoluene	16.72	91	1159619	10.74	ug/l	97
83)	tert-Butylbenzene	17.28	134	306403	11.04	ug/l	99
84)	1,2,4-Trimethylbenzene	17.34	105	1315712	10.92	ug/l	99
85)	sec-Butylbenzene	17.65	105	1881184	10.85	ug/l	99
86)	p-Isopropyltoluene	17.87	119	1475033	10.90	ug/l	99
87)	1,3-Dichlorobenzene	18.02	146	640143	11.04	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	1195304	10.90	ug/l	99
89)	1,4-Dichlorobenzene	18.18	146	612057	10.62	ug/l	99
90)	n-Butylbenzene	18.48	91	1500848	10.14	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	510979	10.81	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	24896	10.50	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	357658	11.17	ug/l	99
94)	Hexachlorobutadiene	20.97	225	227929	11.11	ug/l	98
95)	Naphthalene	21.15	128	445238	11.30	ug/l	99
96)	1,2,3-Trichlorobenzene	21.47	180	268111	11.56	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV457.D Vial: 4
Acq On : 17 Oct 2024 1:06 pm Operator: DNguye/CLing
Sample : VO01J19C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 25 12:47 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



INITIAL CALIBRATION(S)

FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : ICAL

Lab Code : EMAX SDG No : ICAL

Lab File ID: RJV296 BFB Injection Date: 10/12/24

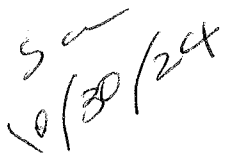
Instrument ID: 01 BFB Injection Time: 12:56

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	20.245
75	30 - 60% of mass 95	42.693
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.659
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	68.470
175	5 - 9% of mass 174	3.843(5.61)1
176	95 - 101% % of mass 174	66.756(97.5)1
177	5 - 9% % of mass 176	3.550(5.32)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following Calibration Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD0.3	VO01J121	RJV297	10/12/24	13:38
2	VSTD0.5	VO01J122	RJV298	10/12/24	14:08
3	VSTD1	VO01J123	RJV299	10/12/24	14:39
4	VSTD2	VO01J124	RJV300	10/12/24	15:09
5	VSTD5	VO01J125	RJV301	10/12/24	15:39
6	VSTD10	VO01J126	RJV302	10/12/24	16:08
7	VSTD20	VO01J127	RJV303	10/12/24	16:38
8	VSTD50	VO01J128	RJV304	10/12/24	17:08
9	VSTD30	VO01J129	RJV305	10/12/24	17:38
10	VSTD100	VO01J1210	RJV306	10/12/24	18:07
11	VSTD10	IVO01J1201	RJV309	10/12/24	19:36



Instrument ID :01
Beginning DateTime :10/12/24 13:38
Spike Units :PPB
IC File :RJV302

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :10/12/24 18:07
HPChem Method :VO01J12

M	IDX	Parameters	.3 13:38 RJV297	.5 14:08 RJV298	1 14:39 RJV299	2 15:09 RJV300	5 15:39 RJV301	10 16:08 RJV302	20 16:38 RJV303	30 17:38 RJV305	50 17:08 RJV304	100 18:07 RJV306	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5435
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	0.346	0.383	0.455	0.425	0.471	0.456	0.437	0.412	0.371	0.351	0.411	11.08	2.2475
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	0.224	0.310	0.353	0.332	0.358	0.341	0.319	0.319	0.276	0.268	0.310	13.65	2.5594
	6	Vinyl chloride	0.195	0.242	0.294	0.299	0.315	0.296	0.287	0.295	0.251	0.261	0.273	13.19	2.6904
	7	Bromomethane	0.204	0.201	0.223	0.195	0.207	0.188	0.198	0.207	0.173	0.177	0.197	7.64	3.2326
	8	Chloroethane	------	0.175	0.213	0.211	0.221	0.216	0.212	0.232	0.192	0.193	0.207	8.38	3.2364
	9	Dichlorofluoromethane	0.332	0.484	0.387	0.387	0.395	0.310	0.363	0.366	0.439	0.334	0.380	13.68	3.3585
	10	Trichlorofluoromethane	------	0.422	0.472	0.475	0.495	0.479	0.459	0.444	0.391	0.366	0.445	9.80	3.6280
5	11	Acrolein	------	------	0.007	0.007	0.008	0.008	0.007	0.009	0.008	0.008	0.008	7.80	4.0240
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.154	0.180	0.195	0.199	0.198	0.177	0.190	0.199	0.173	0.168	0.183	8.51	4.1478
5	13	Acetone	------	------	------	0.039	0.039	0.038	0.035	0.036	0.034	------	0.037	6.03	4.0946
	14	1,1-Dichloroethene	0.433	0.475	0.520	0.515	0.497	0.442	0.464	0.482	0.425	0.413	0.467	8.08	4.2485
25	15	tert-Butyl alcohol	------	0.008	0.009	0.010	0.009	0.010	0.010	0.009	0.009	0.009	0.009	7.42	4.3734
	16	Iodomethane	0.342	0.364	0.437	0.434	0.425	0.373	0.404	0.427	0.377	0.381	0.396	8.42	4.6617
	17	Methyl acetate	------	------	------	0.112	0.089	0.099	0.083	0.094	------	------	0.095	11.58	4.6795
	18	Methylene chloride	0.311	0.350	0.385	0.369	0.353	0.312	0.327	0.345	0.303	0.308	0.336	8.38	4.8808
	19	Carbon disulfide	------	0.762	0.944	0.967	1.024	1.015	1.018	1.102	------	------	0.976	10.91	4.8974
5	20	Acrylonitrile	------	0.026	0.032	0.037	0.037	0.037	0.034	0.038	0.035	0.035	0.035	10.80	5.0579
	21	tert-Butyl methyl ether (MTBE)	0.351	0.414	0.498	0.521	0.510	0.475	0.478	0.489	0.449	0.436	0.462	11.13	5.0793
	22	trans-1,2-Dichloroethene	0.409	0.442	0.503	0.489	0.483	0.420	0.458	0.469	0.409	0.399	0.448	8.41	5.2644
	23	Isopropyl ether (DIPE)	0.827	0.913	1.055	1.025	1.016	0.885	0.932	0.998	0.887	0.845	0.938	8.58	5.6820
	24	Vinyl acetate	0.190	0.302	0.330	0.309	0.316	0.349	0.309	0.334	0.287	0.277	0.300	14.72	5.8464
	25	1,1-Dichloroethane	0.471	0.514	0.605	0.568	0.566	0.493	0.531	0.555	0.483	0.469	0.525	8.95	5.8360
25	26	2-Butanol	------	------	------	0.006	0.008	0.008	0.008	0.009	------	------	0.008	12.15	6.1781
	27	tert-Butyl ethyl ether (ETBE)	0.576	0.614	0.766	0.774	0.763	0.668	0.686	0.720	0.639	0.616	0.682	10.48	6.2477
5	28	2-Butanone	0.052	0.054	0.067	0.056	0.056	0.060	0.055	0.058	0.054	0.054	0.057	7.33	6.4417
	29	2,2-Dichloropropane	0.428	0.445	0.518	0.507	0.476	0.427	0.453	0.456	0.403	0.381	0.449	9.59	6.6297
	30	cis-1,2-Dichloroethene	0.285	0.311	0.360	0.344	0.344	0.303	0.327	0.344	0.302	0.297	0.322	7.93	6.6920
	31	Chloroform	0.555	0.551	0.631	0.590	0.566	0.490	0.523	0.526	0.478	0.445	0.535	10.32	6.9096
	32	Bromochloromethane	0.182	0.174	0.228	0.223	0.214	0.196	0.199	0.206	0.186	0.183	0.199	9.24	7.1510
	33	Tetrahydrofuran	------	------	0.031	0.032	0.039	0.031	0.029	0.031	0.030	0.029	0.031	10.36	7.2079
	34	Dibromofluoromethane	------	------	0.261	0.250	0.264	0.257	0.269	0.266	------	------	0.261	2.58	7.2265
	35	1,1,1-Trichloroethane	0.415	0.463	0.548	0.535	0.527	0.462	0.503	0.491	0.446	0.420	0.481	9.83	7.4946
	36	Cyclohexane	0.447	0.452	0.500	0.513	0.529	0.503	0.496	0.528	------	------	0.496	6.28	7.5172
	37	2,2,4-Trimethylpentane	------	------	------	0.023	0.025	0.024	0.023	0.025	------	------	0.024	5.03	7.5139
	38	1,1-Dichloropropene	0.125	0.137	0.158	0.152	0.157	0.139	0.151	0.160	0.140	0.137	0.146	7.96	7.7167
	39	Carbon tetrachloride	0.298	0.349	0.403	0.395	0.400	0.356	0.392	0.379	0.345	0.323	0.364	9.79	7.8722
	40	tert-Amyl methyl ether (TAME)	0.462	0.516	0.601	0.589	0.558	0.506	0.525	0.527	0.488	0.469	0.524	8.94	7.8914
	41	1,2-Dichloroethane-d4	------	------	0.227	0.227	0.235	0.237	0.236	0.219	------	------	0.230	3.01	7.9669
	42	Benzene	1.147	1.180	1.311	1.243	1.225	1.064	1.148	1.177	1.031	0.924	1.145	9.85	8.1239
	43	1,2-Dichloroethane	0.190	0.229	0.291	0.283	0.291	0.271	0.271	0.258	0.243	0.225	0.255	12.95	8.1002
	44	Trichloroethene	0.280	0.313	0.333	0.325	0.314	0.282	0.311	0.316	0.281	0.273	0.303	7.09	9.0632
	45	Methylcyclohexane	0.632	0.561	0.557	0.600	0.602	0.569	0.581	0.593	------	------	0.587	4.28	9.1484
	46	1,2-Dichloropropane	0.251	0.235	0.285	0.275	0.274	0.244	0.262	0.271	0.243	0.236	0.258	7.03	9.3431
	47	Bromodichloromethane	0.332	0.335	0.394	0.377	0.379	0.342	0.367	0.356	0.330	0.313	0.353	7.42	9.7148
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	14.16	9.7571
	49	Dibromomethane	0.091	0.103	0.131	0.125	0.121	0.113	0.115	0.113	0.106	0.101	0.112	10.72	9.8066
	50	2-Chloroethyl vinyl ether	------	------	0.005	0.010	0.014	0.017	0.019	0.022	0.022	------	0.016	39.29	10.2225
5	51	4-Methyl-2-pentanone	------	0.093	0.120	0.131	0.140	0.145	0.132	0.135	0.126	0.117	0.127	12.23	10.2611
	52	cis-1,3-Dichloropropene	0.295	0.356	0.420	0.404	0.415	0.385	0.422	0.419	0.384	0.363	0.386	10.37	10.6063
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.6939
	54	Toluene-d8	------	------	1.423	1.446	1.443	1.342	1.199	1.399	------	------	1.375	6.87	11.0131
	55	Toluene	1.599	1.679	1.880	1.804	1.739	1.508	1.383	1.663	1.363	1.230	1.585	13.23	11.1483
	56	Ethyl methacrylate	------	0.158	0.214	0.240	0.251	0.254	0.213	0.258	0.229	0.228	0.227	13.58	11.4475
	57	trans-1,3-Dichloropropene	0.262	0.309	0.370	0.408	0.409	0.384	0.336	0.402	0.357	0.352	0.359	13.11	11.4682
	58	1,1,2-Trichloroethane	0.147	0.191	0.227	0.220	0.215	0.203	0.172	0.208	0.183	0.184	0.195	12.51	11.7318
5	59	2-Hexanone	------	------	0.078	0.104	0.113	0.119	0.094	0.115	0.105	0.101	0.104	12.75	11.7455
	60	1,3-Dichloropropane	0.286	0.335	0.407	0.421	0.396	0.373	0.374	0.390	0.356	0.339	0.368	10.91	12.1745
	61	Tetrachloroethene	0.356	0.356	0.377	0.376	0.362	0.315	0.338	0.347	0.306	0.292	0.343	8.52	12.2767
	62	Dibromochloromethane	0.201	0.226	0.230	0.245	0.246	0.238	0.238	0.247	0.230	0.223	0.232	6.04	12.6470
	63	1,2-Dibromoethane	0.135	0.168	0.193	0.197	0.204	0.193	0.195	0.200	0.187	0.177	0.185	11.07	13.0127
	64	1-Chlorohexane	0.748	0.745	0.830	0.804	0.791	0.687	0.745	0.767	0.675	0.612	0.740	8.90	13.2837
	65	Chlorobenzene	0.895	0.943	1.048	1.058	1.014	0.891	0.962	0.988	0.881	0.808	0.949	8.50	13.7620
	66	1,1,1,2-Tetrachloroethane	0.219	0.262	0.321	0.317	0.320	0.280	0.303	0.312	0.289	0.275	0.290	11.11	13.8435
	67	Ethylbenzene	1.926	1.945	2.180	2.149	2.060	1.793	1.884	1.875	1.616	1.325	1.875	13.61	13.8598
2	68	m-Xylene & p-Xylene	1.529	1.446	1.644	1.621	1.553	1.311	1.375	1.370	------	------	1.481	8.36	13.9964
	69	o-Xylene	1.422	1.449	1.670	1.651	1.728	1.561	1.405	1.424	1.241	1.076	1.463	13.73	14.8164
	70	Styrene	0.947	0.981	1.179	1.161	1.246	1.176	1.078	1.082	0.970	0.879	1.070	11.33	14.8860
	71	Isopropylbenzene	1.835	1.857	2.162	2.165	2.450	2.076	1.863	1.887	1.578	------	1.986	12.81	15.4951
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6667
	73	Bromoform	0.135	0.188	0.226	0.217	0.257	0.270	0.279	0.300	0.285	0.300	0.246	21.91	15.5361
	74	trans-1,4-Dichloro-2-butene	------	------	0.117	0.127	0.151	0.167	0.164	0.174	0.160	0.172	0.154	13.73	15.6087
	75	1,1,2,2-Tetrachloroethane	0.384	0.490	0.571	0.509	0.563	0.579	0.560	0.567	0.529	0.526	0.528	11.05	15.8353
	76	4-Bromofluorobenzene	------	------	1.235	1.019	1.171	1.172	1.265	1.242	------	------	1.184	7.58	15.9814
	77	1,2,3-Trichloropropane	------	0.112	0.147	0.141	0.153	0.160	0.156	0.160	0.152	0.153	0.148	10.16	16.1270
	78	n-Propylbenzene	6.302	6.289	6.963	5.873	6.565	5.625	6.079	6.091	5.063	4.364	5.921	12.69	16.2751
	79	Bromobenzene	0.806	0.845	0.914	0.805	0.914	0.812	0.887	0.917	0.827	0.850	0.858	5.43	16.3610
	80	1,3,5-Trimethylbenzene	3.764	3.860	4.238	3.518	3.941	3.444	3.764	3.815	3.287	3.001	3.663	9.71	16.5816
	81	2-Chlorotoluene	3.673	3.763	4.232	3.543	3.897	3.357	3.637	3.731	3.160	2.991	3.598	10.00	16.6157
	82	4-Chlorotoluene	3.572	3.435	3.477	3.079	3.313	2.992	3.286	3.256	2.943	2.756	3.211	8.13	16.7060
	83	tert-Butylbenzene	0.801	0.787	0.899	0.790	0.890	0.791	0.847	0.877	0.790	0.785	0.826	5.73	17.2643
	84	1,2,4-Trimethylbenzene	3.709	3.588	4.109	3.600	3.957	3.412	3.681	3.689	3.196	2.887	3.583	9.83	17.3339
	85	sec-Butylbenzene	5.868	5.508	6.020	5.144	5.666	5.024	5.252	5.172	4.288	3.642	5.158	14.02	17.6375
	86	p-Isopropyltoluene	4.356	4.251	4.770	4.019	4.391	3.814	4.043	4.055	3.483	3.061	4.024	12.06	17.8596
	87	1,3-Dichlorobenzene	1.747	1.715	1.963	1.724	1.839	1.633	1.736	1.770	1.593	1.520	1.724	7.25	18.0077
	88	1,2,3-Trimethylbenzene	3.248	3.363	3.806	3.704	3.515	3.115	3.285	3.247	2.792	2.538	3.261	11.80	18.1143
	89	1,4-Dichlorobenzene	1.846	1.787	1.987	1.819	1.788	1.568	1.683	1.697	1.511	1.445	1.713	9.73	18.1706
	90	n-Butylbenzene	4.848	4.649	5.049	4.717	4.620	3.978	4.162	4.164	3.413	------	4.400	11.64	18.4716
	91	1,2-Dichlorobenzene	1.390	1.390	1.632	1.521	1.501	1.334	1.397	1.408	1.274	1.217	1.406	8.62	18.7037
	92	1,2-Dibromo-3-chloropropane	------	------	0.058	0.066	0.064	0.075	0.074	0.078	0.074	0.075	0.071	9.99	19.7015
	93	1,2,4-Trichlorobenzene	0.933	0.982	1.009	1.010	1.003	0.900	0.952	0.987	0.887	0.857	0.952	5.80	20.7917
	94	Hexachlorobutadiene	0.574	0.613	0.695	0.654	0.646	0.564	0.618	0.649	0.558	0.530	0.610	8.57	20.9561
	95	Naphthalene	1.256	1.003	1.258	1.213	1.162	1.231	1.160	1.257	1.107	1.074	1.172	7.49	21.1368
	96	1,2,3-Trichlorobenzene	0.595	0.651	0.782	0.742	0.730	0.685	0.701	0.733	0.648	0.636	0.690	8.36	21.4581

Spike Amount = Nominal Amount * M
Ave_%RSD : 10.1 Max_%RSD : 39.3

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
50	2-Chloroethyl vinyl ether	-0.00216	0.02145	0.9977
73	Bromoform	-0.00663	0.29386	0.9993

SM 12/30/24

Instrument ID :01
Beginning DateTime :10/12/24 13:38
Spike Units :PPB
IC File :RJV302

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :10/12/24 18:07
HPChem Method :VO01J12

M	IDX	Parameters	.3 13:38 RJV297	.5 14:08 RJV298	1 14:39 RJV299	2 15:09 RJV300	5 15:39 RJV301	10 16:08 RJV302	20 16:38 RJV303	30 17:38 RJV305	50 17:08 RJV304	100 18:07 RJV306	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5435
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	84	93	111	103	115	111	106	100	90	85	9.3	11.08	2.2475
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	72	100	114	107	115	110	103	103	89	86	10.5	13.65	2.5594
	6	Vinyl chloride	71	89	108	110	115	108	105	108	92	96	10.7	13.19	2.6904
	7	Bromomethane	104	102	113	99	105	95	101	105	88	90	5.7	7.64	3.2326
	8	Chloroethane	------	85	103	102	107	104	102	112	93	93	6.7	8.38	3.2364
	9	Dichlorofluoromethane	87	127	102	102	104	82	96	96	116	88	10.2	13.68	3.3585
	10	Trichlorofluoromethane	------	95	106	107	111	108	103	100	88	82	7.8	9.80	3.6280
5	11	Acrolein	------	------	87	87	100	100	87	112	100	100	6.3	7.80	4.0240
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	84	98	107	109	108	97	104	109	95	92	7	8.51	4.1478
5	13	Acetone	------	------	------	105	105	103	95	97	92	------	5	6.03	4.0946
	14	1,1-Dichloroethene	93	102	111	110	106	95	99	103	91	88	6.7	8.08	4.2485
25	15	tert-Butyl alcohol	------	89	100	111	100	111	111	100	100	100	4.9	7.42	4.3734
	16	Iodomethane	86	92	110	110	107	94	102	108	95	96	7.3	8.42	4.6617
	17	Methyl acetate	------	------	------	118	94	104	87	99	------	------	8.4	11.58	4.6795
	18	Methylene chloride	93	104	115	110	105	93	97	103	90	92	7.2	8.38	4.8808
	19	Carbon disulfide	------	78	97	99	105	104	104	113	------	------	7.5	10.91	4.8974
5	20	Acrylonitrile	------	74	91	106	106	106	97	109	100	100	7	10.80	5.0579
	21	tert-Butyl methyl ether (MTBE)	76	90	108	113	110	103	103	106	97	94	8.6	11.13	5.0793
	22	trans-1,2-Dichloroethene	91	99	112	109	108	94	102	105	91	89	7.2	8.41	5.2644
	23	Isopropyl ether (DIPE)	88	97	112	109	108	94	99	106	95	90	7.3	8.58	5.6820
	24	Vinyl acetate	63	101	110	103	105	116	103	111	96	92	9.8	14.72	5.8464
	25	1,1-Dichloroethane	90	98	115	108	108	94	101	106	92	89	7.5	8.95	5.8360
25	26	2-Butanol	------	------	------	75	100	100	100	112	------	------	7.5	12.15	6.1781
	27	tert-Butyl ethyl ether (ETBE)	84	90	112	113	112	98	101	106	94	90	8.7	10.48	6.2477
5	28	2-Butanone	91	95	118	98	98	105	96	102	95	95	5.6	7.33	6.4417
	29	2,2-Dichloropropane	95	99	115	113	106	95	101	102	90	85	7.3	9.59	6.6297
	30	cis-1,2-Dichloroethene	89	97	112	107	107	94	102	107	94	92	6.9	7.93	6.6920
	31	Chloroform	104	103	118	110	106	92	98	98	89	83	8.1	10.32	6.9096
	32	Bromochloromethane	91	87	115	112	108	98	100	104	93	92	7.5	9.24	7.1510
	33	Tetrahydrofuran	------	------	100	103	126	100	94	100	97	94	5.6	10.36	7.2079
	34	Dibromofluoromethane	------	------	100	96	101	98	103	102	------	------	2	2.58	7.2265
	35	1,1,1-Trichloroethane	86	96	114	111	110	96	105	102	93	87	8.3	9.83	7.4946
	36	Cyclohexane	90	91	101	103	107	101	100	106	------	------	4.7	6.28	7.5172
	37	2,2,4-Trimethylpentane	------	------	------	96	104	100	96	104	------	------	3.3	5.03	7.5139
	38	1,1-Dichloropropene	86	94	108	104	108	95	103	110	96	94	6.8	7.96	7.7167
	39	Carbon tetrachloride	82	96	111	109	110	98	108	104	95	89	8.2	9.79	7.8722
	40	tert-Amyl methyl ether (TAME)	88	98	115	112	106	97	100	101	93	90	6.9	8.94	7.8914
	41	1,2-Dichloroethane-d4	------	------	99	99	102	103	103	95	------	------	2.5	3.01	7.9669
	42	Benzene	100	103	114	109	107	93	100	103	90	81	7.3	9.85	8.1239
	43	1,2-Dichloroethane	75	90	114	111	114	106	106	101	95	88	10.5	12.95	8.1002
	44	Trichloroethene	92	103	110	107	104	93	103	104	93	90	6.3	7.09	9.0632
	45	Methylcyclohexane	108	96	95	102	103	97	99	101	------	------	3.4	4.28	9.1484
	46	1,2-Dichloropropane	97	91	110	107	106	95	102	105	94	91	6.1	7.03	9.3431
	47	Bromodichloromethane	94	95	112	107	107	97	104	101	93	89	6.3	7.42	9.7148
20	48	1,4-Dioxane	------	------	------	70	94	104	110	110	108	105	0	14.16	9.7571
	49	Dibromomethane	81	92	117	112	108	101	103	101	95	90	8.3	10.72	9.8066
	50	2-Chloroethyl vinyl ether	------	------	126	97	86	90	95	104	103	------	31.2	39.29	10.2225
5	51	4-Methyl-2-pentanone	------	73	94	103	110	114	104	106	99	92	8.7	12.23	10.2611
	52	cis-1,3-Dichloropropene	76	92	109	105	108	100	109	109	99	94	7.7	10.37	10.6063
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.6939
	54	Toluene-d8	------	------	103	105	105	98	87	102	------	------	5.1	6.87	11.0131
	55	Toluene	101	106	119	114	110	95	87	105	86	78	10.8	13.23	11.1483
	56	Ethyl methacrylate	------	70	94	106	111	112	94	114	101	100	9.5	13.58	11.4475
	57	trans-1,3-Dichloropropene	73	86	103	114	114	107	94	112	99	98	9.9	13.11	11.4682
	58	1,1,2-Trichloroethane	75	98	116	113	110	104	88	107	94	94	10.1	12.51	11.7318
5	59	2-Hexanone	------	------	75	100	109	114	90	111	101	97	9	12.75	11.7455
	60	1,3-Dichloropropane	78	91	111	114	108	101	102	106	97	92	8.4	10.91	12.1745
	61	Tetrachloroethene	104	104	110	110	106	92	99	101	89	85	6.9	8.52	12.2767
	62	Dibromochloromethane	87	97	99	106	106	103	103	106	99	96	4.5	6.04	12.6470
	63	1,2-Dibromoethane	73	91	104	106	110	104	105	108	101	96	8.1	11.07	13.0127
	64	1-Chlorohexane	101	101	112	109	107	93	101	104	91	83	6.7	8.90	13.2837
	65	Chlorobenzene	94	99	110	111	107	94	101	104	93	85	6.9	8.50	13.7620
	66	1,1,1,2-Tetrachloroethane	76	90	111	109	110	97	104	108	100	95	8.6	11.11	13.8435
	67	Ethylbenzene	103	104	116	115	110	96	100	100	86	71	9.5	13.61	13.8598
2	68	m-Xylene & p-Xylene	103	98	111	109	105	89	93	93	------	------	7.1	8.36	13.9964
	69	o-Xylene	97	99	114	113	118	107	96	97	85	74	10.4	13.73	14.8164
	70	Styrene	89	92	110	109	116	110	101	101	91	82	9.4	11.33	14.8860
	71	Isopropylbenzene	92	94	109	109	123	105	94	95	79	------	10.2	12.81	15.4951
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6667
	73	Bromoform	120	110	99	85	92	94	96	103	98	102	17.6	21.91	15.5361
	74	trans-1,4-Dichloro-2-butene	------	------	76	82	98	108	106	113	104	112	10.9	13.73	15.6087
	75	1,1,2,2-Tetrachloroethane	73	93	108	96	107	110	106	107	100	100	7.7	11.05	15.8353
	76	4-Bromofluorobenzene	------	------	104	86	99	99	107	105	------	------	5.3	7.58	15.9814
	77	1,2,3-Trichloropropane	------	76	99	95	103	108	105	108	103	103	6.8	10.16	16.1270
	78	n-Propylbenzene	106	106	118	99	111	95	103	103	86	74	9.3	12.69	16.2751
	79	Bromobenzene	94	98	107	94	107	95	103	107	96	99	4.7	5.43	16.3610
	80	1,3,5-Trimethylbenzene	103	105	116	96	108	94	103	104	90	82	7.7	9.71	16.5816
	81	2-Chlorotoluene	102	105	118	98	108	93	101	104	88	83	7.5	10.00	16.6157
	82	4-Chlorotoluene	111	107	108	96	103	93	102	101	92	86	6.7	8.13	16.7060
	83	tert-Butylbenzene	97	95	109	96	108	96	103	106	96	95	5.1	5.73	17.2643
	84	1,2,4-Trimethylbenzene	104	100	115	100	110	95	103	103	89	81	7	9.83	17.3339
	85	sec-Butylbenzene	114	107	117	100	110	97	102	100	83	71	9.8	14.02	17.6375
	86	p-Isopropyltoluene	108	106	119	100	109	95	100	101	87	76	8.6	12.06	17.8596
	87	1,3-Dichlorobenzene	101	99	114	100	107	95	101	103	92	88	5	7.25	18.0077
	88	1,2,3-Trimethylbenzene	100	103	117	114	108	96	101	100	86	78	8.4	11.80	18.1143
	89	1,4-Dichlorobenzene	108	104	116	106	104	92	98	99	88	84	7.7	9.73	18.1706
	90	n-Butylbenzene	110	106	115	107	105	90	95	95	78	------	9.5	11.64	18.4716
	91	1,2-Dichlorobenzene	99	99	116	108	107	95	99	100	91	87	6.2	8.62	18.7037
	92	1,2-Dibromo-3-chloropropane	------	------	82	93	90	106	104	110	104	106	8.1	9.99	19.7015
	93	1,2,4-Trichlorobenzene	98	103	106	106	105	95	100	104	93	90	4.9	5.80	20.7917
	94	Hexachlorobutadiene	94	100	114	107	106	92	101	106	91	87	7	8.57	20.9561
	95	Naphthalene	107	86	107	103	99	105	99	107	94	92	6	7.49	21.1368
	96	1,2,3-Trichlorobenzene	86	94	113	108	106	99	102	106	94	92	6.9	8.36	21.4581

SC
10/30/24

Compound List Report 01

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
Total Cpnds : 96

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-DIFLUOROBENZENE	114	8.54	1.000	A	1	A	B
2	T	Chlorotrifluoroethylene	116	2.08	0.243	A	2	A	B
3	T	Dichlorodifluoromethane	85	2.26	0.264	A	1	A	B
4	T	2-Chloro-1,1,1-trifluoroethane	118	2.53	0.296	A	2	A	B
5	T	Chloromethane	50	2.57	0.301	A	1	A	B
6	T	Vinyl chloride	62	2.70	0.316	A	1	A	B
7	T	Bromomethane	94	3.24	0.380	A	1	A	B
8	T	Chloroethane	64	3.24	0.380	A	1	A	B
9	T	Dichlorofluoromethane	67	3.36	0.393	A	1	A	B
10	T	Trichlorofluoromethane	101	3.63	0.425	A	1	A	B
11	T	Acrolein	56	4.01	0.470	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	4.15	0.485	A	1	A	B
13	T	Acetone	43	4.09	0.478	A	1	A	B
14	T	1,1-Dichloroethene	61	4.25	0.497	A	2	A	B
15	T	tert-Butyl alcohol	59	4.37	0.511	A	1	A	B
16	T	Iodomethane	142	4.67	0.546	A	1	A	B
17	T	Methyl acetate	43	4.68	0.548	A	1	A	B
18	T	Methylene chloride	49	4.89	0.572	A	2	A	B
19	T	Carbon disulfide	76	4.90	0.574	A	1	A	B
20	T	Acrylonitrile	53	5.05	0.591	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	5.08	0.595	A	1	A	B
22	T	trans-1,2-Dichloroethene	61	5.27	0.617	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	5.69	0.666	A	1	A	B
24	T	Vinyl acetate	43	5.85	0.685	A	1	A	B
25	T	1,1-Dichloroethane	63	5.84	0.683	A	2	A	B
26	T	2-Butanol	45	6.17	0.723	A	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.25	0.731	A	1	A	B
28	T	2-Butanone	43	6.43	0.752	A	1	A	B
29	T	2,2-Dichloropropane	77	6.63	0.777	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	6.69	0.783	A	2	A	B
31	T	Chloroform	83	6.92	0.809	A	2	A	B
32	T	Bromochloromethane	49	7.15	0.837	A	2	A	B
33	T	Tetrahydrofuran	42	7.21	0.844	A	2	A	B
34	S	Dibromofluoromethane	111	7.23	0.846	A	2	A	B
35	T	1,1,1-Trichloroethane	97	7.49	0.877	A	2	A	B
36	T	Cyclohexane	84	7.52	0.880	A	1	A	B
37	T	2,2,4-Trimethylpentane	57	7.52	0.880	A	1	A	B
38	T	1,1-Dichloropropene	110	7.72	0.903	A	1	A	B
39	T	Carbon tetrachloride	119	7.88	0.922	A	1	A	B
40	T	tert-Amyl methyl ether (TAME)	73	7.89	0.924	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	7.97	0.932	A	1	A	B
42	T	Benzene	78	8.13	0.952	A	2	A	B
43	T	1,2-Dichloroethane	62	8.10	0.948	A	1	A	B
44	T	Trichloroethene	130	9.06	1.061	A	3	A	B
45	T	Methylcyclohexane	83	9.15	1.071	A	2	A	B
46	T	1,2-Dichloropropane	63	9.34	1.094	A	1	A	B
47	T	Bromodichloromethane	83	9.71	1.137	A	1	A	B
48	T	1,4-Dioxane	88	9.76	1.142	A	1	A	B
49	T	Dibromomethane	93	9.80	1.147	A	2	A	B
50	T	2-Chloroethyl vinyl ether	63	10.22	1.196	L	2	A	B
51	T	4-Methyl-2-pentanone	43	10.25	1.199	A	3	A	B
52	T	cis-1,3-Dichloropropene	75	10.60	1.241	A	1	A	B

SW 10/30/24

53	I	CHLOROBENZENE-D5	117	13.70	1.000	A	2	A	B
54	S	Toluene-d8	98	11.02	0.804	A	1	A	B
55	T	Toluene	91	11.15	0.814	A	1	A	B
56	T	Ethyl methacrylate	69	11.43	0.835	A	1	A	B
57	T	trans-1,3-Dichloropropene	75	11.46	0.837	A	1	A	B
58	T	1,1,2-Trichloroethane	97	11.73	0.856	A	2	A	B
59	T	2-Hexanone	43	11.74	0.857	A	1	A	B
60	T	1,3-Dichloropropane	76	12.17	0.889	A	1	A	B
61	T	Tetrachloroethene	164	12.28	0.896	A	3	A	B
62	T	Dibromochloromethane	129	12.65	0.923	A	1	A	B
63	T	1,2-Dibromoethane	107	13.02	0.950	A	1	A	B
64	T	1-Chlorohexane	91	13.28	0.970	A	1	A	B
65	P,M	Chlorobenzene	112	13.77	1.005	A	1	A	B
66	T	1,1,1,2-Tetrachloroethane	131	13.85	1.011	A	1	A	B
67	T	Ethylbenzene	91	13.86	1.012	A	1	A	B
68	T	m-Xylene & p-Xylene	91	13.99	1.022	A	1	A	B
69	T	o-Xylene	91	14.82	1.082	A	1	A	B
70	T	Styrene	104	14.88	1.086	A	2	A	B
71	T	Isopropylbenzene	105	15.50	1.132	A	3	A	B
72	I	1,2-DICHLOROBENZENE-D4	152	18.67	1.000	A	1	A	B
73	T	Bromoform	173	15.53	0.832	L	1	A	B
74	T	trans-1,4-Dichloro-2-butene	53	15.61	0.836	A	1	A	B
75	T	1,1,2,2-Tetrachloroethane	83	15.85	0.849	A	1	A	B
76	S	4-Bromofluorobenzene	95	15.98	0.856	A	2	A	B
77	T	1,2,3-Trichloropropane	110	16.13	0.864	A	1	A	B
78	T	n-Propylbenzene	91	16.27	0.872	A	2	A	B
79	T	Bromobenzene	156	16.36	0.876	A	1	A	B
80	T	1,3,5-Trimethylbenzene	105	16.59	0.888	A	2	A	B
81	T	2-Chlorotoluene	91	16.62	0.890	A	1	A	B
82	T	4-Chlorotoluene	91	16.70	0.895	A	1	A	B
83	T	tert-Butylbenzene	134	17.27	0.925	A	1	A	B
84	T	1,2,4-Trimethylbenzene	105	17.34	0.929	A	1	A	B
85	T	sec-Butylbenzene	105	17.64	0.944	A	1	A	B
86	T	p-Isopropyltoluene	119	17.86	0.956	A	2	A	B
87	T	1,3-Dichlorobenzene	146	18.01	0.964	A	2	A	B
88	T	1,2,3-Trimethylbenzene	105	18.11	0.970	A	2	A	B
89	T	1,4-Dichlorobenzene	146	18.17	0.973	A	2	A	B
90	T	n-Butylbenzene	91	18.48	0.990	A	2	A	B
91	T	1,2-Dichlorobenzene	146	18.70	1.002	A	1	A	B
92	T	1,2-Dibromo-3-chloropropane	157	19.71	1.056	A	1	A	B
93	T	1,2,4-Trichlorobenzene	180	20.79	1.113	A	2	A	B
94	T	Hexachlorobutadiene	225	20.95	1.122	A	1	A	B
95	T	Naphthalene	128	21.13	1.132	A	1	A	B
96	T	1,2,3-Trichlorobenzene	180	21.46	1.149	A	2	A	B

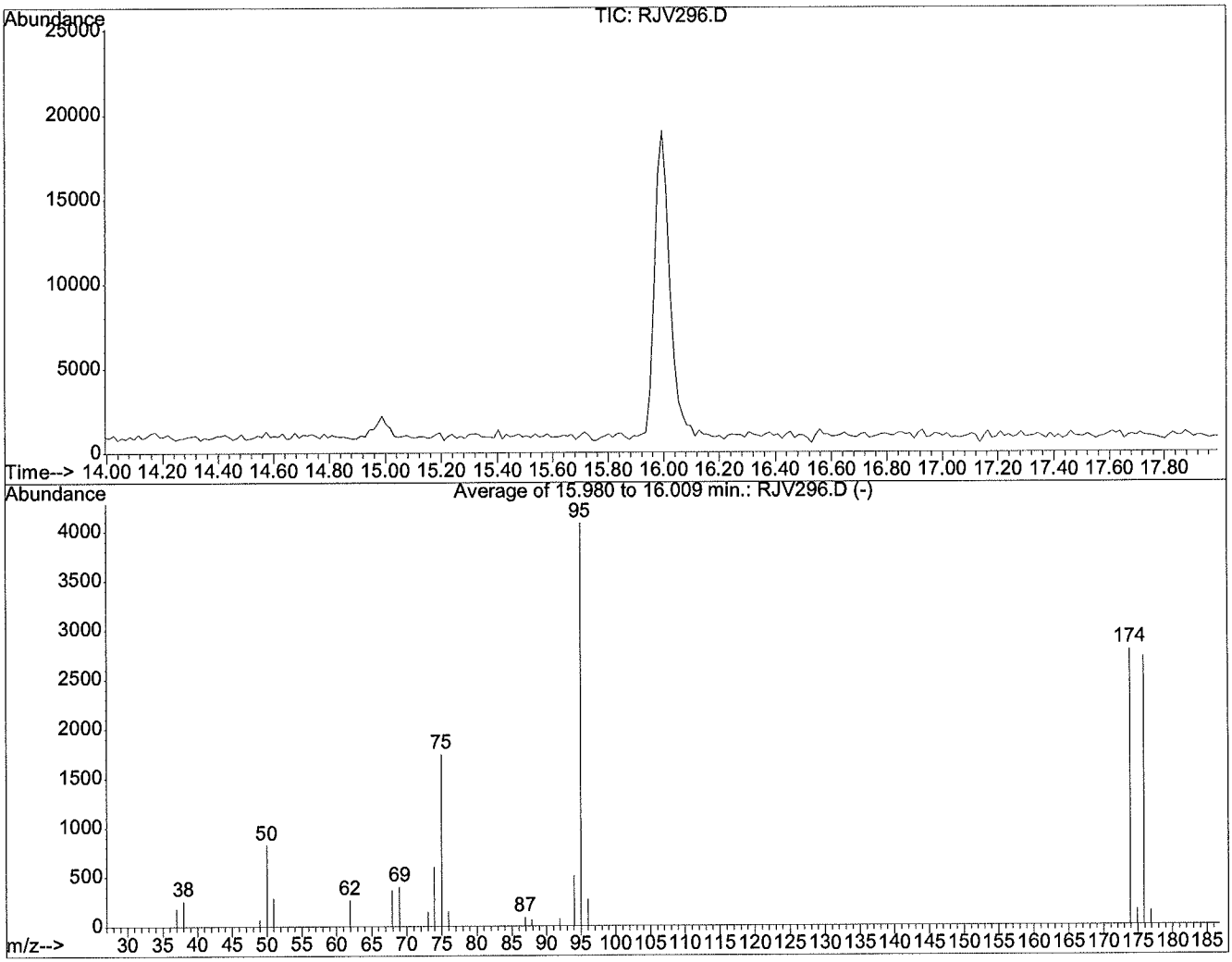
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO01J12.M Thu Oct 24 09:08:04 2024

SU 10/30/24

Data File : D:\HPCHEM\1\DATA\24J12\RJV296.D
Acq On : 12 Oct 2024 12:56 pm
Sample : BFB01J13
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye
Inst : 01
Multiplr: 1.00



AutoFind: Scans 949, 950, 951; Background Corrected with Scan 943

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	827	PASS
75	95	30	60	42.7	1744	PASS
95	95	100	100	100.0	4085	PASS
96	95	5	9	6.7	272	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	68.5	2797	PASS
175	174	5	9	5.6	157	PASS
176	174	95	101	97.5	2727	PASS
177	176	5	9	5.3	145	PASS

RJV296.D VO01J12.M Thu Oct 24 09:04:34 2024 SV 10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV297.D Vial: 2
Acq On : 12 Oct 2024 1:38 pm Operator: DNguye
Sample : VO01J121 0.03/0.15 Inst : 01
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.53	114	846934	10.00	ug/l		-0.01
53) CHLOROBENZENE-D5	13.68	117	644827	10.00	ug/l		-0.01
72) 1,2-DICHLOROBENZENE-D4	18.66	152	249254	10.00	ug/l		-0.01
System Monitoring Compounds							
34) Dibromofluoromethane	7.23	111	4440	0.20	ug/l		0.00
Spiked Amount 10.000			Recovery = 2.00%				
41) 1,2-Dichloroethane-d4	7.95	65	3668	0.19	ug/l		-0.01
Spiked Amount 10.000			Recovery = 1.90%				
54) Toluene-d8	11.02	98	22073	0.25	ug/l		0.00
Spiked Amount 10.000			Recovery = 2.50%				
76) 4-Bromofluorobenzene	15.99	95	7505	0.25	ug/l		0.02
Spiked Amount 10.000			Recovery = 2.50%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	2.23	85	8790	0.25	ug/l		71
5) Chloromethane	2.56	50	5693	0.22	ug/l		71
6) Vinyl chloride	2.69	62	4962	0.21	ug/l		59
7) Bromomethane	3.21	94	5188	0.31	ug/l	#	56
8) Chloroethane	3.23	64	2877	0.16	ug/l	#	40
9) Dichlorofluoromethane	3.35	67	8444	0.26	ug/l		89
10) Trichlorofluoromethane	3.60	101	5514	0.15	ug/l		99
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	3901	0.25	ug/l		62
13) Acetone	4.07	43	30027	9.60	ug/l		90
14) 1,1-Dichloroethene	4.24	61	10999	0.28	ug/l		91
15) tert-Butyl alcohol	4.37	59	3214	4.11	ug/l		83
16) Iodomethane	4.65	142	8686	0.26	ug/l		90
17) Methyl acetate	4.66	43	2257	0.28	ug/l	#	58
18) Methylene chloride	4.87	49	7895	0.28	ug/l	#	31
19) Carbon disulfide	4.87	76	17610	0.21	ug/l	#	74
20) Acrylonitrile	5.08	53	2060	0.70	ug/l	#	30
21) tert-Butyl methyl ether (M	5.08	73	8913	0.23	ug/l		91
22) trans-1,2-Dichloroethene	5.26	61	10380	0.27	ug/l		99
23) Isopropyl ether (DIPE)	5.67	45	21004	0.26	ug/l		89
24) Vinyl acetate	5.86	43	4836	0.19	ug/l	#	75
25) 1,1-Dichloroethane	5.82	63	11955	0.27	ug/l		89
27) tert-Butyl ethyl ether (ET	6.25	59	14628	0.25	ug/l		93
28) 2-Butanone	6.50	43	6566	1.37	ug/l	#	58
29) 2,2-Dichloropropane	6.62	77	10877	0.29	ug/l		90
30) cis-1,2-Dichloroethene	6.68	96	7232	0.27	ug/l		97
31) Chloroform	6.90	83	14103	0.31	ug/l		93
32) Bromochloromethane	7.14	49	4623	0.27	ug/l		86

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV297.D Vial: 2
Acq On : 12 Oct 2024 1:38 pm Operator: DNguye
Sample : VO01J121 0.03/0.15 Inst : 01
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
35)	1,1,1-Trichloroethane	7.49	97	10535	0.26	ug/l		97
36)	Cyclohexane	7.52	84	11360	0.27	ug/l		96
38)	1,1-Dichloropropene	7.72	110	3175	0.26	ug/l		94
39)	Carbon tetrachloride	7.86	119	7579	0.25	ug/l		91
40)	tert-Amyl methyl ether (TA	7.88	73	11744	0.26	ug/l		87
42)	Benzene	8.12	78	29150	0.30	ug/l		96
43)	1,2-Dichloroethane	8.10	62	4840	0.22	ug/l		96
44)	Trichloroethene	9.06	130	7111	0.28	ug/l		99
45)	Methylcyclohexane	9.14	83	16060	0.32	ug/l		99
46)	1,2-Dichloropropane	9.34	63	6380	0.29	ug/l		83
47)	Bromodichloromethane	9.71	83	8435	0.28	ug/l		96
49)	Dibromomethane	9.82	93	2317	0.24	ug/l	#	70
51)	4-Methyl-2-pentanone	10.37	43	9490	0.88	ug/l	#	77
52)	cis-1,3-Dichloropropene	10.62	75	7489	0.23	ug/l		91
55)	Toluene	11.15	91	30923	0.30	ug/l		99
56)	Ethyl methacrylate	11.52	69	2684	0.18	ug/l		76
57)	trans-1,3-Dichloropropene	11.49	75	5067	0.22	ug/l		79
58)	1,1,2-Trichloroethane	11.74	97	2850	0.23	ug/l		96
59)	2-Hexanone	11.92	43	3083	0.46	ug/l	#	29
60)	1,3-Dichloropropane	12.17	76	5524	0.23	ug/l		95
61)	Tetrachloroethene	12.28	164	6881	0.31	ug/l		92
62)	Dibromochloromethane	12.65	129	3881	0.26	ug/l		95
63)	1,2-Dibromoethane	13.03	107	2616	0.22	ug/l		91
64)	1-Chlorohexane	13.28	91	14462	0.30	ug/l		95
65)	Chlorobenzene	13.76	112	17322	0.28	ug/l		90
66)	1,1,1,2-Tetrachloroethane	13.83	131	4237	0.23	ug/l		87
67)	Ethylbenzene	13.86	91	37251	0.31	ug/l		100
68)	m-Xylene & p-Xylene	14.01	91	59146	0.62	ug/l		97
69)	o-Xylene	14.82	91	27516	0.29	ug/l		93
70)	Styrene	14.90	104	18326	0.27	ug/l		98
71)	Isopropylbenzene	15.50	105	35505	0.28	ug/l		96
73)	Bromoform	15.55	173	1009	0.36	ug/l	#	29
75)	1,1,2,2-Tetrachloroethane	15.85	83	2875	0.22	ug/l		95
78)	n-Propylbenzene	16.27	91	47121	0.32	ug/l		98
79)	Bromobenzene	16.36	156	6024	0.28	ug/l		97
80)	1,3,5-Trimethylbenzene	16.59	105	28148	0.31	ug/l		98
81)	2-Chlorotoluene	16.62	91	27464	0.31	ug/l		95
82)	4-Chlorotoluene	16.72	91	26713	0.33	ug/l		92
83)	tert-Butylbenzene	17.25	134	5990	0.29	ug/l		85
84)	1,2,4-Trimethylbenzene	17.34	105	27737	0.31	ug/l		100
85)	sec-Butylbenzene	17.64	105	43875	0.34	ug/l		98

(#) = qualifier out of range (m) = manual integration

SU 10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV297.D Vial: 2
Acq On : 12 Oct 2024 1:38 pm Operator: DNguye
Sample : VO01J121 0.03/0.15 Inst : 01
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	p-Isopropyltoluene	17.86	119	32571	0.32	ug/l	98
87)	1,3-Dichlorobenzene	18.01	146	13067	0.30	ug/l	96
88)	1,2,3-Trimethylbenzene	18.11	105	24287	0.30	ug/l	97
89)	1,4-Dichlorobenzene	18.17	146	13805	0.32	ug/l	91
90)	n-Butylbenzene	18.48	91	36253	0.33	ug/l	98
91)	1,2-Dichlorobenzene	18.70	146	10393	0.30	ug/l	93
93)	1,2,4-Trichlorobenzene	20.79	180	6976	0.29	ug/l	88
94)	Hexachlorobutadiene	20.95	225	4289	0.28	ug/l	90
95)	Naphthalene	21.15	128	9391	0.32	ug/l	89
96)	1,2,3-Trichlorobenzene	21.46	180	4448	0.26	ug/l	88

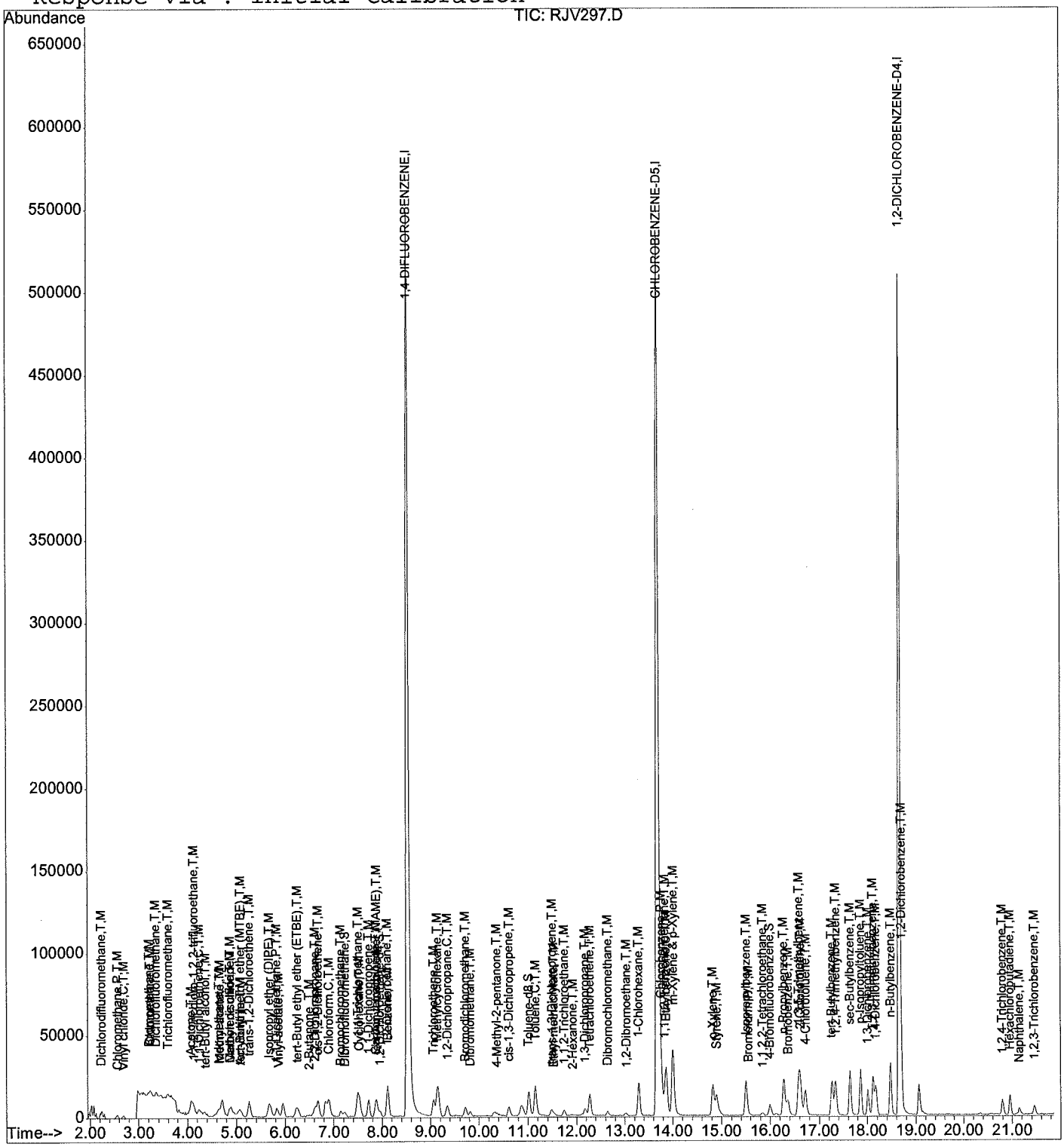
SU 10/30/24

(#) = qualifier out of range (m) = manual integration
RJV297.D VO01J12.M Thu Oct 24 09:04:47 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV297.D Vial: 2
Acq On : 12 Oct 2024 1:38 pm Operator: DNguye
Sample : VO01J121 0.03/0.15 Inst : 01
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV298.D Vial: 3
Acq On : 12 Oct 2024 2:08 pm Operator: DNguye
Sample : VO01J122 0.05/0.25 Inst : 01
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	1024916	10.00	ug/l		0.00
53) CHLOROBENZENE-D5	13.68	117	790592	10.00	ug/l		-0.01
72) 1,2-DICHLOROBENZENE-D4	18.66	152	300897	10.00	ug/l		-0.01
System Monitoring Compounds							
34) Dibromofluoromethane	7.23	111	7030	0.26	ug/l		0.00
Spiked Amount 10.000			Recovery =	2.60%			
41) 1,2-Dichloroethane-d4	7.95	65	5946	0.25	ug/l		-0.01
Spiked Amount 10.000			Recovery =	2.50%			
54) Toluene-d8	11.02	98	33721	0.31	ug/l		0.00
Spiked Amount 10.000			Recovery =	3.10%			
76) 4-Bromofluorobenzene	15.99	95	10661	0.30	ug/l		0.02
Spiked Amount 10.000			Recovery =	3.00%			
Target Compounds							Qvalue
3) Dichlorodifluoromethane	2.25	85	19641	0.47	ug/l		93
5) Chloromethane	2.56	50	15865	0.50	ug/l		85
6) Vinyl chloride	2.69	62	12377	0.44	ug/l		83
7) Bromomethane	3.23	94	10276	0.51	ug/l		73
8) Chloroethane	3.21	64	8972	0.42	ug/l		74
9) Dichlorofluoromethane	3.35	67	24786	0.64	ug/l		81
10) Trichlorofluoromethane	3.63	101	21607	0.47	ug/l		97
11) Acrolein	4.01	56	625	0.80	ug/l	#	53
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	9222	0.49	ug/l		97
13) Acetone	4.10	43	14391	3.80	ug/l		85
14) 1,1-Dichloroethene	4.24	61	24332	0.51	ug/l		92
15) tert-Butyl alcohol	4.38	59	9963	10.52	ug/l		89
16) Iodomethane	4.68	142	18672	0.46	ug/l		95
17) Methyl acetate	4.68	43	11883	1.22	ug/l	#	58
18) Methylene chloride	4.89	49	17946	0.52	ug/l		92
19) Carbon disulfide	4.89	76	39068	0.39	ug/l		95
20) Acrylonitrile	5.08	53	6650	1.87	ug/l		86
21) tert-Butyl methyl ether (M	5.08	73	21192	0.45	ug/l		93
22) trans-1,2-Dichloroethene	5.27	61	22645	0.49	ug/l		99
23) Isopropyl ether (DIPE)	5.69	45	46767	0.49	ug/l		97
24) Vinyl acetate	5.86	43	15474	0.50	ug/l	#	75
25) 1,1-Dichloroethane	5.84	63	26323	0.49	ug/l		94
26) 2-Butanol	6.34	45	690	0.87	ug/l	#	1
27) tert-Butyl ethyl ether (ET	6.25	59	31457	0.45	ug/l		98
28) 2-Butanone	6.47	43	13929	2.40	ug/l		73
29) 2,2-Dichloropropane	6.63	77	22807	0.50	ug/l		97
30) cis-1,2-Dichloroethene	6.69	96	15912	0.48	ug/l		95

(#) = qualifier out of range (m) = manual integration
RJV298.D VO01J12.M Thu Oct 24 09:05:13 2024 Page 1

SU 10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV298.D Vial: 3
Acq On : 12 Oct 2024 2:08 pm Operator: DNguye
Sample : VO01J122 0.05/0.25 Inst : 01
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
31)	Chloroform	6.90	83	28262	0.51 ug/l		98
32)	Bromochloromethane	7.15	49	8892	0.44 ug/l		97
35)	1,1,1-Trichloroethane	7.49	97	23731	0.48 ug/l		95
36)	Cyclohexane	7.51	84	23171	0.46 ug/l		98
38)	1,1-Dichloropropene	7.72	110	7004	0.47 ug/l		98
39)	Carbon tetrachloride	7.86	119	17909	0.48 ug/l		90
40)	tert-Amyl methyl ether (TA	7.89	73	26461	0.49 ug/l		90
42)	Benzene	8.12	78	60474	0.52 ug/l		97
43)	1,2-Dichloroethane	8.10	62	11722	0.45 ug/l		96
44)	Trichloroethene	9.06	130	16015	0.52 ug/l		92
45)	Methylcyclohexane	9.15	83	28732	0.48 ug/l		97
46)	1,2-Dichloropropane	9.34	63	12037	0.46 ug/l		98
47)	Bromodichloromethane	9.72	83	17160	0.47 ug/l		95
49)	Dibromomethane	9.82	93	5267	0.46 ug/l		87
51)	4-Methyl-2-pentanone	10.31	43	23736	1.83 ug/l		87
52)	cis-1,3-Dichloropropene	10.62	75	18260	0.46 ug/l		96
55)	Toluene	11.15	91	66356	0.53 ug/l		100
56)	Ethyl methacrylate	11.52	69	6230	0.35 ug/l	#	65
57)	trans-1,3-Dichloropropene	11.48	75	12223	0.43 ug/l		91
58)	1,1,2-Trichloroethane	11.74	97	7563	0.49 ug/l		92
59)	2-Hexanone	11.85	43	9326	1.14 ug/l		100
60)	1,3-Dichloropropane	12.19	76	13243	0.46 ug/l		97
61)	Tetrachloroethene	12.28	164	14058	0.52 ug/l		94
62)	Dibromochloromethane	12.65	129	8921	0.49 ug/l		90
63)	1,2-Dibromoethane	13.02	107	6660	0.46 ug/l		96
64)	1-Chlorohexane	13.28	91	29446	0.50 ug/l		94
65)	Chlorobenzene	13.76	112	37257	0.50 ug/l		98
66)	1,1,1,2-Tetrachloroethane	13.85	131	10367	0.45 ug/l		97
67)	Ethylbenzene	13.86	91	76866	0.52 ug/l		98
68)	m-Xylene & p-Xylene	13.99	91	114294	0.98 ug/l		99
69)	o-Xylene	14.82	91	57288	0.50 ug/l		98
70)	Styrene	14.90	104	38771	0.46 ug/l		97
71)	Isopropylbenzene	15.49	105	73409	0.47 ug/l		99
73)	Bromoform	15.53	173	2835	0.55 ug/l		57
74)	trans-1,4-Dichloro-2-buten	15.62	53	1480	0.32 ug/l		95
75)	1,1,2,2-Tetrachloroethane	15.85	83	7374	0.46 ug/l		91
77)	1,2,3-Trichloropropane	16.13	110	1678	0.38 ug/l		99
78)	n-Propylbenzene	16.28	91	94614	0.53 ug/l		97
79)	Bromobenzene	16.36	156	12715	0.49 ug/l		100
80)	1,3,5-Trimethylbenzene	16.59	105	58068	0.53 ug/l		98
81)	2-Chlorotoluene	16.62	91	56608	0.52 ug/l		98

(#) = qualifier out of range (m) = manual integration

SV 10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV298.D Vial: 3
Acq On : 12 Oct 2024 2:08 pm Operator: DNguye
Sample : VO01J122 0.05/0.25 Inst : 01
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	4-Chlorotoluene	16.70	91	51681	0.53	ug/l	100
83)	tert-Butylbenzene	17.27	134	11839	0.48	ug/l	94
84)	1,2,4-Trimethylbenzene	17.34	105	53985	0.50	ug/l	98
85)	sec-Butylbenzene	17.64	105	82867	0.53	ug/l	99
86)	p-Isopropyltoluene	17.86	119	63955	0.53	ug/l	97
87)	1,3-Dichlorobenzene	18.01	146	25802	0.50	ug/l	99
88)	1,2,3-Trimethylbenzene	18.11	105	50600	0.52	ug/l	95
89)	1,4-Dichlorobenzene	18.17	146	26890	0.52	ug/l	94
90)	n-Butylbenzene	18.47	91	69951	0.53	ug/l	98
91)	1,2-Dichlorobenzene	18.70	146	20913	0.49	ug/l	100
93)	1,2,4-Trichlorobenzene	20.79	180	14779	0.52	ug/l	91
94)	Hexachlorobutadiene	20.95	225	9230	0.50	ug/l	96
95)	Naphthalene	21.15	128	15091	0.43	ug/l	98
96)	1,2,3-Trichlorobenzene	21.46	180	9790	0.47	ug/l	98

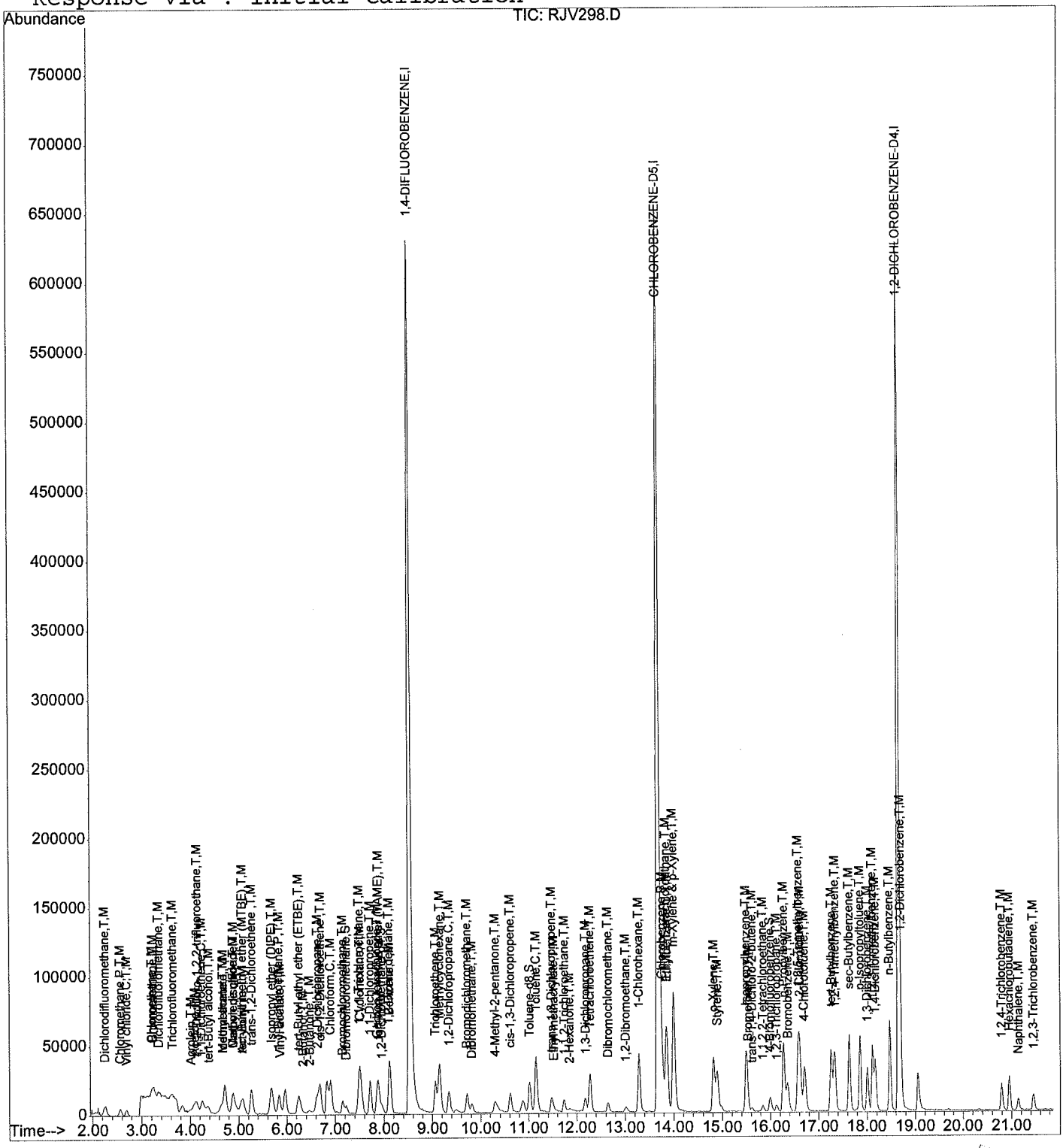
SV

(#) = qualifier out of range (m) = manual integration
RJV298.D VO01J12.M Thu Oct 24 09:05:14 2024 10/30/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV298.D Vial: 3
Acq On : 12 Oct 2024 2:08 pm Operator: DNguye
Sample : VO01J122 0.05/0.25 Inst : 01
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV299.D Vial: 4
Acq On : 12 Oct 2024 2:39 pm Operator: DNguye
Sample : VO01J123 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	863069	10.00	ug/l		0.00
53) CHLOROBENZENE-D5	13.68	117	665582	10.00	ug/l		-0.01
72) 1,2-DICHLOROBENZENE-D4	18.66	152	264976	10.00	ug/l		-0.01
System Monitoring Compounds							
34) Dibromofluoromethane	7.23	111	22505	1.00	ug/l		0.00
Spiked Amount 10.000			Recovery =	10.00%			
41) 1,2-Dichloroethane-d4	7.97	65	19601	0.99	ug/l		0.00
Spiked Amount 10.000			Recovery =	9.90%			
54) Toluene-d8	11.02	98	94707	1.03	ug/l		0.00
Spiked Amount 10.000			Recovery =	10.30%			
76) 4-Bromofluorobenzene	15.99	95	32723	1.04	ug/l		0.02
Spiked Amount 10.000			Recovery =	10.40%			
Target Compounds							Qvalue
3) Dichlorodifluoromethane	2.26	85	39243	1.11	ug/l		92
5) Chloromethane	2.57	50	30460	1.14	ug/l		95
6) Vinyl chloride	2.70	62	25359	1.07	ug/l		99
7) Bromomethane	3.23	94	19265	1.13	ug/l		81
8) Chloroethane	3.23	64	18347	1.03	ug/l		81
9) Dichlorofluoromethane	3.35	67	33367	1.02	ug/l		97
10) Trichlorofluoromethane	3.63	101	40766	1.06	ug/l		95
11) Acrolein	4.01	56	2895	4.39	ug/l		96
12) 1,1,2-Trichloro-1,2,2-trif	4.13	151	16799	1.06	ug/l		91
13) Acetone	4.09	43	23140	7.26	ug/l		90
14) 1,1-Dichloroethene	4.23	61	44907	1.12	ug/l		98
15) tert-Butyl alcohol	4.38	59	18846	23.64	ug/l		77
16) Iodomethane	4.65	142	37685	1.10	ug/l		99
17) Methyl acetate	4.68	43	10690	1.30	ug/l	#	58
18) Methylene chloride	4.87	49	33196	1.14	ug/l		96
19) Carbon disulfide	4.89	76	81448	0.97	ug/l		99
20) Acrylonitrile	5.08	53	13914	4.65	ug/l		93
21) tert-Butyl methyl ether (M	5.08	73	42990	1.08	ug/l		93
22) trans-1,2-Dichloroethene	5.26	61	43417	1.12	ug/l		98
23) Isopropyl ether (DIPE)	5.67	45	91090	1.12	ug/l		99
24) Vinyl acetate	5.85	43	28463	1.10	ug/l		86
25) 1,1-Dichloroethane	5.83	63	52190	1.15	ug/l		94
26) 2-Butanol	6.26	45	8708	13.03	ug/l	#	1
27) tert-Butyl ethyl ether (ET	6.23	59	66134	1.12	ug/l		98
28) 2-Butanone	6.46	43	28761	5.89	ug/l		81
29) 2,2-Dichloropropane	6.62	77	44732	1.15	ug/l		96
30) cis-1,2-Dichloroethene	6.69	96	31078	1.12	ug/l		97

(#) = qualifier out of range (m) = manual integration

10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV299.D Vial: 4
Acq On : 12 Oct 2024 2:39 pm Operator: DNguye
Sample : VO01J123 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
31)	Chloroform	6.90	83	54449	1.18	ug/l		96
32)	Bromochloromethane	7.15	49	19689	1.15	ug/l		92
33)	Tetrahydrofuran	7.23	42	2685	0.99	ug/l	#	40
35)	1,1,1-Trichloroethane	7.49	97	47315	1.14	ug/l		96
36)	Cyclohexane	7.51	84	43185	1.01	ug/l		98
37)	2,2,4-Trimethylpentane	7.52	57	1092	0.53	ug/l	#	100
38)	1,1-Dichloropropene	7.70	110	13671	1.09	ug/l		95
39)	Carbon tetrachloride	7.86	119	34771	1.11	ug/l		96
40)	tert-Amyl methyl ether (TA	7.89	73	51861	1.15	ug/l		94
42)	Benzene	8.11	78	113163	1.15	ug/l		98
43)	1,2-Dichloroethane	8.10	62	25132	1.14	ug/l		97
44)	Trichloroethene	9.06	130	28726	1.10	ug/l		97
45)	Methylcyclohexane	9.15	83	48077	0.95	ug/l		97
46)	1,2-Dichloropropane	9.34	63	24616	1.11	ug/l		98
47)	Bromodichloromethane	9.71	83	34032	1.12	ug/l		98
48)	1,4-Dioxane	9.82	88	195	2.29	ug/l	#	20
49)	Dibromomethane	9.80	93	11313	1.17	ug/l		91
50)	2-Chloroethyl vinyl ether	10.23	63	468	1.26	ug/l	#	43
51)	4-Methyl-2-pentanone	10.28	43	51833	4.74	ug/l		97
52)	cis-1,3-Dichloropropene	10.60	75	36206	1.09	ug/l		96
55)	Toluene	11.15	91	125121	1.19	ug/l		100
56)	Ethyl methacrylate	11.46	69	14246	0.94	ug/l		86
57)	trans-1,3-Dichloropropene	11.48	75	24650	1.03	ug/l		97
58)	1,1,2-Trichloroethane	11.73	97	15119	1.16	ug/l		94
59)	2-Hexanone	11.79	43	25932	3.76	ug/l		99
60)	1,3-Dichloropropane	12.17	76	27065	1.11	ug/l		100
61)	Tetrachloroethene	12.28	164	25118	1.10	ug/l		97
62)	Dibromochloromethane	12.65	129	15336	0.99	ug/l		100
63)	1,2-Dibromoethane	13.02	107	12861	1.05	ug/l		93
64)	1-Chlorohexane	13.28	91	55243	1.12	ug/l		99
65)	Chlorobenzene	13.76	112	69767	1.10	ug/l		98
66)	1,1,1,2-Tetrachloroethane	13.85	131	21346	1.11	ug/l		96
67)	Ethylbenzene	13.86	91	145077	1.16	ug/l		99
68)	m-Xylene & p-Xylene	13.99	91	218861	2.22	ug/l		100
69)	o-Xylene	14.81	91	111172	1.14	ug/l		97
70)	Styrene	14.88	104	78488	1.10	ug/l		99
71)	Isopropylbenzene	15.49	105	143880	1.09	ug/l		99
73)	Bromoform	15.53	173	5978	0.99	ug/l		93
74)	trans-1,4-Dichloro-2-buten	15.61	53	3098	0.76	ug/l		90
75)	1,1,2,2-Tetrachloroethane	15.83	83	15127	1.08	ug/l		94
77)	1,2,3-Trichloropropane	16.13	110	3888	0.99	ug/l		91

(#) = qualifier out of range (m) = manual integration

SM 10/29/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV299.D Vial: 4
Acq On : 12 Oct 2024 2:39 pm Operator: DNguye
Sample : VO01J123 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.28	91	184504	1.18	ug/l	98
79)	Bromobenzene	16.36	156	24218	1.07	ug/l	99
80)	1,3,5-Trimethylbenzene	16.57	105	112287	1.16	ug/l	99
81)	2-Chlorotoluene	16.62	91	112150	1.18	ug/l	97
82)	4-Chlorotoluene	16.70	91	92137	1.08	ug/l	97
83)	tert-Butylbenzene	17.25	134	23828	1.09	ug/l	94
84)	1,2,4-Trimethylbenzene	17.33	105	108887	1.15	ug/l	100
85)	sec-Butylbenzene	17.64	105	159519	1.17	ug/l	98
86)	p-Isopropyltoluene	17.86	119	126401	1.19	ug/l	97
87)	1,3-Dichlorobenzene	18.01	146	52027	1.14	ug/l	98
88)	1,2,3-Trimethylbenzene	18.11	105	100861	1.17	ug/l	98
89)	1,4-Dichlorobenzene	18.17	146	52646	1.16	ug/l	97
90)	n-Butylbenzene	18.47	91	133788	1.15	ug/l	98
91)	1,2-Dichlorobenzene	18.70	146	43235	1.16	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.71	157	1531	0.82	ug/l	97
93)	1,2,4-Trichlorobenzene	20.79	180	26731	1.06	ug/l	94
94)	Hexachlorobutadiene	20.95	225	18415	1.14	ug/l	98
95)	Naphthalene	21.13	128	33323	1.07	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	20718	1.13	ug/l	96

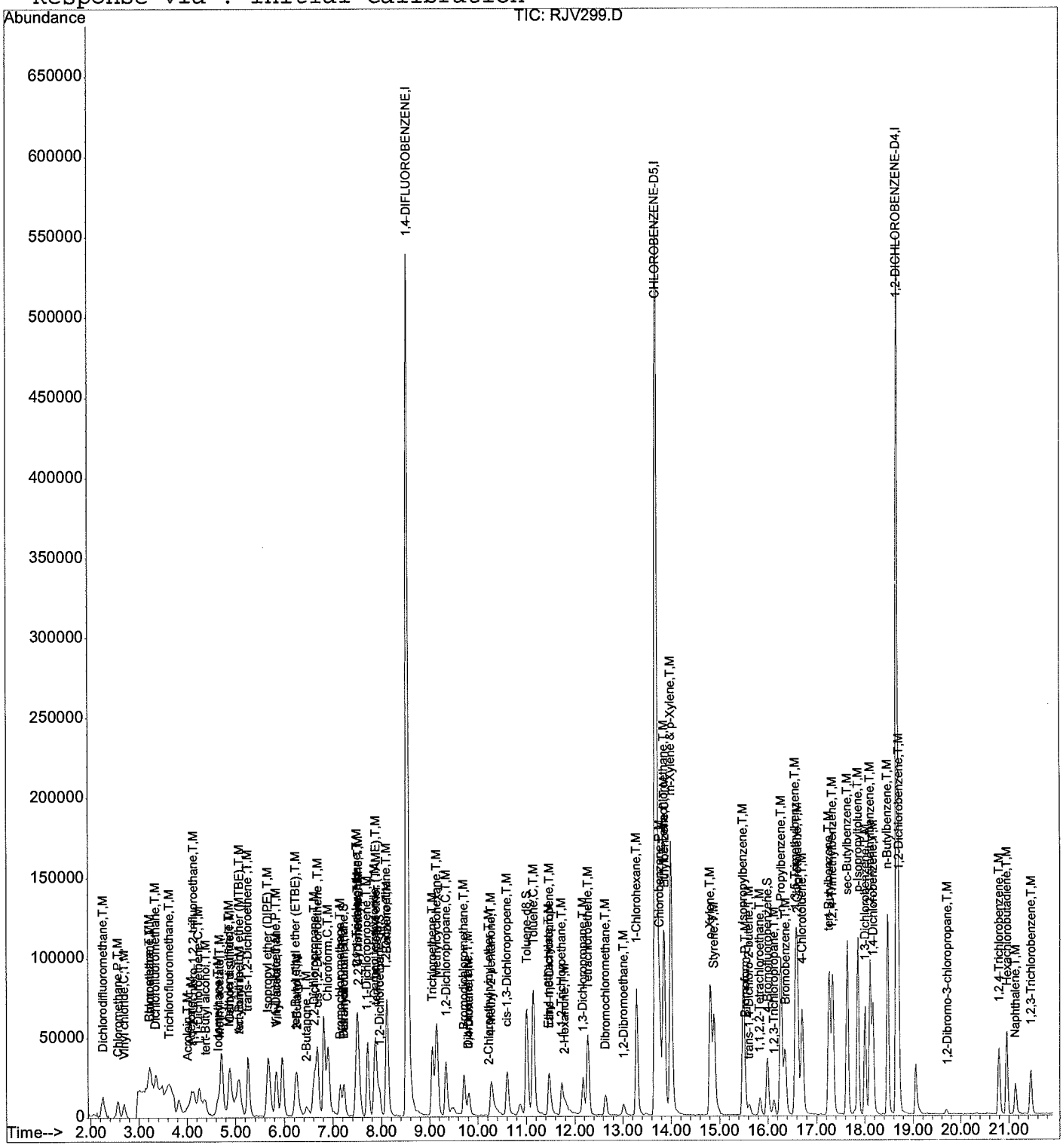
SA
10/30/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV299.D Vial: 4
Acq On : 12 Oct 2024 2:39 pm Operator: DNguye
Sample : VO01J123 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV300.D Vial: 5
Acq On : 12 Oct 2024 3:09 pm Operator: DNguye
Sample : VO01J124 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	922777	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.70	117	696403	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.66	152	324601	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	46204	1.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	19.20%		
41) 1,2-Dichloroethane-d4	7.97	65	41927	1.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	19.70%		
54) Toluene-d8	11.02	98	201374	2.10	ug/l	0.00
Spiked Amount 10.000			Recovery =	21.00%		
76) 4-Bromofluorobenzene	15.98	95	66131	1.72	ug/l	0.00
Spiked Amount 10.000			Recovery =	17.20%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.23	85	78454	2.07	ug/l	98
5) Chloromethane	2.55	50	61196	2.14	ug/l	98
6) Vinyl chloride	2.68	62	55170	2.19	ug/l	94
7) Bromomethane	3.23	94	35944	1.98	ug/l	90
8) Chloroethane	3.23	64	38883	2.03	ug/l	99
9) Dichlorofluoromethane	3.36	67	71331	2.04	ug/l	98
10) Trichlorofluoromethane	3.63	101	87666	2.14	ug/l	97
11) Acrolein	4.03	56	6522	9.24	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	36789	2.18	ug/l	99
13) Acetone	4.09	43	36289	10.65	ug/l	98
14) 1,1-Dichloroethene	4.25	61	95082	2.21	ug/l	98
15) tert-Butyl alcohol	4.37	59	46964	55.09	ug/l	96
16) Iodomethane	4.65	142	80156	2.19	ug/l	100
17) Methyl acetate	4.68	43	20673	2.35	ug/l	77
18) Methylene chloride	4.87	49	68046	2.19	ug/l	97
19) Carbon disulfide	4.90	76	178502	1.98	ug/l	100
20) Acrylonitrile	5.06	53	34579	10.80	ug/l	96
21) tert-Butyl methyl ether (M	5.08	73	96114	2.25	ug/l	100
22) trans-1,2-Dichloroethene	5.26	61	90285	2.18	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	189169	2.19	ug/l	100
24) Vinyl acetate	5.85	43	56943	2.06	ug/l	95
25) 1,1-Dichloroethane	5.83	63	104879	2.16	ug/l	98
26) 2-Butanol	6.22	45	28686	40.16	ug/l #	19
27) tert-Butyl ethyl ether (ET	6.25	59	142799	2.27	ug/l	98
28) 2-Butanone	6.44	43	51680	9.89	ug/l	96
29) 2,2-Dichloropropane	6.62	77	93585	2.26	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	63558	2.14	ug/l	96

(#) = qualifier out of range (m) = manual integration

BU 10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV300.D Vial: 5
Acq On : 12 Oct 2024 3:09 pm Operator: DNguye
Sample : VO01J124 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
31)	Chloroform	6.90	83	108957	2.20	ug/l		99
32)	Bromochloromethane	7.15	49	41177	2.24	ug/l		97
33)	Tetrahydrofuran	7.21	42	5857	2.02	ug/l	#	50
35)	1,1,1-Trichloroethane	7.49	97	98660	2.22	ug/l		98
36)	Cyclohexane	7.51	84	94760	2.07	ug/l		98
37)	2,2,4-Trimethylpentane	7.51	57	4158	1.88	ug/l	#	100
38)	1,1-Dichloropropene	7.71	110	28088	2.09	ug/l		97
39)	Carbon tetrachloride	7.86	119	72812	2.17	ug/l		99
40)	tert-Amyl methyl ether (TA	7.89	73	108752	2.25	ug/l		96
42)	Benzene	8.11	78	229449	2.17	ug/l		99
43)	1,2-Dichloroethane	8.10	62	52248	2.22	ug/l		97
44)	Trichloroethene	9.06	130	60002	2.15	ug/l		98
45)	Methylcyclohexane	9.14	83	110767	2.05	ug/l		98
46)	1,2-Dichloropropane	9.35	63	50785	2.14	ug/l		97
47)	Bromodichloromethane	9.72	83	69590	2.14	ug/l		100
48)	1,4-Dioxane	9.79	88	2561	28.17	ug/l		85
49)	Dibromomethane	9.80	93	23149	2.24	ug/l		95
50)	2-Chloroethyl vinyl ether	10.25	63	1840	1.93	ug/l	#	43
51)	4-Methyl-2-pentanone	10.26	43	121251	10.38	ug/l		99
52)	cis-1,3-Dichloropropene	10.60	75	74630	2.09	ug/l		99
55)	Toluene	11.14	91	251316	2.28	ug/l		100
56)	Ethyl methacrylate	11.45	69	33411	2.11	ug/l		89
57)	trans-1,3-Dichloropropene	11.46	75	56806	2.27	ug/l		99
58)	1,1,2-Trichloroethane	11.73	97	30611	2.25	ug/l		97
59)	2-Hexanone	11.76	43	72312	10.01	ug/l		96
60)	1,3-Dichloropropane	12.17	76	58578	2.29	ug/l		99
61)	Tetrachloroethene	12.28	164	52314	2.19	ug/l		99
62)	Dibromochloromethane	12.65	129	34147	2.11	ug/l		99
63)	1,2-Dibromoethane	13.00	107	27441	2.13	ug/l		99
64)	1-Chlorohexane	13.28	91	112011	2.17	ug/l		98
65)	Chlorobenzene	13.76	112	147419	2.23	ug/l		100
66)	1,1,1,2-Tetrachloroethane	13.83	131	44132	2.19	ug/l		99
67)	Ethylbenzene	13.86	91	299342	2.29	ug/l		100
68)	m-Xylene & p-Xylene	14.00	91	451623	4.38	ug/l		99
69)	o-Xylene	14.81	91	229928	2.26	ug/l		97
70)	Styrene	14.88	104	161668	2.17	ug/l		99
71)	Isopropylbenzene	15.49	105	301594	2.18	ug/l		99
73)	Bromoform	15.54	173	14102	1.70	ug/l		98
74)	trans-1,4-Dichloro-2-buten	15.62	53	8221	1.65	ug/l		98
75)	1,1,2,2-Tetrachloroethane	15.83	83	33039	1.93	ug/l		97
77)	1,2,3-Trichloropropane	16.13	110	9132	1.90	ug/l		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV300.D Vial: 5
Acq On : 12 Oct 2024 3:09 pm Operator: DNguye
Sample : VO01J124 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.28	91	381302	1.98	ug/l	99
79)	Bromobenzene	16.36	156	52263	1.88	ug/l	100
80)	1,3,5-Trimethylbenzene	16.57	105	228391	1.92	ug/l	100
81)	2-Chlorotoluene	16.62	91	230020	1.97	ug/l	97
82)	4-Chlorotoluene	16.71	91	199913	1.92	ug/l	99
83)	tert-Butylbenzene	17.27	134	51264	1.91	ug/l	95
84)	1,2,4-Trimethylbenzene	17.33	105	233727	2.01	ug/l	98
85)	sec-Butylbenzene	17.64	105	333974	1.99	ug/l	100
86)	p-Isopropyltoluene	17.86	119	260889	2.00	ug/l	98
87)	1,3-Dichlorobenzene	18.01	146	111892	2.00	ug/l	99
88)	1,2,3-Trimethylbenzene	18.11	105	240443	2.27	ug/l	98
89)	1,4-Dichlorobenzene	18.17	146	118112	2.12	ug/l	99
90)	n-Butylbenzene	18.47	91	306208	2.14	ug/l	99
91)	1,2-Dichlorobenzene	18.70	146	98743	2.16	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.70	157	4290	1.87	ug/l	98
93)	1,2,4-Trichlorobenzene	20.79	180	65545	2.12	ug/l	99
94)	Hexachlorobutadiene	20.96	225	42489	2.15	ug/l	97
95)	Naphthalene	21.13	128	78739	2.07	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	48152	2.15	ug/l	97

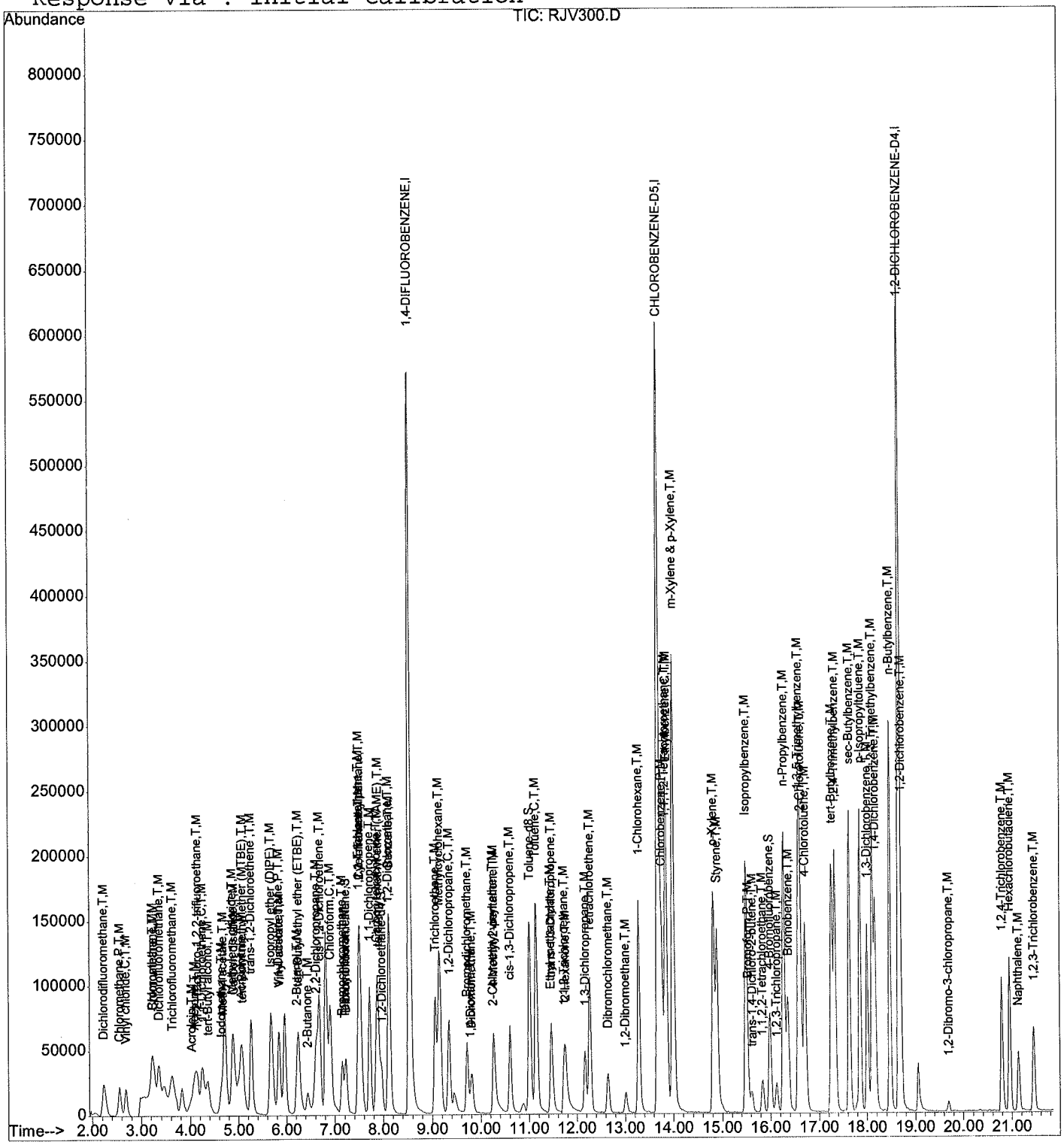
SU

(#) = qualifier out of range (m) = manual integration
RJV300.D VO01J12.M Thu Oct 24 09:05:33 2024 10/30/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV300.D Vial: 5
Acq On : 12 Oct 2024 3:09 pm Operator: DNguye
Sample : VO01J124 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



SG 10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV301.D Vial: 6
Acq On : 12 Oct 2024 3:39 pm Operator: DNguye
Sample : VO01J125 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	905492	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.70	117	699495	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.66	152	330138	10.00	ug/l	-0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	119430	5.05	ug/l	0.00
Spiked Amount 10.000			Recovery = 50.50%			
41) 1,2-Dichloroethane-d4	7.97	65	106266	5.10	ug/l	0.00
Spiked Amount 10.000			Recovery = 51.00%			
54) Toluene-d8	11.00	98	504573	5.25	ug/l	-0.01
Spiked Amount 10.000			Recovery = 52.50%			
76) 4-Bromofluorobenzene	15.98	95	193283	4.94	ug/l	0.00
Spiked Amount 10.000			Recovery = 49.40%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	213384	5.74	ug/l	99
5) Chloromethane	2.57	50	162276	5.78	ug/l	98
6) Vinyl chloride	2.70	62	142672	5.76	ug/l	98
7) Bromomethane	3.24	94	93620	5.24	ug/l	96
8) Chloroethane	3.24	64	100076	5.33	ug/l	96
9) Dichlorofluoromethane	3.36	67	178929	5.21	ug/l	100
10) Trichlorofluoromethane	3.63	101	224076	5.56	ug/l	97
11) Acrolein	4.04	56	17932	25.90	ug/l	60
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	89590	5.40	ug/l	99
13) Acetone	4.10	43	88863	26.58	ug/l	99
14) 1,1-Dichloroethene	4.26	61	224878	5.32	ug/l	81
15) tert-Butyl alcohol	4.38	59	106937	127.83	ug/l	97
16) Iodomethane	4.68	142	192217	5.36	ug/l	100
17) Methyl acetate	4.68	43	40457	4.69	ug/l	100
18) Methylene chloride	4.89	49	159889	5.25	ug/l	98
19) Carbon disulfide	4.90	76	463404	5.24	ug/l	99
20) Acrylonitrile	5.06	53	84026	26.75	ug/l	99
21) tert-Butyl methyl ether (M	5.08	73	230852	5.52	ug/l	95
22) trans-1,2-Dichloroethene	5.27	61	218546	5.39	ug/l	99
23) Isopropyl ether (DIPE)	5.69	45	460212	5.42	ug/l	99
24) Vinyl acetate	5.85	43	142845	5.25	ug/l	99
25) 1,1-Dichloroethane	5.83	63	256471	5.39	ug/l	98
26) 2-Butanol	6.19	45	85215	121.57	ug/l #	63
27) tert-Butyl ethyl ether (ET	6.25	59	345462	5.59	ug/l	97
28) 2-Butanone	6.44	43	126587	24.69	ug/l	98
29) 2,2-Dichloropropane	6.63	77	215587	5.30	ug/l	99
30) cis-1,2-Dichloroethene	6.69	96	155893	5.35	ug/l	99

(#) = qualifier out of range (m) = manual integration

SM 10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV301.D Vial: 6
Acq On : 12 Oct 2024 3:39 pm Operator: DNguye
Sample : VO01J125 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
31)	Chloroform	6.92	83	256128	5.28 ug/l		99
32)	Bromochloromethane	7.15	49	96770	5.37 ug/l		98
33)	Tetrahydrofuran	7.21	42	17760	6.23 ug/l		77
35)	1,1,1-Trichloroethane	7.49	97	238395	5.48 ug/l		100
36)	Cyclohexane	7.52	84	239701	5.34 ug/l		99
37)	2,2,4-Trimethylpentane	7.52	57	11305	5.20 ug/l	#	100
38)	1,1-Dichloropropene	7.73	110	70975	5.38 ug/l		98
39)	Carbon tetrachloride	7.88	119	181220	5.50 ug/l		100
40)	tert-Amyl methyl ether (TA	7.89	73	252534	5.32 ug/l		98
42)	Benzene	8.13	78	554695	5.35 ug/l		99
43)	1,2-Dichloroethane	8.10	62	131745	5.70 ug/l		100
44)	Trichloroethene	9.06	130	142278	5.19 ug/l		99
45)	Methylcyclohexane	9.15	83	272565	5.13 ug/l		99
46)	1,2-Dichloropropane	9.35	63	123974	5.31 ug/l		99
47)	Bromodichloromethane	9.72	83	171758	5.38 ug/l		99
48)	1,4-Dioxane	9.76	88	8371	93.85 ug/l		100
49)	Dibromomethane	9.80	93	54675	5.39 ug/l		95
50)	2-Chloroethyl vinyl ether	10.22	63	6431	4.32 ug/l		98
51)	4-Methyl-2-pentanone	10.26	43	316434	27.60 ug/l		99
52)	cis-1,3-Dichloropropene	10.60	75	188039	5.37 ug/l		99
55)	Toluene	11.14	91	608350	5.49 ug/l		99
56)	Ethyl methacrylate	11.43	69	87665	5.52 ug/l		100
57)	trans-1,3-Dichloropropene	11.46	75	143059	5.70 ug/l		98
58)	1,1,2-Trichloroethane	11.73	97	75365	5.52 ug/l		98
59)	2-Hexanone	11.74	43	197588	27.24 ug/l		99
60)	1,3-Dichloropropane	12.17	76	138369	5.38 ug/l		98
61)	Tetrachloroethene	12.28	164	126542	5.28 ug/l		99
62)	Dibromochloromethane	12.65	129	86037	5.29 ug/l		99
63)	1,2-Dibromoethane	13.02	107	71225	5.51 ug/l		98
64)	1-Chlorohexane	13.28	91	276816	5.34 ug/l		97
65)	Chlorobenzene	13.76	112	354661	5.34 ug/l		100
66)	1,1,1,2-Tetrachloroethane	13.85	131	111893	5.52 ug/l		99
67)	Ethylbenzene	13.85	91	720555	5.49 ug/l		100
68)	m-Xylene & p-Xylene	14.00	91	1086309	10.49 ug/l		99
69)	o-Xylene	14.81	91	604282	5.91 ug/l		98
70)	Styrene	14.88	104	435855	5.82 ug/l		99
71)	Isopropylbenzene	15.49	105	857009	6.17 ug/l		100
73)	Bromoform	15.54	173	42420	4.60 ug/l		99
74)	trans-1,4-Dichloro-2-buten	15.61	53	24990	4.92 ug/l		98
75)	1,1,2,2-Tetrachloroethane	15.83	83	92945	5.33 ug/l		99
77)	1,2,3-Trichloropropane	16.13	110	25335	5.18 ug/l		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV301.D Vial: 6
Acq On : 12 Oct 2024 3:39 pm Operator: DNguye
Sample : VO01J125 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.28	91	1083682	5.54	ug/l	100
79)	Bromobenzene	16.35	156	150955	5.33	ug/l	100
80)	1,3,5-Trimethylbenzene	16.57	105	650534	5.38	ug/l	100
81)	2-Chlorotoluene	16.62	91	643209	5.41	ug/l	99
82)	4-Chlorotoluene	16.71	91	546854	5.16	ug/l	100
83)	tert-Butylbenzene	17.27	134	146871	5.39	ug/l	97
84)	1,2,4-Trimethylbenzene	17.33	105	653100	5.52	ug/l	98
85)	sec-Butylbenzene	17.64	105	935209	5.49	ug/l	99
86)	p-Isopropyltoluene	17.86	119	724832	5.46	ug/l	99
87)	1,3-Dichlorobenzene	18.01	146	303628	5.33	ug/l	99
88)	1,2,3-Trimethylbenzene	18.11	105	580259	5.39	ug/l	99
89)	1,4-Dichlorobenzene	18.17	146	295141	5.22	ug/l	98
90)	n-Butylbenzene	18.47	91	762602	5.25	ug/l	99
91)	1,2-Dichlorobenzene	18.70	146	247763	5.34	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.70	157	10567	4.54	ug/l	91
93)	1,2,4-Trichlorobenzene	20.79	180	165568	5.27	ug/l	99
94)	Hexachlorobutadiene	20.96	225	106705	5.30	ug/l	100
95)	Naphthalene	21.13	128	191738	4.96	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	120418	5.29	ug/l	98

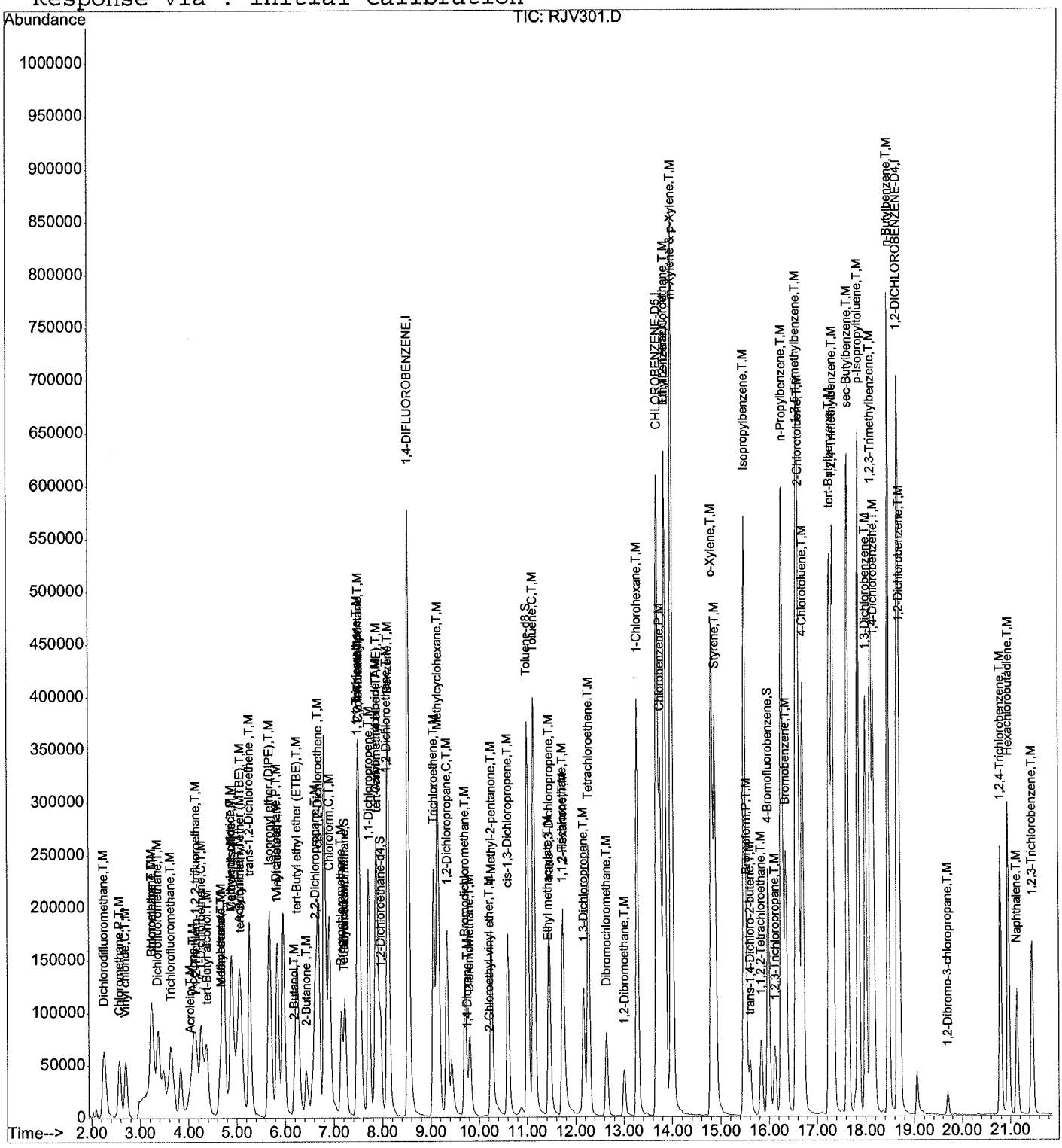
10/30/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV301.D Vial: 6
Acq On : 12 Oct 2024 3:39 pm Operator: DNguye
Sample : VO01J125 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:12 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



SW 10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV302.D Vial: 7
Acq On : 12 Oct 2024 4:08 pm Operator: DNguye
Sample : VO01J126 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	878286	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.70	117	685675	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.67	152	317109	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	225931	9.85	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.50%			
41) 1,2-Dichloroethane-d4	7.97	65	207946	10.29	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.90%			
54) Toluene-d8	11.02	98	920008	9.76	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.60%			
76) 4-Bromofluorobenzene	15.98	95	371599	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.00%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	400860	11.11	ug/l	100
5) Chloromethane	2.57	50	299576	11.00	ug/l	100
6) Vinyl chloride	2.70	62	259844	10.82	ug/l	100
7) Bromomethane	3.24	94	164820	9.52	ug/l	100
8) Chloroethane	3.24	64	189547	10.41	ug/l	100
9) Dichlorofluoromethane	3.36	67	272135	8.16	ug/l	100
10) Trichlorofluoromethane	3.63	101	420520	10.77	ug/l	100
11) Acrolein	4.01	56	34583	51.50	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	155070	9.64	ug/l	100
13) Acetone	4.09	43	166904	51.46	ug/l	100
14) 1,1-Dichloroethene	4.25	61	388399	9.48	ug/l	100
15) tert-Butyl alcohol	4.37	59	213894	263.61	ug/l	100
16) Iodomethane	4.67	142	327169	9.40	ug/l	100
17) Methyl acetate	4.68	43	86534	10.34	ug/l	100
18) Methylene chloride	4.89	49	274216	9.28	ug/l	100
19) Carbon disulfide	4.90	76	891332	10.40	ug/l	100
20) Acrylonitrile	5.05	53	161190	52.91	ug/l	100
21) tert-Butyl methyl ether (M	5.08	73	417171	10.28	ug/l	100
22) trans-1,2-Dichloroethene	5.27	61	368657	9.37	ug/l	100
23) Isopropyl ether (DIPE)	5.69	45	777113	9.43	ug/l	100
24) Vinyl acetate	5.85	43	306706	11.63	ug/l	100
25) 1,1-Dichloroethane	5.84	63	432835	9.38	ug/l	100
26) 2-Butanol	6.18	45	183544	269.96	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	586616	9.79	ug/l	100
28) 2-Butanone	6.43	43	261298	52.54	ug/l	100
29) 2,2-Dichloropropane	6.63	77	374874	9.50	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	266459	9.43	ug/l	100

(#) = qualifier out of range (m) = manual integration

SV 10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV302.D Vial: 7
Acq On : 12 Oct 2024 4:08 pm Operator: DNguye
Sample : VO01J126 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
31)	Chloroform	6.92	83	430064	9.14	ug/l		100
32)	Bromochloromethane	7.15	49	172327	9.85	ug/l		100
33)	Tetrahydrofuran	7.21	42	26836	9.71	ug/l		100
35)	1,1,1-Trichloroethane	7.49	97	405643	9.60	ug/l		100
36)	Cyclohexane	7.52	84	441965	10.14	ug/l		100
37)	2,2,4-Trimethylpentane	7.52	57	20929	9.93	ug/l	#	100
38)	1,1-Dichloropropene	7.72	110	122103	9.55	ug/l		100
39)	Carbon tetrachloride	7.88	119	312543	9.77	ug/l		100
40)	tert-Amyl methyl ether (TA	7.89	73	444716	9.66	ug/l		100
42)	Benzene	8.13	78	934186	9.29	ug/l		100
43)	1,2-Dichloroethane	8.10	62	238130	10.62	ug/l		100
44)	Trichloroethene	9.06	130	248092	9.33	ug/l		100
45)	Methylcyclohexane	9.15	83	499588	9.69	ug/l		100
46)	1,2-Dichloropropane	9.34	63	214042	9.46	ug/l		100
47)	Bromodichloromethane	9.71	83	300542	9.70	ug/l		100
48)	1,4-Dioxane	9.76	88	17915	207.07	ug/l		100
49)	Dibromomethane	9.80	93	99337	10.11	ug/l		100
50)	2-Chloroethyl vinyl ether	10.22	63	14973	8.95	ug/l		100
51)	4-Methyl-2-pentanone	10.25	43	636189	57.21	ug/l		100
52)	cis-1,3-Dichloropropene	10.60	75	337726	9.95	ug/l		100
55)	Toluene	11.15	91	1034098	9.52	ug/l		100
56)	Ethyl methacrylate	11.43	69	173966	11.18	ug/l		100
57)	trans-1,3-Dichloropropene	11.46	75	263040	10.69	ug/l		100
58)	1,1,2-Trichloroethane	11.73	97	139249	10.41	ug/l		100
59)	2-Hexanone	11.74	43	408405	57.44	ug/l		100
60)	1,3-Dichloropropane	12.17	76	255886	10.15	ug/l		100
61)	Tetrachloroethene	12.28	164	216228	9.21	ug/l		100
62)	Dibromochloromethane	12.65	129	163288	10.25	ug/l		100
63)	1,2-Dibromoethane	13.02	107	132676	10.47	ug/l		100
64)	1-Chlorohexane	13.28	91	471248	9.28	ug/l		100
65)	Chlorobenzene	13.77	112	610921	9.39	ug/l		100
66)	1,1,1,2-Tetrachloroethane	13.85	131	191791	9.65	ug/l		100
67)	Ethylbenzene	13.86	91	1229610	9.56	ug/l		100
68)	m-Xylene & p-Xylene	13.99	91	1797737	17.70	ug/l		100
69)	o-Xylene	14.82	91	1070018	10.67	ug/l		100
70)	Styrene	14.88	104	806452	10.99	ug/l		100
71)	Isopropylbenzene	15.50	105	1423196	10.45	ug/l		100
73)	Bromoform	15.53	173	85568	9.41	ug/l		100
74)	trans-1,4-Dichloro-2-buten	15.61	53	52892	10.84	ug/l		100
75)	1,1,2,2-Tetrachloroethane	15.85	83	183539	10.97	ug/l		100
77)	1,2,3-Trichloropropane	16.13	110	50777	10.81	ug/l		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV302.D Vial: 7
Acq On : 12 Oct 2024 4:08 pm Operator: DNguye
Sample : VO01J126 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

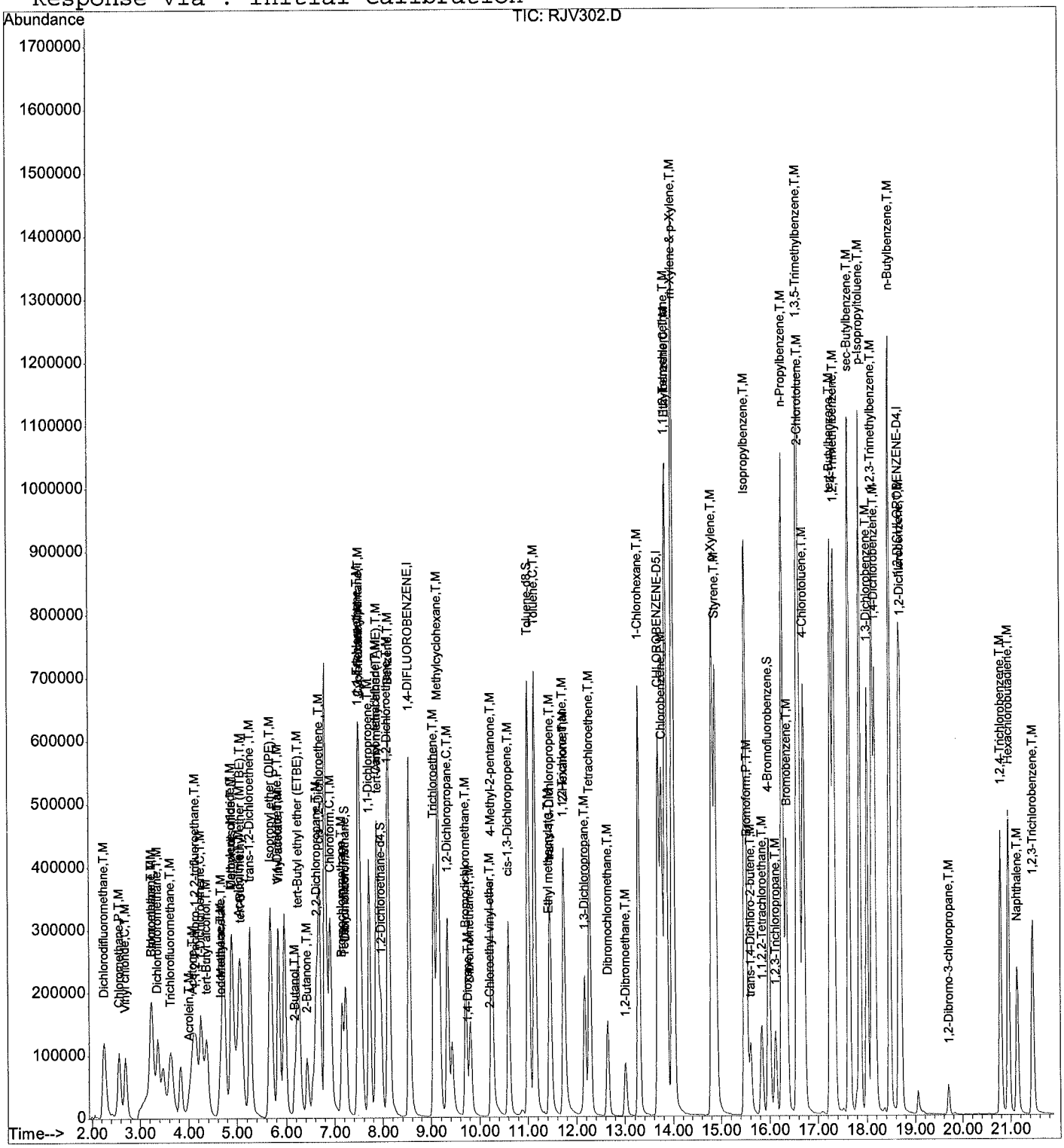
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.27	91	1783846	9.50	ug/l	100
79)	Bromobenzene	16.36	156	257371	9.46	ug/l	100
80)	1,3,5-Trimethylbenzene	16.59	105	1092014	9.40	ug/l	100
81)	2-Chlorotoluene	16.62	91	1064525	9.33	ug/l	100
82)	4-Chlorotoluene	16.70	91	948743	9.32	ug/l	100
83)	tert-Butylbenzene	17.27	134	250692	9.57	ug/l	100
84)	1,2,4-Trimethylbenzene	17.34	105	1081823	9.52	ug/l	100
85)	sec-Butylbenzene	17.64	105	1593114	9.74	ug/l	100
86)	p-Isopropyltoluene	17.86	119	1209457	9.48	ug/l	100
87)	1,3-Dichlorobenzene	18.01	146	517967	9.47	ug/l	100
88)	1,2,3-Trimethylbenzene	18.11	105	987688	9.55	ug/l	100
89)	1,4-Dichlorobenzene	18.17	146	497192	9.15	ug/l	100
90)	n-Butylbenzene	18.48	91	1261592	9.04	ug/l	100
91)	1,2-Dichlorobenzene	18.70	146	422900	9.48	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	23865	10.67	ug/l	100
93)	1,2,4-Trichlorobenzene	20.79	180	285523	9.46	ug/l	100
94)	Hexachlorobutadiene	20.95	225	178714	9.24	ug/l	100
95)	Naphthalene	21.13	128	390436	10.51	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	217064	9.92	ug/l	100

(#) = qualifier out of range (m) = manual integration
RJV302.D VO01J12.M Thu Oct 24 09:06:45 2024 SM 10/30/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV302.D Vial: 7
Acq On : 12 Oct 2024 4:08 pm Operator: DNguye
Sample : VO01J126 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV303.D Vial: 8
Acq On : 12 Oct 2024 4:38 pm Operator: DNguye
Sample : VO01J127 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	941724	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.70	117	874060	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.67	152	333207	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	507059	20.61	ug/l	0.00
Spiked Amount 10.000			Recovery = 206.10%			
41) 1,2-Dichloroethane-d4	7.97	65	444140	20.50	ug/l	0.00
Spiked Amount 10.000			Recovery = 205.00%			
54) Toluene-d8	11.02	98	2095606	17.43	ug/l	0.00
Spiked Amount 10.000			Recovery = 174.30%			
76) 4-Bromofluorobenzene	15.98	95	843064	21.37	ug/l	0.00
Spiked Amount 10.000			Recovery = 213.70%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	822542	21.27	ug/l	98
5) Chloromethane	2.57	50	601404	20.60	ug/l	98
6) Vinyl chloride	2.70	62	539734	20.97	ug/l	99
7) Bromomethane	3.24	94	373501	20.12	ug/l	95
8) Chloroethane	3.24	64	400183	20.51	ug/l	100
9) Dichlorofluoromethane	3.38	67	684137	19.14	ug/l	100
10) Trichlorofluoromethane	3.63	101	864677	20.64	ug/l	97
11) Acrolein	4.03	56	69638	96.72	ug/l	84
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	357185	20.71	ug/l	99
13) Acetone	4.10	43	330845	95.14	ug/l	100
14) 1,1-Dichloroethene	4.26	61	873755	19.89	ug/l	81
15) tert-Butyl alcohol	4.37	59	447918	514.85	ug/l	100
16) Iodomethane	4.66	142	761822	20.41	ug/l	100
17) Methyl acetate	4.68	43	155750	17.36	ug/l	96
18) Methylene chloride	4.89	49	615681	19.44	ug/l	99
19) Carbon disulfide	4.90	76	1916562	20.86	ug/l	100
20) Acrylonitrile	5.05	53	324088	99.21	ug/l	100
21) tert-Butyl methyl ether (M	5.08	73	900113	20.69	ug/l	100
22) trans-1,2-Dichloroethene	5.27	61	862488	20.44	ug/l	99
23) Isopropyl ether (DIPE)	5.69	45	1754960	19.86	ug/l	98
24) Vinyl acetate	5.83	43	581400	20.56	ug/l	97
25) 1,1-Dichloroethane	5.85	63	1000118	20.21	ug/l	99
26) 2-Butanol	6.16	45	377355	517.63	ug/l	88
27) tert-Butyl ethyl ether (ET	6.25	59	1292881	20.13	ug/l	99
28) 2-Butanone	6.43	43	518724	97.28	ug/l	99
29) 2,2-Dichloropropane	6.63	77	854045	20.18	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	615689	20.32	ug/l	100

(#) = qualifier out of range (m) = manual integration
RJV303.D VO01J12.M Thu Oct 24 09:06:54 2024 10/30/24 Page 1

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV303.D Vial: 8
Acq On : 12 Oct 2024 4:38 pm Operator: DNguye
Sample : VO01J127 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
31)	Chloroform	6.92	83	984862	19.53	ug/l		100
32)	Bromochloromethane	7.15	49	375021	20.00	ug/l		97
33)	Tetrahydrofuran	7.21	42	54884	18.52	ug/l		98
35)	1,1,1-Trichloroethane	7.49	97	947462	20.92	ug/l		100
36)	Cyclohexane	7.52	84	934014	19.99	ug/l		100
37)	2,2,4-Trimethylpentane	7.51	57	43780	19.37	ug/l	#	100
38)	1,1-Dichloropropene	7.73	110	284731	20.76	ug/l		99
39)	Carbon tetrachloride	7.88	119	739054	21.55	ug/l		99
40)	tert-Amyl methyl ether (TA	7.89	73	988508	20.02	ug/l		99
42)	Benzene	8.13	78	2161734	20.05	ug/l		99
43)	1,2-Dichloroethane	8.10	62	510429	21.24	ug/l		100
44)	Trichloroethene	9.06	130	586311	20.56	ug/l		98
45)	Methylcyclohexane	9.15	83	1094474	19.80	ug/l		99
46)	1,2-Dichloropropane	9.34	63	494110	20.36	ug/l		99
47)	Bromodichloromethane	9.71	83	691258	20.81	ug/l		99
48)	1,4-Dioxane	9.76	88	40827	440.10	ug/l		98
49)	Dibromomethane	9.80	93	216065	20.50	ug/l		98
50)	2-Chloroethyl vinyl ether	10.22	63	36226	18.94	ug/l		98
51)	4-Methyl-2-pentanone	10.25	43	1246578	104.55	ug/l		100
52)	cis-1,3-Dichloropropene	10.60	75	795595	21.87	ug/l		99
55)	Toluene	11.15	91	2417898	17.45	ug/l		98
56)	Ethyl methacrylate	11.43	69	371503	18.72	ug/l		98
57)	trans-1,3-Dichloropropene	11.46	75	587731	18.73	ug/l		100
58)	1,1,2-Trichloroethane	11.73	97	301375	17.67	ug/l		100
59)	2-Hexanone	11.74	43	821756	90.66	ug/l		98
60)	1,3-Dichloropropane	12.17	76	654033	20.36	ug/l		98
61)	Tetrachloroethene	12.28	164	590775	19.73	ug/l		99
62)	Dibromochloromethane	12.65	129	416614	20.51	ug/l		99
63)	1,2-Dibromoethane	13.02	107	340577	21.08	ug/l		99
64)	1-Chlorohexane	13.28	91	1303212	20.14	ug/l		100
65)	Chlorobenzene	13.76	112	1680926	20.27	ug/l		100
66)	1,1,1,2-Tetrachloroethane	13.85	131	529315	20.90	ug/l		99
67)	Ethylbenzene	13.86	91	3293978	20.10	ug/l		98
68)	m-Xylene & p-Xylene	13.99	91	4807410	37.13	ug/l		96
69)	o-Xylene	14.81	91	2456831	19.22	ug/l		99
70)	Styrene	14.88	104	1884749	20.15	ug/l		100
71)	Isopropylbenzene	15.49	105	3256050	18.76	ug/l		99
73)	Bromoform	15.53	173	186129	19.23	ug/l		99
74)	trans-1,4-Dichloro-2-buten	15.61	53	108996	21.26	ug/l		95
75)	1,1,2,2-Tetrachloroethane	15.83	83	373375	21.23	ug/l		98
77)	1,2,3-Trichloropropane	16.13	110	103730	21.01	ug/l		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV303.D Vial: 8
Acq On : 12 Oct 2024 4:38 pm Operator: DNguye
Sample : VO01J127 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.27	91	4051078	20.53	ug/l	99
79)	Bromobenzene	16.36	156	591001	20.68	ug/l	99
80)	1,3,5-Trimethylbenzene	16.59	105	2508116	20.55	ug/l	99
81)	2-Chlorotoluene	16.62	91	2423790	20.21	ug/l	98
82)	4-Chlorotoluene	16.70	91	2189904	20.47	ug/l	98
83)	tert-Butylbenzene	17.27	134	564243	20.51	ug/l	98
84)	1,2,4-Trimethylbenzene	17.33	105	2452758	20.55	ug/l	99
85)	sec-Butylbenzene	17.64	105	3500283	20.36	ug/l	100
86)	p-Isopropyltoluene	17.86	119	2694193	20.09	ug/l	100
87)	1,3-Dichlorobenzene	18.01	146	1156917	20.14	ug/l	99
88)	1,2,3-Trimethylbenzene	18.11	105	2189305	20.15	ug/l	99
89)	1,4-Dichlorobenzene	18.17	146	1121854	19.65	ug/l	99
90)	n-Butylbenzene	18.47	91	2773404	18.90	ug/l	98
91)	1,2-Dichlorobenzene	18.70	146	930982	19.87	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.70	157	49261	20.96	ug/l	98
93)	1,2,4-Trichlorobenzene	20.79	180	634426	20.00	ug/l	99
94)	Hexachlorobutadiene	20.95	225	411911	20.26	ug/l	99
95)	Naphthalene	21.13	128	772927	19.79	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	466925	20.31	ug/l	98

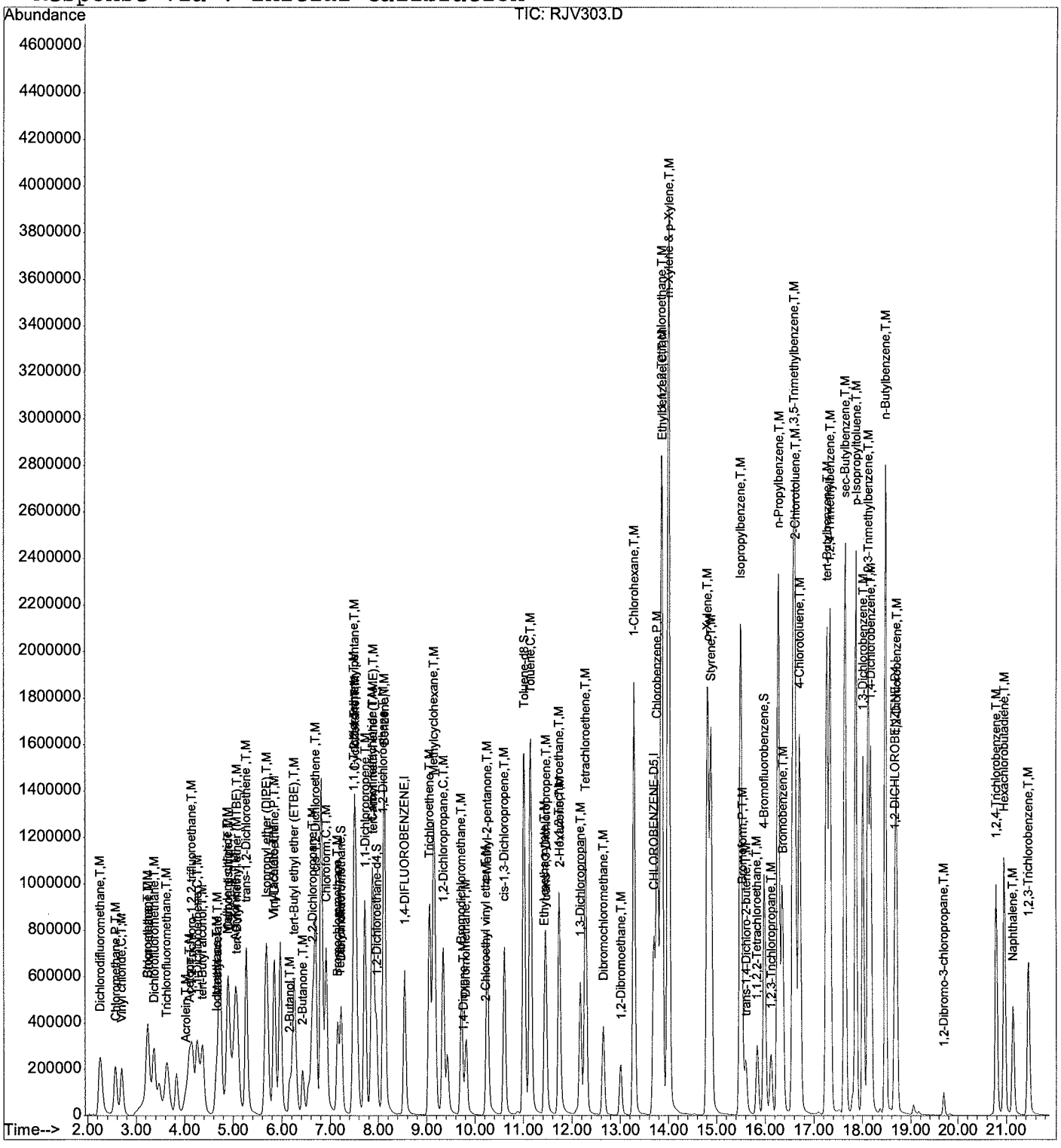
(#) = qualifier out of range (m) = manual integration
RJV303.D VO01J12.M Thu Oct 24 09:06:55 2024 Page 3

10/24/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV303.D Vial: 8
Acq On : 12 Oct 2024 4:38 pm Operator: DNguye
Sample : VO01J127 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV305.D Vial: 10
Acq On : 12 Oct 2024 5:38 pm Operator: DNguye
Sample : VO01J129 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	1021374	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.70	117	786601	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.67	152	302051	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	814773	30.54	ug/l	0.00
Spiked Amount 10.000			Recovery =	305.40%		
41) 1,2-Dichloroethane-d4	7.97	65	670901	28.55	ug/l	0.00
Spiked Amount 10.000			Recovery =	285.50%		
54) Toluene-d8	11.00	98	3301949	30.52	ug/l	-0.01
Spiked Amount 10.000			Recovery =	305.20%		
76) 4-Bromofluorobenzene	15.98	95	1125863	31.48	ug/l	0.00
Spiked Amount 10.000			Recovery =	314.80%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.26	85	1261118	30.06	ug/l	99
5) Chloromethane	2.56	50	977696	30.88	ug/l	97
6) Vinyl chloride	2.70	62	902459	32.32	ug/l	99
7) Bromomethane	3.24	94	633167	31.45	ug/l	96
8) Chloroethane	3.24	64	711028	33.59	ug/l	98
9) Dichlorofluoromethane	3.36	67	1121013	28.91	ug/l	100
10) Trichlorofluoromethane	3.63	101	1360811	29.96	ug/l	98
11) Acrolein	4.03	56	132817	170.09	ug/l	73
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	610042	32.62	ug/l	99
13) Acetone	4.10	43	546473	144.89	ug/l	95
14) 1,1-Dichloroethene	4.25	61	1475892	30.97	ug/l	78
15) tert-Butyl alcohol	4.37	59	714928	757.67	ug/l	96
16) Iodomethane	4.67	142	1307949	32.31	ug/l	96
17) Methyl acetate	4.68	43	286881	29.49	ug/l	97
18) Methylene chloride	4.89	49	1057583	30.79	ug/l	98
19) Carbon disulfide	4.90	76	3375469	33.87	ug/l	99
20) Acrylonitrile	5.05	53	584198	164.90	ug/l	98
21) tert-Butyl methyl ether (M	5.08	73	1499354	31.77	ug/l	97
22) trans-1,2-Dichloroethene	5.27	61	1437975	31.42	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	3057961	31.91	ug/l	98
24) Vinyl acetate	5.83	43	1023550	33.38	ug/l	97
25) 1,1-Dichloroethane	5.85	63	1700771	31.69	ug/l	100
26) 2-Butanol	6.15	45	657760	831.91	ug/l	90
27) tert-Butyl ethyl ether (ET	6.25	59	2204742	31.65	ug/l	99
28) 2-Butanone	6.43	43	893838	154.55	ug/l	97
29) 2,2-Dichloropropane	6.63	77	1398152	30.46	ug/l	99
30) cis-1,2-Dichloroethene	6.69	96	1055115	32.10	ug/l	97

(#) = qualifier out of range (m) = manual integration

9/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV305.D Vial: 10
Acq On : 12 Oct 2024 5:38 pm Operator: DNguye
Sample : VO01J129 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	Chloroform	6.92	83	1611480	29.46	ug/l	99
32)	Bromochloromethane	7.15	49	630812	31.02	ug/l	97
33)	Tetrahydrofuran	7.20	42	94472	29.39	ug/l	98
35)	1,1,1-Trichloroethane	7.49	97	1504023	30.62	ug/l	99
36)	Cyclohexane	7.52	84	1616527	31.90	ug/l	100
37)	2,2,4-Trimethylpentane	7.51	57	78012	31.82	ug/l	100
38)	1,1-Dichloropropene	7.72	110	489047	32.88	ug/l	99
39)	Carbon tetrachloride	7.88	119	1162519	31.26	ug/l	98
40)	tert-Amyl methyl ether (TA	7.89	73	1615224	30.16	ug/l	99
42)	Benzene	8.13	78	3606911	30.84	ug/l	99
43)	1,2-Dichloroethane	8.10	62	790866	30.34	ug/l	99
44)	Trichloroethene	9.06	130	966876	31.26	ug/l	98
45)	Methylcyclohexane	9.15	83	1816116	30.30	ug/l	99
46)	1,2-Dichloropropane	9.34	63	830627	31.56	ug/l	97
47)	Bromodichloromethane	9.71	83	1090983	30.29	ug/l	98
48)	1,4-Dioxane	9.74	88	66336	659.32	ug/l	100
49)	Dibromomethane	9.80	93	344804	30.16	ug/l	99
50)	2-Chloroethyl vinyl ether	10.22	63	66447	31.33	ug/l	95
51)	4-Methyl-2-pentanone	10.25	43	2064842	159.67	ug/l	99
52)	cis-1,3-Dichloropropene	10.60	75	1282910	32.51	ug/l	98
55)	Toluene	11.15	91	3924304	31.48	ug/l	96
56)	Ethyl methacrylate	11.43	69	608849	34.10	ug/l	98
57)	trans-1,3-Dichloropropene	11.46	75	948517	33.59	ug/l	98
58)	1,1,2-Trichloroethane	11.73	97	490176	31.94	ug/l	99
59)	2-Hexanone	11.73	43	1360892	166.83	ug/l	97
60)	1,3-Dichloropropane	12.17	76	920355	31.84	ug/l	99
61)	Tetrachloroethene	12.28	164	819741	30.43	ug/l	99
62)	Dibromochloromethane	12.65	129	582093	31.84	ug/l	98
63)	1,2-Dibromoethane	13.00	107	471196	32.40	ug/l	99
64)	1-Chlorohexane	13.28	91	1809697	31.07	ug/l	99
65)	Chlorobenzene	13.76	112	2332282	31.25	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.85	131	735329	32.27	ug/l	98
67)	Ethylbenzene	13.86	91	4423489	29.99	ug/l	96
68)	m-Xylene & p-Xylene	13.99	91	6467044	55.51	ug/l	94
69)	o-Xylene	14.81	91	3360390	29.20	ug/l	99
70)	Styrene	14.88	104	2553659	30.34	ug/l	100
71)	Isopropylbenzene	15.49	105	4451782	28.50	ug/l	99
73)	Bromoform	15.53	173	272196	30.89	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.61	53	157412	33.87	ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.83	83	513818	32.23	ug/l	100
77)	1,2,3-Trichloropropane	16.13	110	145089	32.42	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV305.D Vial: 10
Acq On : 12 Oct 2024 5:38 pm Operator: DNguye
Sample : VO01J129 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.27	91	5519227	30.86	ug/l	98
79)	Bromobenzene	16.35	156	830978	32.08	ug/l	100
80)	1,3,5-Trimethylbenzene	16.59	105	3457404	31.25	ug/l	98
81)	2-Chlorotoluene	16.62	91	3380958	31.11	ug/l	98
82)	4-Chlorotoluene	16.70	91	2950311	30.42	ug/l	97
83)	tert-Butylbenzene	17.27	134	794954	31.88	ug/l	100
84)	1,2,4-Trimethylbenzene	17.33	105	3342934	30.89	ug/l	97
85)	sec-Butylbenzene	17.64	105	4686851	30.08	ug/l	98
86)	p-Isopropyltoluene	17.86	119	3674486	30.23	ug/l	99
87)	1,3-Dichlorobenzene	18.01	146	1603674	30.80	ug/l	99
88)	1,2,3-Trimethylbenzene	18.11	105	2942061	29.87	ug/l	98
89)	1,4-Dichlorobenzene	18.17	146	1538182	29.72	ug/l	98
90)	n-Butylbenzene	18.47	91	3773228	28.37	ug/l	97
91)	1,2-Dichlorobenzene	18.70	146	1275864	30.04	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.70	157	70688	33.18	ug/l	97
93)	1,2,4-Trichlorobenzene	20.79	180	893999	31.09	ug/l	98
94)	Hexachlorobutadiene	20.95	225	588209	31.91	ug/l	99
95)	Naphthalene	21.13	128	1138915	32.17	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	664030	31.86	ug/l	99

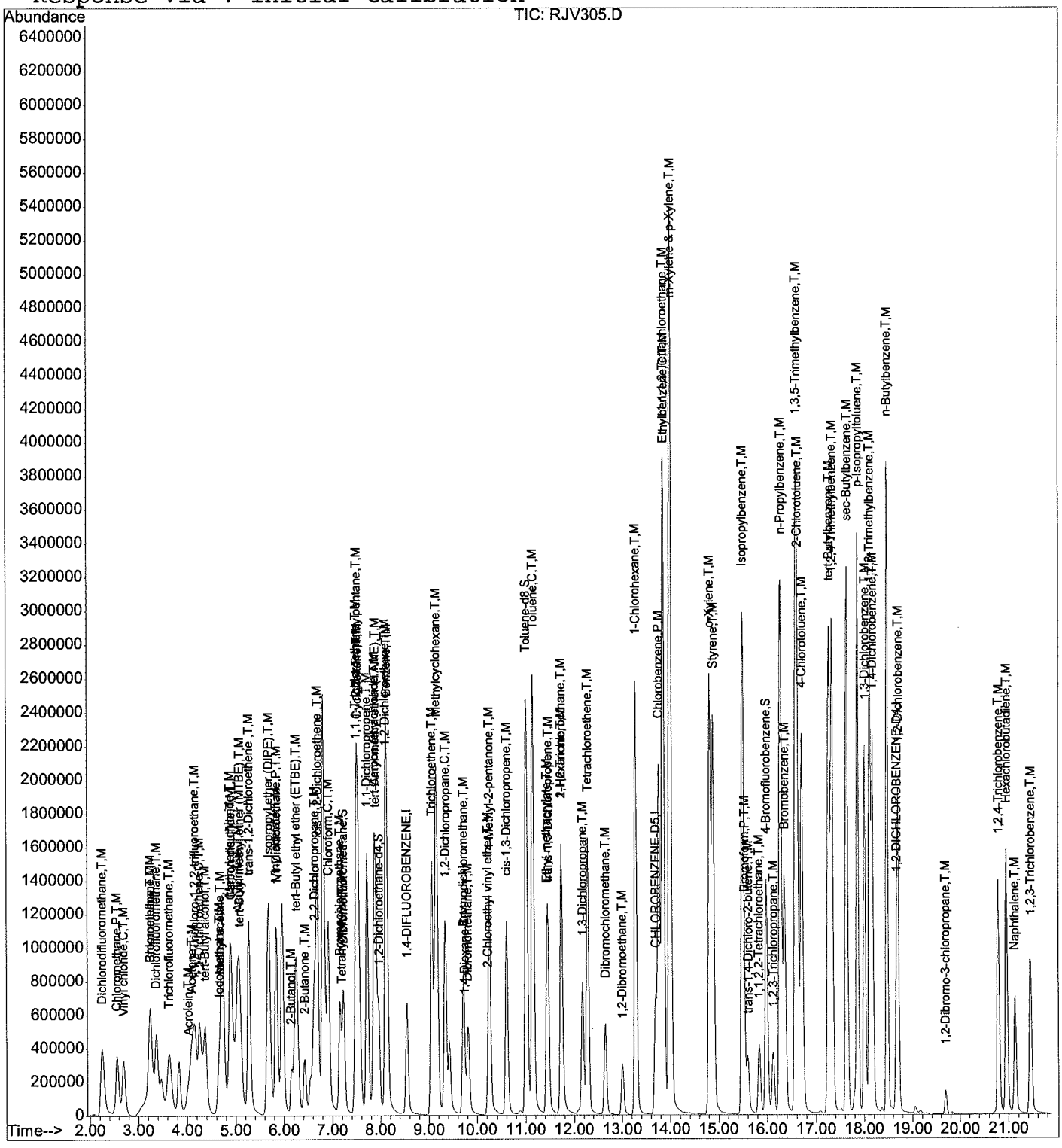
(#) = qualifier out of range (m) = manual integration
RJV305.D VO01J12.M Wed Oct 30 15:25:38 2024 Page 3

SU 10/30/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV305.D Vial: 10
Acq On : 12 Oct 2024 5:38 pm Operator: DNguye
Sample : VO01J129 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:13 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV304.D Vial: 9
Acq On : 12 Oct 2024 5:08 pm Operator: DNguye
Sample : VO01J128 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 16:52 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	1069388	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.70	117	873212	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.67	152	329603	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	1200	0.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.40%		
41) 1,2-Dichloroethane-d4	7.95	65	1540	0.06	ug/l	-0.01
Spiked Amount 10.000			Recovery =	0.60%		
54) Toluene-d8	11.02	98	12224	0.10	ug/l	0.00
Spiked Amount 10.000			Recovery =	1.00%		
76) 4-Bromofluorobenzene	15.98	95	15713	0.40	ug/l	0.00
Spiked Amount 10.000			Recovery =	4.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	1983615	45.16	ug/l	100
5) Chloromethane	2.54	50	1476864	44.55	ug/l	99
6) Vinyl chloride	2.68	62	1343437	45.95	ug/l	99
7) Bromomethane	3.23	94	923532	43.81	ug/l	94
8) Chloroethane	3.24	64	1025607	46.28	ug/l	98
9) Dichlorofluoromethane	3.36	67	2345378	57.77	ug/l	84
10) Trichlorofluoromethane	3.63	101	2090394	43.95	ug/l	97
11) Acrolein	4.01	56	205533	251.39	ug/l	79
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	925005	47.24	ug/l	97
13) Acetone	4.09	43	913476	231.33	ug/l	98
14) 1,1-Dichloroethene	4.25	61	2271263	45.52	ug/l	94
15) tert-Butyl alcohol	4.37	59	1260896	1276.28	ug/l	97
16) Iodomethane	4.65	142	2016319	47.57	ug/l	98
18) Methylene chloride	4.87	49	1622404	45.11	ug/l	97
20) Acrylonitrile	5.04	53	935996	252.33	ug/l	99
21) tert-Butyl methyl ether (M	5.08	73	2402533	48.63	ug/l	98
22) trans-1,2-Dichloroethene	5.26	61	2189562	45.70	ug/l	99
23) Isopropyl ether (DIPE)	5.69	45	4741217	47.26	ug/l	97
24) Vinyl acetate	5.83	43	1535132	47.82	ug/l	98
25) 1,1-Dichloroethane	5.83	63	2580978	45.93	ug/l	99
26) 2-Butanol	6.25	45	65407	79.01	ug/l #	1
27) tert-Butyl ethyl ether (ET	6.25	59	3414479	46.81	ug/l	97
28) 2-Butanone	6.41	43	1456715	240.57	ug/l	99
29) 2,2-Dichloropropane	6.63	77	2152292	44.78	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	1614492	46.92	ug/l	98
31) Chloroform	6.92	83	2554994	44.62	ug/l	99
32) Bromochloromethane	7.15	49	996291	46.79	ug/l	97

(#) = qualifier out of range (m) = manual integration
RJV304.D VO01J12.M Wed Oct 30 16:52:40 2024 10/30/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV304.D Vial: 9
Acq On : 12 Oct 2024 5:08 pm Operator: DNguye
Sample : VO01J128 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 16:52 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33) Tetrahydrofuran	7.20	42	159009	47.25	ug/l	97
35) 1,1,1-Trichloroethane	7.49	97	2383782	46.36	ug/l	99
38) 1,1-Dichloropropene	7.72	110	748202	48.05	ug/l	98
39) Carbon tetrachloride	7.88	119	1844292	47.37	ug/l	98
40) tert-Amyl methyl ether (TA	7.89	73	2611545	46.58	ug/l	99
42) Benzene	8.13	78	5514913	45.04	ug/l	99
43) 1,2-Dichloroethane	8.10	62	1296995	47.52	ug/l	100
44) Trichloroethene	9.06	130	1503523	46.43	ug/l	97
46) 1,2-Dichloropropane	9.34	63	1300340	47.19	ug/l	100
47) Bromodichloromethane	9.71	83	1766637	46.85	ug/l	97
48) 1,4-Dioxane	9.74	88	113529	1077.71	ug/l	98
49) Dibromomethane	9.80	93	569273	47.56	ug/l	98
50) 2-Chloroethyl vinyl ether	10.20	63	115297	51.27	ug/l	94
51) 4-Methyl-2-pentanone	10.25	43	3381753	249.77	ug/l	98
52) cis-1,3-Dichloropropene	10.60	75	2054932	49.74	ug/l	97
55) Toluene	11.15	91	5952773	43.01	ug/l	95
56) Ethyl methacrylate	11.43	69	999333	50.41	ug/l	98
57) trans-1,3-Dichloropropene	11.46	75	1559444	49.75	ug/l	98
58) 1,1,2-Trichloroethane	11.73	97	797655	46.82	ug/l	100
59) 2-Hexanone	11.73	43	2290452	252.94	ug/l	97
60) 1,3-Dichloropropane	12.17	76	1552719	48.38	ug/l	99
61) Tetrachloroethene	12.28	164	1338133	44.74	ug/l	99
62) Dibromochloromethane	12.65	129	1005360	49.53	ug/l	99
63) 1,2-Dibromoethane	13.00	107	815107	50.49	ug/l	100
64) 1-Chlorohexane	13.28	91	2945719	45.56	ug/l	99
65) Chlorobenzene	13.77	112	3847034	46.43	ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.85	131	1262185	49.89	ug/l	99
67) Ethylbenzene	13.86	91	7054644	43.08	ug/l	94
68) m-Xylene & p-Xylene	14.01	91	9607180	74.28	ug/l	89
69) o-Xylene	14.82	91	5418309	42.42	ug/l	97
70) Styrene	14.88	104	4235619	45.34	ug/l	99
71) Isopropylbenzene	15.50	105	6888107	39.72	ug/l	96
73) Bromoform	15.53	173	469968	48.75	ug/l	98
74) trans-1,4-Dichloro-2-buten	15.61	53	264045	52.07	ug/l	87
75) 1,1,2,2-Tetrachloroethane	15.83	83	871766	50.11	ug/l	100
77) 1,2,3-Trichloropropane	16.13	110	250075	51.21	ug/l	99
78) n-Propylbenzene	16.27	91	8344255	42.75	ug/l	95
79) Bromobenzene	16.36	156	1363616	48.24	ug/l	98
80) 1,3,5-Trimethylbenzene	16.59	105	5416703	44.86	ug/l	97
81) 2-Chlorotoluene	16.61	91	5207858	43.91	ug/l	92
82) 4-Chlorotoluene	16.70	91	4850851	45.83	ug/l	99

(#) = qualifier out of range (m) = manual integration

SC 10/30/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV304.D Vial: 9
Acq On : 12 Oct 2024 5:08 pm Operator: DNguye
Sample : VO01J128 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 16:52 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83)	tert-Butylbenzene	17.27	134	1302135	47.85 ug/l	94
84)	1,2,4-Trimethylbenzene	17.34	105	5267008	44.60 ug/l	94
85)	sec-Butylbenzene	17.64	105	7067157	41.57 ug/l	95
86)	p-Isopropyltoluene	17.86	119	5740265	43.28 ug/l	97
87)	1,3-Dichlorobenzene	18.01	146	2625097	46.20 ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	4601696	42.81 ug/l	96
89)	1,4-Dichlorobenzene	18.17	146	2490236	44.10 ug/l	98
90)	n-Butylbenzene	18.48	91	5624029	38.75 ug/l	94
91)	1,2-Dichlorobenzene	18.70	146	2098868	45.28 ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.71	157	121943	52.46 ug/l	99
93)	1,2,4-Trichlorobenzene	20.79	180	1462322	46.60 ug/l	99
94)	Hexachlorobutadiene	20.97	225	920046	45.74 ug/l	98
95)	Naphthalene	21.15	128	1824885	47.24 ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	1068289	46.97 ug/l	99

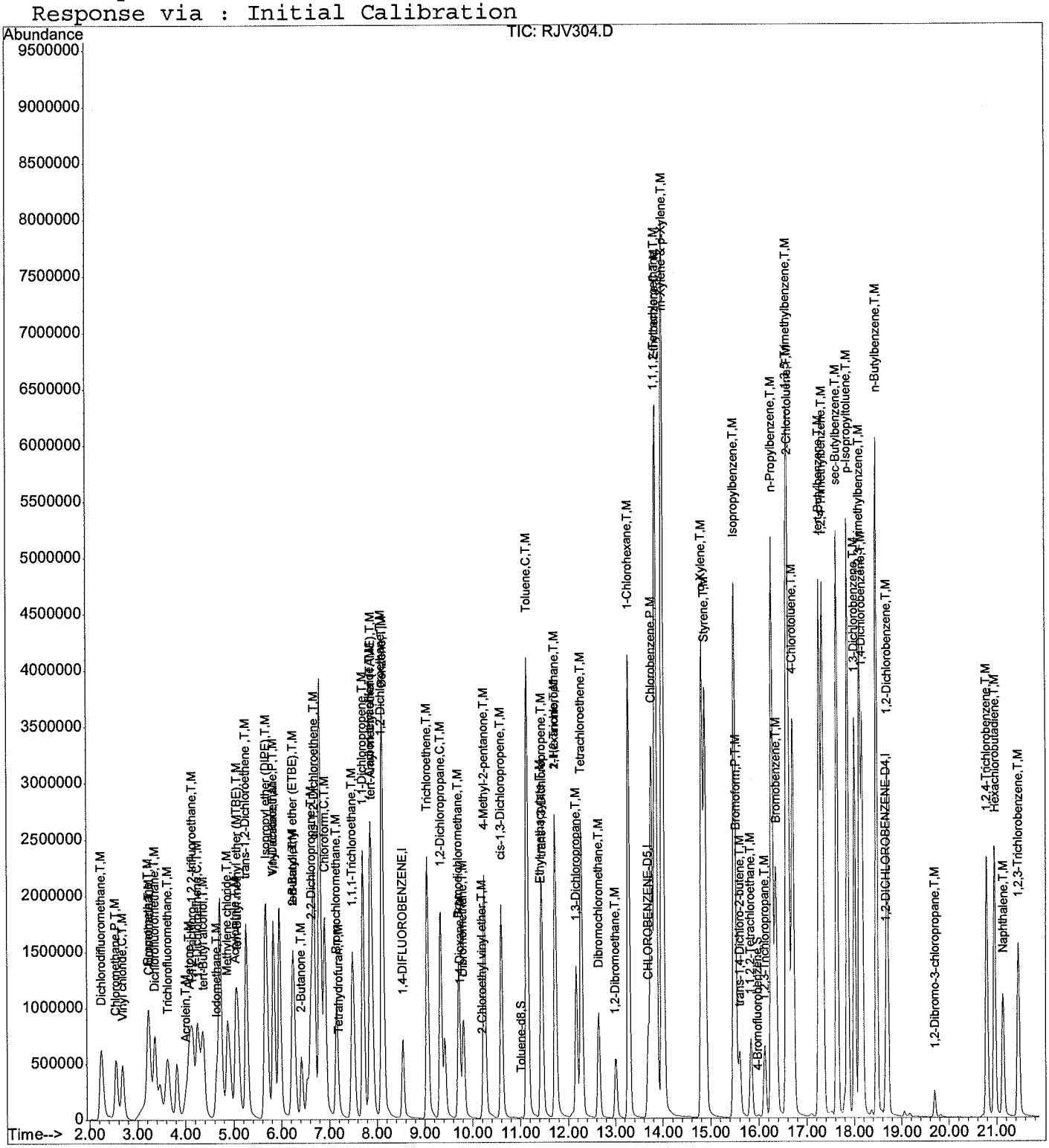
SM 10/30/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV304.D Vial: 9
Acq On : 12 Oct 2024 5:08 pm Operator: DNguye
Sample : VO01J128 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 16:52 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV306.D Vial: 11
Acq On : 12 Oct 2024 6:07 pm Operator: DNguye
Sample : VO01J1210 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 16:53 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	1124028	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.70	117	870044	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.67	152	301750	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	666	0.02	ug/l	0.00
Spiked Amount 10.000			Recovery = 0.20%			
41) 1,2-Dichloroethane-d4	8.10	65	78218	3.02	ug/l	0.13
Spiked Amount 10.000			Recovery = 30.20%			
54) Toluene-d8	11.40	98	291	0.00	ug/l	0.39
Spiked Amount 10.000			Recovery = 0.00%			
76) 4-Bromofluorobenzene	15.98	95	10390	0.29	ug/l	0.00
Spiked Amount 10.000			Recovery = 2.90%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	3949323	85.54	ug/l	98
5) Chloromethane	2.55	50	3008051	86.33	ug/l	98
6) Vinyl chloride	2.67	62	2932061	95.42	ug/l	99
7) Bromomethane	3.23	94	1985042	89.58	ug/l	96
8) Chloroethane	3.24	64	2174452	93.36	ug/l	100
9) Dichlorofluoromethane	3.36	67	3757606	88.06	ug/l	100
10) Trichlorofluoromethane	3.63	101	4112956	82.27	ug/l	99
11) Acrolein	4.03	56	440466	512.56	ug/l	81
12) 1,1,2-Trichloro-1,2,2-trif	4.16	151	1882973	91.48	ug/l	97
13) Acetone	4.10	43	1874696	451.67	ug/l	97
14) 1,1-Dichloroethene	4.25	61	4642682	88.53	ug/l	76
15) tert-Butyl alcohol	4.37	59	2525792	2432.33	ug/l	96
16) Iodomethane	4.66	142	4281206	96.10	ug/l	96
18) Methylene chloride	4.89	49	3462623	91.60	ug/l	98
20) Acrylonitrile	5.05	53	1974498	506.42	ug/l	98
21) tert-Butyl methyl ether (M	5.08	73	4895297	94.26	ug/l	97
22) trans-1,2-Dichloroethene	5.26	61	4483486	89.02	ug/l	95
23) Isopropyl ether (DIPE)	5.69	45	9494226	90.03	ug/l	95
24) Vinyl acetate	5.83	43	3114327	92.29	ug/l	96
25) 1,1-Dichloroethane	5.83	63	5273737	89.29	ug/l	98
26) 2-Butanol	6.25	45	137473	157.99	ug/l #	1
27) tert-Butyl ethyl ether (ET	6.25	59	6919432	90.25	ug/l	95
28) 2-Butanone	6.41	43	3046674	478.68	ug/l	97
29) 2,2-Dichloropropane	6.63	77	4280495	84.73	ug/l	97
30) cis-1,2-Dichloroethene	6.69	96	3343221	92.43	ug/l	95
31) Chloroform	6.91	83	5003360	83.12	ug/l	97
32) Bromochloromethane	7.15	49	2060437	92.06	ug/l	97

(#) = qualifier out of range (m) = manual integration

SG 10/30/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV306.D Vial: 11
Acq On : 12 Oct 2024 6:07 pm Operator: DNguye
Sample : VO01J1210 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 16:53 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33)	Tetrahydrofuran	7.20	42	330422	93.42 ug/l	97
35)	1,1,1-Trichloroethane	7.51	97	4719432	87.32 ug/l	99
38)	1,1-Dichloropropene	7.71	110	1544057	94.34 ug/l	98
39)	Carbon tetrachloride	7.88	119	3631396	88.73 ug/l	97
40)	tert-Amyl methyl ether (TA	7.89	73	5276582	89.54 ug/l	100
42)	Benzene	8.13	78	10383102	80.67 ug/l	96
43)	1,2-Dichloroethane	8.10	62	2527929	88.12 ug/l	99
44)	Trichloroethene	9.06	130	3069728	90.19 ug/l	96
46)	1,2-Dichloropropane	9.33	63	2656105	91.70 ug/l	98
47)	Bromodichloromethane	9.72	83	3520681	88.82 ug/l	96
48)	1,4-Dioxane	9.75	88	231424	2090.07 ug/l	99
49)	Dibromomethane	9.80	93	1137284	90.40 ug/l	98
50)	2-Chloroethyl vinyl ether	10.20	63	283831	118.72 ug/l	94
51)	4-Methyl-2-pentanone	10.25	43	6579123	462.29 ug/l	96
52)	cis-1,3-Dichloropropene	10.60	75	4084042	94.04 ug/l	96
55)	Toluene	11.15	91	10701456	77.61 ug/l	87
56)	Ethyl methacrylate	11.43	69	1981693	100.34 ug/l	97
57)	trans-1,3-Dichloropropene	11.46	75	3063604	98.10 ug/l	97
58)	1,1,2-Trichloroethane	11.73	97	1601272	94.33 ug/l	99
59)	2-Hexanone	11.73	43	4414025	489.22 ug/l	95
60)	1,3-Dichloropropane	12.17	76	2947857	92.19 ug/l	98
61)	Tetrachloroethene	12.28	164	2539505	85.22 ug/l	100
62)	Dibromochloromethane	12.65	129	1940270	95.95 ug/l	99
63)	1,2-Dibromoethane	13.00	107	1535828	95.48 ug/l	99
64)	1-Chlorohexane	13.28	91	5327143	82.69 ug/l	96
65)	Chlorobenzene	13.77	112	7029821	85.15 ug/l	95
66)	1,1,1,2-Tetrachloroethane	13.85	131	2394720	95.00 ug/l	99
67)	Ethylbenzene	13.86	91	11529226	70.67 ug/l	85
68)	m-Xylene & p-Xylene	14.01	91	14448640	112.12 ug/l	76
69)	o-Xylene	14.82	91	9365835	73.59 ug/l	91
70)	Styrene	14.88	104	7643565	82.11 ug/l	97
71)	Isopropylbenzene	15.51	105	11409295	66.04 ug/l	91
73)	Bromoform	15.54	173	905209	102.31 ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.59	53	517849	111.54 ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.83	83	1586143	99.59 ug/l	99
77)	1,2,3-Trichloropropane	16.13	110	463181	103.59 ug/l	99
78)	n-Propylbenzene	16.28	91	13168393	73.70 ug/l	87
79)	Bromobenzene	16.36	156	2564147	99.07 ug/l	97
80)	1,3,5-Trimethylbenzene	16.59	105	9055447	81.92 ug/l	91
81)	2-Chlorotoluene	16.62	91	9025752	83.12 ug/l	87
82)	4-Chlorotoluene	16.71	91	8315064	85.82 ug/l	97

(#) = qualifier out of range (m) = manual integration

SM 10/30/24

Data File : D:\HPCHEM\1\DATA\24J12\RJV306.D Vial: 11
Acq On : 12 Oct 2024 6:07 pm Operator: DNguye
Sample : VO01J1210 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 16:53 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83)	tert-Butylbenzene	17.27	134	2370142	95.13 ug/l	98
84)	1,2,4-Trimethylbenzene	17.34	105	8711231	80.58 ug/l	87
85)	sec-Butylbenzene	17.64	105	10990866	70.61 ug/l	87
86)	p-Isopropyltoluene	17.86	119	9235748	76.06 ug/l	91
87)	1,3-Dichlorobenzene	18.01	146	4585379	88.14 ug/l	96
88)	1,2,3-Trimethylbenzene	18.13	105	7658860	77.82 ug/l	90
89)	1,4-Dichlorobenzene	18.17	146	4360861	84.35 ug/l	97
90)	n-Butylbenzene	18.48	91	8610114	64.80 ug/l	88
91)	1,2-Dichlorobenzene	18.70	146	3673166	86.56 ug/l	96
92)	1,2-Dibromo-3-chloropropan	19.70	157	226710	106.53 ug/l	99
93)	1,2,4-Trichlorobenzene	20.79	180	2586527	90.04 ug/l	98
94)	Hexachlorobutadiene	20.96	225	1600329	86.91 ug/l	98
95)	Naphthalene	21.13	128	3240066	91.62 ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	1918099	92.12 ug/l	99

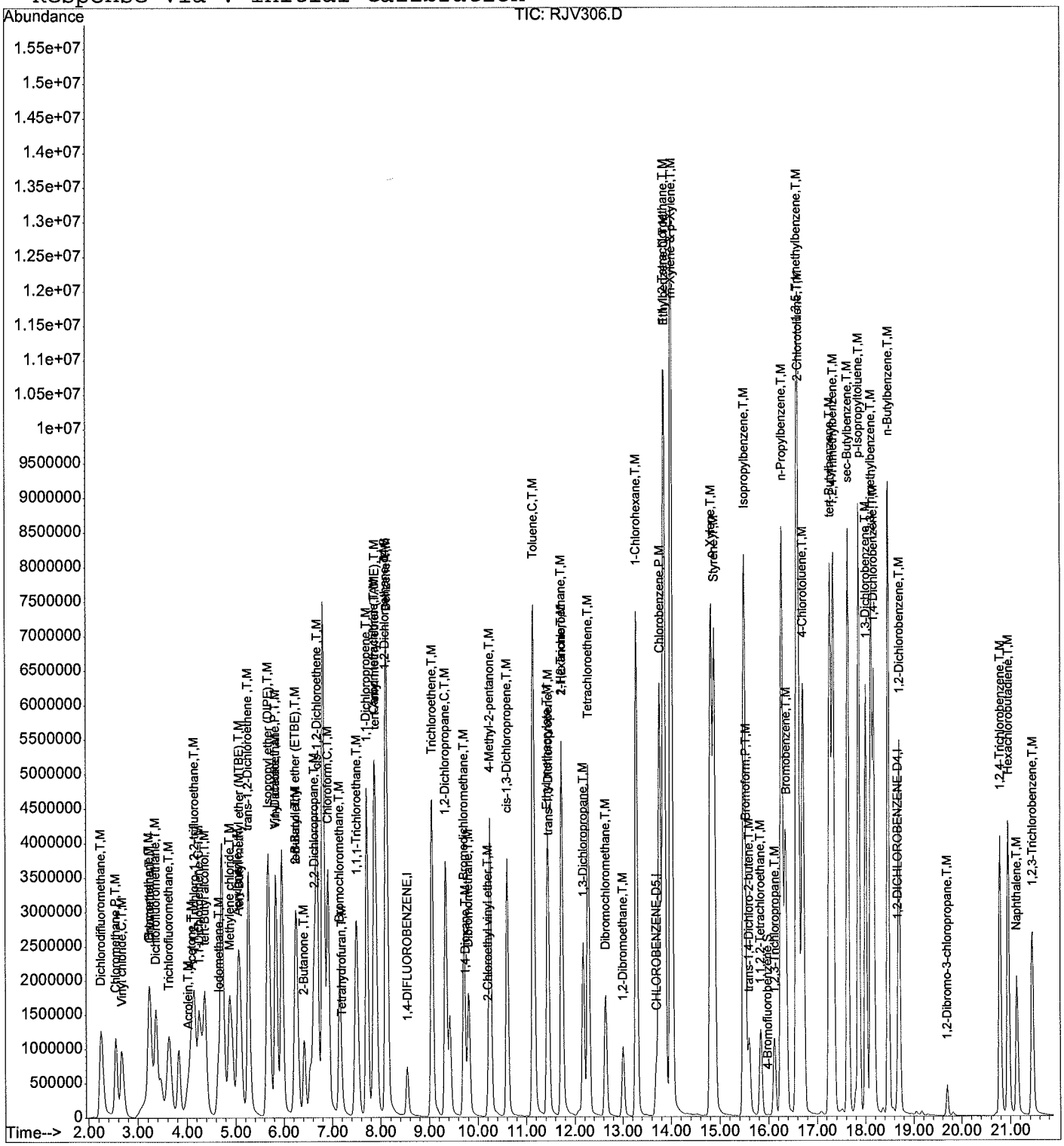
Scan 10/30/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV306.D Vial: 11
Acq On : 12 Oct 2024 6:07 pm Operator: DNguye
Sample : VO01J1210 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 30 16:53 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



REPORT ID: 24J055

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01
IC_Beginning DateTime :10/12/24 13:38
Spike Amount :10 PPB
CC/CV File :RJV309
IC File :RJV302

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :10/12/24 18:07
HPChem Method :VO01J12
Date_Time :10/12/24 19:36

M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	1068034	1	1	8.545	8.543	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane	9.045	-9.5	396817	0.372	0.411	2.247	2.247	11.08				
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane	11.560	15.6	382728	0.358	0.310	2.560	2.559	13.65				
	6	Vinyl chloride	11.451	14.5	334350	0.313	0.273	2.702	2.690	13.19				
	7	Bromomethane	10.636	6.4	223947	0.210	0.197	3.243	3.233	7.64				
	8	Chloroethane	11.296	13.0	250004	0.234	0.207	3.243	3.236	8.38				
	9	Dichlorofluoromethane	9.273	-7.3	375995	0.352	0.380	3.362	3.359	13.68				
	10	Trichlorofluoromethane	9.160	-8.4	435121	0.407	0.445	3.628	3.628	9.80				
5	11	Acrolein	58.363	16.7	47656	0.009	0.008	4.028	4.024	7.80				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	9.639	-3.6	188528	0.177	0.183	4.147	4.148	8.51				
5	13	Acetone	51.858	3.7	204520	0.038	0.037	4.102	4.095	6.03				
	14	1,1-Dichloroethene	9.782	-2.2	487444	0.456	0.467	4.250	4.248	8.08				
25	15	tert-Butyl alcohol	251.012	0.4	247673	0.009	0.009	4.369	4.373	7.42				
	16	Iodomethane	10.700	7.0	452955	0.424	0.396	4.665	4.662	8.42				
	17	Methyl acetate	10.248	2.5	104248	0.098	0.095	4.680	4.680	11.58				
	18	Methylene chloride	10.565	5.6	379499	0.355	0.336	4.887	4.881	8.38				
	19	Carbon disulfide	11.140	11.4	1161131	1.087	0.976	4.902	4.897	10.91				
5	20	Acrylonitrile	57.404	14.8	212664	0.040	0.035	5.050	5.058	10.80				
	21	tert-Butyl methyl ether (MTBE)	10.823	8.2	534080	0.500	0.462	5.079	5.079	11.13				
	22	trans-1,2-Dichloroethene	10.337	3.4	494700	0.463	0.448	5.272	5.264	8.41				
	23	Isopropyl ether (DIPE)	10.730	7.3	1075243	1.007	0.938	5.687	5.682	8.58				
	24	Vinyl acetate	11.035	10.3	353866	0.331	0.300	5.850	5.846	14.72				
	25	1,1-Dichloroethane	10.631	6.3	596611	0.559	0.525	5.850	5.836	8.95				
25	26	2-Butanol	261.905	4.8	216540	0.008	0.008	6.175	6.178	12.15				
	27	tert-Butyl ethyl ether (ETBE)	10.623	6.2	773868	0.725	0.682	6.249	6.248	10.48				
5	28	2-Butanone	52.036	4.1	314700	0.059	0.057	6.427	6.442	7.33				
	29	2,2-Dichloropropane	9.529	-4.7	457430	0.428	0.449	6.634	6.630	9.59				
	30	cis-1,2-Dichloroethene	10.363	3.6	356177	0.333	0.322	6.694	6.692	7.93				
	31	Chloroform	9.844	-1.6	563062	0.527	0.535	6.916	6.910	10.32				
	32	Bromochloromethane	10.587	5.9	225161	0.211	0.199	7.153	7.151	9.24				
	33	Tetrahydrofuran	11.394	13.9	38294	0.036	0.031	7.212	7.208	10.36				
	34	Dibromofluoromethane	10.445	4.4	291419	0.273	0.261	7.227	7.227	2.58				
	35	1,1,1-Trichloroethane	9.542	-4.6	490060	0.459	0.481	7.493	7.495	9.83				
	36	Cyclohexane	9.755	-2.4	516950	0.484	0.496	7.523	7.517	6.28				
	37	2,2,4-Trimethylpentane	10.330	3.3	26488	0.025	0.024	7.508	7.514	5.03				
	38	1,1-Dichloropropene	10.006	0.1	155616	0.146	0.146	7.715	7.717	7.96				
	39	Carbon tetrachloride	9.441	-5.6	367156	0.344	0.364	7.878	7.872	9.79				
	40	tert-Amyl methyl ether (TAME)	10.208	2.1	571608	0.535	0.524	7.893	7.891	8.94				
	41	1,2-Dichloroethane-d4	9.840	-1.6	241828	0.226	0.230	7.967	7.967	3.01				
	42	Benzene	10.239	2.4	1252194	1.172	1.145	8.130	8.124	9.85				
	43	1,2-Dichloroethane	10.114	1.1	275712	0.258	0.255	8.100	8.100	12.95				
	44	Trichloroethene	10.063	0.6	325468	0.305	0.303	9.063	9.063	7.09				
	45	Methylcyclohexane	9.296	-7.0	582682	0.546	0.587	9.152	9.148	4.28				
	46	1,2-Dichloropropane	10.410	4.1	286506	0.268	0.258	9.344	9.343	7.03				
	47	Bromodichloromethane	10.077	0.8	379560	0.355	0.353	9.714	9.715	7.42				
20	48	1,4-Dioxane	191.902	-4.0	20190	0.001	0.001	9.759	9.757	14.16				
	49	Dibromomethane	9.983	-0.2	119339	0.112	0.112	9.803	9.807	10.72				
	50	2-Chloroethyl vinyl ether	9.980	-0.2	20564	0.019	0.016	10.218	10.222	39.29	-0.0022	0.0214		0.9977
5	51	4-Methyl-2-pentanone	56.086	12.2	758438	0.142	0.127	10.248	10.261	12.23				
	52	cis-1,3-Dichloropropene	10.596	6.0	437236	0.409	0.386	10.603	10.606	10.37				
	53	CHLOROBENZENE-D5	10.000	0	813885	1	1	13.698	13.694	0				
	54	Toluene-d8	10.818	8.2	1210901	1.488	1.375	11.017	11.013	6.87				
	55	Toluene	10.583	5.8	1365083	1.677	1.585	11.151	11.148	13.23				
	56	Ethyl methacrylate	11.318	13.2	209124	0.257	0.227	11.432	11.448	13.58				
	57	trans-1,3-Dichloropropene	10.873	8.7	317657	0.390	0.359	11.462	11.468	13.11				
	58	1,1,2-Trichloroethane	10.903	9.0	173128	0.213	0.195	11.728	11.732	12.51				
5	59	2-Hexanone	57.060	14.1	481596	0.118	0.104	11.743	11.745	12.75				
	60	1,3-Dichloropropane	10.660	6.6	318885	0.392	0.368	12.173	12.175	10.91				
	61	Tetrachloroethene	9.664	-3.4	269419	0.331	0.343	12.276	12.277	8.52				
	62	Dibromochloromethane	10.500	5.0	198635	0.244	0.232	12.646	12.647	6.04				
	63	1,2-Dibromoethane	10.649	6.5	160251	0.197	0.185	13.017	13.013	11.07				
	64	1-Chlorohexane	9.738	-2.6	586912	0.721	0.740	13.283	13.284	8.90				
	65	Chlorobenzene	10.460	4.6	807857	0.993	0.949	13.757	13.762	8.50				
	66	1,1,1,2-Tetrachloroethane	10.475	4.8	247002	0.303	0.290	13.846	13.844	11.11				
	67	Ethylbenzene	10.276	2.8	1568373	1.927	1.875	13.861	13.860	13.61				
2	68	m-Xylene & p-Xylene	19.454	-2.7	2345217	1.441	1.481	13.994	13.996	8.36				
	69	o-Xylene	9.900	-1.0	1178660	1.448	1.463	14.809	14.816	13.73				
	70	Styrene	10.219	2.2	889936	1.093	1.070	14.883	14.886	11.33				
	71	Isopropylbenzene	9.644	-3.6	1558818	1.915	1.986	15.490	15.495	12.81				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	318498	1	1	18.674	18.667	0				
	73	Bromoform	9.546	-4.5	87239	0.274	0.246	15.534	15.536	21.91	-0.0066	0.2939		0.9993
	74	trans-1,4-Dichloro-2-butene	10.050	0.5	49251	0.155	0.154	15.608	15.609	13.73				
	75	1,1,2,2-Tetrachloroethane	10.402	4.0	174869	0.549	0.528	15.830	15.835	11.05				
	76	4-Bromofluorobenzene	10.407	4.1	392450	1.232	1.184	15.979	15.981	7.58				
	77	1,2,3-Trichloropropane	10.111	1.1	47720	0.150	0.148	16.126	16.127	10.16				
	78	n-Propylbenzene	10.247	2.5	1932721	6.068	5.921	16.275	16.275	12.69				
	79	Bromobenzene	10.270	2.7	280561	0.881	0.858	16.349	16.361	5.43				
	80	1,3,5-Trimethylbenzene	10.161	1.6	1185583	3.722	3.663	16.571	16.582	9.71				
	81	2-Chlorotoluene	10.169	1.7	1165470	3.659	3.598	16.615	16.616	10.00				
	82	4-Chlorotoluene	9.800	-2.0	1002272	3.147	3.211	16.704	16.706	8.13				
	83	tert-Butylbenzene	9.974	-0.3	262292	0.824	0.826	17.267	17.264	5.73				
	84	1,2,4-Trimethylbenzene	10.316	3.2	1177231	3.696	3.583	17.326	17.334	9.83				
	85	sec-Butylbenzene	10.097	1.0	1658995	5.209	5.158	17.637	17.638	14.02				
	86	p-Isopropyltoluene	10.064	0.6	1289914	4.050	4.024	17.859	17.860	12.06				
	87	1,3-Dichlorobenzene	10.049	0.5	551841	1.733	1.724	18.007	18.008	7.25				
	88	1,2,3-Trimethylbenzene	10.220	2.2	1061628	3.333	3.261	18.111	18.114	11.80				
	89	1,4-Dichlorobenzene	9.666	-3.3	527463	1.656	1.713	18.170	18.171	9.73				
	90	n-Butylbenzene	9.373	-6.3	1314457	4.127	4.400	18.466	18.472	11.64				
	91	1,2-Dichlorobenzene	10.001	0.0	447963	1.406	1.406	18.703	18.704	8.62				
	92	1,2-Dibromo-3-chloropropane	9.942	-0.6	22332	0.070	0.071	19.695	19.701	9.99				
	93	1,2,4-Trichlorobenzene	9.723	-2.8	294827	0.926	0.952	20.791	20.792	5.80				
	94	Hexachlorobutadiene	9.984	-0.2	194057	0.609	0.610	20.954	20.956	8.57				
	95	Naphthalene	9.845	-1.5	367510	1.154	1.172	21.132	21.137	7.49				
	96	1,2,3-Trichlorobenzene	10.198	2.0	224150	0.704	0.690	21.458	21.458	8.36				

Spike Amount = Nominal Amount * M

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV309.D Vial: 14
Acq On : 12 Oct 2024 7:36 pm Operator: DNguye
Sample : IVO01J1201 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	122	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	9.046	9.5	99	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	11.560	-15.6	128	0.00
6	C,T,M	Vinyl chloride	10.000	11.451	-14.5	129	0.00
7	T,M	Bromomethane	10.000	10.636	-6.4	136	0.00
8	T,M	Chloroethane	10.000	11.296	-13.0	132	0.00
9	T,M	Dichlorofluoromethane	10.000	9.274	7.3	138	0.00
10	T,M	Trichlorofluoromethane	10.000	9.160	8.4	103	0.00
11	T,M	Acrolein	50.000	58.363	-16.7	138	0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.640	3.6	122	0.00
13	T,M	Acetone	50.000	51.858	-3.7	123	0.02
14	C,T,M	1,1-Dichloroethene	10.000	9.782	2.2	126	0.00
15	T,M	tert-Butyl alcohol	250.000	251.013	-0.4	116	0.00
16	T,M	Iodomethane	10.000	10.700	-7.0	138	0.00
17	T,M	Methyl acetate	10.000	10.248	-2.5	120	0.00
18	T,M	Methylene chloride	10.000	10.565	-5.6	138	0.00
19	T,M	Carbon disulfide	10.000	11.141	-11.4	130	0.00
20	T,M	Acrylonitrile	50.000	57.404	-14.8	132	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.823	-8.2	128	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.337	-3.4	134	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.731	-7.3	138	0.00
24	T,M	Vinyl acetate	10.000	11.036	-10.4	115	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.631	-6.3	138	0.01
26	T,M	2-Butanol	250.000	261.906	-4.8	118	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.623	-6.2	132	0.00
28	T,M	2-Butanone	50.000	52.037	-4.1	120	0.00
29	T,M	2,2-Dichloropropane	10.000	9.529	4.7	122	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.363	-3.6	134	0.00
31	C,T,M	Chloroform	10.000	9.845	1.5	131	0.00
32	T,M	Bromochloromethane	10.000	10.587	-5.9	131	0.00
33	T,M	Tetrahydrofuran	10.000	11.394	-13.9	143	0.00
34	S	Dibromofluoromethane	10.000	10.446	-4.5	129	0.00
35	T,M	1,1,1-Trichloroethane	10.000	9.542	4.6	121	0.00
36	T,M	Cyclohexane	10.000	9.756	2.4	117	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	10.331	-3.3	127	-0.01
38	T,M	1,1-Dichloropropene	10.000	10.006	-0.1	127	0.00
39	T,M	Carbon tetrachloride	10.000	9.441	5.6	117	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.208	-2.1	129	0.00
41	S	1,2-Dichloroethane-d4	10.000	9.841	1.6	116	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV309.D Vial: 14
Acq On : 12 Oct 2024 7:36 pm Operator: DNguye
Sample : IVO01J1201 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	10.239	-2.4	134	0.00
43	T,M	1,2-Dichloroethane	10.000	10.115	-1.2	116	0.00
44	T,M	Trichloroethene	10.000	10.063	-0.6	131	0.00
45	T,M	Methylcyclohexane	10.000	9.297	7.0	117	0.00
46	C,T,M	1,2-Dichloropropane	10.000	10.410	-4.1	134	0.00
47	T,M	Bromodichloromethane	10.000	10.078	-0.8	126	0.00
48	T,M	1,4-Dioxane	200.000	191.902	4.0	113	0.00
49	T,M	Dibromomethane	10.000	9.983	0.2	120	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	9.981	0.2	137	0.00
51	T,M	4-Methyl-2-pentanone	50.000	56.087	-12.2	119	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	10.596	-6.0	129	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	119	0.00
54	S	Toluene-d8	10.000	10.819	-8.2	132	0.00
55	C,T,M	Toluene	10.000	10.583	-5.8	132	0.00
56	T,M	Ethyl methacrylate	10.000	11.319	-13.2	120	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	10.873	-8.7	121	0.00
58	T,M	1,1,2-Trichloroethane	10.000	10.903	-9.0	124	0.00
59	T,M	2-Hexanone	50.000	57.060	-14.1	118	0.00
60	T,M	1,3-Dichloropropane	10.000	10.661	-6.6	125	0.00
61	T,M	Tetrachloroethene	10.000	9.665	3.4	125	0.00
62	T,M	Dibromochloromethane	10.000	10.500	-5.0	122	0.00
63	T,M	1,2-Dibromoethane	10.000	10.650	-6.5	121	0.00
64	T,M	1-Chlorohexane	10.000	9.739	2.6	125	0.00
65	P,M	Chlorobenzene	10.000	10.461	-4.6	132	-0.01
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.475	-4.7	129	0.00
67	C,T,M	Ethylbenzene	10.000	10.276	-2.8	128	0.00
68	T,M	m-Xylene & p-Xylene	20.000	19.455	2.7	130	0.00
69	T,M	o-Xylene	10.000	9.900	1.0	110	-0.01
70	T,M	Styrene	10.000	10.220	-2.2	110	0.00
71	T,M	Isopropylbenzene	10.000	9.645	3.6	110	-0.01
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	100	0.00
73	P,T,M	Bromoform	10.000	9.547	4.5	102	0.00
74	T,M	trans-1,4-Dichloro-2-butene	10.000	10.051	-0.5	93	0.00
75	T,M	1,1,2,2-Tetrachloroethane	10.000	10.402	-4.0	95	-0.01
76	S	4-Bromofluorobenzene	10.000	10.407	-4.1	106	0.00
77	T,M	1,2,3-Trichloropropane	10.000	10.112	-1.1	94	0.00
78	T,M	n-Propylbenzene	10.000	10.248	-2.5	108	0.00
79	T,M	Bromobenzene	10.000	10.270	-2.7	109	-0.01
80	T,M	1,3,5-Trimethylbenzene	10.000	10.162	-1.6	109	-0.01

(#) = Out of Range

SM 10/30/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV309.D Vial: 14
Acq On : 12 Oct 2024 7:36 pm Operator: DNguye
Sample : IVO01J1201 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	10.169	-1.7	109	0.00
82	T,M	4-Chlorotoluene	10.000	9.800	2.0	106	0.00
83	T,M	tert-Butylbenzene	10.000	9.974	0.3	105	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	10.317	-3.2	109	-0.01
85	T,M	sec-Butylbenzene	10.000	10.098	-1.0	104	0.00
86	T,M	p-Isopropyltoluene	10.000	10.064	-0.6	107	0.00
87	T,M	1,3-Dichlorobenzene	10.000	10.050	-0.5	107	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	10.220	-2.2	107	0.00
89	T,M	1,4-Dichlorobenzene	10.000	9.666	3.3	106	0.00
90	T,M	n-Butylbenzene	10.000	9.373	6.3	104	-0.01
91	T,M	1,2-Dichlorobenzene	10.000	10.001	-0.0	106	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.942	0.6	94	-0.01
93	T,M	1,2,4-Trichlorobenzene	10.000	9.723	2.8	103	0.00
94	T,M	Hexachlorobutadiene	10.000	9.984	0.2	109	0.00
95	T,M	Naphthalene	10.000	9.845	1.5	94	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	10.199	-2.0	103	0.00

SY 10/30/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
RJV309.D VO01J12.M Thu Oct 24 09:07:52 2024 Page 3

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV309.D Vial: 14
Acq On : 12 Oct 2024 7:36 pm Operator: DNguye
Sample : IVO01J1201 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	122	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.411	0.372	9.5	99	0.00
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.310	0.358	-15.5	128	0.00
6	C,T,M	Vinyl chloride	0.273	0.313	-14.7	129	0.00
7	T,M	Bromomethane	0.197	0.210	-6.6	136	0.00
8	T,M	Chloroethane	0.207	0.234	-13.0	132	0.00
9	T,M	Dichlorofluoromethane	0.380	0.352	7.4	138	0.00
10	T,M	Trichlorofluoromethane	0.445	0.407	8.5	103	0.00
11	T,M	Acrolein	0.008	0.009	-12.5	138	0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.183	0.177	3.3	122	0.00
13	T,M	Acetone	0.037	0.038	-2.7	123	0.02
14	C,T,M	1,1-Dichloroethene	0.467	0.456	2.4	126	0.00
15	T,M	tert-Butyl alcohol	0.009	0.009	0.0	116	0.00
16	T,M	Iodomethane	0.396	0.424	-7.1	138	0.00
17	T,M	Methyl acetate	0.095	0.098	-3.2	120	0.00
18	T,M	Methylene chloride	0.336	0.355	-5.7	138	0.00
19	T,M	Carbon disulfide	0.976	1.087	-11.4	130	0.00
20	T,M	Acrylonitrile	0.035	0.040	-14.3	132	0.00
21	T,M	tert-Butyl methyl ether (MT	0.462	0.500	-8.2	128	0.00
22	T,M	trans-1,2-Dichloroethene	0.448	0.463	-3.3	134	0.00
23	T,M	Isopropyl ether (DIPE)	0.938	1.007	-7.4	138	0.00
24	T,M	Vinyl acetate	0.300	0.331	-10.3	115	0.00
25	P,T,M	1,1-Dichloroethane	0.525	0.559	-6.5	138	0.01
26	T,M	2-Butanol	0.008	0.008	0.0	118	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.682	0.725	-6.3	132	0.00
28	T,M	2-Butanone	0.057	0.059	-3.5	120	0.00
29	T,M	2,2-Dichloropropane	0.449	0.428	4.7	122	0.00
30	T,M	cis-1,2-Dichloroethene	0.322	0.333	-3.4	134	0.00
31	C,T,M	Chloroform	0.535	0.527	1.5	131	0.00
32	T,M	Bromochloromethane	0.199	0.211	-6.0	131	0.00
33	T,M	Tetrahydrofuran	0.031	0.036	-16.1	143	0.00
34	S	Dibromofluoromethane	0.261	0.273	-4.6	129	0.00
35	T,M	1,1,1-Trichloroethane	0.481	0.459	4.6	121	0.00
36	T,M	Cyclohexane	0.496	0.484	2.4	117	0.00
37	T,M	2,2,4-Trimethylpentane	0.024	0.025	-4.2	127	-0.01
38	T,M	1,1-Dichloropropene	0.146	0.146	0.0	127	0.00
39	T,M	Carbon tetrachloride	0.364	0.344	5.5	117	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.524	0.535	-2.1	129	0.00
41	S	1,2-Dichloroethane-d4	0.230	0.226	1.7	116	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV309.D Vial: 14
Acq On : 12 Oct 2024 7:36 pm Operator: DNguye
Sample : IVO01J1201 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M Benzene	1.145	1.172	-2.4	134	0.00
43	T,M 1,2-Dichloroethane	0.255	0.258	-1.2	116	0.00
44	T,M Trichloroethene	0.303	0.305	-0.7	131	0.00
45	T,M Methylcyclohexane	0.587	0.546	7.0	117	0.00
46	C,T,M 1,2-Dichloropropane	0.258	0.268	-3.9	134	0.00
47	T,M Bromodichloromethane	0.353	0.355	-0.6	126	0.00
48	T,M 1,4-Dioxane	0.001	0.001	0.0	113	0.00
49	T,M Dibromomethane	0.112	0.112	0.0	120	0.00
50	T,M 2-Chloroethyl vinyl ether	0.016	0.019	-18.7	137	0.00
51	T,M 4-Methyl-2-pentanone	0.127	0.142	-11.8	119	0.00
52	T,M cis-1,3-Dichloropropene	0.386	0.409	-6.0	129	0.00
53	I CHLOROBENZENE-D5	1.000	1.000	0.0	119	0.00
54	S Toluene-d8	1.375	1.488	-8.2	132	0.00
55	C,T,M Toluene	1.585	1.677	-5.8	132	0.00
56	T,M Ethyl methacrylate	0.227	0.257	-13.2	120	0.00
57	T,M trans-1,3-Dichloropropene	0.359	0.390	-8.6	121	0.00
58	T,M 1,1,2-Trichloroethane	0.195	0.213	-9.2	124	0.00
59	T,M 2-Hexanone	0.104	0.118	-13.5	118	0.00
60	T,M 1,3-Dichloropropane	0.368	0.392	-6.5	125	0.00
61	T,M Tetrachloroethene	0.343	0.331	3.5	125	0.00
62	T,M Dibromochloromethane	0.232	0.244	-5.2	122	0.00
63	T,M 1,2-Dibromoethane	0.185	0.197	-6.5	121	0.00
64	T,M 1-Chlorohexane	0.740	0.721	2.6	125	0.00
65	P,M Chlorobenzene	0.949	0.993	-4.6	132	-0.01
66	T,M 1,1,1,2-Tetrachloroethane	0.290	0.303	-4.5	129	0.00
67	C,T,M Ethylbenzene	1.875	1.927	-2.8	128	0.00
68	T,M m-Xylene & p-Xylene	1.481	1.441	2.7	130	0.00
69	T,M o-Xylene	1.463	1.448	1.0	110	-0.01
70	T,M Styrene	1.070	1.093	-2.1	110	0.00
71	T,M Isopropylbenzene	1.986	1.915	3.6	110	-0.01
72	I 1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	100	0.00
73	P,T,M Bromoform	0.246	0.274	-11.4	102	0.00
74	T,M trans-1,4-Dichloro-2-butene	0.154	0.155	-0.6	93	0.00
75	T,M 1,1,2,2-Tetrachloroethane	0.528	0.549	-4.0	95	-0.01
76	S 4-Bromofluorobenzene	1.184	1.232	-4.1	106	0.00
77	T,M 1,2,3-Trichloropropane	0.148	0.150	-1.4	94	0.00
78	T,M n-Propylbenzene	5.921	6.068	-2.5	108	0.00
79	T,M Bromobenzene	0.858	0.881	-2.7	109	-0.01
80	T,M 1,3,5-Trimethylbenzene	3.663	3.722	-1.6	109	-0.01

(#) = Out of Range

SM 10/30/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV309.D Vial: 14
Acq On : 12 Oct 2024 7:36 pm Operator: DNguye
Sample : IVO01J1201 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	3.598	3.659	-1.7	109	0.00
82	T,M	4-Chlorotoluene	3.211	3.147	2.0	106	0.00
83	T,M	tert-Butylbenzene	0.826	0.824	0.2	105	0.00
84	T,M	1,2,4-Trimethylbenzene	3.583	3.696	-3.2	109	-0.01
85	T,M	sec-Butylbenzene	5.158	5.209	-1.0	104	0.00
86	T,M	p-Isopropyltoluene	4.024	4.050	-0.6	107	0.00
87	T,M	1,3-Dichlorobenzene	1.724	1.733	-0.5	107	0.00
88	T,M	1,2,3-Trimethylbenzene	3.261	3.333	-2.2	107	0.00
89	T,M	1,4-Dichlorobenzene	1.713	1.656	3.3	106	0.00
90	T,M	n-Butylbenzene	4.403	4.127	6.3	104	-0.01
91	T,M	1,2-Dichlorobenzene	1.406	1.406	0.0	106	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.071	0.070	1.4	94	-0.01
93	T,M	1,2,4-Trichlorobenzene	0.952	0.926	2.7	103	0.00
94	T,M	Hexachlorobutadiene	0.610	0.609	0.2	109	0.00
95	T,M	Naphthalene	1.172	1.154	1.5	94	0.00
96	T,M	1,2,3-Trichlorobenzene	0.690	0.704	-2.0	103	0.00

Su 10/30/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV309.D Vial: 14
Acq On : 12 Oct 2024 7:36 pm Operator: DNguye
Sample : IVO01J1201 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:14 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	1068034	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.70	117	813885	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.67	152	318498	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	291419	10.45	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.50%			
41) 1,2-Dichloroethane-d4	7.97	65	241828	9.84	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.40%			
54) Toluene-d8	11.02	98	1210901	10.82	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.20%			
76) 4-Bromofluorobenzene	15.98	95	392450	10.41	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.10%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.25	85	396817	9.05	ug/l	99
5) Chloromethane	2.56	50	382728	11.56	ug/l	99
6) Vinyl chloride	2.70	62	334350	11.45	ug/l	99
7) Bromomethane	3.24	94	223947	10.64	ug/l	96
8) Chloroethane	3.24	64	250004	11.30	ug/l	98
9) Dichlorofluoromethane	3.36	67	375995	9.27	ug/l	95
10) Trichlorofluoromethane	3.63	101	435121	9.16	ug/l	96
11) Acrolein	4.03	56	47656	58.36	ug/l	90
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	188528	9.64	ug/l	99
13) Acetone	4.10	43	204520	51.86	ug/l	95
14) 1,1-Dichloroethene	4.25	61	487444	9.78	ug/l	97
15) tert-Butyl alcohol	4.37	59	247673	251.01	ug/l	99
16) Iodomethane	4.66	142	452955	10.70	ug/l	94
17) Methyl acetate	4.68	43	104248	10.25	ug/l	99
18) Methylene chloride	4.89	49	379499	10.57	ug/l	98
19) Carbon disulfide	4.90	76	1161131	11.14	ug/l	100
20) Acrylonitrile	5.05	53	212664	57.40	ug/l	99
21) tert-Butyl methyl ether (M	5.08	73	534080	10.82	ug/l	97
22) trans-1,2-Dichloroethene	5.27	61	494700	10.34	ug/l	98
23) Isopropyl ether (DIPE)	5.69	45	1075243	10.73	ug/l	99
24) Vinyl acetate	5.85	43	353866	11.04	ug/l	98
25) 1,1-Dichloroethane	5.85	63	596611	10.63	ug/l	100
26) 2-Butanol	6.18	45	216540	261.91	ug/l #	83
27) tert-Butyl ethyl ether (ET	6.25	59	773868	10.62	ug/l	100
28) 2-Butanone	6.43	43	314700	52.04	ug/l	96
29) 2,2-Dichloropropane	6.63	77	457430	9.53	ug/l	99
30) cis-1,2-Dichloroethene	6.69	96	356177	10.36	ug/l	99

(#) = qualifier out of range (m) = manual integration
RJV309.D VO01J12.M Thu Oct 24 09:07:40 2024 Page 1

SG 10/30/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV309.D Vial: 14
Acq On : 12 Oct 2024 7:36 pm Operator: DNguye
Sample : IVO01J1201 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:14 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	Chloroform	6.92	83	563062	9.84 ug/l	99
32)	Bromochloromethane	7.15	49	225161	10.59 ug/l	99
33)	Tetrahydrofuran	7.21	42	38294	11.39 ug/l	92
35)	1,1,1-Trichloroethane	7.49	97	490060	9.54 ug/l	100
36)	Cyclohexane	7.52	84	516950	9.76 ug/l	99
37)	2,2,4-Trimethylpentane	7.51	57	26488	10.33 ug/l #	100
38)	1,1-Dichloropropene	7.72	110	155616	10.01 ug/l	99
39)	Carbon tetrachloride	7.88	119	367156	9.44 ug/l	98
40)	tert-Amyl methyl ether (TA	7.89	73	571608	10.21 ug/l	98
42)	Benzene	8.13	78	1252194	10.24 ug/l	99
43)	1,2-Dichloroethane	8.10	62	275712	10.11 ug/l	99
44)	Trichloroethene	9.06	130	325468	10.06 ug/l	98
45)	Methylcyclohexane	9.15	83	582682	9.30 ug/l	100
46)	1,2-Dichloropropane	9.34	63	286506	10.41 ug/l	95
47)	Bromodichloromethane	9.71	83	379560	10.08 ug/l	100
48)	1,4-Dioxane	9.76	88	20190	191.90 ug/l	98
49)	Dibromomethane	9.80	93	119339	9.98 ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	20564	9.98 ug/l	99
51)	4-Methyl-2-pentanone	10.25	43	758438	56.09 ug/l	99
52)	cis-1,3-Dichloropropene	10.60	75	437236	10.60 ug/l	99
55)	Toluene	11.15	91	1365083	10.58 ug/l	99
56)	Ethyl methacrylate	11.43	69	209124	11.32 ug/l	99
57)	trans-1,3-Dichloropropene	11.46	75	317657	10.87 ug/l	98
58)	1,1,2-Trichloroethane	11.73	97	173128	10.90 ug/l	100
59)	2-Hexanone	11.74	43	481596	57.06 ug/l	99
60)	1,3-Dichloropropane	12.17	76	318885	10.66 ug/l	100
61)	Tetrachloroethene	12.28	164	269419	9.66 ug/l	100
62)	Dibromochloromethane	12.65	129	198635	10.50 ug/l	100
63)	1,2-Dibromoethane	13.02	107	160251	10.65 ug/l	100
64)	1-Chlorohexane	13.28	91	586912	9.74 ug/l	100
65)	Chlorobenzene	13.76	112	807857	10.46 ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.85	131	247002	10.48 ug/l	99
67)	Ethylbenzene	13.86	91	1568373	10.28 ug/l	98
68)	m-Xylene & p-Xylene	13.99	91	2345217	19.45 ug/l	98
69)	o-Xylene	14.81	91	1178660	9.90 ug/l	100
70)	Styrene	14.88	104	889936	10.22 ug/l	100
71)	Isopropylbenzene	15.49	105	1558818	9.64 ug/l	100
73)	Bromoform	15.53	173	87239	9.55 ug/l	100
74)	trans-1,4-Dichloro-2-buten	15.61	53	49251	10.05 ug/l	92
75)	1,1,2,2-Tetrachloroethane	15.83	83	174869	10.40 ug/l	99
77)	1,2,3-Trichloropropane	16.13	110	47720	10.11 ug/l	99

(#) = qualifier out of range (m) = manual integration

Sa 10/22/24

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24J12\RJV309.D Vial: 14
Acq On : 12 Oct 2024 7:36 pm Operator: DNguye
Sample : IVO01J1201 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:14 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.27	91	1932721	10.25	ug/l	100
79)	Bromobenzene	16.35	156	280561	10.27	ug/l	100
80)	1,3,5-Trimethylbenzene	16.57	105	1185583	10.16	ug/l	100
81)	2-Chlorotoluene	16.62	91	1165470	10.17	ug/l	100
82)	4-Chlorotoluene	16.70	91	1002272	9.80	ug/l	99
83)	tert-Butylbenzene	17.27	134	262292	9.97	ug/l	98
84)	1,2,4-Trimethylbenzene	17.33	105	1177231	10.32	ug/l	99
85)	sec-Butylbenzene	17.64	105	1658995	10.10	ug/l	99
86)	p-Isopropyltoluene	17.86	119	1289914	10.06	ug/l	99
87)	1,3-Dichlorobenzene	18.01	146	551841	10.05	ug/l	100
88)	1,2,3-Trimethylbenzene	18.11	105	1061628	10.22	ug/l	100
89)	1,4-Dichlorobenzene	18.17	146	527463	9.67	ug/l	99
90)	n-Butylbenzene	18.47	91	1314457	9.37	ug/l	100
91)	1,2-Dichlorobenzene	18.70	146	447963	10.00	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.70	157	22332	9.94	ug/l	95
93)	1,2,4-Trichlorobenzene	20.79	180	294827	9.72	ug/l	98
94)	Hexachlorobutadiene	20.95	225	194057	9.98	ug/l	100
95)	Naphthalene	21.13	128	367510	9.85	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	224150	10.20	ug/l	98

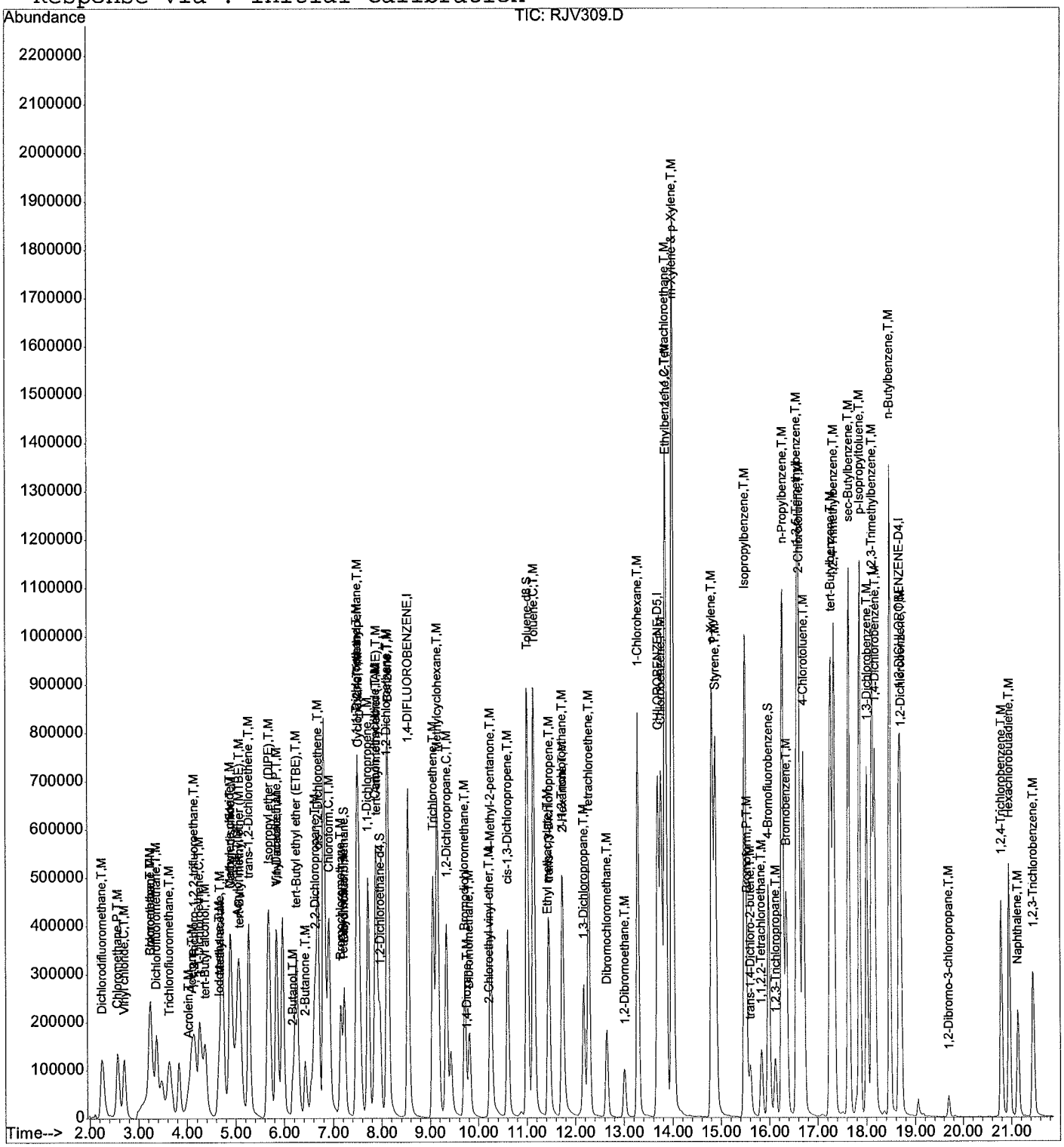
SA 10/30/24

(#) = qualifier out of range (m) = manual integration
RJV309.D VO01J12.M Thu Oct 24 09:07:41 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J12\RJV309.D Vial: 14
Acq On : 12 Oct 2024 7:36 pm Operator: DNguye
Sample : IVO01J1201 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 23 17:14 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



DAILY CALIBRATIONS

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc.
Project : VA SALT LAKE CITY
Lab Code : EMAX
SDG No : 24J055
Lab File ID: RJV427
BFB Injection Date: 10/16/24
Instrument ID: 01
BFB Injection Time: 17:46

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.009
75	30 - 60% of mass 95	47.043
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.066
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	77.531
175	5 - 9% of mass 174	5.162(6.66)1
176	95 - 101% % of mass 174	74.039(95.5)1
177	5 - 9% % of mass 176	4.694(6.34)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CVO01J1204	RJV42B	10/16/24	19:07
2	LCS1W	VO01J18L	RJV429	10/16/24	19:37
3	MBLK1W	VO01J1BB	RJV430	10/16/24	20:06
4	MW41S-GW100224	24J055-01	RJV436	10/16/24	23:04
5	MW41D-GW100224	24J055-02	RJV437	10/16/24	23:34
6	MW39D-GW100324	24J055-03	RJV441	10/17/24	01:33
7	RG01-GW100324	24J055-05	RJV442	10/17/24	02:02
8	RG02-GW100324	24J055-06	RJV443	10/17/24	02:32
9	RG03-GW100324	24J055-07	RJV444	10/17/24	03:01
10	RG04-GW100324	24J055-08	RJV445	10/17/24	03:31
11	RG05-GW100324	24J055-09	RJV446	10/17/24	04:01
12	RG09-GW100324	24J055-10	RJV447	10/17/24	04:30
13	RG0B-GW100324	24J055-11	RJV44B	10/17/24	05:00
14	LCD1W	VO01J18C	RJV449	10/17/24	05:29

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RJV302
Instrument ID: 01

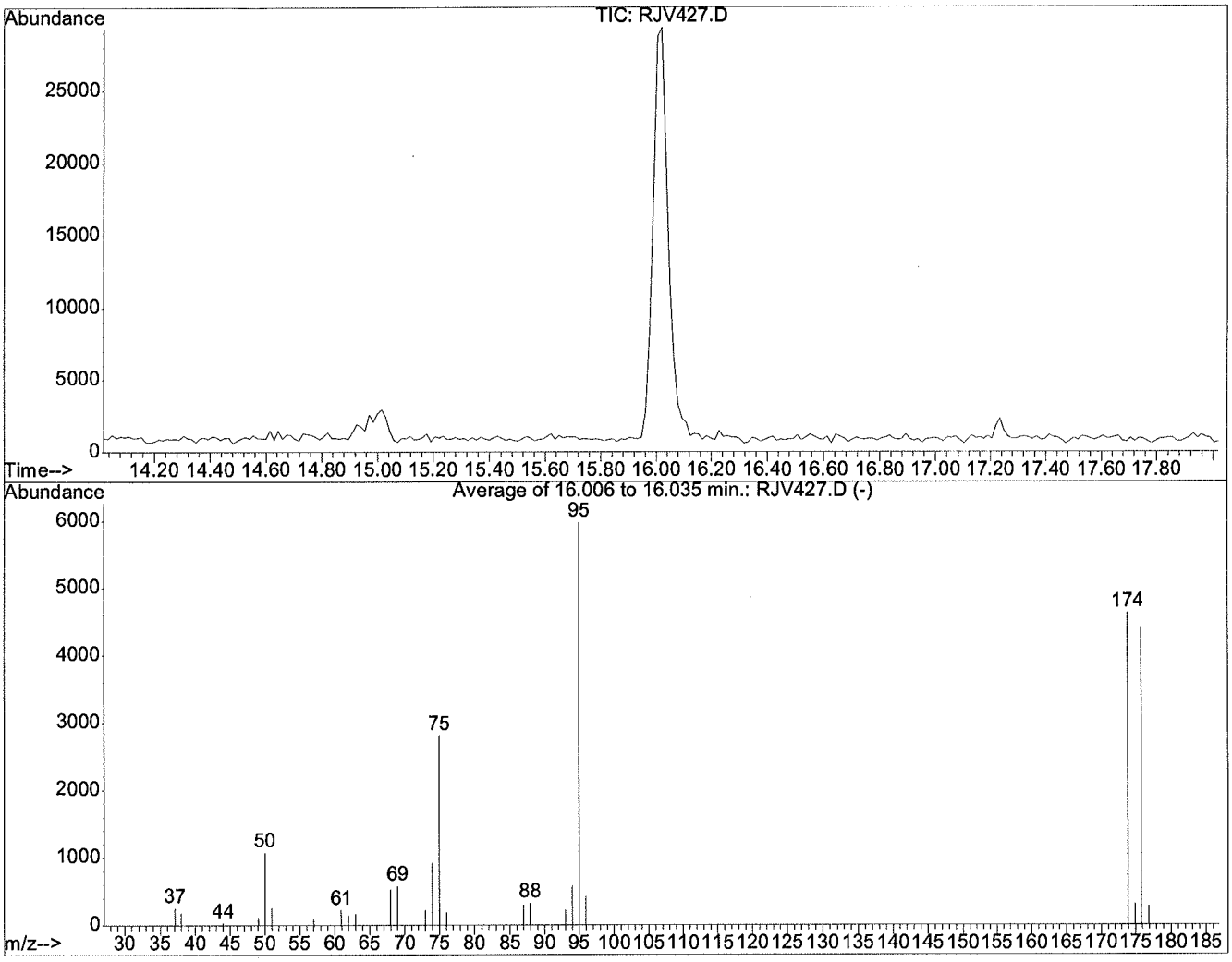
Project: VA SALT LAKE CITY
SDG No: 24J055
Date Analyzed: 10/12/24
Time Analyzed: 16:08

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	878286	8.54	685675	13.70	317109	18.67
	UPPER LIMIT	1756572	8.71	1371350	13.87	634218	18.84
	LOWER LIMIT	439143	8.37	342838	13.53	158555	18.50
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	898893	8.54	692201	13.71	307780	18.68
2	LCS1W	877825	8.56	664943	13.71	343050	18.68
3	MBLK1W	944374	8.56	726301	13.71	312798	18.68
4	MW41S-GW100224	742633	8.56	584503	13.71	250116	18.67
5	MW41D-GW100224	724309	8.56	559107	13.71	232827	18.68
6	MW39D-GW100324	707365	8.56	555663	13.71	237212	18.68
7	RG01-GW100324	709008	8.56	550713	13.71	245734	18.69
8	RG02-GW100324	708394	8.56	554372	13.71	235160	18.69
9	RG03-GW100324	694602	8.56	552129	13.71	232117	18.69
10	RG04-GW100324	705657	8.56	553088	13.71	233918	18.68
11	RG05-GW100324	673483	8.56	526196	13.71	235049	18.68
12	RG09-GW100324	675637	8.56	544438	13.71	230393	18.68
13	RG08-GW100324	658227	8.56	517171	13.71	222841	18.69
14	LCD1W	686637	8.56	551200	13.71	320184	18.68

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data File : D:\HPCHEM\1\DATA\24J16\RJV427.D
Acq On : 16 Oct 2024 5:46 pm
Sample : BFB01J18
Misc : 25mL
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye/CLi
Inst : 01
Multiplr: 1.00



AutoFind: Scans 951, 952, 953; Background Corrected with Scan 945

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	1078	PASS
75	95	30	60	47.0	2816	PASS
95	95	100	100	100.0	5986	PASS
96	95	5	9	7.1	423	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.5	4641	PASS
175	174	5	9	6.7	309	PASS
176	174	95	101	95.5	4432	PASS
177	176	5	9	6.3	281	PASS

RJV427.D VO01J12.M Wed Oct 30 16:58:18 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV428.D Vial: 2
Acq On : 16 Oct 2024 7:07 pm Operator: DNguye/CLingl
Sample : CVO01J1204 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	102	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	9.745	2.6	90	-0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	9.947	0.5	93	-0.01
6	C,T,M	Vinyl chloride	10.000	11.030	-10.3	104	0.00
7	T,M	Bromomethane	10.000	11.017	-10.2	118	-0.02
8	T,M	Chloroethane	10.000	11.180	-11.8	110	-0.02
9	T,M	Dichlorofluoromethane	10.000	11.783	-17.8	148	0.00
10	T,M	Trichlorofluoromethane	10.000	10.061	-0.6	96	0.00
11	T,M	Acrolein	50.000	58.649	-17.3	117	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	12.899	-29.0#	137	0.00
13	T,M	Acetone	50.000	54.693	-9.4	109	0.00
14	C,T,M	1,1-Dichloroethene	10.000	11.155	-11.5	120	0.00
15	T,M	tert-Butyl alcohol	250.000	276.161	-10.5	107	-0.02
16	T,M	Iodomethane	10.000	12.371	-23.7#	135	-0.02
17	T,M	Methyl acetate	10.000	10.422	-4.2	103	-0.02
18	T,M	Methylene chloride	10.000	11.026	-10.3	122	-0.02
19	T,M	Carbon disulfide	10.000	11.997	-20.0	118	0.00
20	T,M	Acrylonitrile	50.000	58.498	-17.0	113	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	11.188	-11.9	111	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	11.183	-11.8	122	-0.02
23	T,M	Isopropyl ether (DIPE)	10.000	10.848	-8.5	118	-0.02
24	T,M	Vinyl acetate	10.000	9.595	4.0	84	-0.02
25	P,T,M	1,1-Dichloroethane	10.000	11.115	-11.2	121	0.00
26	T,M	2-Butanol	250.000	286.835	-14.7	109	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.657	-6.6	111	0.00
28	T,M	2-Butanone	50.000	52.476	-5.0	102	0.00
29	T,M	2,2-Dichloropropane	10.000	11.537	-15.4	124	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	11.459	-14.6	124	0.00
31	C,T,M	Chloroform	10.000	10.804	-8.0	121	0.00
32	T,M	Bromochloromethane	10.000	10.548	-5.5	110	0.00
33	T,M	Tetrahydrofuran	10.000	9.315	6.9	98	0.00
34	S	Dibromofluoromethane	10.000	10.713	-7.1	111	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.629	-6.3	113	0.01
36	T,M	Cyclohexane	10.000	12.125	-21.3#	122	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	11.686	-16.9	120	0.00
38	T,M	1,1-Dichloropropene	10.000	11.214	-12.1	120	0.01
39	T,M	Carbon tetrachloride	10.000	10.851	-8.5	114	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.549	-5.5	112	0.00
41	S	1,2-Dichloroethane-d4	10.000	10.098	-1.0	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV428.D Vial: 2
Acq On : 16 Oct 2024 7:07 pm Operator: DNguye/CLingl
Sample : CVO01J1204 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.		%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	11.471		-14.7	126	0.00
43	T,M	1,2-Dichloroethane	10.000	10.838		-8.4	104	0.00
44	T,M	Trichloroethene	10.000	11.483		-14.8	126	0.00
45	T,M	Methylcyclohexane	10.000	11.472		-14.7	121	0.02
46	C,T,M	1,2-Dichloropropane	10.000	10.734	✓	-7.3	116	0.00
47	T,M	Bromodichloromethane	10.000	10.991		-9.9	116	0.01
48	T,M	1,4-Dioxane	200.000	222.930		-11.5	110	0.02
49	T,M	Dibromomethane	10.000	10.501		-5.0	106	0.01
50	T,M	2-Chloroethyl vinyl ether	10.000	8.071		19.3	91	0.01
51	T,M	4-Methyl-2-pentanone	50.000	54.189		-8.4	97	0.01
52	T,M	cis-1,3-Dichloropropene	10.000	11.366		-13.7	117	0.01
53	I	CHLOROBENZENE-D5	10.000	10.000		0.0	101	0.01
54	S	Toluene-d8	10.000	10.955		-9.6	113	0.00
55	C,T,M	Toluene	10.000	11.338		-13.4	120	0.00
56	T,M	Ethyl methacrylate	10.000	11.438	✓	-14.4	103	0.01
57	T,M	trans-1,3-Dichloropropene	10.000	11.481		-14.8	108	0.01
58	T,M	1,1,2-Trichloroethane	10.000	10.961		-9.6	106	0.01
59	T,M	2-Hexanone	50.000	54.012		-8.0	95	0.01
60	T,M	1,3-Dichloropropane	10.000	11.464		-14.6	114	0.01
61	T,M	Tetrachloroethene	10.000	11.144		-11.4	122	0.01
62	T,M	Dibromochloromethane	10.000	11.364		-13.6	112	0.01
63	T,M	1,2-Dibromoethane	10.000	10.945		-9.5	106	0.01
64	T,M	1-Chlorohexane	10.000	10.771		-7.7	117	0.01
65	P,M	Chlorobenzene	10.000	10.883		-8.8	117	0.01
66	T,M	1,1,1,2-Tetrachloroethane	10.000	11.887		-18.9	124	0.01
67	C,T,M	Ethylbenzene	10.000	11.261		-12.6	119	0.01
68	T,M	m-Xylene & p-Xylene	20.000	20.697	✓	-3.5	118	0.01
69	T,M	o-Xylene	10.000	10.768		-7.7	102	0.01
70	T,M	Styrene	10.000	10.738		-7.4	99	0.01
71	T,M	Isopropylbenzene	10.000	10.526		-5.3	102	0.01
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000		0.0	97	0.01
73	P,T,M	Bromoform	10.000	9.112		8.9	94	0.03
74	T,M	trans-1,4-Dichloro-2-butene	10.000	8.846		11.5	79	0.01
75	T,M	1,1,2,2-Tetrachloroethane	10.000	10.321		-3.2	91	0.01
76	S	4-Bromofluorobenzene	10.000	9.614		3.9	94	0.03
77	T,M	1,2,3-Trichloropropane	10.000	10.237		-2.4	92	0.01
78	T,M	n-Propylbenzene	10.000	10.112		-1.1	103	0.01
79	T,M	Bromobenzene	10.000	10.878		-8.8	112	0.01
80	T,M	1,3,5-Trimethylbenzene	10.000	9.923		0.8	102	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV428.D Vial: 2
Acq On : 16 Oct 2024 7:07 pm Operator: DNguye/CLingl
Sample : CVO01J1204 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	10.511	-5.1	109	0.01
82	T,M	4-Chlorotoluene	10.000	9.300	7.0	97	0.03
83	T,M	tert-Butylbenzene	10.000	10.883	-8.8	110	0.01
84	T,M	1,2,4-Trimethylbenzene	10.000	10.138	-1.4	103	0.01
85	T,M	sec-Butylbenzene	10.000	9.953	0.5	99	0.01
86	T,M	p-Isopropyltoluene	10.000	10.337	-3.4	106	0.01
87	T,M	1,3-Dichlorobenzene	10.000	10.960	-9.6	112	0.01
88	T,M	1,2,3-Trimethylbenzene	10.000	10.081	-0.8	102	0.01
89	T,M	1,4-Dichlorobenzene	10.000	10.545	-5.4	112	0.01
90	T,M	n-Butylbenzene	10.000	9.567	4.3	103	0.01
91	T,M	1,2-Dichlorobenzene	10.000	10.829	-8.3	111	0.01
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.915	-9.1	99	0.01
93	T,M	1,2,4-Trichlorobenzene	10.000	10.767	-7.7	110	0.02
94	T,M	Hexachlorobutadiene	10.000	11.335	-13.4	119	0.02
95	T,M	Naphthalene	10.000	10.695	-7.0	99	0.02
96	T,M	1,2,3-Trichlorobenzene	10.000	10.966	-9.7	107	0.02

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV428.D Vial: 2
Acq On : 16 Oct 2024 7:07 pm Operator: DNguye/CLingl
Sample : CVO01J1204 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	102	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.411	0.400	2.7	90	-0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.310	0.308	0.6	93	-0.01
6	C,T,M	Vinyl chloride	0.273	0.302	-10.6	104	0.00
7	T,M	Bromomethane	0.197	0.217	-10.2	118	-0.02
8	T,M	Chloroethane	0.207	0.232	-12.1	110	-0.02
9	T,M	Dichlorofluoromethane	0.380	0.447	-17.6	148	0.00
10	T,M	Trichlorofluoromethane	0.445	0.447	-0.4	96	0.00
11	T,M	Acrolein	0.008	0.009	-12.5	117	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.183	0.236	-29.0#	137	0.00
13	T,M	Acetone	0.037	0.040	-8.1	109	0.00
14	C,T,M	1,1-Dichloroethene	0.467	0.520	-11.3	120	0.00
15	T,M	tert-Butyl alcohol	0.009	0.010	-11.1	107	-0.02
16	T,M	Iodomethane	0.396	0.490	-23.7#	135	-0.02
17	T,M	Methyl acetate	0.095	0.099	-4.2	103	-0.02
18	T,M	Methylene chloride	0.336	0.371	-10.4	122	-0.02
19	T,M	Carbon disulfide	0.976	1.171	-20.0	118	0.00
20	T,M	Acrylonitrile	0.035	0.041	-17.1	113	0.00
21	T,M	tert-Butyl methyl ether (MT	0.462	0.517	-11.9	111	0.00
22	T,M	trans-1,2-Dichloroethene	0.448	0.501	-11.8	122	-0.02
23	T,M	Isopropyl ether (DIPE)	0.938	1.018	-8.5	118	-0.02
24	T,M	Vinyl acetate	0.300	0.288	4.0	84	-0.02
25	P,T,M	1,1-Dichloroethane	0.525	0.584	-11.2	121	0.00
26	T,M	2-Butanol	0.008	0.009	-12.5	109	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.682	0.727	-6.6	111	0.00
28	T,M	2-Butanone	0.057	0.059	-3.5	102	0.00
29	T,M	2,2-Dichloropropane	0.449	0.519	-15.6	124	0.00
30	T,M	cis-1,2-Dichloroethene	0.322	0.369	-14.6	124	0.00
31	C,T,M	Chloroform	0.535	0.579	-8.2	121	0.00
32	T,M	Bromochloromethane	0.199	0.210	-5.5	110	0.00
33	T,M	Tetrahydrofuran	0.031	0.029	6.5	98	0.00
34	S	Dibromofluoromethane	0.261	0.280	-7.3	111	0.00
35	T,M	1,1,1-Trichloroethane	0.481	0.511	-6.2	113	0.01
36	T,M	Cyclohexane	0.496	0.602	-21.4#	122	0.00
37	T,M	2,2,4-Trimethylpentane	0.024	0.028	-16.7	120	0.00
38	T,M	1,1-Dichloropropene	0.146	0.163	-11.6	120	0.01
39	T,M	Carbon tetrachloride	0.364	0.395	-8.5	114	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.524	0.553	-5.5	112	0.00
41	S	1,2-Dichloroethane-d4	0.230	0.232	-0.9	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV428.D Vial: 2
Acq On : 16 Oct 2024 7:07 pm Operator: DNguye/CLingl
Sample : CVO01J1204 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.145	1.314	-14.8	126	0.00
43	T,M	1,2-Dichloroethane	0.255	0.277	-8.6	104	0.00
44	T,M	Trichloroethene	0.303	0.348	-14.9	126	0.00
45	T,M	Methylcyclohexane	0.587	0.673	-14.7	121	0.02
46	C,T,M	1,2-Dichloropropane	0.258	0.277	-7.4	116	0.00
47	T,M	Bromodichloromethane	0.353	0.388	-9.9	116	0.01
48	T,M	1,4-Dioxane	0.001	0.001	0.0	110	0.02
49	T,M	Dibromomethane	0.112	0.118	-5.4	106	0.01
50	T,M	2-Chloroethyl vinyl ether	0.016	0.015	6.3	91	0.01
51	T,M	4-Methyl-2-pentanone	0.127	0.137	-7.9	97	0.01
52	T,M	cis-1,3-Dichloropropene	0.386	0.439	-13.7	117	0.01
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	101	0.01
54	S	Toluene-d8	1.375	1.506	-9.5	113	0.00
55	C,T,M	Toluene	1.585	1.797	-13.4	120	0.00
56	T,M	Ethyl methacrylate	0.227	0.260	-14.5	103	0.01
57	T,M	trans-1,3-Dichloropropene	0.359	0.412	-14.8	108	0.01
58	T,M	1,1,2-Trichloroethane	0.195	0.214	-9.7	106	0.01
59	T,M	2-Hexanone	0.104	0.112	-7.7	95	0.01
60	T,M	1,3-Dichloropropane	0.368	0.421	-14.4	114	0.01
61	T,M	Tetrachloroethene	0.343	0.382	-11.4	122	0.01
62	T,M	Dibromochloromethane	0.232	0.264	-13.8	112	0.01
63	T,M	1,2-Dibromoethane	0.185	0.202	-9.2	106	0.01
64	T,M	1-Chlorohexane	0.740	0.798	-7.8	117	0.01
65	P,M	Chlorobenzene	0.949	1.033	-8.9	117	0.01
66	T,M	1,1,1,2-Tetrachloroethane	0.290	0.344	-18.6	124	0.01
67	C,T,M	Ethylbenzene	1.875	2.112	-12.6	119	0.01
68	T,M	m-Xylene & p-Xylene	1.481	1.533	-3.5	118	0.01
69	T,M	o-Xylene	1.463	1.575	-7.7	102	0.01
70	T,M	Styrene	1.070	1.149	-7.4	99	0.01
71	T,M	Isopropylbenzene	1.986	2.090	-5.2	102	0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	97	0.01
73	P,T,M	Bromoform	0.246	0.261	-6.1	94	0.03
74	T,M	trans-1,4-Dichloro-2-butene	0.154	0.136	11.7	79	0.01
75	T,M	1,1,2,2-Tetrachloroethane	0.528	0.545	-3.2	91	0.01
76	S	4-Bromofluorobenzene	1.184	1.138	3.9	94	0.03
77	T,M	1,2,3-Trichloropropane	0.148	0.152	-2.7	92	0.01
78	T,M	n-Propylbenzene	5.921	5.988	-1.1	103	0.01
79	T,M	Bromobenzene	0.858	0.933	-8.7	112	0.01
80	T,M	1,3,5-Trimethylbenzene	3.663	3.635	0.8	102	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV428.D Vial: 2
Acq On : 16 Oct 2024 7:07 pm Operator: DNguye/CLingl
Sample : CVO01J1204 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	3.598	3.782	-5.1	109	0.01
82	T,M	4-Chlorotoluene	3.211	2.986	7.0	97	0.03
83	T,M	tert-Butylbenzene	0.826	0.899	-8.8	110	0.01
84	T,M	1,2,4-Trimethylbenzene	3.583	3.632	-1.4	103	0.01
85	T,M	sec-Butylbenzene	5.158	5.134	0.5	99	0.01
86	T,M	p-Isopropyltoluene	4.024	4.160	-3.4	106	0.01
87	T,M	1,3-Dichlorobenzene	1.724	1.890	-9.6	112	0.01
88	T,M	1,2,3-Trimethylbenzene	3.261	3.288	-0.8	102	0.01
89	T,M	1,4-Dichlorobenzene	1.713	1.807	-5.5	112	0.01
90	T,M	n-Butylbenzene	4.403	4.213	4.3	103	0.01
91	T,M	1,2-Dichlorobenzene	1.406	1.523	-8.3	111	0.01
92	T,M	1,2-Dibromo-3-chloropropane	0.071	0.077	-8.5	99	0.01
93	T,M	1,2,4-Trichlorobenzene	0.952	1.025	-7.7	110	0.02
94	T,M	Hexachlorobutadiene	0.610	0.692	-13.4	119	0.02
95	T,M	Naphthalene	1.172	1.254	-7.0	99	0.02
96	T,M	1,2,3-Trichlorobenzene	0.690	0.757	-9.7	107	0.02

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV428.D Vial: 2
Acq On : 16 Oct 2024 7:07 pm Operator: DNguye/CLingl
Sample : CVO01J1204 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:22 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	898893	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	692201	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.68	152	307780	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.22	111	251544	10.71	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.10%		
41) 1,2-Dichloroethane-d4	7.96	65	208852	10.10	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.00%		
54) Toluene-d8	11.02	98	1042786	10.95	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.50%		
76) 4-Bromofluorobenzene	16.00	95	350340	9.61	ug/l	0.03
Spiked Amount 10.000			Recovery =	96.10%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	359781	9.74	ug/l	99
5) Chloromethane	2.55	50	277182	9.95	ug/l	100
6) Vinyl chloride	2.70	62	271037	11.03	ug/l	99
7) Bromomethane	3.23	94	195226	11.02	ug/l	93
8) Chloroethane	3.23	64	208248	11.18	ug/l	97
9) Dichlorofluoromethane	3.36	67	402067	11.78	ug/l	99
10) Trichlorofluoromethane	3.63	101	402218	10.06	ug/l	98
11) Acrolein	4.01	56	40305	58.65	ug/l	64
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	212318	12.90	ug/l	98
13) Acetone	4.09	43	181541	54.69	ug/l	92
14) 1,1-Dichloroethene	4.25	61	467833	11.16	ug/l	78
15) tert-Butyl alcohol	4.35	59	229334	276.16	ug/l	96
16) Iodomethane	4.65	142	440758	12.37	ug/l	94
17) Methyl acetate	4.66	43	89230	10.42	ug/l	92
18) Methylene chloride	4.87	49	333318	11.03	ug/l	94
19) Carbon disulfide	4.90	76	1052326	12.00	ug/l	100
20) Acrylonitrile	5.05	53	182397	58.50	ug/l	98
21) tert-Butyl methyl ether (M	5.08	73	464658	11.19	ug/l	96
22) trans-1,2-Dichloroethene	5.26	61	450417	11.18	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	914904	10.85	ug/l	96
24) Vinyl acetate	5.83	43	258927	9.59	ug/l	95
25) 1,1-Dichloroethane	5.83	63	524979	11.12	ug/l	100
26) 2-Butanol	6.17	45	199594	286.83	ug/l	96
27) tert-Butyl ethyl ether (ET	6.25	59	653394	10.66	ug/l	96
28) 2-Butanone	6.43	43	267096	52.48	ug/l	94
29) 2,2-Dichloropropane	6.63	77	466126	11.54	ug/l	99
30) cis-1,2-Dichloroethene	6.69	96	331466	11.46	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J16\RJV428.D Vial: 2
Acq On : 16 Oct 2024 7:07 pm Operator: DNguye/CLingl
Sample : CVO01J1204 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:22 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
31)	Chloroform	6.91	83	520043	10.80	ug/l		98
32)	Bromochloromethane	7.15	49	188804	10.55	ug/l		92
33)	Tetrahydrofuran	7.21	42	26347	9.31	ug/l		92
35)	1,1,1-Trichloroethane	7.51	97	459432	10.63	ug/l		99
36)	Cyclohexane	7.52	84	540775	12.13	ug/l		98
37)	2,2,4-Trimethylpentane	7.52	57	25217	11.69	ug/l	#	100
38)	1,1-Dichloropropene	7.73	110	146772	11.21	ug/l		99
39)	Carbon tetrachloride	7.88	119	355154	10.85	ug/l		100
40)	tert-Amyl methyl ether (TA	7.89	73	497123	10.55	ug/l		99
42)	Benzene	8.13	78	1180715	11.47	ug/l		98
43)	1,2-Dichloroethane	8.10	62	248637	10.84	ug/l		99
44)	Trichloroethene	9.06	130	312575	11.48	ug/l		95
45)	Methylcyclohexane	9.17	83	605122	11.47	ug/l		96
46)	1,2-Dichloropropane	9.34	63	248621	10.73	ug/l		100
47)	Bromodichloromethane	9.73	83	348416	10.99	ug/l		99
48)	1,4-Dioxane	9.77	88	19740	222.93	ug/l		98
49)	Dibromomethane	9.82	93	105651	10.50	ug/l		97
50)	2-Chloroethyl vinyl ether	10.23	63	13624	8.07	ug/l		95
51)	4-Methyl-2-pentanone	10.26	43	616729	54.19	ug/l		96
52)	cis-1,3-Dichloropropene	10.62	75	394739	11.37	ug/l		99
55)	Toluene	11.15	91	1243767	11.34	ug/l		99
56)	Ethyl methacrylate	11.45	69	179729	11.44	ug/l		94
57)	trans-1,3-Dichloropropene	11.48	75	285269	11.48	ug/l		100
58)	1,1,2-Trichloroethane	11.74	97	148030	10.96	ug/l		96
59)	2-Hexanone	11.76	43	387714	54.01	ug/l		92
60)	1,3-Dichloropropane	12.19	76	291647	11.46	ug/l		100
61)	Tetrachloroethene	12.29	164	264203	11.14	ug/l		99
62)	Dibromochloromethane	12.66	129	182834	11.36	ug/l		99
63)	1,2-Dibromoethane	13.03	107	140072	10.95	ug/l		99
64)	1-Chlorohexane	13.30	91	552083	10.77	ug/l		97
65)	Chlorobenzene	13.78	112	714825	10.88	ug/l		100
66)	1,1,1,2-Tetrachloroethane	13.86	131	238381	11.89	ug/l		99
67)	Ethylbenzene	13.87	91	1461693	11.26	ug/l		99
68)	m-Xylene & p-Xylene	14.01	91	2121929	20.70	ug/l		100
69)	o-Xylene	14.84	91	1090325	10.77	ug/l		99
70)	Styrene	14.89	104	795284	10.74	ug/l		98
71)	Isopropylbenzene	15.52	105	1446825	10.53	ug/l		99
73)	Bromoform	15.56	173	80374	9.11	ug/l		97
74)	trans-1,4-Dichloro-2-buten	15.62	53	41887	8.85	ug/l		89
75)	1,1,2,2-Tetrachloroethane	15.86	83	167665	10.32	ug/l		98
77)	1,2,3-Trichloropropane	16.14	110	46684	10.24	ug/l		93

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24J16\RJV428.D Vial: 2
Acq On : 16 Oct 2024 7:07 pm Operator: DNguye/CLingl
Sample : CVO01J1204 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:22 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

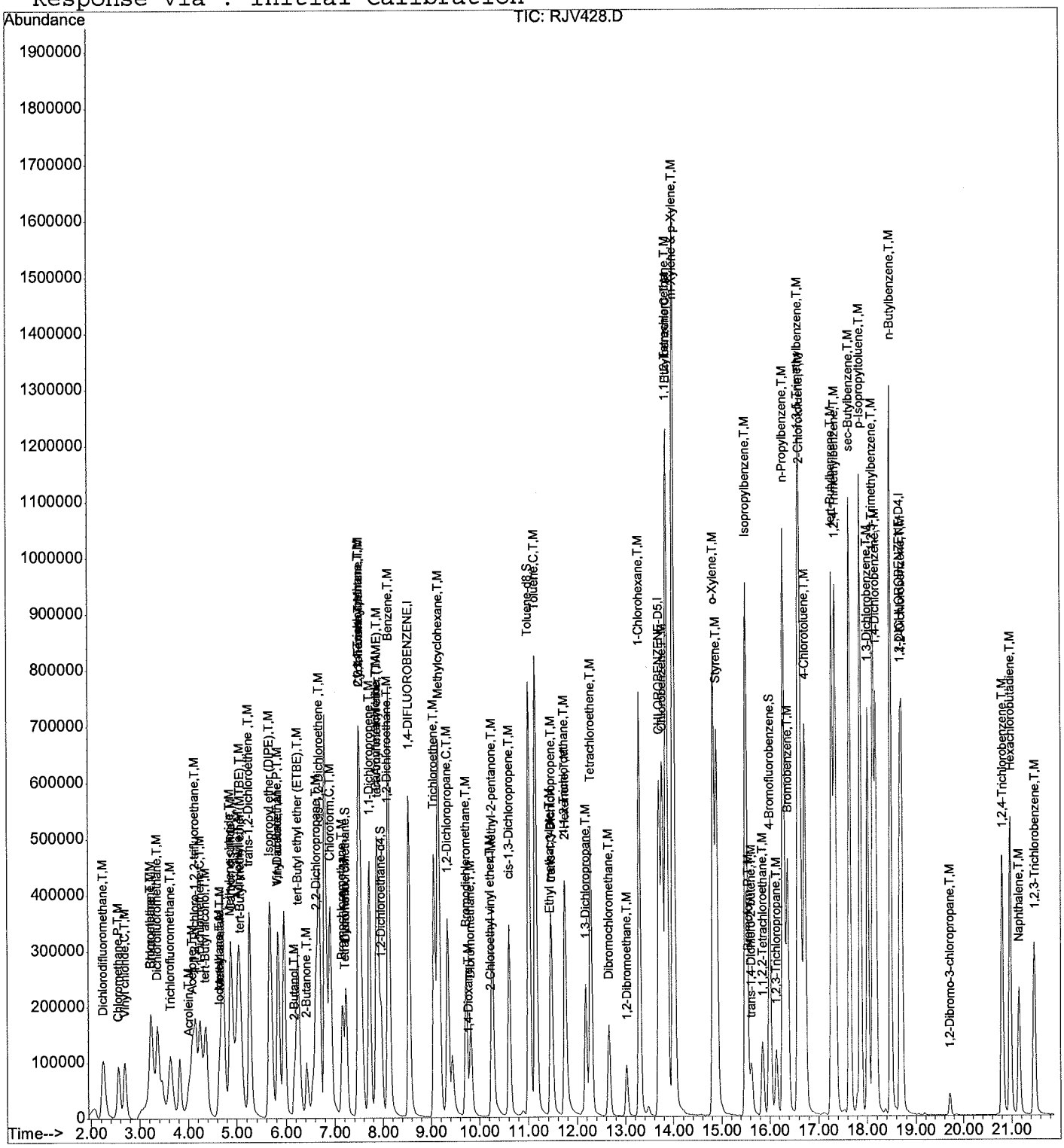
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	n-Propylbenzene	16.29	91	1842981	10.11	ug/l	99
79)	Bromobenzene	16.37	156	287163	10.88	ug/l	100
80)	1,3,5-Trimethylbenzene	16.60	105	1118781	9.92	ug/l	98
81)	2-Chlorotoluene	16.63	91	1164152	10.51	ug/l	96
82)	4-Chlorotoluene	16.73	91	919103	9.30	ug/l	96
83)	tert-Butylbenzene	17.28	134	276568	10.88	ug/l	95
84)	1,2,4-Trimethylbenzene	17.35	105	1117930	10.14	ug/l	99
85)	sec-Butylbenzene	17.65	105	1580197	9.95	ug/l	97
86)	p-Isopropyltoluene	17.87	119	1280380	10.34	ug/l	98
87)	1,3-Dichlorobenzene	18.02	146	581575	10.96	ug/l	98
88)	1,2,3-Trimethylbenzene	18.12	105	1011895	10.08	ug/l	99
89)	1,4-Dichlorobenzene	18.18	146	556039	10.54	ug/l	97
90)	n-Butylbenzene	18.49	91	1296534	9.57	ug/l	98
91)	1,2-Dichlorobenzene	18.71	146	468705	10.83	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	23692	10.92	ug/l	98
93)	1,2,4-Trichlorobenzene	20.82	180	315499	10.77	ug/l	99
94)	Hexachlorobutadiene	20.98	225	212888	11.33	ug/l	100
95)	Naphthalene	21.16	128	385804	10.70	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	232905	10.97	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J16\RJV428.D Vial: 2
Acq On : 16 Oct 2024 7:07 pm Operator: DNguye/CLing
Sample : CVO01J1204 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:22 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc.

Project : VA SALT LAKE CITY

Lab Code : EMAX
SDG No : 24J055

Lab File ID: RJV454
BFB Injection Date: 10/17/24

Instrument ID: 01
BFB Injection Time: 10:50

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.905
75	30 - 60% of mass 95	43.260
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.756
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	77.140
175	5 - 9% of mass 174	6.812(8.83)1
176	95 - 101% % of mass 174	76.539(99.22)1
177	5 - 9% % of mass 176	5.829(7.62)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, Lab QCs and Standards:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD10	CV001J1205	RJV455	10/17/24	12:06
2	LCS2W	V001J19L	RJV456	10/17/24	12:36
3	LCD2W	V001J19C	RJV457	10/17/24	13:06
4	MBLK2W	V001J19B	RJV459	10/17/24	14:06
5	TB07-GW100324	24J055-04	RJV460	10/17/24	14:36
6	RG07-GW100324	24J055-12	RJV461	10/17/24	15:06
7	RG06-GW100324	24J055-13	RJV462	10/17/24	15:36
8	RG10-GW100324	24J055-14	RJV463	10/17/24	16:06
9	RG11-GW100324	24J055-15	RJV464	10/17/24	16:36
10	FD09-GW100324	24J055-16	RJV465	10/17/24	17:06
11	MW39S-GW100324	24J055-17	RJV466	10/17/24	17:36

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RJV302
Instrument ID: 01

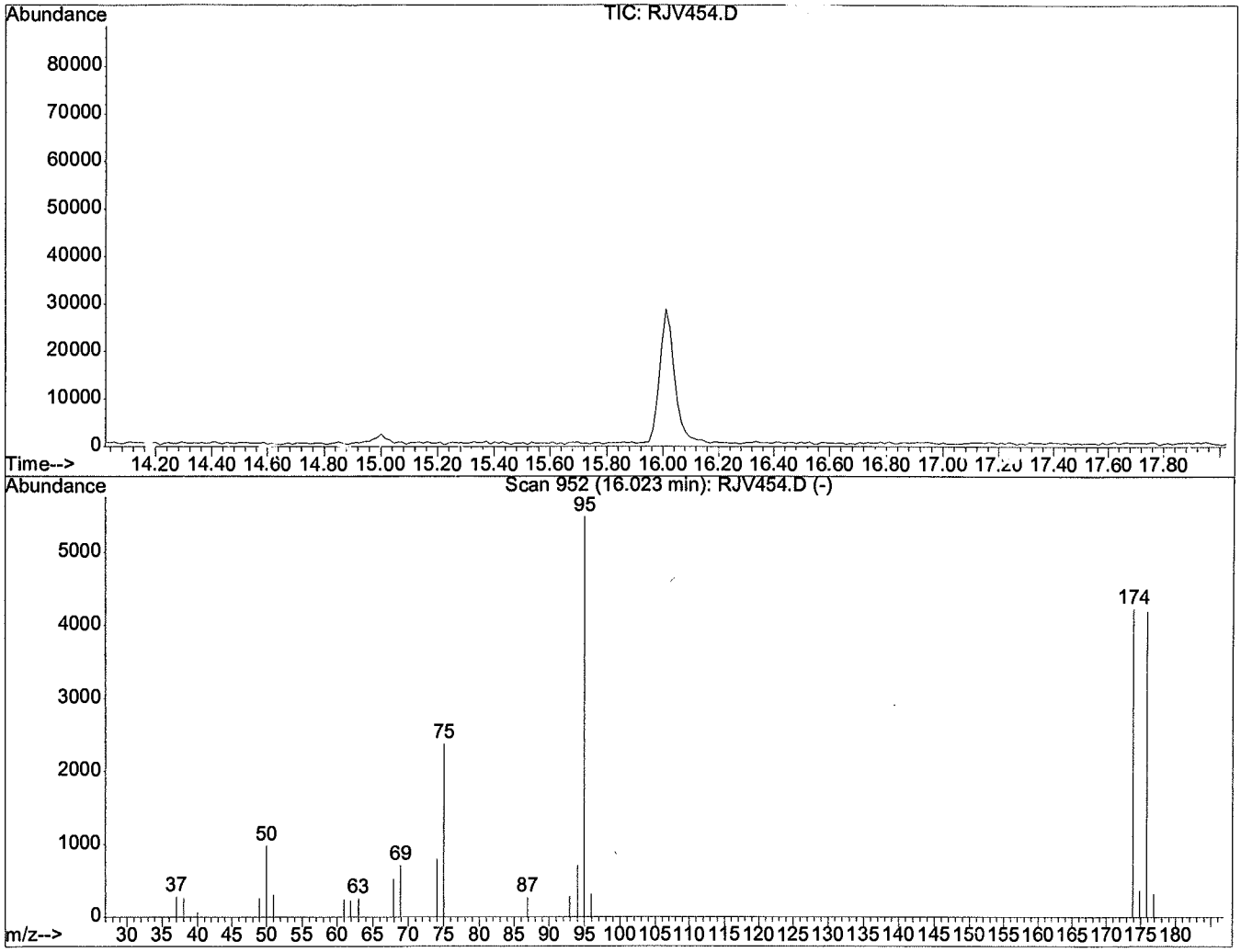
Project: VA SALT LAKE CITY
SDG No: 24J055
Date Analyzed: 10/12/24
Time Analyzed: 16:08

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	878286	8.54	685675	13.70	317109	18.67
	UPPER LIMIT	1756572	8.71	1371350	13.87	634218	18.84
	LOWER LIMIT	439143	8.37	342838	13.53	158555	18.50
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	967368	8.55	745704	13.71	308437	18.67
2	LCS2W	867364	8.56	688415	13.71	330750	18.67
3	LCD2W	938401	8.56	718004	13.71	336232	18.67
4	MBLK2W	962529	8.56	731483	13.71	276304	18.69
5	TB07-GW100324	910081	8.56	683131	13.71	264370	18.69
6	RG07-GW100324	880535	8.56	670803	13.71	256607	18.69
7	RG06-GW100324	846635	8.56	650842	13.71	254988	18.69
8	RG10-GW100324	731053	8.56	555344	13.71	216312	18.69
9	RG11-GW100324	844289	8.57	645069	13.73	245845	18.69
10	FD09-GW100324	803980	8.57	621191	13.71	248134	18.69
11	MW39S-GW100324	796961	8.56	620994	13.71	241934	18.69

Area Upper Limit = +100% of ICAL Midpoint IS Area
Area Lower Limit = -50% of ICAL Midpoint IS Area
Retention Time(RT) Upper Limit = +10 seconds of ICAL Midpoint IS RT
Retention Time(RT) Lower Limit = -10 seconds of ICAL Midpoint IS RT

Data File : D:\HPCHEM\1\DATA\24J17\RJV454.D
Acq On : 17 Oct 2024 10:50 am
Sample : BFB01J19
Misc : 25mL
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye/CLi
Inst : 01
Multiplr: 1.00



Spectrum Information: Scan 952 - scan 944 CL 10/30/24

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.9	983	PASS
75	95	30	60	43.3	2375	PASS
95	95	100	100	100.0	5490	PASS
96	95	5	9	5.8	316	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.1	4235	PASS
175	174	5	9	8.8	374	PASS
176	174	95	101	99.2	4202	PASS
177	176	5	9	7.6	320	PASS

RJV454.D VO01J12.M Wed Oct 30 17:31:34 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV455.D Vial: 2
Acq On : 17 Oct 2024 12:06 pm Operator: DNguye/CLingl
Sample : CVO01J1205 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	10.000	10.000	0.0	110	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	8.574	14.3	85	-0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	-1.000	0.000	0.0	0	-2.53#
5	P,T,M	Chloromethane	10.000	10.865	-8.7	109	-0.01
6	C,T,M	Vinyl chloride	10.000	10.996	-10.0	112	-0.01
7	T,M	Bromomethane	10.000	10.763	-7.6	125	0.00
8	T,M	Chloroethane	10.000	10.963	-9.6	116	0.04
9	T,M	Dichlorofluoromethane	10.000	11.503	-15.0	155	0.01
10	T,M	Trichlorofluoromethane	10.000	8.762	12.4	90	0.00
11	T,M	Acrolein	50.000	67.149	-34.3#	144	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.601	-6.0	121	0.00
13	T,M	Acetone	50.000	58.270	-16.5	125	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.494	-4.9	122	0.00
15	T,M	tert-Butyl alcohol	250.000	269.915	-8.0	113	0.00
16	T,M	Iodomethane	10.000	11.242	-12.4	132	0.00
17	T,M	Methyl acetate	10.000	10.806	-8.1	115	0.00
18	T,M	Methylene chloride	10.000	11.373	-13.7	135	-0.02
19	T,M	Carbon disulfide	10.000	11.257	-12.6	119	0.00
20	T,M	Acrylonitrile	50.000	62.495	-25.0#	130	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.766	-7.7	115	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.841	-8.4	127	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	11.327	-13.3	132	-0.02
24	T,M	Vinyl acetate	10.000	10.010	-0.1	95	-0.02
25	P,T,M	1,1-Dichloroethane	10.000	11.137	-11.4	131	0.00
26	T,M	2-Butanol	250.000	307.336	-22.9#	125	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.836	-8.4	122	0.00
28	T,M	2-Butanone	50.000	56.703	-13.4	119	0.00
29	T,M	2,2-Dichloropropane	10.000	10.876	-8.8	126	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	11.193	-11.9	131	0.00
31	C,T,M	Chloroform	10.000	10.425	-4.3	126	0.00
32	T,M	Bromochloromethane	10.000	11.376	-13.8	127	0.00
33	T,M	Tetrahydrofuran	10.000	9.353	6.5	106	0.00
34	S	Dibromofluoromethane	10.000	10.760	-7.6	120	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.125	-1.3	116	0.01
36	T,M	Cyclohexane	10.000	11.269	-12.7	122	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	11.535	-15.4	128	0.00
38	T,M	1,1-Dichloropropene	10.000	10.820	-8.2	125	0.01
39	T,M	Carbon tetrachloride	10.000	9.961	0.4	112	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.433	-4.3	119	0.00
41	S	1,2-Dichloroethane-d4	10.000	9.666	3.3	103	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV455.D
Acq On : 17 Oct 2024 12:06 pm
Sample : CVO01J1205
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: DNguye/CLingl
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
42	T,M	Benzene	10.000	10.923	-9.2	130	0.00
43	T,M	1,2-Dichloroethane	10.000	10.387	-3.9	108	0.01
44	T,M	Trichloroethene	10.000	10.529	-5.3	124	0.00
45	T,M	Methylcyclohexane	10.000	10.580	-5.8	120	0.00
46	C,T,M	1,2-Dichloropropane	10.000	10.960	-9.6	128	0.00
47	T,M	Bromodichloromethane	10.000	10.241	-2.4	116	0.02
48	T,M	1,4-Dioxane	200.000	208.640	-4.3	111	0.02
49	T,M	Dibromomethane	10.000	10.274	-2.7	112	0.02
50	T,M	2-Chloroethyl vinyl ether	10.000	9.736	2.6	121	0.02
51	T,M	4-Methyl-2-pentanone	50.000	58.300	-16.6	112	0.02
52	T,M	cis-1,3-Dichloropropene	10.000	11.035	-10.4	122	0.02
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	109	0.02
54	S	Toluene-d8	10.000	10.903	-9.0	122	0.00
55	C,T,M	Toluene	10.000	11.178	-11.8	128	0.00
56	T,M	Ethyl methacrylate	10.000	11.297	-13.0	110	0.02
57	T,M	trans-1,3-Dichloropropene	10.000	11.176	-11.8	114	0.02
58	T,M	1,1,2-Trichloroethane	10.000	11.102	-11.0	116	0.02
59	T,M	2-Hexanone	50.000	58.373	-16.7	111	0.02
60	T,M	1,3-Dichloropropane	10.000	10.865	-8.7	116	0.02
61	T,M	Tetrachloroethene	10.000	10.374	-3.7	123	0.02
62	T,M	Dibromochloromethane	10.000	10.779	-7.8	114	0.02
63	T,M	1,2-Dibromoethane	10.000	10.879	-8.8	113	0.02
64	T,M	1-Chlorohexane	10.000	10.092	-0.9	118	0.02
65	P,M	Chlorobenzene	10.000	10.876	-8.8	126	0.00
66	T,M	1,1,1,2-Tetrachloroethane	10.000	11.114	-11.1	125	0.02
67	C,T,M	Ethylbenzene	10.000	10.922	-9.2	124	0.02
68	T,M	m-Xylene & p-Xylene	20.000	20.360	-1.8	125	0.02
69	T,M	o-Xylene	10.000	10.543	-5.4	107	0.00
70	T,M	Styrene	10.000	10.790	-7.9	107	0.02
71	T,M	Isopropylbenzene	10.000	10.344	-3.4	108	0.02
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	97	0.00
73	P,T,M	Bromoform	10.000	9.258	7.4	96	0.02
74	T,M	trans-1,4-Dichloro-2-butene	10.000	9.703	3.0	87	0.02
75	T,M	1,1,2,2-Tetrachloroethane	10.000	10.762	-7.6	95	0.00
76	S	4-Bromofluorobenzene	10.000	10.299	-3.0	101	0.02
77	T,M	1,2,3-Trichloropropane	10.000	10.737	-7.4	97	0.02
78	T,M	n-Propylbenzene	10.000	10.386	-3.9	106	0.02
79	T,M	Bromobenzene	10.000	10.406	-4.1	107	0.02
80	T,M	1,3,5-Trimethylbenzene	10.000	10.353	-3.5	107	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV455.D Vial: 2
Acq On : 17 Oct 2024 12:06 pm Operator: DNguye/CLingl
Sample : CVO01J1205 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	10.000	10.316	-3.2	108	0.02
82	T,M	4-Chlorotoluene	10.000	10.299	-3.0	108	0.02
83	T,M	tert-Butylbenzene	10.000	10.512	-5.1	107	0.02
84	T,M	1,2,4-Trimethylbenzene	10.000	10.683	-6.8	109	0.00
85	T,M	sec-Butylbenzene	10.000	10.372	-3.7	104	0.02
86	T,M	p-Isopropyltoluene	10.000	10.657	-6.6	109	0.02
87	T,M	1,3-Dichlorobenzene	10.000	10.990	-9.9	113	0.02
88	T,M	1,2,3-Trimethylbenzene	10.000	10.673	-6.7	109	0.02
89	T,M	1,4-Dichlorobenzene	10.000	10.587	-5.9	113	0.02
90	T,M	n-Butylbenzene	10.000	10.086	-0.9	108	0.00
91	T,M	1,2-Dichlorobenzene	10.000	10.796	-8.0	111	0.02
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.099	-1.0	92	0.02
93	T,M	1,2,4-Trichlorobenzene	10.000	11.154	-11.5	115	0.02
94	T,M	Hexachlorobutadiene	10.000	10.861	-8.6	114	0.02
95	T,M	Naphthalene	10.000	10.963	-9.6	101	0.02
96	T,M	1,2,3-Trichlorobenzene	10.000	11.739	-17.4	115	0.02

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV455.D Vial: 2
Acq On : 17 Oct 2024 12:06 pm Operator: DNguye/CLingl
Sample : CVO01J1205 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	110	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.411	0.352	14.4	85	-0.01
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.310	0.337	-8.7	109	-0.01
6	C,T,M	Vinyl chloride	0.273	0.301	-10.3	112	-0.01
7	T,M	Bromomethane	0.197	0.212	-7.6	125	0.00
8	T,M	Chloroethane	0.207	0.227	-9.7	116	0.04
9	T,M	Dichlorofluoromethane	0.380	0.437	-15.0	155	0.01
10	T,M	Trichlorofluoromethane	0.445	0.390	12.4	90	0.00
11	T,M	Acrolein	0.008	0.010	-25.0#	144	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.183	0.194	-6.0	121	0.00
13	T,M	Acetone	0.037	0.043	-16.2	125	0.00
14	C,T,M	1,1-Dichloroethene	0.467	0.490	-4.9	122	0.00
15	T,M	tert-Butyl alcohol	0.009	0.010	-11.1	113	0.00
16	T,M	Iodomethane	0.396	0.446	-12.6	132	0.00
17	T,M	Methyl acetate	0.095	0.103	-8.4	115	0.00
18	T,M	Methylene chloride	0.336	0.382	-13.7	135	-0.02
19	T,M	Carbon disulfide	0.976	1.098	-12.5	119	0.00
20	T,M	Acrylonitrile	0.035	0.043	-22.9#	130	0.00
21	T,M	tert-Butyl methyl ether (MT	0.462	0.497	-7.6	115	0.00
22	T,M	trans-1,2-Dichloroethene	0.448	0.486	-8.5	127	0.00
23	T,M	Isopropyl ether (DIPE)	0.938	1.063	-13.3	132	-0.02
24	T,M	Vinyl acetate	0.300	0.301	-0.3	95	-0.02
25	P,T,M	1,1-Dichloroethane	0.525	0.585	-11.4	131	0.00
26	T,M	2-Butanol	0.008	0.010	-25.0#	125	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.682	0.739	-8.4	122	0.00
28	T,M	2-Butanone	0.057	0.064	-12.3	119	0.00
29	T,M	2,2-Dichloropropane	0.449	0.489	-8.9	126	0.00
30	T,M	cis-1,2-Dichloroethene	0.322	0.360	-11.8	131	0.00
31	C,T,M	Chloroform	0.535	0.558	-4.3	126	0.00
32	T,M	Bromochloromethane	0.199	0.227	-14.1	127	0.00
33	T,M	Tetrahydrofuran	0.031	0.029	6.5	106	0.00
34	S	Dibromofluoromethane	0.261	0.281	-7.7	120	0.00
35	T,M	1,1,1-Trichloroethane	0.481	0.487	-1.2	116	0.01
36	T,M	Cyclohexane	0.496	0.559	-12.7	122	0.00
37	T,M	2,2,4-Trimethylpentane	0.024	0.028	-16.7	128	0.00
38	T,M	1,1-Dichloropropene	0.146	0.158	-8.2	125	0.01
39	T,M	Carbon tetrachloride	0.364	0.363	0.3	112	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.524	0.547	-4.4	119	0.00
41	S	1,2-Dichloroethane-d4	0.230	0.222	3.5	103	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV455.D Vial: 2
Acq On : 17 Oct 2024 12:06 pm Operator: DNguye/CLingl
Sample : CVO01J1205 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42	T,M	Benzene	1.145	1.251	-9.3	130	0.00
43	T,M	1,2-Dichloroethane	0.255	0.265	-3.9	108	0.01
44	T,M	Trichloroethene	0.303	0.319	-5.3	124	0.00
45	T,M	Methylcyclohexane	0.587	0.621	-5.8	120	0.00
46	C,T,M	1,2-Dichloropropane	0.258	0.282	-9.3	128	0.00
47	T,M	Bromodichloromethane	0.353	0.361	-2.3	116	0.02
48	T,M	1,4-Dioxane	0.001	0.001	0.0	111	0.02
49	T,M	Dibromomethane	0.112	0.115	-2.7	112	0.02
50	T,M	2-Chloroethyl vinyl ether	0.016	0.019	-18.7	121	0.02
51	T,M	4-Methyl-2-pentanone	0.127	0.148	-16.5	112	0.02
52	T,M	cis-1,3-Dichloropropene	0.386	0.426	-10.4	122	0.02
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	109	0.02
54	S	Toluene-d8	1.375	1.499	-9.0	122	0.00
55	C,T,M	Toluene	1.585	1.772	-11.8	128	0.00
56	T,M	Ethyl methacrylate	0.227	0.256	-12.8	110	0.02
57	T,M	trans-1,3-Dichloropropene	0.359	0.401	-11.7	114	0.02
58	T,M	1,1,2-Trichloroethane	0.195	0.217	-11.3	116	0.02
59	T,M	2-Hexanone	0.104	0.121	-16.3	111	0.02
60	T,M	1,3-Dichloropropane	0.368	0.399	-8.4	116	0.02
61	T,M	Tetrachloroethene	0.343	0.355	-3.5	123	0.02
62	T,M	Dibromochloromethane	0.232	0.251	-8.2	114	0.02
63	T,M	1,2-Dibromoethane	0.185	0.201	-8.6	113	0.02
64	T,M	1-Chlorohexane	0.740	0.747	-0.9	118	0.02
65	P,M	Chlorobenzene	0.949	1.032	-8.7	126	0.00
66	T,M	1,1,1,2-Tetrachloroethane	0.290	0.322	-11.0	125	0.02
67	C,T,M	Ethylbenzene	1.875	2.048	-9.2	124	0.02
68	T,M	m-Xylene & p-Xylene	1.481	1.508	-1.8	125	0.02
69	T,M	o-Xylene	1.463	1.542	-5.4	107	0.00
70	T,M	Styrene	1.070	1.154	-7.9	107	0.02
71	T,M	Isopropylbenzene	1.986	2.054	-3.4	108	0.02
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	97	0.00
73	P,T,M	Bromoform	0.246	0.265	-7.7	96	0.02
74	T,M	trans-1,4-Dichloro-2-butene	0.154	0.149	3.2	87	0.02
75	T,M	1,1,2,2-Tetrachloroethane	0.528	0.568	-7.6	95	0.00
76	S	4-Bromofluorobenzene	1.184	1.219	-3.0	101	0.02
77	T,M	1,2,3-Trichloropropane	0.148	0.159	-7.4	97	0.02
78	T,M	n-Propylbenzene	5.921	6.150	-3.9	106	0.02
79	T,M	Bromobenzene	0.858	0.893	-4.1	107	0.02
80	T,M	1,3,5-Trimethylbenzene	3.663	3.792	-3.5	107	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV455.D Vial: 2
Acq On : 17 Oct 2024 12:06 pm Operator: DNguye/CLingl
Sample : CVO01J1205 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.16min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	T,M	2-Chlorotoluene	3.598	3.712	-3.2	108	0.02
82	T,M	4-Chlorotoluene	3.211	3.307	-3.0	108	0.02
83	T,M	tert-Butylbenzene	0.826	0.868	-5.1	107	0.02
84	T,M	1,2,4-Trimethylbenzene	3.583	3.827	-6.8	109	0.00
85	T,M	sec-Butylbenzene	5.158	5.350	-3.7	104	0.02
86	T,M	p-Isopropyltoluene	4.024	4.289	-6.6	109	0.02
87	T M	1,3-Dichlorobenzene	1.724	1.895	-9.9	113	0.02
88	T,M	1,2,3-Trimethylbenzene	3.261	3.481	-6.7	109	0.02
89	T,M	1,4-Dichlorobenzene	1.713	1.814	-5.9	113	0.02
90	T,M	n-Butylbenzene	4.403	4.441	-0.9	108	0.00
91	T,M	1,2-Dichlorobenzene	1.406	1.518	-8.0	111	0.02
92	T,M	1,2-Dibromo-3-chloropropane	0.071	0.071	0.0	92	0.02
93	T,M	1,2,4-Trichlorobenzene	0.952	1.062	-11.6	115	0.02
94	T,M	Hexachlorobutadiene	0.610	0.663	-8.7	114	0.02
95	T,M	Naphthalene	1.172	1.285	-9.6	101	0.02
96	T,M	1,2,3-Trichlorobenzene	0.690	0.810	-17.4	115	0.02

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV455.D Vial: 2
Acq On : 17 Oct 2024 12:06 pm Operator: DNguye/CLingl
Sample : CVO01J1205 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:25 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	967368	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	745704	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	308437	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	271891	10.76	ug/l	0.00
Spiked Amount 10.000			Recovery = 107.60%			
41) 1,2-Dichloroethane-d4	7.97	65	215136	9.67	ug/l	0.00
Spiked Amount 10.000			Recovery = 96.70%			
54) Toluene-d8	11.02	98	1118101	10.90	ug/l	0.00
Spiked Amount 10.000			Recovery = 109.00%			
76) 4-Bromofluorobenzene	15.99	95	376119	10.30	ug/l	0.02
Spiked Amount 10.000			Recovery = 103.00%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.24	85	340684	8.57	ug/l	100
5) Chloromethane	2.56	50	325815	10.87	ug/l	100
6) Vinyl chloride	2.68	62	290792	11.00	ug/l	99
7) Bromomethane	3.24	94	205249	10.76	ug/l	96
8) Chloroethane	3.29	64	219762	10.96	ug/l	65
9) Dichlorofluoromethane	3.38	67	422437	11.50	ug/l	100
10) Trichlorofluoromethane	3.63	101	376970	8.76	ug/l	97
11) Acrolein	4.01	56	49662	67.15	ug/l	84
12) 1,1,2-Trichloro-1,2,2-trif	4.15	151	187794	10.60	ug/l	98
13) Acetone	4.09	43	208147	58.27	ug/l	94
14) 1,1-Dichloroethene	4.25	61	473604	10.49	ug/l	77
15) tert-Butyl alcohol	4.37	59	241222	269.92	ug/l	98
16) Iodomethane	4.66	142	431059	11.24	ug/l	95
17) Methyl acetate	4.68	43	99561	10.81	ug/l	95
18) Methylene chloride	4.87	49	369996	11.37	ug/l	100
19) Carbon disulfide	4.90	76	1062628	11.26	ug/l	100
20) Acrylonitrile	5.05	53	209702	62.50	ug/l	98
21) tert-Butyl methyl ether (M	5.08	73	481196	10.77	ug/l	97
22) trans-1,2-Dichloroethene	5.27	61	469892	10.84	ug/l	97
23) Isopropyl ether (DIPE)	5.67	45	1028072	11.33	ug/l	100
24) Vinyl acetate	5.83	43	290714	10.01	ug/l	98
25) 1,1-Dichloroethane	5.83	63	566074	11.14	ug/l	100
26) 2-Butanol	6.17	45	330151	307.34	ug/l	94
27) tert-Butyl ethyl ether (ET	6.25	59	714973	10.84	ug/l	99
28) 2-Butanone	6.43	43	310597	56.70	ug/l	98
29) 2,2-Dichloropropane	6.63	77	472891	10.88	ug/l	99
30) cis-1,2-Dichloroethene	6.69	96	348434	11.19	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24J17\RJV455.D Vial: 2
Acq On : 17 Oct 2024 12:06 pm Operator: DNguye/CLingl
Sample : CVO01J1205 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:25 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
31)	Chloroform	6.91	83	540055	10.43 ug/l		98
32)	Bromochloromethane	7.15	49	219130	11.38 ug/l		98
33)	Tetrahydrofuran	7.21	42	28470	9.35 ug/l		98
35)	1,1,1-Trichloroethane	7.51	97	470957	10.12 ug/l		100
36)	Cyclohexane	7.52	84	540887	11.27 ug/l		99
37)	2,2,4-Trimethylpentane	7.52	57	26789	11.54 ug/l	#	100
38)	1,1-Dichloropropene	7.73	110	152404	10.82 ug/l		99
39)	Carbon tetrachloride	7.83	119	350839	9.96 ug/l		100
40)	tert-Amyl methyl ether (TA	7.89	73	529142	10.43 ug/l		98
42)	Benzene	8.13	78	1209917	10.32 ug/l		100
43)	1,2-Dichloroethane	8.11	62	256458	10.39 ug/l		100
44)	Trichloroethene	9.06	130	308434	10.53 ug/l		98
45)	Methylcyclohexane	9.15	83	600630	10.58 ug/l		99
46)	1,2-Dichloropropane	9.34	63	273212	10.96 ug/l		94
47)	Bromodichloromethane	9.73	83	349347	10.24 ug/l		97
48)	1,4-Dioxane	9.77	88	19882	208.64 ug/l		94
49)	Dibromomethane	9.82	93	111242	10.27 ug/l		97
50)	2-Chloroethyl vinyl ether	10.23	63	18117	9.74 ug/l		96
51)	4-Methyl-2-pentanone	10.26	43	714058	58.30 ug/l		98
52)	cis-1,3-Dichloropropene	10.62	75	412418	11.03 ug/l		99
55)	Toluene	11.15	91	1321032	11.18 ug/l		98
56)	Ethyl methacrylate	11.45	69	191228	11.30 ug/l		98
57)	trans-1,3-Dichloropropene	11.48	75	299142	11.18 ug/l		98
58)	1,1,2-Trichloroethane	11.74	97	161516	11.10 ug/l		99
59)	2-Hexanone	11.76	43	451408	58.37 ug/l		97
60)	1,3-Dichloropropane	12.19	76	297767	10.86 ug/l		99
61)	Tetrachloroethene	12.29	164	264965	10.37 ug/l		99
62)	Dibromochloromethane	12.66	129	186832	10.78 ug/l		99
63)	1,2-Dibromoethane	13.03	107	149988	10.88 ug/l		98
64)	1-Chlorohexane	13.30	91	557236	10.09 ug/l		100
65)	Chlorobenzene	13.77	112	769582	10.88 ug/l		100
66)	1,1,1,2-Tetrachloroethane	13.86	131	240107	11.11 ug/l		98
67)	Ethylbenzene	13.88	91	1527303	10.92 ug/l		99
68)	m-Xylene & p-Xylene	14.01	91	2248704	20.36 ug/l		98
69)	o-Xylene	14.82	91	1150013	10.54 ug/l		100
70)	Styrene	14.90	104	860885	10.79 ug/l		99
71)	Isopropylbenzene	15.52	105	1531744	10.34 ug/l		100
73)	Bromoform	15.55	173	81866	9.26 ug/l		98
74)	trans-1,4-Dichloro-2-buten	15.62	53	46047	9.70 ug/l		97
75)	1,1,2,2-Tetrachloroethane	15.85	83	175200	10.76 ug/l		100
77)	1,2,3-Trichloropropane	16.14	110	49071	10.74 ug/l		95

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24J17\RJV455.D Vial: 2
Acq On : 17 Oct 2024 12:06 pm Operator: DNguye/CLingl
Sample : CVO01J1205 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:25 2024 Quant Results File: VO01J12.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration
DataAcq Meth : VO01J12

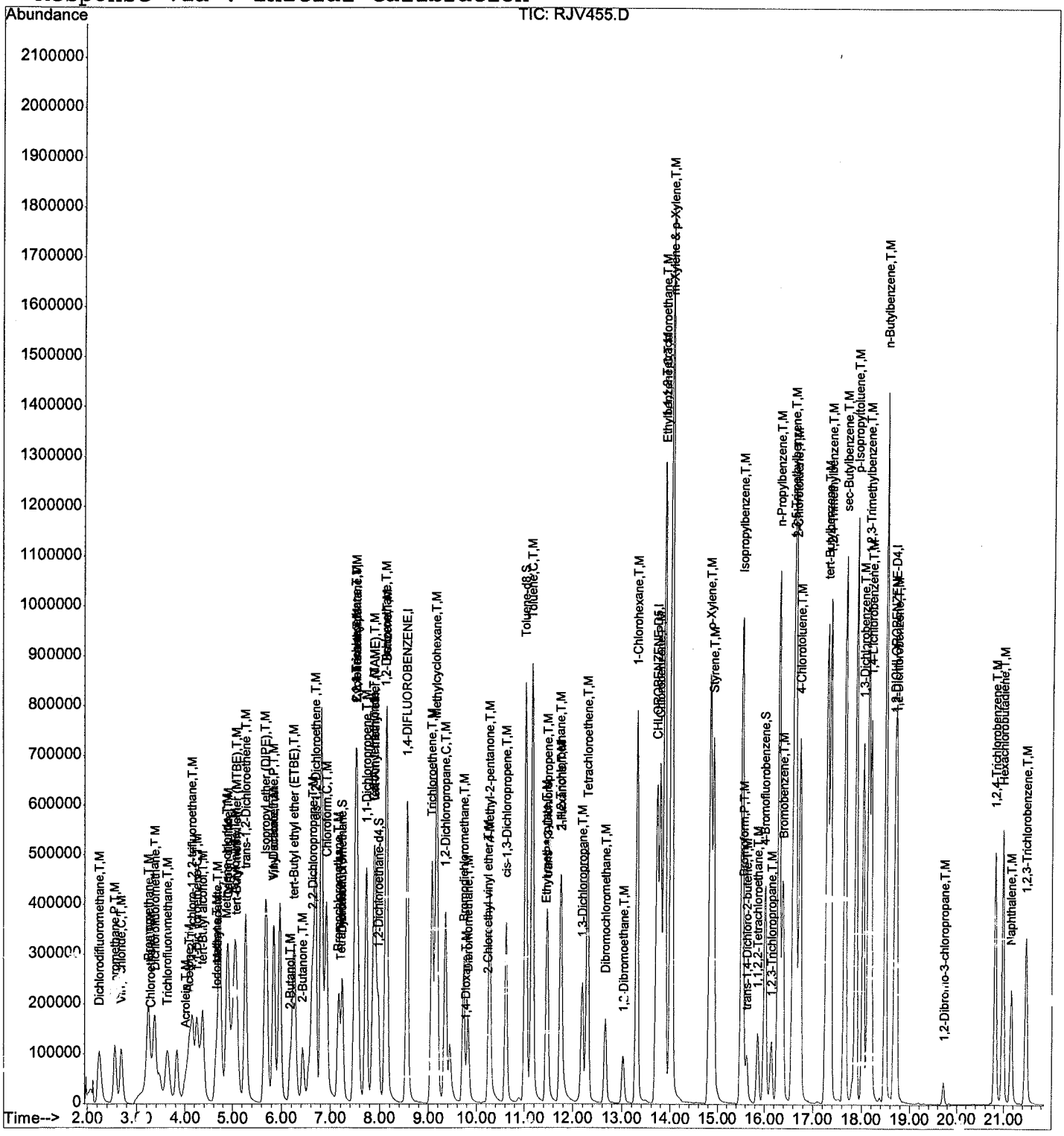
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
78)	n-Propylbenzene	16.29	91	1896803	10.39 ug/l	100
79)	Bromobenzene	16.38	156	275284	10.41 ug/l	99
80)	1,3,5-Trimethylbenzene	16.59	105	1169690	10.35 ug/l	99
81)	2-Chlorotoluene	16.63	91	1144911	10.32 ug/l	99
82)	4-Chlorotoluene	16.72	91	1019979	10.30 ug/l	98
83)	tert-Butylbenzene	17.28	134	267701	10.51 ug/l	99
84)	1,2,4-Trimethylbenzene	17.34	105	1180484	10.68 ug/l	99
85)	sec-Butylbenzene	17.65	105	1650187	10.37 ug/l	99
86)	p-Isopropyltoluene	17.87	119	1322768	10.66 ug/l	99
87)	1,3-Dichlorobenzene	18.02	146	584406	10.99 ug/l	98
88)	1,2,3-Trimethylbenzene	18.13	105	1073632	10.67 ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	559457	10.59 ug/l	99
90)	n-Butylbenzene	18.48	91	1369719	10.09 ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	468277	10.80 ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.73	157	21968	10.10 ug/l	97
93)	1,2,4-Trichlorobenzene	20.81	180	327536	11.15 ug/l	98
94)	Hexachlorobutadiene	20.97	225	204428	10.86 ug/l	97
95)	Naphthalene	21.15	128	396291	10.96 ug/l	99
96)	1,2,3-Trichlorobenzene	21.47	180	249839	11.74 ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24J17\RJV455.D Vial: 2
Acq On : 17 Oct 2024 12:06 pm Operator: DNguye/CLing
Sample : CVO01J1205 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Oct 29 16:25 2024 Quant Results File: VO01J12.RES

Method : D:\HPCHEM\1\METHODS\VO01J12.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Wed Oct 23 17:10:41 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments: * Varied Amounts

Book #:	A01-077
Instrument No.:	01
Analytical Sequence:	24J12
Method File:	V001J12
Analytical Batch:	V001J126

INITIAL CALIBRATION REFERENCE			
DATE	10/12/24		
ICAL ID	V001J12		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-45-36-03 -37-01	*	250 250
DCC	-32-02		250
DCC	-32-03		50
DCC	-40-02	↓	250
BFB	-41-03	1	50
IS/SURR.	SVI-45-37-02 -37-03	1 *	250 250
ICV/LCS	-35-01	1	250
ICV/LCS	-34-03	1	250
ICV/LCS	-26-03 -21-03	5 5	50 250
ICV/LCS	-43-01	5	50
Data File Folder	24J12		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-4	
Chlorine strip	↓	-6	
Methanol		-03-23	
$NaHSO_4$		-01-24	
Reagent Water	RW3-23-001		
Sand			

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☐ Water
☐ pH <2. Outliers indicated on analytical sequence.
☐ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☑ pH <2 and Cl2 are not applicable.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: DH

Date: 10/12/24

Disposed By: JL

Date Disposed: 10/13/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24J12

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RJV296.D	1.	BFB01J13	T/CHK	12 Oct 2024 12:56
2	2	RJV297.D	1.	VO01J121 0.03/0.15	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	12 Oct 2024 13:38
3	3	RJV298.D	1.	VO01J122 0.05/0.25	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	12 Oct 2024 14:08
4	4	RJV299.D	1.	VO01J123 0.1/0.5	1ppb 8260/5ppb KET-AA/25ppb TBA	12 Oct 2024 14:39
5	5	RJV300.D	1.	VO01J124 0.2/1.0	2ppb 8260/10ppb KET-AA/50ppb TBA	12 Oct 2024 15:09
6	6	RJV301.D	1.	VO01J125 0.5/2.5	5ppb 8260/25ppb KET-AA/125ppb TBA	12 Oct 2024 15:39
7	7	RJV302.D	1.	VO01J126 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	12 Oct 2024 16:08
8	8	RJV303.D	1.	VO01J127 2.0/10	20ppb 8260/100ppb KET-AA/500ppb TBA	12 Oct 2024 16:38
9	9	RJV304.D	1.	VO01J128 5.0/25	50ppb 8260/250ppb KET-AA/1250ppb TBA	12 Oct 2024 17:08
10	10	RJV305.D	1.	VO01J129 3.0/15	30ppb 8260/150ppb KET-AA/750ppb TBA	12 Oct 2024 17:38
11	11	RJV306.D	1.	VO01J1210 10/50	100ppb 8260/500ppb KET-AA/2500ppb TBA	12 Oct 2024 18:07
12	12	RJV307.D	1.	RINSE		12 Oct 2024 18:37
13	13	RJV308.D	1.	RINSE		12 Oct 2024 19:07
14	14	RJV309.D	1.	IVO[illegible]J1201 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	12 Oct 2024 19:36
15	15	RJV310.D	1.	RINSE		12 Oct 2024 20:06
16	16	RJV311.D	1.	LOD1	0.2ppb 8260/4.0ppb KET-AA/5.0ppb TBA	12 Oct 2024 20:36
17	17	RJV312.D	1.	LOD2	0.3ppb 8260/4.0ppb KET-AA/5.0ppb TBA	12 Oct 2024 21:05

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-077
Instrument No.:	01
Analytical Sequence:	24J16
Method File:	V001J12
Analytical Batch:	CV001J1204

SOP #
☑ EMAX-8260 Rev. No. 10
☑ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	10/12/24		
ICAL ID	V001J12		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SV1-45-36-03 -37-01	1	
DCC	-32-02	1	
DCC	-32-03	5	
DCC	-40-02	5	
BFB	-41-03	1	50/200
IS/SURR	SV1-45-29-03	5	
ICV/LCS	-35-01	1	
ICV/LCS	-34-03	1	
ICV/LCS	-26-03 -21-03	5 5	
ICV/LCS	-43-01	5	
Data File Folder	24J16		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSD-03-09-12-4	
Chlorine strip	301902	↓ -6	
Methanol			
$NaHSO_4$			
Reagent Water	RW3-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: CL / DM
Date: 10/14/24
Disposed By: CL
Date Disposed: 10/17/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24J16

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RJV411.D	1.	BFB01J17		16 Oct 2024 07:16
2	2	RJV412.D	1.	CVO01I1404	10ppb 8260/50ppb KET-AA/250ppb TBA	16 Oct 2024 07:54
3	3	RJV413.D	1.	VO01J17L	10ppb 8260/50ppb KET-AA/250ppb TBA	16 Oct 2024 08:24
4	4	RJV414.D	1.	VO01J17C	10ppb 8260/50ppb KET-AA/250ppb TBA	16 Oct 2024 08:53
5	4	RJV415.D	1.	RINSE	25mL	16 Oct 2024 09:23
6	5	RJV416.D	1.	VO01J17B	25mL	16 Oct 2024 09:53
7	6	RJV417.D	1.	MRLJ1701	25mL	16 Oct 2024 11:19
8	7	RJV418.D	1.	24J041-01	25mL	16 Oct 2024 12:10
9	8	RJV419.D	1.	24J041-02	25mL	16 Oct 2024 12:39
10	9	RJV420.D	1.	24J041-03	25mL	16 Oct 2024 13:09
11	10	RJV421.D	1.	24J041-04	25mL	16 Oct 2024 13:39
12	11	RJV422.D	1.	24J041-05	25mL	16 Oct 2024 14:09
13	12	RJV423.D	1.	24J041-06	25mL	16 Oct 2024 14:39
14	13	RJV424.D	1.	24J041-07	25mL	16 Oct 2024 15:09
15	14	RJV425.D	1.	24J041-01N	25mL	16 Oct 2024 15:39
16	15	RJV426.D	1.	24J041-08	25mL	16 Oct 2024 16:09
17	1	RJV427.D	1.	BFB01J18	25mL	16 Oct 2024 17:46
18	2	RJV428.D	1.	CVO01J1204	10ppb 8260/50ppb KET-AA/250ppb TBA	16 Oct 2024 19:07
19	3	RJV429.D	1.	VO01J18L	10ppb 8260/50ppb KET-AA/250ppb TBA	16 Oct 2024 19:37
20	4	RJV430.D	1.	VO01J18B	25mL	16 Oct 2024 20:06
21	5	RJV431.D	1.	24J030-01	25mL	16 Oct 2024 20:36
22	6	RJV432.D	1.	24J051-01	25mL	16 Oct 2024 21:06
23	7	RJV433.D	1.	24J051-02	25mL	16 Oct 2024 21:35
24	8	RJV434.D	1.	24J030-02	25mL	16 Oct 2024 22:05
25	9	RJV435.D	1.	24J030-03	25mL	16 Oct 2024 22:35
26	10	RJV436.D	1.	24J055-01	25mL	16 Oct 2024 23:04
27	11	RJV437.D	1.	24J055-02	25mL	16 Oct 2024 23:34
28	12	RJV438.D	1.	24J029-20I 25X	1.0mL	17 Oct 2024 00:04
29	13	RJV439.D	1.	24J029-21I 25X	1.0mL	17 Oct 2024 00:33
30	14	RJV440.D	1.	24J029-22I 25X	1.0mL	17 Oct 2024 01:03
31	15	RJV441.D	1.	24J055-03	25mL	17 Oct 2024 01:33
32	16	RJV442.D	1.	24J055-05	25mL	17 Oct 2024 02:02
33	17	RJV443.D	1.	24J055-06	25mL	17 Oct 2024 02:32
34	18	RJV444.D	1.	24J055-07	25mL	17 Oct 2024 03:01
35	19	RJV445.D	1.	24J055-08	25mL	17 Oct 2024 03:31
36	20	RJV446.D	1.	24J055-09	25mL	17 Oct 2024 04:01
37	21	RJV447.D	1.	24J055-10	25mL	17 Oct 2024 04:30
38	22	RJV448.D	1.	24J055-11	25mL	17 Oct 2024 05:00
39	23	RJV449.D	1.	VO01J18C	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Oct 2024 05:29
40	24	RJV450.D	1.	EVO01J1204	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Oct 2024 05:59
41	25	RJV451.D	1.	EVO01J12041	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Oct 2024 06:29
42	26	RJV452.D	1.	EVO01J12042	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Oct 2024 06:58
43	27	RJV453.D	1.	RINSE	25mL	17 Oct 2024 07:28

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-077
Instrument No.:	01
Analytical Sequence:	24J17
Method File:	V001J12
Analytical Batch:	CV001J1205

SOP #
☑ EMAX-8260 Rev. No. 10
☑ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM Rev. No. 0
☐ EMAX-TCPSIM Rev. No. 2
☐ EMAX-624 Rev. No. 6
☐ EMAX-624.1 Rev. No. 1
PURGE AMOUNT
☐ 5-mL Purge
☐ 10-mL Purge
☑ 25-mL Purge
SAMPLE MATRIX
☐ Soil (refer to sample weight log)
☑ Water
☑ pH <2. Outliers indicated on analytical sequence.
☑ Cl_2 <5ppm. Outliers indicated on analytical sequence.
☐ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	10/17/24		
ICAL ID	VO01J12		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-45-36-03	1	
DCC	-37-01	1	
DCC	-32-02	1	
DCC	-32-03	5	
DCC	-40-02	5	
BFB	-41-03	1	50/250
IS/SURR.	SVI-45-29-03	5	
ICV/LCS	-35-01	1	
ICV/LCS	-34-03	1	
ICV/LCS	-26-03	5	
	-21-03	5	
ICV/LCS	-43-01	5	
Data File Folder	24J17		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-0912-4	
Chlorine strip	301902	↓ -6	
Methanol			
$NaHSO_4$			
Reagent Water	RW3 23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: CV/DN
Date: 10/17/24
Disposed By: CL
Date Disposed: 10/18/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24J17

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RJV454.D	1.	BFB01J19	25mL	17 Oct 2024 10:50
2	2	RJV455.D	1.	CVO01J1205	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Oct 2024 12:06
3	3	RJV456.D	1.	VO01J19L	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Oct 2024 12:36
4	4	RJV457.D	1.	VO01J19C	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Oct 2024 13:06
5	5	RJV458.D	1.	RINSE	25mL	17 Oct 2024 13:36
6	6	RJV459.D	1.	VO01J19B	25mL	17 Oct 2024 14:06
7	7	RJV460.D	1.	24J055-04	25mL	17 Oct 2024 14:36
8	8	RJV461.D	1.	24J055-12	25mL	17 Oct 2024 15:06
9	9	RJV462.D	1.	24J055-13	25mL	17 Oct 2024 15:36
10	10	RJV463.D	1.	24J055-14	25mL	17 Oct 2024 16:06
11	11	RJV464.D	1.	24J055-15	25mL	17 Oct 2024 16:36
12	12	RJV465.D	1.	24J055-16	25mL	17 Oct 2024 17:06
13	13	RJV466.D	1.	24J055-17	25mL	17 Oct 2024 17:36
14	14	RJV467.D	1.	24J101-04	25mL	17 Oct 2024 18:07
15	15	RJV468.D	1.	24J052-01	25mL	17 Oct 2024 18:37
16	16	RJV469.D	1.	24J057-05	25mL	17 Oct 2024 19:06
17	17	RJV470.D	1.	24J102-02	25mL	17 Oct 2024 19:36
18	18	RJV471.D	1.	24J102-03	25mL	17 Oct 2024 20:06
19	19	RJV472.D	1.	24J053-01	25mL	17 Oct 2024 20:36
20	20	RJV473.D	1.	24J053-02	25mL	17 Oct 2024 21:05
21	21	RJV474.D	1.	24J063-01	25mL	17 Oct 2024 21:35
22	22	RJV475.D	1.	24J096-01	25mL	17 Oct 2024 22:05
23	23	RJV476.D	1.	24J071-01	25mL	17 Oct 2024 22:34
24	24	RJV477.D	1.	EVO01J1205	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Oct 2024 23:03
25	25	RJV478.D	1.	EVO01J12051	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Oct 2024 23:33
26	26	RJV479.D	1.	EVO01J12052	10ppb 8260/50ppb KET-AA/250ppb TBA	18 Oct 2024 00:02
27	27	RJV480.D	1.	RINSE	25mL	18 Oct 2024 00:31

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ACCREDITED
CERTIFICATE #7157.01

SITE LOGIC Report

QuantArray®-Chlor Study

Contact:	Cherie Zakowski	Phone:	720-264-1109
Address:	CDM 555 17th Street Suite 500 Denver, CO 80202	Email:	ZakowskiCA@cdmsmith.com

MI Identifier: 005VJ

Report Date: 10/15/2024

Project: 700 S 1600 E PCE Plume

Reviewed By: *Sarah Keys*

Comments:

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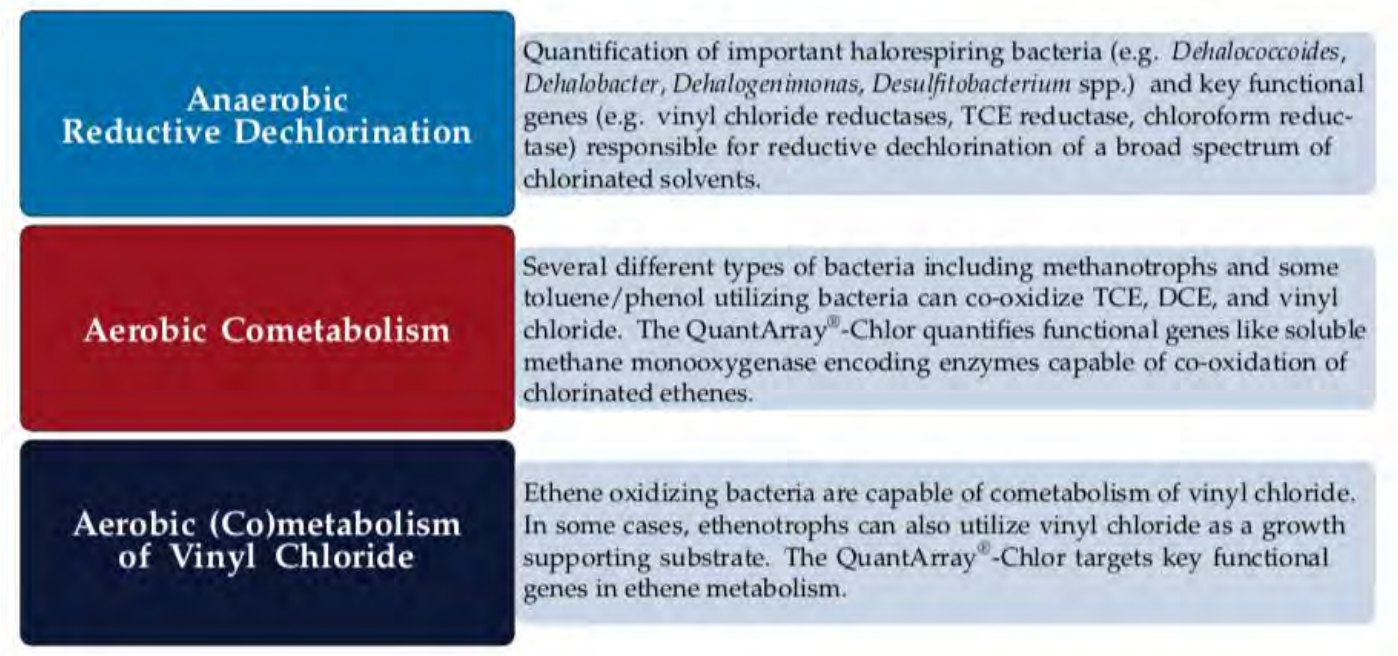
The QuantArray®-Chlor Approach

Quantification *Dehalococcoides*, the only known bacterial group capable of complete reductive dechlorination of PCE and TCE to ethene, has become an indispensable component of assessment, remedy selection, and performance monitoring at sites impacted by chlorinated solvents. While undeniably a key group of halorespiring bacteria, *Dehalococcoides* are not the only bacteria of interest in the subsurface because reductive dechlorination is not the only potential biodegradation pathway operative at contaminated sites, and chlorinated ethenes are not always the primary contaminants of concern. The QuantArray®-Chlor not only includes a variety of halorespiring bacteria (*Dehalococcoides*, *Dehalobacter*, *Dehalogenimonas*, etc.) to assess the potential for reductive dechlorination of chloroethenes, chloroethanes, chlorobenzenes, chlorophenols, and chloroform, but also provides quantification of functional genes involved in aerobic (co)metabolic pathways for biodegradation of chlorinated solvents and even competing biological processes. Thus, the QuantArray®-Chlor will give site managers the ability to simultaneously yet economically evaluate the potential for biodegradation of a spectrum of common chlorinated contaminants through a multitude of anaerobic and aerobic (co)metabolic pathways to give a much more clear and comprehensive view of contaminant biodegradation.

The QuantArray®-Chlor is used to quantify specific microorganisms and functional genes to evaluate the following:



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Results

Table 1: Summary of the QuantArray®-Chlor results obtained for sample MW42D-GW100224

Sample Name Sample Date	MW42D-GW100224 10/02/2024
Reductive Dechlorination	cells/mL
Dehalococcoides (DHC)	<2.40E-01
tceA Reductase (TCE)	<2.40E-01
BAV1 Vinyl Chloride Reductase (BVC)	<2.40E-01
Vinyl Chloride Reductase (VCR)	<2.40E-01
Dehalobacter spp. (DHBt)	<2.40E-01
Dehalobacter DCM (DCM)	<2.40E-01
Dehalogenimonas spp. (DHG)	<2.40E-01
cerA Reductase (CER)	<2.40E-01
trans-1,2-DCE Reductase (TDR)	<2.40E-01
Desulfitobacterium spp. (DSB)	<2.40E-01
Dehalobium chlorocoercia (DECO)	<2.40E-01
Desulfuromonas spp. (DSM)	<2.40E-01
PCE Reductase (PCE-1)	<2.40E-01
PCE Reductase (PCE-2)	<2.40E-01
Chloroform Reductase (CFR)	<2.40E-01
1,1 DCA Reductase (DCA)	<2.40E-01
1,2 DCA Reductase (DCAR)	<2.40E-01
Aerobic (Co)Metabolic	
Soluble Methane Monooxygenase (SMMO)	<2.40E-01
Toluene Dioxygenase (TOD)	<2.40E-01
Phenol Hydroxylase (PHE)	**9.40E+00**
Trichlorobenzene Dioxygenase (TCBO)	<2.40E-01
Toluene Monooxygenase 2 (RDEG)	<2.40E-01
Toluene Monooxygenase (RMO)	<2.40E-01
Ethene Monooxygenase (EtnC)	<2.40E-01
Epoxyalkane Transferase (EtnE)	<2.40E-01
Dichloromethane Dehalogenase (DCMA)	<2.40E-01
Other	
Total Eubacteria (EBAC)	**8.10E+02**
Sulfate Reducing Bacteria (APS)	<2.40E-01
Methanogens (MGN)	<2.40E-01

Legend:

NA = Not Analyzed NS = Not Sampled J = Estimated Gene Copies Below PQL but Above LQL

I = Inhibited < = Result Not Detected

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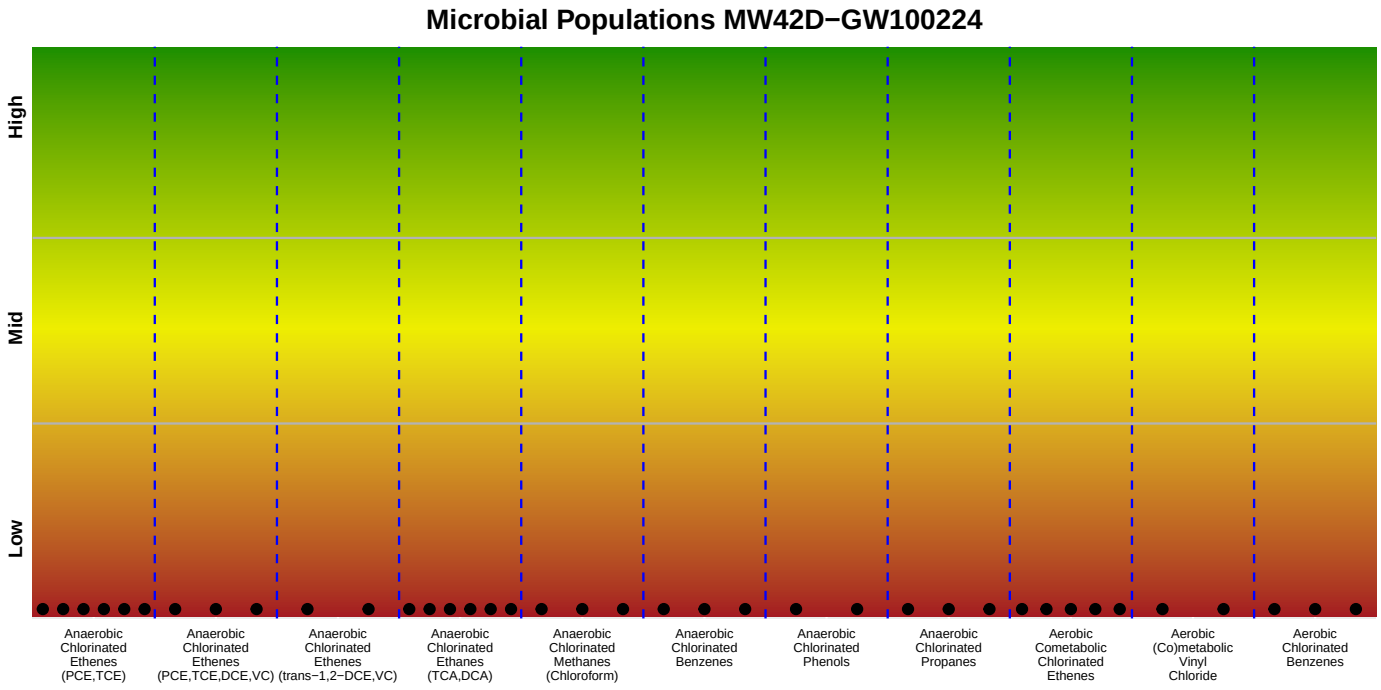

Figure 1: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants. See below to understand the correlation between contaminants and their associated qPCR assays.

Anaerobic - Reductive Dechlorination or Dichloroelimination	
Contaminants	**qPCR Assays**
Chlorinated Ethenes (PCE, TCE)	DHC, DHBt, DSB, DSM, PCE-1, PCE-2
Chlorinated Ethenes (PCE, TCE, DCE, VC)	DHC, BVC, VCR
Chlorinated Ethenes (trans-1,2-DCE, VC)	TDR, CER
Chlorinated Ethanes (TCA and 1,2- DCA)	DHC, DHBt, DHG, DSB[1], DCA, DCAR
Chlorinated Methanes (Chloroform)	DHBt, DCM, CFR
Chlorinated Benzenes	DHC, DHBt[2], DECO
Chlorinated Phenols	DHC, DSB
Chlorinated Propanes	DHC, DHG, DSB[1]
Aerobic - (Co)metabolism	
Chlorinated Ethenes (TCE,DCE,VC)	sMMO, TOD, PHE, RDEG, RMO
(Co)metabolic Vinyl Chloride	etnC, etnE
Chlorinated Benzenes	TOD, TCBO, PHE

[1] *Desulfitobacterium dichloroeliminans* DCA1. [2] Implicated in reductive dechlorination of dichlorobenzene and potentially chlorobenzene.

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Interpretation

The overall purpose of the QuantArray®-Chlor is to give site managers the ability to simultaneously yet economically evaluate the potential for biodegradation of a spectrum of common chlorinated contaminants through a multitude of anaerobic and aerobic (co)metabolic pathways in order to provide a clearer and more comprehensive view of contaminant biodegradation. The following discussion describes the interpretation of results in general terms and is meant to serve as a guide.

Reductive Dechlorination - Chlorinated Ethenes: While a number of bacterial cultures including *Dehalococcoides*, *Dehalobacter*, *Desulfitobacterium*, *Desulfuromonas* spp. capable, of utilizing PCE and TCE as growth-supporting electron acceptors have been isolated [1–5], *Dehalococcoides* may be the most important because they are the only bacterial group that has been isolated to date which is capable of complete reductive dechlorination of PCE to ethene [6]. In fact, the presence of *Dehalococcoides* has been associated with complete reductive dechlorination to ethene at sites across North America and Europe. Hendrickson and Lu have proposed using a *Dehalococcoides* concentration of 1 x 10^4 cells/mL as a screening criterion to identify sites where biological reductive dechlorination is predicted to proceed at "generally useful" rates [7,8].

At chlorinated ethene sites, any "stall" leading to the accumulation of daughter products, especially vinyl chloride, would be a substantial concern. While *Dehalococcoides* concentrations greater than 1 x 10^4 cells/mL correspond to ethene production and useful rates of dechlorination, the range of chlorinated ethenes degraded varies by strain within the *Dehalococcoides* genus [6,9] and the presence of co-contaminants and competitors can have complex impacts on the halorespiring microbial community [10–15]. Therefore, QuantArray®-Chlor also provides quantification of a suite of reductive dehalogenase genes (PCE, TCE, BVC, VCR, CER, and TDR) to more definitively confirm the potential for reductive dechlorination of all chlorinated ethene compounds including vinyl chloride.

Perhaps most importantly, QuantArray®-Chlor quantifies TCE reductase (TCE) and both known vinyl chloride reductase genes (BVC, VCR) from *Dehalococcoides* to conclusively evaluate the potential for complete reductive dechlorination of chlorinated ethenes to non-toxic ethene [16–18]. In addition, the analysis also includes quantification of reductive dehalogenase genes from *Dehalogenimonas* spp. capable of reductive dechlorination of chlorinated ethenes. More specifically, these are the trans-1,2-DCE dehalogenase gene (TDR) from strain WBC-2 [19] and the vinyl chloride reductase gene (CER) from GP, the only known organisms other than *Dehalococcoides* capable of vinyl chloride reduction [20]. Finally, PCE reductase genes responsible for sequential reductive dechlorination of PCE to *cis*-DCE by *Sulfurospirillum* and *Geobacter* spp. are also quantified. In mixed cultures, evidence increasingly suggests that partial dechlorinators like *Sulfurospirillum}* and *Geobacter* may be responsible for the majority of reductive dechlorination of PCE to TCE and *cis*-DCE while *Dehalococcoides* functions more as *cis*-DCE and vinyl chloride reducing specialists [10,21].

Reductive Dechlorination - Chlorinated Ethanes: Under anaerobic conditions, chlorinated ethanes are susceptible to reductive dechlorination by several groups of halorespiring bacteria including *Dehalobacter*, *Dehalogenimonas*, and *Dehalococcoides*. While the reported range of chlorinated ethanes utilized varies by genus, species, and sometimes at the strain level, several general observations can be made regarding biodegradation pathways and daughter product formation. *Dehalobacter* spp. have been isolated that are capable of sequential reductive dechlorination of 1,1,1-TCA through 1,1-DCA to chloroethane [13]. Biodegradation of 1,1,2-TCA by several halorespiring bacteria including *Dehalobacter* and *Dehalogenimonas* spp. proceeds via dichloroelimination producing vinyl chloride [22–24]. Similarly, 1,2-DCA biodegradation by *Dehalobacter*, *Dehalogenimonas*, and *Dehalococcoides* occurs via dichloroelimination producing ethene. While not utilized by many *Desulfitobacterium* isolates, at least one strain, *Desulfitobacterium dichloroeliminans* strain DCA1, is also capable of dichloroelimination of 1,2-DCA [25]. The 1,2-dichloroethane reductive dehalogenase gene (DCAR) from members of *Desulfitobacterium* and *Dehalobacter* is known to dechlorinate 1,2-DCA to ethene, while the 1,1-dichloroethane reductive dehalogenase (DCA) targets the gene responsible for 1,1-DCA dechlorination in some strains of *Dehalobacter*. In addition to chloroform, chloroform reductase (CFR) has also been shown to be responsible for reductive dechlorination of 1,1,1-TCA [26].

Reductive Dechlorination - Chlorinated Methanes: Chloroform is a common co-contaminant at chlorinated solvent sites and can inhibit reductive dechlorination of chlorinated ethenes. Grostern et al. demonstrated that a *Dehalobacter* population was capable of reductive dechlorination of chloroform to produce dichloromethane [27]. The *cfrA* gene encodes the reductase which catalyzes this initial step in chloroform biodegradation [26]. Justicia-Leon et al. have since shown that dichloromethane can support growth of a distinct group of *Dehalobacter* strains via fermentation [28]. The *Dehalobacter* DCM assay targets the 16S rRNA gene of these strains.

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Reductive Dechlorination - Chlorinated Benzenes: Chlorinated benzenes are an important class of industrial solvents and chemical intermediates in the production of drugs, dyes, herbicides, and insecticides. The physical-chemical properties of chlorinated benzenes as well as susceptibility to biodegradation are functions of their degree of chlorination and the positions of chlorine substituents. Under anaerobic conditions, reductive dechlorination of higher chlorinated benzenes including hexachlorobenzene (HCB), pentachlorobenzene (PeCB), tetrachlorobenzene (TeCB) isomers, and trichlorobenzene (TCB) isomers has been well documented [29], although biodegradation of individual compounds and isomers varies between isolates. For example, *Dehalococcoides* strain CBDB1 reductively dechlorinats HCB, PeCB, all three TeCB isomers, 1,2,3-TCB, and 1,2,4-TCB [9]. *Dehalobium chlorocoercia* DF-1 has been shown to be capable of reductive dechlorination of HCB, PeCB, and 1,2,3,5-TeCB [31]. The dichlorobenzene (DCB) isomers and chlorobenzene (CB) were considered relatively recalcitrant under anaerobic conditions. However, new evidence has demonstrated reductive dechlorination of DCBs to CB and CB to benzene [32] with corresponding increases in concentrations of *Dehalobacter* spp. [33].

Reductive Dechlorination - Chlorinated Phenols: Pentachlorophenol (PCP) was one of the most widely used biocides in the U.S. and despite residential use restrictions, is still extensively used industrially as a wood preservative. Along with PCP, the tetrachlorophenol and trichlorophenol isomers were also used as fungicides in wood preserving formulations. 2,4-Dichlorophenol and 2,4,5-TCP were used as chemical intermediates in herbicide production (e.g. 2,4-D) and chlorophenols are known byproducts of chlorine bleaching in the pulp and paper industry. While the range of compounds utilized varies by strain, some *Dehalococcoides* isolates are capable of reductive dechlorination of PCP and other chlorinated phenols. For example, *Dehalococcoides* strain CBDB1 is capable of utilizing PCP, all three tetrach lorophenol (TeCP) congeners, all six trichlorophenol (TCP) congeners, and 2,3-dichlorophenol (2,3-DCP). PCP dechlorination by strain CBDB1 produces a mixture of 3,5-DCP, 3,4-DCP, 2,4-DCP, 3-CP, and 4-CP [34]. In the same study, however, *Dehalococcoides* strain 195 dechlorinated a more narrow spectrum of chlorophenols which included 2,3-DCP, 2,3,4-TCP, and 2,3,6-TCP, but no other TCPs or PCP. Similar to *Dehalococcoides*, some species and strains of *Desulfitobacterium* are capable of utilizing PCP and other chlorinated phenols. *Desulfitobacterium hafniense* PCP-1 is capable of reductive dechlorination of PCP to 3-CP [35]. However, the ability to biodegrade PCP is not universal among *Desulfitobacterium* isolates. *Desulfitobacterium* spp. strain PCE1 and *D. chlororespirans* strain Co23, for example, can utilize some TCP and DCP isomers, but not PCP for growth [2,36].

Reductive Dechlorination - Chlorinated Propanes: *Dehalogenimonas* is a recently described bacterial genus of the phylum Chloroflexi which also includes the well-known chloroethene-respiring *Dehalococcoides* [23]. The *Dehalogenimonas* isolates characterized to date are also halorespiring bacteria, but utilize a rather unique range of chlorinated compounds as electron acceptors including chlorinated propanes (1,2,3-TCP and 1,2-DCP) and a variety of other vicinally chlorinated alkanes including 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, and 1,2-dichloroethane [23].

Aerobic - Chlorinated Ethene Cometabolism: Under aerobic conditions, several different types of bacteria including methane-oxidizing bacteria (methanotrophs), and many benzene, toluene, ethylbenzene, xylene, and (BTEX)-utilizing bacteria can cometabolize or co-oxidize TCE, DCE, and vinyl chloride [37]. In general, cometabolism of chlorinated ethenes is mediated by monooxygenase enzymes with "relaxed" specificity that oxidize a primary (growth supporting) substrate (*e.g.* methane) and co-oxidize the chlorinated compound (*e.g.* TCE). QuantArray®-Chlor provides quantification of a suite of genes encoding oxygenase enzymes capable of co-oxidation of chlorinated ethenes including soluble methane monooxygenase (sMMO). Soluble methane monooxygenases co-oxidize a broad range of chlorinated compounds [38–41] including TCE, *cis*-DCE, and vinyl chloride. Furthermore, soluble methane monooxygenases are generally believed to support greater rates of aerobic cometabolism [40]. QuantArray®-Chlor also quantifies aromatic oxygenase genes encoding ring hydroxylating toluene monooxygenase genes (RMO, RDEG), toluene dioxygenase (TOD) and phenol hydroxylases (PHE) capable of TCE co-oxidation [42–46]. TCE or a degradation product has been shown to induce expression of toluene monooxygenases in some laboratory studies [43,47] raising the possibility of TCE cometabolism with an alternative (non-aromatic) growth substrate. Moreover, while a number of additional factors must be considered, recent research under ESTCP Project 201584 has shown positive correlations between concentrations of monooxygenase genes (soluble methane monooxygenase, ring hydroxylating monooxygenases, and phenol hydroxylase) and the rate of TCE degradation [48].

Aerobic - Chlorinated Ethane Cometabolism: While less widely studied than cometabolism of chlorinated ethenes, some chlorinated ethanes are also susceptible to co-oxidation. As mentioned previously, soluble methane monooxygenases (sMMO) exhibit very relaxed specificity. In laboratory studies, sMMO has been shown to co-oxidize a number of chlorinated ethanes including 1,1,1-TCA and 1,2-DCA [38,40].

Aerobic - Vinyl Chloride Cometabolism: Beginning in the early 1990s, numerous microcosm studies demonstrated

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aerobic oxidation of vinyl chloride under MNA conditions without the addition of exogenous primary substrates. Since then, strains of *Mycobacterium*, *Nocardioides*, *Pseudomonas*, *Ochrobactrum*, and *Ralstonia* species have been isolated which are capable of aerobic growth on both ethene and vinyl chloride (see Mattes et al. [49] for a review). The initial steps in the pathway are the monooxygenase (*etn*ABCD) catalyzed conversion of ethene and vinyl chloride to their respective epoxyalkanes (epoxyethane and chlorooxirane), followed by epoxyalkane:CoM transferase (*etn*E) mediated conjugation and breaking of the epoxide [50].

Aerobic - Chlorinated Benzenes: In general, chlorobenzenes with four or less chlorine groups are susceptible to aerobic biodegradation and can serve as growth-supporting substrates. Toluene dioxygenase (TOD) has a relatively relaxed substrate specificity and mediates the incorporation of both atoms of oxygen into the aromatic ring of benzene and substituted benzenes (toluene and chlorobenzene). Comparison of TOD levels in background and source zone samples from a CB-impacted site suggested that CBs promoted growth of TOD-containing bacteria [51]. In addition, aerobic biodegradation of some trichlorobenzene and even tetrachlorobenzene isomers is initiated by a group of related trichlorobenzene dioxygenase genes (TCBO). Finally, phenol hydroxylases catalyze the continued oxidation and in some cases, the initial oxidation of a variety of monoaromatic compounds. In an independent study, significant increases in numbers of bacteria containing PHE genes corresponded to increases in biodegradation of DCB isomers [51].

Aerobic - Chlorinated Methanes: Many aerobic methylotrophic bacteria, belonging to diverse genera (*Hyphomicrobium*, *Methylobacterium*, *Methylophilus*, *Pseudomonas*, *Paracoccus*, and *Alibacter*) have been isolated which are capable of utilizing dichloromethane (DCM) as a growth substrate. The DCM metabolic pathway in methylotrophic bacteria is initiated by a dichloromethane dehalogenase (DCMA) gene. DCMA is responsible for aerobic biodegradation of dichloromethane by methylotrophs by first producing formaldehyde which is then further oxidized [52].

As discussed in previous sections, soluble methane monooxygenase (sMMO) exhibits relaxed specificity and co-oxidizes a broad spectrum of chlorinated hydrocarbons. In addition to chlorinated ethenes, sMMO has been shown to co-oxidize chloroform in laboratory studies [38,41].

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SITE LOGIC Report

QuantArray®-Chlor Study

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MI Identifier: 035VI

Report Date: 10/17/2024

Project: 700 S 1600 E PCE Plume

Reviewed By: *Sarah Keys*

Comments: This report has been revised to add Linh Pham as a report contact.

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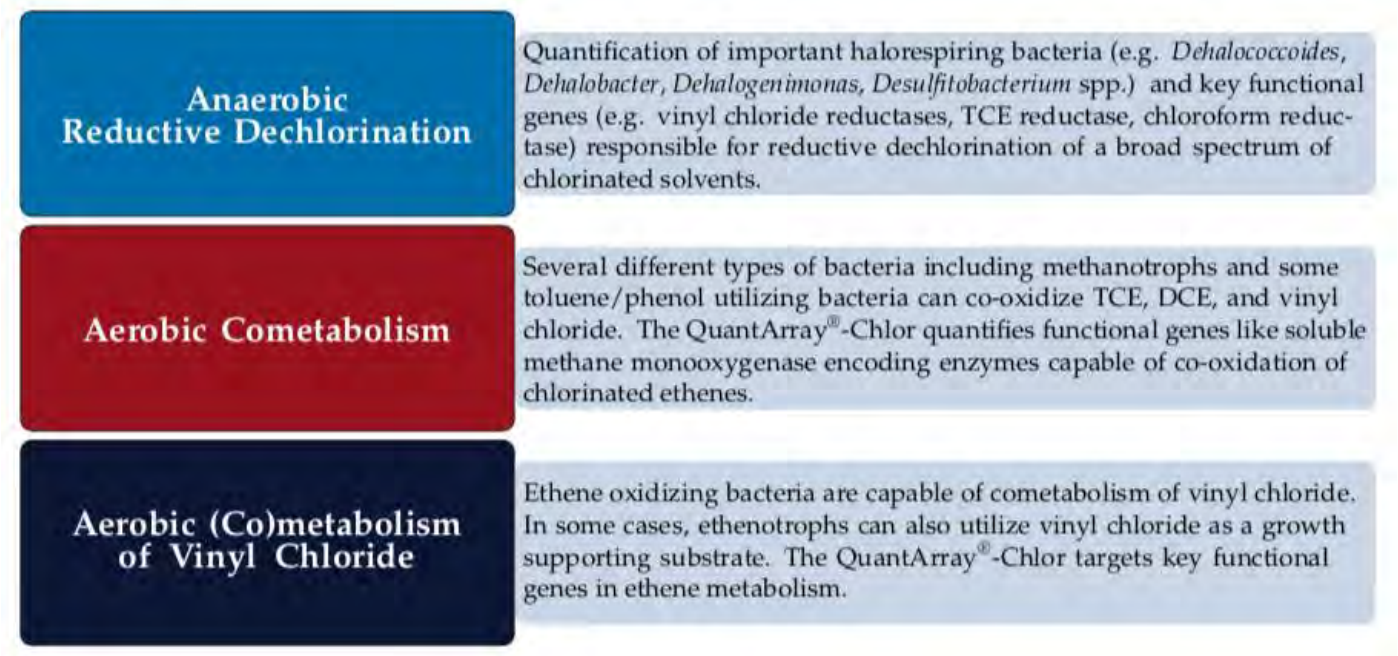
The QuantArray®-Chlor Approach

Quantification *Dehalococcoides*, the only known bacterial group capable of complete reductive dechlorination of PCE and TCE to ethene, has become an indispensable component of assessment, remedy selection, and performance monitoring at sites impacted by chlorinated solvents. While undeniably a key group of halorespiring bacteria, *Dehalococcoides* are not the only bacteria of interest in the subsurface because reductive dechlorination is not the only potential biodegradation pathway operative at contaminated sites, and chlorinated ethenes are not always the primary contaminants of concern. The QuantArray®-Chlor not only includes a variety of halorespiring bacteria (*Dehalococcoides*, *Dehalobacter*, *Dehalogenimonas*, etc.) to assess the potential for reductive dechlorination of chloroethenes, chloroethanes, chlorobenzenes, chlorophenols, and chloroform, but also provides quantification of functional genes involved in aerobic (co)metabolic pathways for biodegradation of chlorinated solvents and even competing biological processes. Thus, the QuantArray®-Chlor will give site managers the ability to simultaneously yet economically evaluate the potential for biodegradation of a spectrum of common chlorinated contaminants through a multitude of anaerobic and aerobic (co)metabolic pathways to give a much more clear and comprehensive view of contaminant biodegradation.

The QuantArray®-Chlor is used to quantify specific microorganisms and functional genes to evaluate the following:



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Results

Table 1: Summary of the QuantArray®-Chlor results obtained for samples IW01-GW091124, MW03RB-GW091124, EW01-GW091124, MW03RA-GW091124, and MW42S-GW091224

Sample Name Sample Date	IW01-GW091124 09/11/2024	MW03RB-GW091124 09/11/2024	EW01-GW091124 09/11/2024	MW03RA-GW091124 09/11/2024	MW42S-GW091224 09/12/2024
Reductive Dechlorination	cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Dehalococcoides (DHC)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
tceA Reductase (TCE)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
BAV1 Vinyl Chloride Reductase (BVC)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
Vinyl Chloride Reductase (VCR)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
Dehalobacter spp. (DHBt)	<2.50E-01	**1.70E+03**	<2.50E-01	**9.30E+02**	<2.50E-01
Dehalobacter DCM (DCM)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
Dehalogenimonas spp. (DHG)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
cerA Reductase (CER)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
trans-1,2-DCE Reductase (TDR)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
Desulfitobacterium spp. (DSB)	<2.50E-01	**1.30E+03**	<2.50E-01	**6.30E+02**	<2.50E-01
Dehalobium chlorocoercia (DECO)	<2.50E-01	<2.50E-01	<2.50E-01	**1.50E+01**	<2.50E-01
Desulfuromonas spp. (DSM)	<2.50E-01	<2.50E-01	**5.10E+00**	**1.20E+00**	<2.50E-01
PCE Reductase (PCE-1)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
PCE Reductase (PCE-2)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
Chloroform Reductase (CFR)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
1,1 DCA Reductase (DCA)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
1,2 DCA Reductase (DCAR)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
Aerobic (Co)Metabolic					
Soluble Methane Monooxygenase (SMMO)	<2.50E-01	<2.50E-01	<2.50E-01	**2.90E+00**	<2.50E-01
Toluene Dioxygenase (TOD)	<2.50E-01	**2.20E+02**	<2.50E-01	<2.50E-01	<2.50E-01
Phenol Hydroxylase (PHE)	**1.50E+02**	**2.30E+02**	**5.30E+02**	**2.50E+02**	<2.50E-01
Trichlorobenzene Dioxygenase (TCBO)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
Toluene Monooxygenase 2 (RDEG)	**3.20E+02**	**1.40E+03**	**1.00E+02**	**4.80E+02**	<2.50E-01
Toluene Monooxygenase (RMO)	**2.30E+01**	**1.00E+02**	**5.00E+02**	**1.70E+02**	<2.50E-01
Ethene Monooxygenase (EtnC)	<2.50E-01	**3.80E+02**	<2.50E-01	<2.50E-01	<2.50E-01
Epoxyalkane Transferase (EtnE)	<2.50E-01	**1.80E+03**	<2.50E-01	<2.50E-01	<2.50E-01
Dichloromethane Dehalogenase (DCMA)	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01	<2.50E-01
Other					
Total Eubacteria (EBAC)	**3.00E+04**	**5.20E+05**	**1.50E+05**	**2.20E+05**	**1.60E+03**
Sulfate Reducing Bacteria (APS)	<2.50E-01	**6.20E+02**	**1.60E+02**	**1.80E+02**	<2.50E-01
Methanogens (MGN)	<2.50E-01	**1.10E-01 (J)**	**1.60E-01 (J)**	<2.50E-01	<2.50E-01

Legend:

NA = Not Analyzed
NS = Not Sampled
J = Estimated Gene Copies Below PQL but Above LQL
I = Inhibited
< = Result Not Detected

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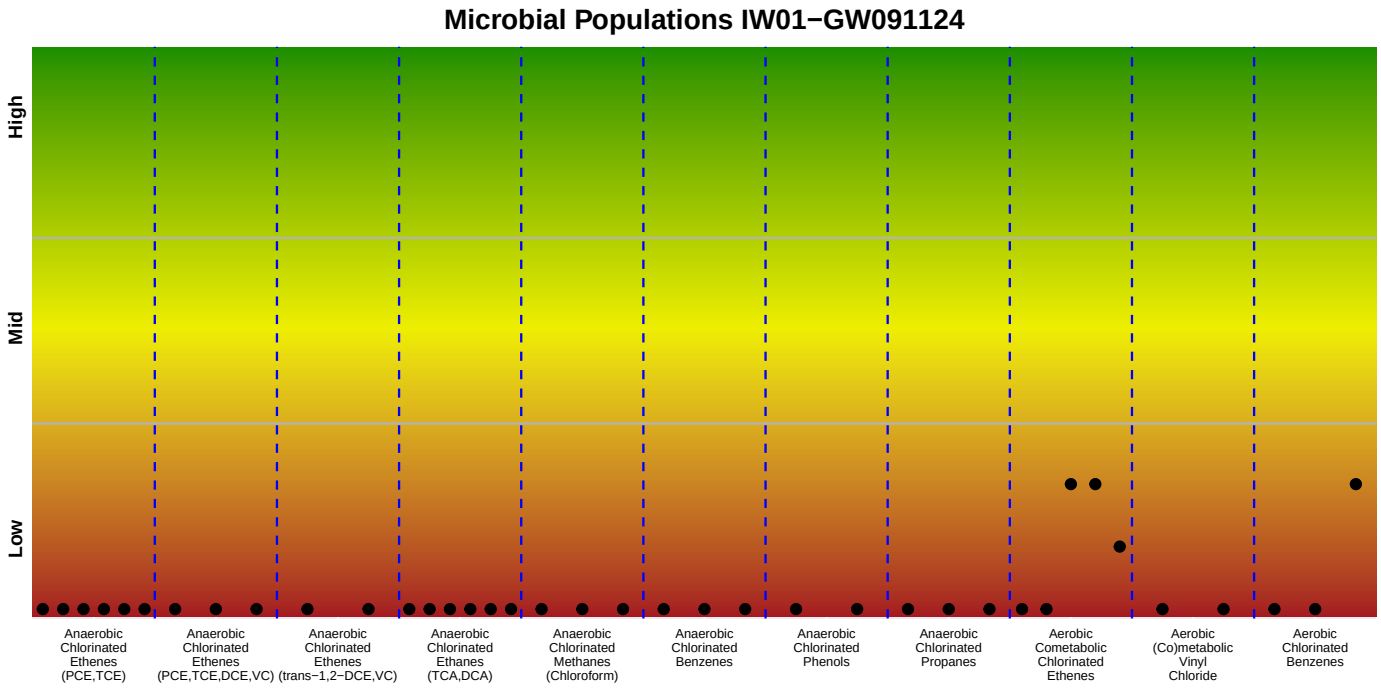

Figure 1: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants. See below to understand the correlation between contaminants and their associated qPCR assays.

Anaerobic - Reductive Dechlorination or Dichloroelimination	
Contaminants	**qPCR Assays**
Chlorinated Ethenes (PCE, TCE)	DHC, DHBt, DSB, DSM, PCE-1, PCE-2
Chlorinated Ethenes (PCE, TCE, DCE, VC)	DHC, BVC, VCR
Chlorinated Ethenes (trans-1,2-DCE, VC)	TDR, CER
Chlorinated Ethanes (TCA and 1,2- DCA)	DHC, DHBt, DHG, DSB[1], DCA, DCAR
Chlorinated Methanes (Chloroform)	DHBt, DCM, CFR
Chlorinated Benzenes	DHC, DHBt[2], DECO
Chlorinated Phenols	DHC, DSB
Chlorinated Propanes	DHC, DHG, DSB[1]
Aerobic - (Co)metabolism	
Chlorinated Ethenes (TCE,DCE,VC)	sMMO, TOD, PHE, RDEG, RMO
(Co)metabolic Vinyl Chloride	etnC, etnE
Chlorinated Benzenes	TOD, TCBO, PHE

[1] *Desulfitobacterium dichloroeliminans* DCA1. [2] Implicated in reductive dechlorination of dichlorobenzene and potentially chlorobenzene.

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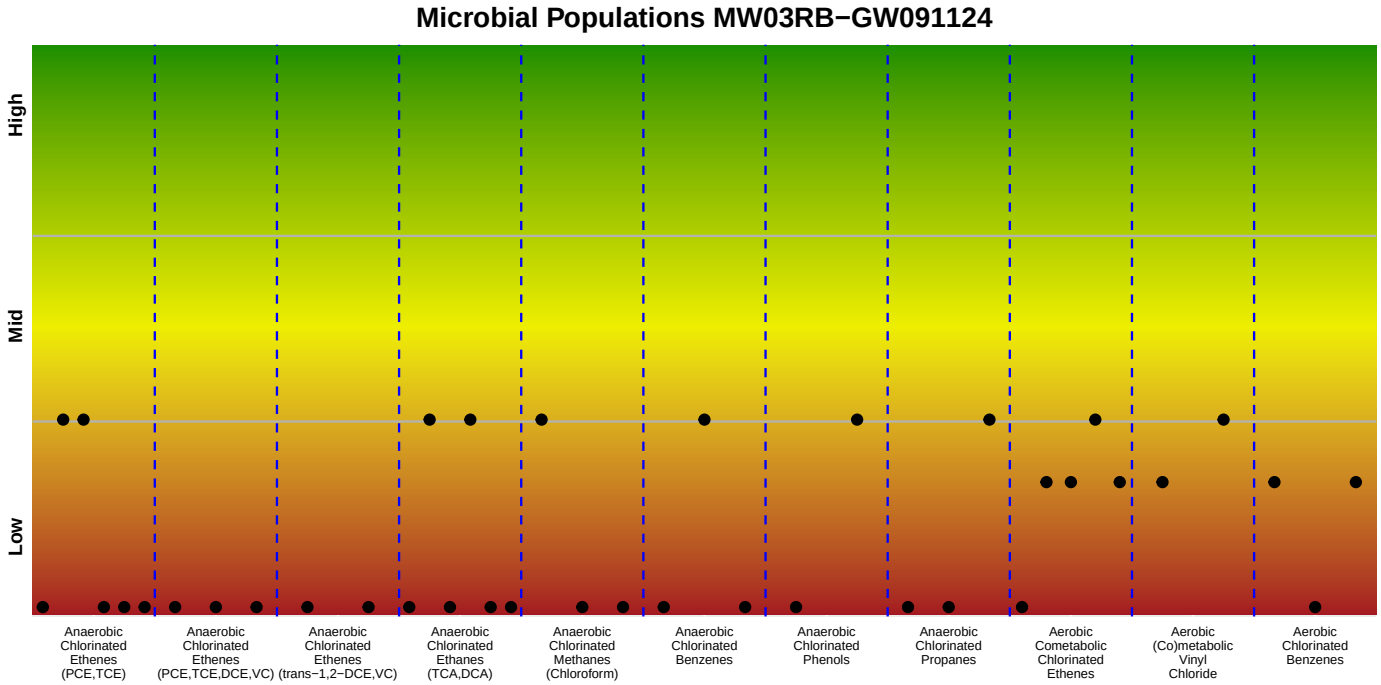

Figure 2: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants. See below to understand the correlation between contaminants and their associated qPCR assays.

Anaerobic - Reductive Dechlorination or Dichloroelimination	
Contaminants	**qPCR Assays**
Chlorinated Ethenes (PCE, TCE)	DHC, DHBt, DSB, DSM, PCE-1, PCE-2
Chlorinated Ethenes (PCE, TCE, DCE, VC)	DHC, BVC, VCR
Chlorinated Ethenes (trans-1,2-DCE, VC)	TDR, CER
Chlorinated Ethanes (TCA and 1,2- DCA)	DHC, DHBt, DHG, DSB[1], DCA, DCAR
Chlorinated Methanes (Chloroform)	DHBt, DCM, CFR
Chlorinated Benzenes	DHC, DHBt[2], DECO
Chlorinated Phenols	DHC, DSB
Chlorinated Propanes	DHC, DHG, DSB[1]
Aerobic - (Co)metabolism	
Chlorinated Ethenes (TCE,DCE,VC)	sMMO, TOD, PHE, RDEG, RMO
(Co)metabolic Vinyl Chloride	etnC, etnE
Chlorinated Benzenes	TOD, TCBO, PHE

[1] *Desulfitobacterium dichloroeliminans* DCA1. [2] Implicated in reductive dechlorination of dichlorobenzene and potentially chlorobenzene.

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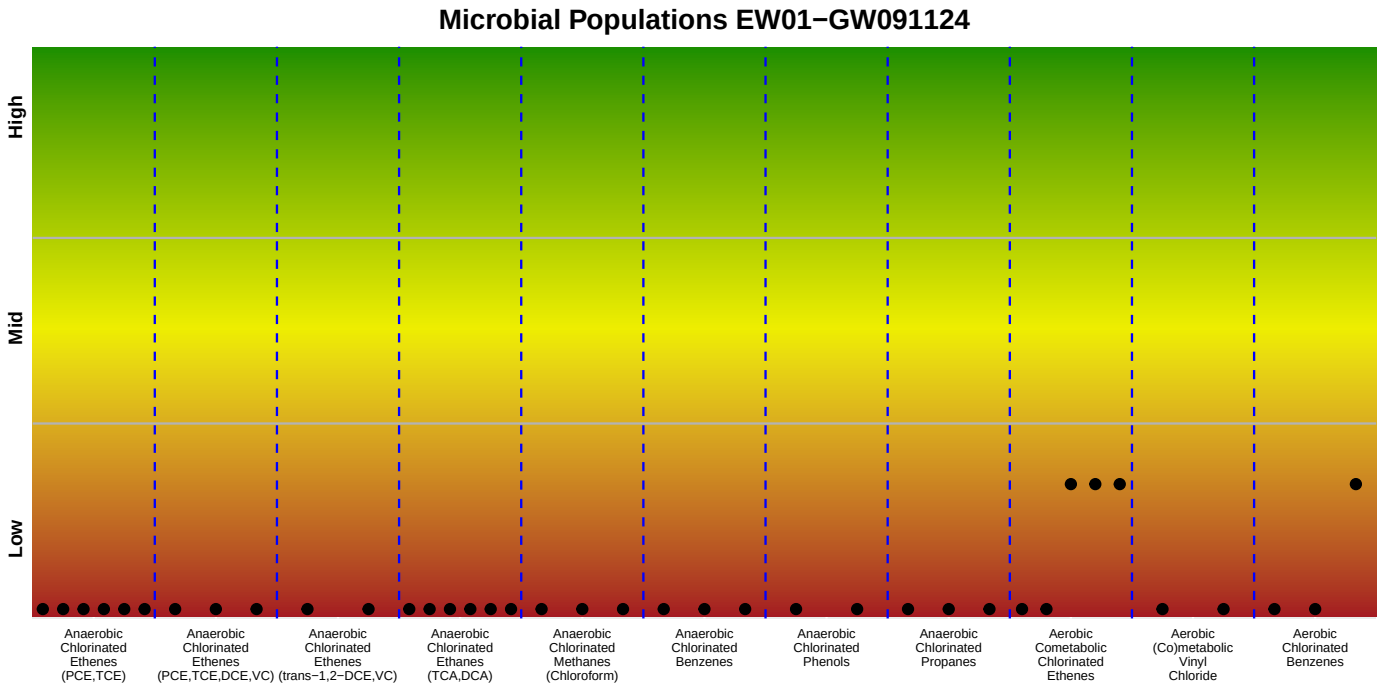

Figure 3: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants. See below to understand the correlation between contaminants and their associated qPCR assays.

Anaerobic - Reductive Dechlorination or Dichloroelimination	
Contaminants	**qPCR Assays**
Chlorinated Ethenes (PCE, TCE)	DHC, DHBt, DSB, DSM, PCE-1, PCE-2
Chlorinated Ethenes (PCE, TCE, DCE, VC)	DHC, BVC, VCR
Chlorinated Ethenes (trans-1,2-DCE, VC)	TDR, CER
Chlorinated Ethanes (TCA and 1,2- DCA)	DHC, DHBt, DHG, DSB[1], DCA, DCAR
Chlorinated Methanes (Chloroform)	DHBt, DCM, CFR
Chlorinated Benzenes	DHC, DHBt[2], DECO
Chlorinated Phenols	DHC, DSB
Chlorinated Propanes	DHC, DHG, DSB[1]
Aerobic - (Co)metabolism	
Chlorinated Ethenes (TCE,DCE,VC)	sMMO, TOD, PHE, RDEG, RMO
(Co)metabolic Vinyl Chloride	etnC, etnE
Chlorinated Benzenes	TOD, TCBO, PHE

[1] *Desulfitobacterium dichloroeliminans* DCA1. [2] Implicated in reductive dechlorination of dichlorobenzene and potentially chlorobenzene.

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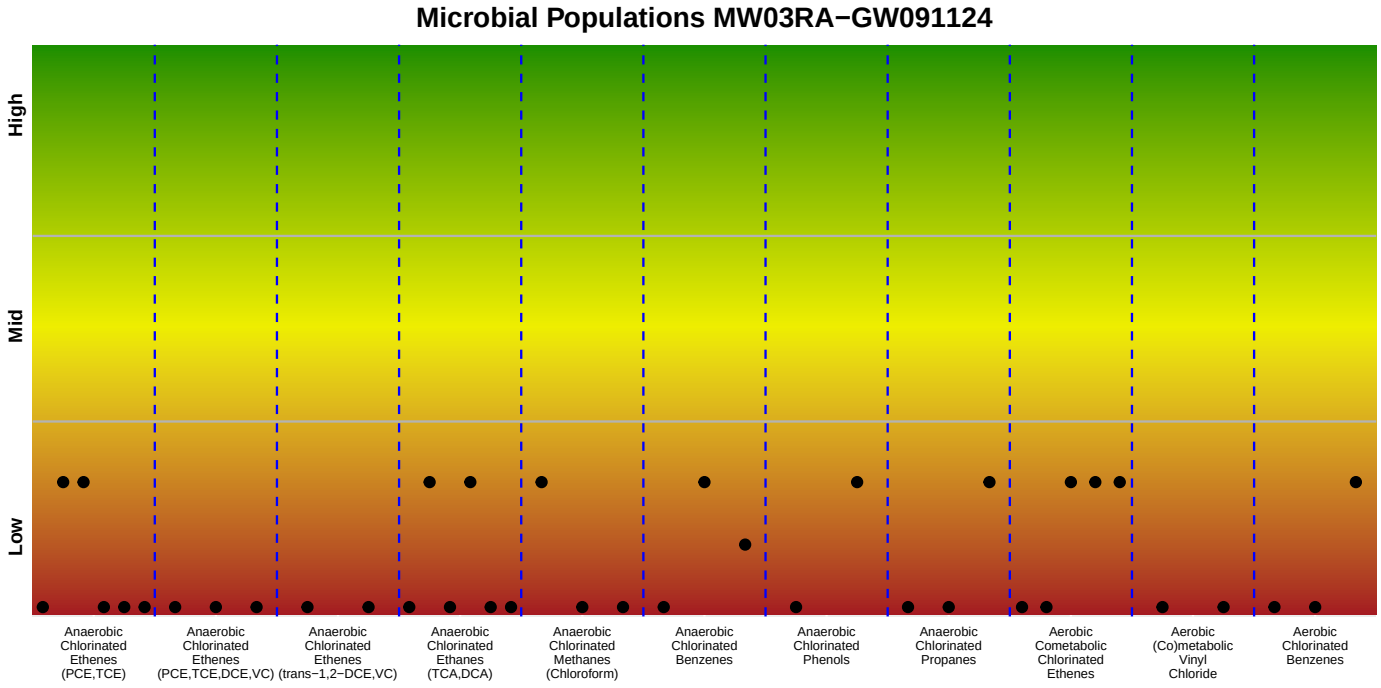

Figure 4: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants. See below to understand the correlation between contaminants and their associated qPCR assays.

Anaerobic - Reductive Dechlorination or Dichloroelimination	
Contaminants	**qPCR Assays**
Chlorinated Ethenes (PCE, TCE)	DHC, DHBt, DSB, DSM, PCE-1, PCE-2
Chlorinated Ethenes (PCE, TCE, DCE, VC)	DHC, BVC, VCR
Chlorinated Ethenes (trans-1,2-DCE, VC)	TDR, CER
Chlorinated Ethanes (TCA and 1,2- DCA)	DHC, DHBt, DHG, DSB[1], DCA, DCAR
Chlorinated Methanes (Chloroform)	DHBt, DCM, CFR
Chlorinated Benzenes	DHC, DHBt[2], DECO
Chlorinated Phenols	DHC, DSB
Chlorinated Propanes	DHC, DHG, DSB[1]
Aerobic - (Co)metabolism	
Chlorinated Ethenes (TCE,DCE,VC)	sMMO, TOD, PHE, RDEG, RMO
(Co)metabolic Vinyl Chloride	etnC, etnE
Chlorinated Benzenes	TOD, TCBO, PHE

[1] *Desulfitobacterium dichloroeliminans* DCA1. [2] Implicated in reductive dechlorination of dichlorobenzene and potentially chlorobenzene.

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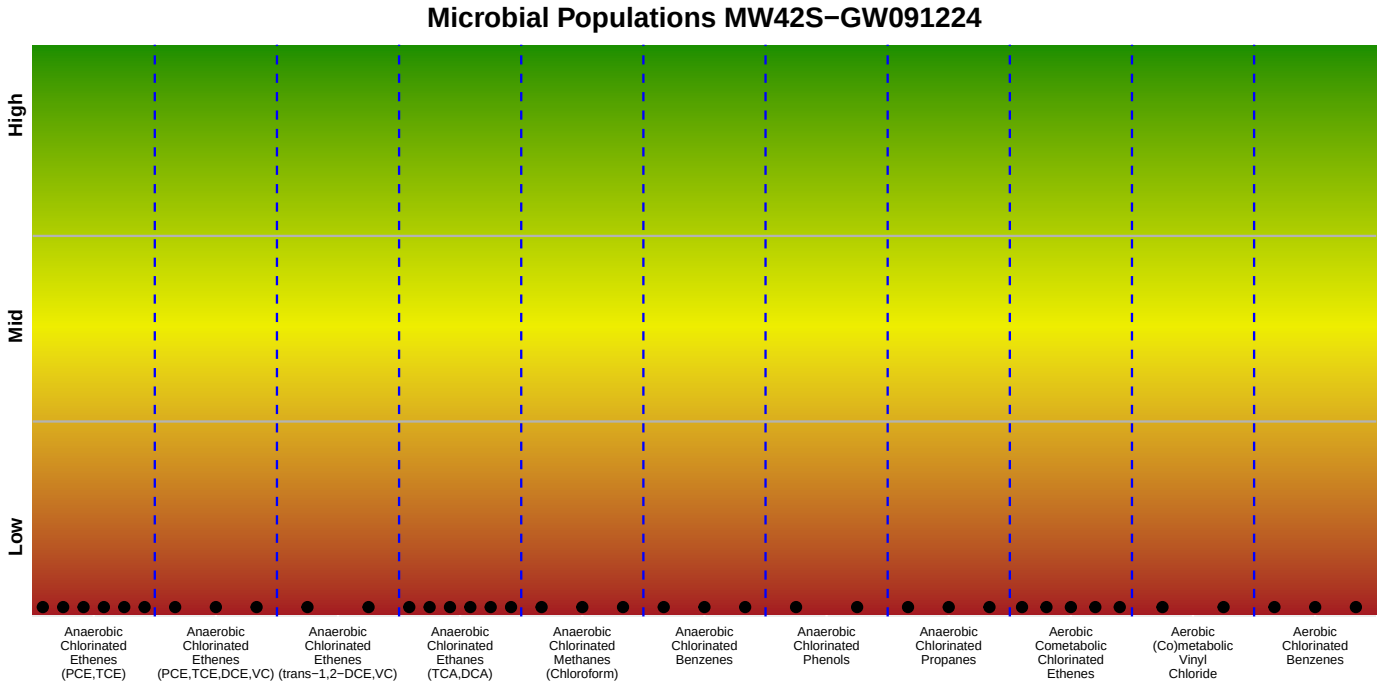

Figure 5: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants. See below to understand the correlation between contaminants and their associated qPCR assays.

Anaerobic - Reductive Dechlorination or Dichloroelimination	
Contaminants	**qPCR Assays**
Chlorinated Ethenes (PCE, TCE)	DHC, DHBt, DSB, DSM, PCE-1, PCE-2
Chlorinated Ethenes (PCE, TCE, DCE, VC)	DHC, BVC, VCR
Chlorinated Ethenes (trans-1,2-DCE, VC)	TDR, CER
Chlorinated Ethanes (TCA and 1,2- DCA)	DHC, DHBt, DHG, DSB[1], DCA, DCAR
Chlorinated Methanes (Chloroform)	DHBt, DCM, CFR
Chlorinated Benzenes	DHC, DHBt[2], DECO
Chlorinated Phenols	DHC, DSB
Chlorinated Propanes	DHC, DHG, DSB[1]
Aerobic - (Co)metabolism	
Chlorinated Ethenes (TCE,DCE,VC)	sMMO, TOD, PHE, RDEG, RMO
(Co)metabolic Vinyl Chloride	etnC, etnE
Chlorinated Benzenes	TOD, TCBO, PHE

[1] *Desulfitobacterium dichloroeliminans* DCA1. [2] Implicated in reductive dechlorination of dichlorobenzene and potentially chlorobenzene.

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Interpretation

The overall purpose of the QuantArray®-Chlor is to give site managers the ability to simultaneously yet economically evaluate the potential for biodegradation of a spectrum of common chlorinated contaminants through a multitude of anaerobic and aerobic (co)metabolic pathways in order to provide a clearer and more comprehensive view of contaminant biodegradation. The following discussion describes the interpretation of results in general terms and is meant to serve as a guide.

Reductive Dechlorination - Chlorinated Ethenes: While a number of bacterial cultures including *Dehalococcoides*, *Dehalobacter*, *Desulfitobacterium*, *Desulfuromonas* spp. capable, of utilizing PCE and TCE as growth-supporting electron acceptors have been isolated [1–5], *Dehalococcoides* may be the most important because they are the only bacterial group that has been isolated to date which is capable of complete reductive dechlorination of PCE to ethene [6]. In fact, the presence of *Dehalococcoides* has been associated with complete reductive dechlorination to ethene at sites across North America and Europe. Hendrickson and Lu have proposed using a *Dehalococcoides* concentration of 1 x 10^4 cells/mL as a screening criterion to identify sites where biological reductive dechlorination is predicted to proceed at "generally useful" rates [7,8].

At chlorinated ethene sites, any "stall" leading to the accumulation of daughter products, especially vinyl chloride, would be a substantial concern. While *Dehalococcoides* concentrations greater than 1 x 10^4 cells/mL correspond to ethene production and useful rates of dechlorination, the range of chlorinated ethenes degraded varies by strain within the *Dehalococcoides* genus [6,9] and the presence of co-contaminants and competitors can have complex impacts on the halorespiring microbial community [10–15]. Therefore, QuantArray®-Chlor also provides quantification of a suite of reductive dehalogenase genes (PCE, TCE, BVC, VCR, CER, and TDR) to more definitively confirm the potential for reductive dechlorination of all chlorinated ethene compounds including vinyl chloride.

Perhaps most importantly, QuantArray®-Chlor quantifies TCE reductase (TCE) and both known vinyl chloride reductase genes (BVC, VCR) from *Dehalococcoides* to conclusively evaluate the potential for complete reductive dechlorination of chlorinated ethenes to non-toxic ethene [16–18]. In addition, the analysis also includes quantification of reductive dehalogenase genes from *Dehalogenimonas* spp. capable of reductive dechlorination of chlorinated ethenes. More specifically, these are the trans-1,2-DCE dehalogenase gene (TDR) from strain WBC-2 [19] and the vinyl chloride reductase gene (CER) from GP, the only known organisms other than *Dehalococcoides* capable of vinyl chloride reduction [20]. Finally, PCE reductase genes responsible for sequential reductive dechlorination of PCE to *cis*-DCE by *Sulfurospirillum* and *Geobacter* spp. are also quantified. In mixed cultures, evidence increasingly suggests that partial dechlorinators like *Sulfurospirillum}* and *Geobacter* may be responsible for the majority of reductive dechlorination of PCE to TCE and *cis*-DCE while *Dehalococcoides* functions more as *cis*-DCE and vinyl chloride reducing specialists [10,21].

Reductive Dechlorination - Chlorinated Ethanes: Under anaerobic conditions, chlorinated ethanes are susceptible to reductive dechlorination by several groups of halorespiring bacteria including *Dehalobacter*, *Dehalogenimonas*, and *Dehalococcoides*. While the reported range of chlorinated ethanes utilized varies by genus, species, and sometimes at the strain level, several general observations can be made regarding biodegradation pathways and daughter product formation. *Dehalobacter* spp. have been isolated that are capable of sequential reductive dechlorination of 1,1,1-TCA through 1,1-DCA to chloroethane [13]. Biodegradation of 1,1,2-TCA by several halorespiring bacteria including *Dehalobacter* and *Dehalogenimonas* spp. proceeds via dichloroelimination producing vinyl chloride [22–24]. Similarly, 1,2-DCA biodegradation by *Dehalobacter*, *Dehalogenimonas*, and *Dehalococcoides* occurs via dichloroelimination producing ethene. While not utilized by many *Desulfitobacterium* isolates, at least one strain, *Desulfitobacterium dichloroeliminans* strain DCA1, is also capable of dichloroelimination of 1,2-DCA [25]. The 1,2-dichloroethane reductive dehalogenase gene (DCAR) from members of *Desulfitobacterium* and *Dehalobacter* is known to dechlorinate 1,2-DCA to ethene, while the 1,1-dichloroethane reductive dehalogenase (DCA) targets the gene responsible for 1,1-DCA dechlorination in some strains of *Dehalobacter*. In addition to chloroform, chloroform reductase (CFR) has also been shown to be responsible for reductive dechlorination of 1,1,1-TCA [26].

Reductive Dechlorination - Chlorinated Methanes: Chloroform is a common co-contaminant at chlorinated solvent sites and can inhibit reductive dechlorination of chlorinated ethenes. Grostern et al. demonstrated that a *Dehalobacter* population was capable of reductive dechlorination of chloroform to produce dichloromethane [27]. The *cfrA* gene encodes the reductase which catalyzes this initial step in chloroform biodegradation [26]. Justicia-Leon et al. have since shown that dichloromethane can support growth of a distinct group of *Dehalobacter* strains via fermentation [28]. The *Dehalobacter* DCM assay targets the 16S rRNA gene of these strains.

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Reductive Dechlorination - Chlorinated Benzenes: Chlorinated benzenes are an important class of industrial solvents and chemical intermediates in the production of drugs, dyes, herbicides, and insecticides. The physical-chemical properties of chlorinated benzenes as well as susceptibility to biodegradation are functions of their degree of chlorination and the positions of chlorine substituents. Under anaerobic conditions, reductive dechlorination of higher chlorinated benzenes including hexachlorobenzene (HCB), pentachlorobenzene (PeCB), tetrachlorobenzene (TeCB) isomers, and trichlorobenzene (TCB) isomers has been well documented [29], although biodegradation of individual compounds and isomers varies between isolates. For example, *Dehalococcoides* strain CBDB1 reductively dechlorinats HCB, PeCB, all three TeCB isomers, 1,2,3-TCB, and 1,2,4-TCB [9]. *Dehalobium chlorocoercia* DF-1 has been shown to be capable of reductive dechlorination of HCB, PeCB, and 1,2,3,5-TeCB [31]. The dichlorobenzene (DCB) isomers and chlorobenzene (CB) were considered relatively recalcitrant under anaerobic conditions. However, new evidence has demonstrated reductive dechlorination of DCBs to CB and CB to benzene [32] with corresponding increases in concentrations of *Dehalobacter* spp. [33].

Reductive Dechlorination - Chlorinated Phenols: Pentachlorophenol (PCP) was one of the most widely used biocides in the U.S. and despite residential use restrictions, is still extensively used industrially as a wood preservative. Along with PCP, the tetrachlorophenol and trichlorophenol isomers were also used as fungicides in wood preserving formulations. 2,4-Dichlorophenol and 2,4,5-TCP were used as chemical intermediates in herbicide production (e.g. 2,4-D) and chlorophenols are known byproducts of chlorine bleaching in the pulp and paper industry. While the range of compounds utilized varies by strain, some *Dehalococcoides* isolates are capable of reductive dechlorination of PCP and other chlorinated phenols. For example, *Dehalococcoides* strain CBDB1 is capable of utilizing PCP, all three tetrach lorophenol (TeCP) congeners, all six trichlorophenol (TCP) congeners, and 2,3-dichlorophenol (2,3-DCP). PCP dechlorination by strain CBDB1 produces a mixture of 3,5-DCP, 3,4-DCP, 2,4-DCP, 3-CP, and 4-CP [34]. In the same study, however, *Dehalococcoides* strain 195 dechlorinated a more narrow spectrum of chlorophenols which included 2,3-DCP, 2,3,4-TCP, and 2,3,6-TCP, but no other TCPs or PCP. Similar to *Dehalococcoides*, some species and strains of *Desulfitobacterium* are capable of utilizing PCP and other chlorinated phenols. *Desulfitobacterium hafniense* PCP-1 is capable of reductive dechlorination of PCP to 3-CP [35]. However, the ability to biodegrade PCP is not universal among *Desulfitobacterium* isolates. *Desulfitobacterium* spp. strain PCE1 and *D. chlororespirans* strain Co23, for example, can utilize some TCP and DCP isomers, but not PCP for growth [2,36].

Reductive Dechlorination - Chlorinated Propanes: *Dehalogenimonas* is a recently described bacterial genus of the phylum Chloroflexi which also includes the well-known chloroethene-respiring *Dehalococcoides* [23]. The *Dehalogenimonas* isolates characterized to date are also halorespiring bacteria, but utilize a rather unique range of chlorinated compounds as electron acceptors including chlorinated propanes (1,2,3-TCP and 1,2-DCP) and a variety of other vicinally chlorinated alkanes including 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, and 1,2-dichloroethane [23].

Aerobic - Chlorinated Ethene Cometabolism: Under aerobic conditions, several different types of bacteria including methane-oxidizing bacteria (methanotrophs), and many benzene, toluene, ethylbenzene, xylene, and (BTEX)-utilizing bacteria can cometabolize or co-oxidize TCE, DCE, and vinyl chloride [37]. In general, cometabolism of chlorinated ethenes is mediated by monooxygenase enzymes with "relaxed" specificity that oxidize a primary (growth supporting) substrate (*e.g.* methane) and co-oxidize the chlorinated compound (*e.g.* TCE). QuantArray®-Chlor provides quantification of a suite of genes encoding oxygenase enzymes capable of co-oxidation of chlorinated ethenes including soluble methane monooxygenase (sMMO). Soluble methane monooxygenases co-oxidize a broad range of chlorinated compounds [38–41] including TCE, *cis*-DCE, and vinyl chloride. Furthermore, soluble methane monooxygenases are generally believed to support greater rates of aerobic cometabolism [40]. QuantArray®-Chlor also quantifies aromatic oxygenase genes encoding ring hydroxylating toluene monooxygenase genes (RMO, RDEG), toluene dioxygenase (TOD) and phenol hydroxylases (PHE) capable of TCE co-oxidation [42–46]. TCE or a degradation product has been shown to induce expression of toluene monooxygenases in some laboratory studies [43,47] raising the possibility of TCE cometabolism with an alternative (non-aromatic) growth substrate. Moreover, while a number of additional factors must be considered, recent research under ESTCP Project 201584 has shown positive correlations between concentrations of monooxygenase genes (soluble methane monooxygenase, ring hydroxylating monooxygenases, and phenol hydroxylase) and the rate of TCE degradation [48].

Aerobic - Chlorinated Ethane Cometabolism: While less widely studied than cometabolism of chlorinated ethenes, some chlorinated ethanes are also susceptible to co-oxidation. As mentioned previously, soluble methane monooxygenases (sMMO) exhibit very relaxed specificity. In laboratory studies, sMMO has been shown to co-oxidize a number of chlorinated ethanes including 1,1,1-TCA and 1,2-DCA [38,40].

Aerobic - Vinyl Chloride Cometabolism: Beginning in the early 1990s, numerous microcosm studies demonstrated

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aerobic oxidation of vinyl chloride under MNA conditions without the addition of exogenous primary substrates. Since then, strains of *Mycobacterium*, *Nocardioides*, *Pseudomonas*, *Ochrobactrum*, and *Ralstonia* species have been isolated which are capable of aerobic growth on both ethene and vinyl chloride (see Mattes et al. [49] for a review). The initial steps in the pathway are the monooxygenase (*etn*ABCD) catalyzed conversion of ethene and vinyl chloride to their respective epoxyalkanes (epoxyethane and chlorooxirane), followed by epoxyalkane:CoM transferase (*etn*E) mediated conjugation and breaking of the epoxide [50].

Aerobic - Chlorinated Benzenes: In general, chlorobenzenes with four or less chlorine groups are susceptible to aerobic biodegradation and can serve as growth-supporting substrates. Toluene dioxygenase (TOD) has a relatively relaxed substrate specificity and mediates the incorporation of both atoms of oxygen into the aromatic ring of benzene and substituted benzenes (toluene and chlorobenzene). Comparison of TOD levels in background and source zone samples from a CB-impacted site suggested that CBs promoted growth of TOD-containing bacteria [51]. In addition, aerobic biodegradation of some trichlorobenzene and even tetrachlorobenzene isomers is initiated by a group of related trichlorobenzene dioxygenase genes (TCBO). Finally, phenol hydroxylases catalyze the continued oxidation and in some cases, the initial oxidation of a variety of monoaromatic compounds. In an independent study, significant increases in numbers of bacteria containing PHE genes corresponded to increases in biodegradation of DCB isomers [51].

Aerobic - Chlorinated Methanes: Many aerobic methylotrophic bacteria, belonging to diverse genera (*Hyphomicrobium*, *Methylobacterium*, *Methylophilus*, *Pseudomonas*, *Paracoccus*, and *Alibacter*) have been isolated which are capable of utilizing dichloromethane (DCM) as a growth substrate. The DCM metabolic pathway in methylotrophic bacteria is initiated by a dichloromethane dehalogenase (DCMA) gene. DCMA is responsible for aerobic biodegradation of dichloromethane by methylotrophs by first producing formaldehyde which is then further oxidized [52].

As discussed in previous sections, soluble methane monooxygenase (sMMO) exhibits relaxed specificity and co-oxidizes a broad spectrum of chlorinated hydrocarbons. In addition to chlorinated ethenes, sMMO has been shown to co-oxidize chloroform in laboratory studies [38,41].

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Appendix C
Summary of VOCs in Groundwater

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Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
EW-01	EW01-GW091124	9/11/2024	**67**		**1**		**0.93**	**J**	*1*	*U*
GW-001	A-GW-001_03042016	3/4/2016	**0.78**		*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-001	A-GW-001-D_03042016	3/4/2016	**0.76**		*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-003	A-GW-003_02/26/2016	2/26/2016	**0.48**	**J**	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-004	A-GW-004_02/26/2016	2/26/2016	**12**		**0.34**	**J**	*0.5*	*UJ*	*0.5*	*U*
GW-005	A-GW-005_02/26/2016	2/26/2016	**1.4**		*0.5*	*U*	*0.5*	*UJ*	*0.5*	*U*
GW-006	A-GW-006_02/26/2016	2/26/2016	**3.1**		**1**		**0.45**	**J**	*0.5*	*U*
GW-007	A-GW-007_02282016	2/28/2016	**33**		**0.59**		*0.5*	*U*	*0.5*	*U*
GW-008	A-GW-008_02272016	2/27/2016	**9.6**		**1.8**		*0.5*	*U*	*0.5*	*U*
GW-009	A-GW-009_02/26/2016	2/26/2016	**0.7**		**2.4**		**0.68**		*0.5*	*U*
GW-010/ RG-01	A-GW-010_02272016	2/27/2016	**0.99**		*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-010/ RG-01	A-GW-010-D_02272016	2/27/2016	**1.4**		**0.11**	**J**	*0.5*	*U*	*0.5*	*U*
GW-010/ RG-01	A-GW-10_07/12/2016	7/12/2016	**1.1**		*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-010/ RG-01	A-GW-10_09202016	9/20/2016	**1.1**		**0.19**	**J**	*0.5*	*U*	*0.5*	*U*
GW-010/ RG-01	RG01-GW041621	4/16/2021	**7.3**		**0.17**	**J**	*1*	*U*	*1*	*U*
GW-010/ RG-01	RG01-GW061422	6/14/2022	**6.7**		*1*	*U*	*1*	*U*	*1*	*U*
GW-010/ RG-01	RG01-GW-120722	12/7/2022	**6.2**		**0.36**	**J**	*1*	*U*	*1*	*U*
GW-010/ RG-01	RG01-GW100324	10/3/2024	**7.5**		**0.5**	**J**	*1*	*U*	*1*	*U*
GW-011/ RG-02	A-GW-011_02272016	2/27/2016	**45**		**0.82**		**0.39**	**J**	*0.5*	*U*
GW-011/ RG-02	A-GW-11_07/11/2016	7/11/2016	**44**		**0.56**		**0.37**	**J**	*0.5*	*U*
GW-011/ RG-02	A-GW-11_09192016	9/19/2016	**35**		**0.62**		**0.43**	**J**	*0.5*	*U*
GW-011/ RG-02	RG02-GW041621	4/16/2021	**57**		**1.3**		**1.1**		*1*	*U*
GW-011/ RG-02	RG02-GW061422	6/14/2022	**23**		**1.1**		**1.2**		*1*	*U*
GW-011/ RG-02	RG02-GW-120822	12/8/2022	**55**		**1.5**		**1.6**		*1*	*U*
GW-011/ RG-02	RG02-GW100324	10/3/2024	**14**		**0.61**	**J**	**0.85**	**J**	*1*	*U*
GW-012	A-GW-012_03/02/2016	3/2/2016	**4.8**		**0.22**	**J**	**0.14**	**J**	*0.5*	*U*
GW-013	A-GW-013_03042016	3/4/2016	**22**		**0.18**	**J**	**0.11**	**J**	*0.5*	*U*
GW-014	A-GW-014_03/02/2016	3/2/2016	**3.2**		**1.9**		**0.24**	**J**	*0.5*	*U*
GW-014	A-GW-014_03022016	3/2/2016								
GW-015	A-GW-015_02292016	2/29/2016	**31**		**0.62**	**J**	**0.29**	**J**	*0.5*	*U*
GW-015	A-GW-015-D_02292016	2/29/2016	**29**	**J**	**0.63**	**J**	**0.32**	**J**	*0.5*	*U*
GW-016/ RG-03	A-GW-016_02282016	2/28/2016	**20**	**J**	**0.61**		**0.26**	**J**	*0.5*	*U*
GW-016/ RG-03	A-GW-16_07/11/2016	7/11/2016	**13**		**0.53**		*0.5*	*U*	*0.5*	*U*
GW-016/ RG-03	A-GW-16_09192016	9/19/2016	**18**		**0.73**		**0.3**	**J**	*0.5*	*U*
GW-016/ RG-03	RG03-GW041521	4/15/2021	**60**		**0.67**	**J**	**0.41**	**J**	*1*	*U*
GW-016/ RG-03	RG03-GW061422	6/14/2022	**51**		**1**	**J**	**1**		*1*	*U*
GW-016/ RG-03	RG03-GW111622	11/16/2022	**55**		**1.5**		**1.8**		*1*	*U*
GW-016/ RG-03	RG03-GW100324	10/3/2024	**51**		**1.6**		**2**		*1*	*U*
GW-017	A-GW-017_03/02/2016	3/2/2016	**1.1**		**0.56**		*0.5*	*U*	*0.5*	*U*
GW-018	A-GW-018_03/02/2016	3/2/2016	**10**		**2.1**		**0.27**	**J-**	*0.5*	*U*
GW-020/ RG-04	A-GW-020_03012016	3/1/2016	**2.7**		**1**		*0.5*	*U*	*0.5*	*U*
GW-020/ RG-04	A-GW-20_07/11/2016	7/11/2016	**8.3**		**0.4**	**J**	*0.5*	*U*	*0.5*	*U*
GW-020/ RG-04	A-GW-20_09192016	9/19/2016	**8.6**		**0.29**	**J**	*0.5*	*U*	*0.5*	*U*
GW-020/ RG-04	RG04-GW041521	4/15/2021	**6**		**0.99**	**J**	*1*	*U*	*1*	*U*
GW-020/ RG-04	RG04-GW061422	6/14/2022	**5.3**		0.79	J+	*1*	*U*	*1*	*U*
GW-020/ RG-04	RG04-GW-120722	12/7/2022	**10**		**0.92**	**J**	*1*	*U*	*1*	*U*
GW-020/ RG-04	RG04-GW100324	10/3/2024	**11**		**0.46**	**J**	*1*	*U*	*1*	*U*
GW-021	A-GW-021_03012016	3/1/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-022	A-GW-022_03012016	3/1/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-023	A-GW-023_02/22/2016	2/22/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-024	A-GW-024_02/25/2016	2/25/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-025	A-GW-025_02292016	2/29/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
GW-026	A-GW-026_02282016	2/28/2016	**0.27**	**J**	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-027/ RG-05	A-GW-027_03052016	3/5/2016	**22**		**0.21**	**J**	**0.14**	**J**	*0.5*	*U*
GW-027/ RG-05	RG05-GW041621	4/16/2021	**7.8**		*1*	*U*	*1*	*U*	*1*	*U*
GW-027/ RG-05	RG05-GW061422	6/14/2022	**3.8**		*1*	*U*	*1*	*U*	*1*	*U*
GW-027/ RG-05	RG05-GW-120822	12/8/2022	**5.9**		**0.38**	**J**	**0.12**	**J**	*1*	*U*
GW-027/ RG-05	FD09-GW100324	10/3/2024	**9**		**0.15**	**J**	*1*	*U*	*1*	*U*
GW-027/ RG-05	RG05-GW100324	10/3/2024	**8.9**		**0.14**	**J**	*1*	*U*	*1*	*U*
GW-028	A-GW-028_03052016	3/5/2016	**43**		**0.4**	**J**	**0.27**	**J**	*0.5*	*U*
GW-031	A-GW-031_02282016	2/28/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-039	A-GW-039_02/23/2016	2/23/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-040	A-GW-040_03/03/2016	3/3/2016	**0.13**	**J**	*0.5*	*U*	*0.5*	*UJ*	*0.5*	*U*
GW-043	A-GW-043_03032016	3/3/2016	**0.35**	**J**	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-046	A-GW-046_02/24/2016	2/24/2016	**0.2**	**J**	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-048	A-GW-048_03/03/2016	3/3/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-049	A-GW-049_02/25/2016	2/25/2016	**1.2**		*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-049	A-GW-049-D_02/25/2016	2/25/2016	**1.2**		*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-049	A-GW-49_07/12/2016	7/12/2016	**1.1**		*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-049	A-GW-49_09202016	9/20/2016	**1.1**		*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-050/ RG-06	A-GW-050_02292016	2/29/2016	**2.5**		**1.7**		**1.1**		*0.5*	*U*
GW-050/ RG-06	A-GW-50_07/12/2016	7/12/2016	**2.8**		**6.1**		**1.3**		*0.5*	*U*
GW-050/ RG-06	A-GW-50_09202016	9/20/2016	**3**		**6.4**		**1.4**		*0.5*	*U*
GW-050/ RG-06	RG06-GW041621	4/16/2021	**1.5**		**7.4**		**2.2**		*1*	*U*
GW-050/ RG-06	RG06-GW061422	6/14/2022	*1*	*U*	**2.4**		**7.2**		*1*	*U*
GW-050/ RG-06	RG06-GW-120822	12/8/2022	*1*	*U*	**0.26**	**J**	**7.3**		*1*	*U*
GW-050/ RG-06	RG06-GW100324	10/3/2024	*1*	*U*	**0.26**	**J**	**6**		*1*	*U*
GW-051	A-GW-051_03042016	3/4/2016	**23**		**0.19**	**J**	*0.5*	*U*	*0.5*	*U*
GW-052/ RG-07	A-GW-052_03/03/2016	3/3/2016	**57**		**0.53**	**J**	**0.39**	**J**	*0.5*	*U*
GW-052/ RG-07	A-GW-052-D_03/03/2016	3/3/2016	**61**		**0.61**	**J**	**0.42**	**J**	*0.5*	*U*
GW-052/ RG-07	A-GW-52_07/12/2016	7/12/2016	**52**		**0.56**		**0.32**	**J**	*0.5*	*U*
GW-052/ RG-07	A-GW-52-D_07/12/2016	7/12/2016	**46**		**0.49**	**J**	**0.31**	**J**	*0.5*	*U*
GW-052/ RG-07	A-GW-52_09202016	9/20/2016	**43**		**0.44**	**J**	**0.3**	**J**	*0.5*	*U*
GW-052/ RG-07	A-GW-52-D_09202016	9/20/2016	**42**		**0.4**	**J**	**0.28**	**J**	*0.5*	*U*
GW-052/ RG-07	RG07-GW041621	4/16/2021	**43**		**0.32**	**J**	**0.11**	**J**	*1*	*U*
GW-052/ RG-07	RG07-GW061422	6/14/2022	**36**		*1*	*U*	**0.13**	**J**	*1*	*U*
GW-052/ RG-07	FD01-GW-120722	12/7/2022	**51**		**0.41**	**J**	**0.16**	**J**	*1*	*U*
GW-052/ RG-07	RG07-GW-120722	12/7/2022	**48**		**0.4**	**J**	**0.15**	**J**	*1*	*U*
GW-052/ RG-07	RG07-GW100324	10/3/2024	**38**		**0.27**	**J**	*1*	*U*	*1*	*U*
GW-053/ RG-08	A-GW-053_03/03/2016	3/3/2016	**37**		**0.83**		**0.31**	**J**	*0.5*	*U*
GW-053/ RG-08	A-GW-53_07/11/2016	7/11/2016	**40**		**0.84**		**0.21**	**J**	*0.5*	*U*
GW-053/ RG-08	A-GW-53_09192016	9/19/2016	**45**		**0.59**		**0.22**	**J**	*0.5*	*U*
GW-053/ RG-08	RG08-GW041521	4/15/2021	**56**		**0.42**	**J**	**0.15**	**J**	*1*	*U*
GW-053/ RG-08	FD01-GW041521	4/15/2021	**58**		**0.43**	**J**	**0.15**	**J**	*1*	*U*
GW-053/ RG-08	RG08-GW061422	6/14/2022	**37**		*1*	*U*	**0.17**	**J**	*1*	*U*
GW-053/ RG-08	RG08-GW-120822	12/8/2022	**39**	**J**	**0.43**	**J**	**0.13**	**J**	*1*	*UJ*
GW-053/ RG-08	RG08-GW100324	10/3/2024	**50**		**0.46**	**J**	*1*	*U*	*1*	*U*
GW-055	A-GW-055_03052016	3/5/2016	**0.19**	**J**	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-059/ RG-09	A-GW-059_03052016	3/5/2016	**0.17**	**J**	**7.7**		**3.9**		*0.5*	*U*
GW-059/ RG-09	A-GW-59_07/11/2016	7/11/2016	**2**		**6.1**		**2.5**		*0.5*	*U*
GW-059/ RG-09	A-GW-59_09192016	9/19/2016	**1**		**7.2**		**3**		*0.5*	*U*
GW-059/ RG-09	RG09-GW041621	4/16/2021	**13**		**1.2**		**0.49**	**J**	*1*	*U*
GW-059/ RG-09	RG09-GW061422	6/14/2022	**16**		*1*	*U*	*1*	*U*	*1*	*U*
GW-059/ RG-09	RG09-GW-120822	12/8/2022	**11**		**0.21**	**J**	*1*	*U*	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
GW-059/ RG-09	RG09-GW100324	10/3/2024	**14**		**0.25**	**J**	*1*	*U*	*1*	*U*
GW-060	A-GW-060_03/08/2016	3/8/2016	**10**		**1**		*0.5*	*U*	*0.5*	*U*
GW-061/ RG-10	A-GW-061_03052016	3/5/2016	**2.3**		*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-061/ RG-10	A-GW-61_07/12/2016	7/12/2016	**2.9**		*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
GW-061/ RG-10	A-GW-61_09202016	9/20/2016	**3**		**0.15**	**J**	*0.5*	*U*	*0.5*	*U*
GW-061/ RG-10	RG10-GW041621	4/16/2021	**3**		**0.59**	**J**	*1*	*U*	*1*	*U*
GW-061/ RG-10	RG10-GW061422	6/14/2022	**1.4**		*1*	*U*	*1*	*U*	*1*	*U*
GW-061/ RG-10	RG10-GW-120822	12/8/2022	**0.98**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
GW-061/ RG-10	RG10-GW100324	10/3/2024	**0.3**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
GW-062	A-GW-062_03/08/2016	3/8/2016	**20**		**0.23**	**J**	**0.16**	**J**	*0.5*	*U*
IW-01	IW01-GW091124	9/11/2024	**60**		**0.43**	**J**	**0.32**	**J**	*1*	*U*
Mt Olivet	A-GW-MTO_05022016	5/2/2016	**40**		**0.56**		**0.26**	**J**	*0.5*	*U*
MW-01D	NR - See Loose Lab Data EPA 1999	6/30/1998	**2**		*1*	*U*	*1*	*U*	NR	
MW-01D	NR - See Loose Lab Data EPA 1999	7/1/1998	*1*	*U*	*1*	*U*	*1*	*U*	NR	
MW-01D	NR - See UDEQ 2000	11/10/1998	**1**	**J**	*10*	*U*	*10*	*U*	NR	
MW-01D	NR - See UDEQ 2012	10/4/2004	**8.3**		NR		NR		NR	
MW-01D	NR - See USGS 2005	2/22/2005	**0.2**		*0.1*	*U*	*0.1*	*U*	NR	
MW-01D	NR - See UDEQ 2012	10/5/2005	**0.33**		NR		NR		NR	
MW-01D	NR - See MWH 2012	12/21/2011	**9.9**		*0.1*	*U*	*0.1*	*U*	NR	
MW-01D	NR - See UDEQ 2012	12/21/2011	**12**		*5*	*U*	*5*	*U*	NR	
MW-01D	NR - See Sealy Env Svcs 2014	6/26/2014	**9**		*5*	*U*	*5*	*U*	NR	
MW-01D	MW-01D_04262016	4/26/2016	**9.1**		**0.16**	**J**	*0.5*	*U*	*0.5*	*U*
MW-01D	MW-01D-FD_04262016	4/26/2016	**9.2**		**0.15**	**J**	*0.5*	*U*	*0.5*	*U*
MW-01D	A-GW-MW-01D_07/13/2016	7/13/2016	**2.8**		*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
MW-01D	A-GW-MW-01D_09212016	9/21/2016	**1.6**		*0.5*	*U*	*0.5*	*UJ*	*0.5*	*U*
MW-01D	OU2-MW01D-GW-121118	12/11/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-01D	OU2-MW01D-GW-031819	3/18/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-01D	OU2-MW01D-GW120619	12/6/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-01D	MW01D-GW061720	6/17/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-01D	MW01D-GW092920	9/29/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-01D	MW01D-GW121520	12/15/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-01D	MW01D-GW032221	3/22/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-01D	MW01D-GW090624	9/6/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-01S	NR - See Loose Lab Data EPA 1999	6/30/1998	**280**		**2**		**2.7**		NR	
MW-01S	NR - See Loose Lab Data EPA 1999	7/1/1998	**420**	**E**	**4**		**4.5**		NR	
MW-01S	NR - See UDEQ 2000; UDEQ 2012	11/11/1998	**320**	**D**	**4**	**J**	**5**	**J**	NR	
MW-01S	NR - See UDEQ 2012	11/11/1998	**310**		**4**	**J**	**3**	**J**	NR	
MW-01S	NR - See USGS 2005	2/25/2005	**278**		**2.3**		**1.4**		NR	
MW-01S	NR - See MWH 2012	11/14/2011	**160**		**1.8**		**1**		NR	
MW-01S	NR - See UDEQ 2012	11/14/2011	**150**		*5*	*U*	*5*	*U*	NR	
MW-01S	NR - See Sealy Env Svcs 2014	6/26/2014	**260**	**E**	**2.1**	**J**	**1.3**	**J**	NR	
MW-01S	MW-01S_04282016	4/28/2016	**98**		**1.3**		**0.79**		*0.5*	*U*
MW-01S	A-GW-MW-01S_07/14/2016	7/14/2016	**60**		**1**		**0.63**		*0.5*	*U*
MW-01S	A-GW-MW-01S_09222016	9/22/2016	**210**		**1.5**		**0.85**	**J**	*0.5*	*U*
MW-01S	OU2-MW01S-GW-121118	12/11/2018	**190**		**1.2**		**0.6**	**J**	*1*	*U*
MW-01S	OU2-MW01S-GW-031819	3/18/2019	**200**		**1.2**		**0.6**	**J**	*1*	*U*
MW-01S	MW01S-GW062120	6/21/2020	**160**		**1**		**0.47**	**J**	*1*	*U*
MW-01S	FD01-GW062120	6/21/2020	**150**		**1**		**0.48**	**J**	*1*	*U*
MW-01S	MW01S-GW092920	9/29/2020	**180**		**1.1**		**0.49**	**J**	*1*	*U*
MW-01S	FD01-GW092920	9/29/2020	**170**		**1.1**		**0.51**	**J**	*1*	*U*
MW-01S	MW01S-GW121620	12/16/2020	**160**		**1.1**		**0.56**	**J**	*1*	*U*
MW-01S	MW01S-GW032221	3/22/2021	**170**		**0.95**	**J**	**0.44**	**J**	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
MW-01S	MW01S-GW062721	6/27/2021	**130**		**0.89**	**J**	**0.44**	**J**	*1*	*U*
MW-01S	FD01-GW062721	6/27/2021	**120**		**0.99**	**J**	**0.48**	**J**	*1*	*U*
MW-01S	FD04-GW061322	6/13/2022	**140**		**1.2**		**0.47**	**J**	*1*	*U*
MW-01S	MW01S-GW061322	6/13/2022	**140**		**1.1**		**0.47**	**J**	*1*	*U*
MW-02	NR - See UDEQ 2000	11/11/1998	**290**		*50*	*U*	*50*	*U*	NR	
MW-02	NR - See USGS 2005	2/24/2005	**296**		**2**		**1.1**		NR	
MW-02	NR - See UDEQ 2012	10/5/2005	**160**		NR		NR		NR	
MW-02	NR - See Sealy Env Svcs 2014	6/26/2014	**200**		**1.7**		**0.94**	**J**	NR	
MW-02	MW-02_04272016	4/27/2016	**98**		**0.66**		**0.36**	**J**	*0.5*	*U*
MW-02	A-GW-MW-02_07/14/2016	7/14/2016	**72**		**0.56**		**0.4**	**J**	*0.5*	*U*
MW-02	A-GW-MW-02_09222016	9/22/2016	**130**		**0.56**		**0.32**	**J**	*0.5*	*U*
MW-02	OU2-MW02-GW-121818	12/18/2018	**160**		**0.52**	**J**	**0.32**	**J**	*1*	*U*
MW-02	OU2-MW02-GW-040919	4/9/2019	**180**		**0.58**	**J**	**0.38**	**J**	*1*	*U*
MW-02	OU2-MW02-GW120519	12/5/2019	**150**		**0.54**	**J**	**0.36**	**J**	*1*	*U*
MW-02	MW02-GW061720	6/17/2020	**190**	**J**	**0.56**	**J**	**0.39**	**J**	*1*	*U*
MW-02	MW02-GW092820	9/28/2020	**210**		**0.58**	**J**	**0.37**	**J**	*1*	*U*
MW-02	MW02-GW121620	12/16/2020	**220**		**0.55**	**J**	**0.43**	**J**	*1*	*U*
MW-02	FD01-GW121620	12/16/2020	**210**		**0.6**	**J**	**0.44**	**J**	*1*	*U*
MW-02	MW02-GW032321	3/23/2021	**230**		**0.58**	**J**	**0.36**	**J**	*1*	*U*
MW-02	MW02-GW062721	6/27/2021	**140**	**J**	**0.52**	**J**	**0.35**	**J**	*1*	*U*
MW-02	FD02-GW062721	6/27/2021	**170**		**0.57**	**J**	**0.41**	**J**	*1*	*U*
MW-02	MW02-GW061322	6/13/2022	**230**		*1*	*U*	**0.31**	**J**	*1*	*U*
MW-02	MW02-GW111422	11/14/2022	**150**		**0.61**	**J**	**0.29**	**J**	*1*	*U*
MW-02	FD01-GW111422	11/14/2022	**150**		**0.57**	**J**	**0.27**	**J**	*1*	*U*
MW-02	FD02-GW090524	9/5/2024	**200**		**0.58**	**J**	**0.45**	**J**	*1*	*U*
MW-02	MW02-GW090524	9/5/2024	**210**		**0.55**	**J**	**1**		*1*	*U*
MW-03	NR - See UDEQ 2000	11/11/1998	**11**		*10*	*U*	*10*	*U*	NR	
MW-03	NR - See EPA 2000	9/21/1999	**7.1**		NR		NR		NR	
MW-03R	MW03R-GWA-1-187	10/17/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-03R	MW03R-GWA-2-217	10/18/2018	**6.63**		*1*	*U*	*1*	*U*		
MW-03R	MW03R-GWA-3-247	10/19/2018	**6.53**		*1*	*U*	*1*	*U*		
MW-03R	MW03R-GWA-4-267	10/20/2018	**80.8**		*1*	*U*	*1*	*U*		
MW-03R	MW03R-GWA-5-287	10/20/2018	**8.06**		*1*	*U*	*1*	*U*		
MW-03R	MW03R-GWA-6-307	10/21/2018	**22.5**		*1*	*U*	*1*	*U*		
MW-03R	MW03R-GWA-7-327	10/22/2018	**1.99**		*1*	*U*	*1*	*U*		
MW-03R	MW03RGWE1102218327FD-	10/22/2018	**4.3**	**J**	*1*	*UJ*	*1*	*UJ*	*1*	*UJ*
MW-03R	MW03R-GWE1102218-327	10/22/2018	**3.8**	**J**	*1*	*UJ*	*1*	*UJ*	*1*	*UJ*
MW-03R	MW03R-GWA-8-347	10/25/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-03R	MW03R-GWE-35-347	10/25/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-03R	MW03R-GWE-5-347	10/25/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-03R	MW03R-GWA-9-367	10/26/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-03R	MW-03R-GWA-11-387	11/1/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-03R	MW-03R-GWA-12-407	11/1/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-03RA	OU2-MW03RA-GW-121318	12/13/2018	**1.6**		*1*	*U*	*1*	*U*	*1*	*U*
MW-03RA	OU2-MW03RA-GW-032519	3/25/2019	**30**		**0.15**	**J**	*1*	*U*	*1*	*U*
MW-03RA	OU2-MW03RA-GW120719	12/7/2019	**32**		**0.18**	**J**	*1*	*U*	*1*	*U*
MW-03RA	MW03RA-GW061820	6/18/2020	**30**		**0.19**	**J**	*1*	*U*	*1*	*U*
MW-03RA	MW03RA-GW092920	9/29/2020	**28**		**0.17**	**J**	*1*	*U*	*1*	*U*
MW-03RA	MW03RA-GW121120	12/11/2020	**29**		**0.19**	**J**	*1*	*U*	*1*	*U*
MW-03RA	MW03RA-GW032121	3/21/2021	**25**		**0.13**	**J**	*1*	*U*	*1*	*U*
MW-03RA	MW03RA-GW061122	6/11/2022	**24**	**J**	**0.14**	**J**	*1*	*U*	*1*	*U*
MW-03RA	MW03RA-GW111422	11/14/2022	**27**		**0.19**	**J**	*1*	*U*	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
MW-03RA	MW03RA-GW091124	9/11/2024	**32**		**0.16**	**J**	*1*	*U*	*1*	*U*
MW-03RB	OU2-MW03RB-GW-122718	12/27/2018	**220**		**2**		**1.5**		*1*	*U*
MW-03RB	OU2-MW03RB-GW-032519	3/25/2019	**230**		**2.1**		**1.5**		*1*	*U*
MW-03RB	OU2-MW03RB-GW120819	12/8/2019	**200**		**1.9**		**1.4**		*1*	*U*
MW-03RB	MW03RB-GW061820	6/18/2020	**210**		**1.8**		**1.3**		*1*	*U*
MW-03RB	MW03RB-GW092920	9/29/2020	**230**		**1.8**		**1.3**		*1*	*U*
MW-03RB	MW03RB-GW121120	12/11/2020	**170**		**1.9**		**1.2**		*1*	*U*
MW-03RB	MW03RB-GW032121	3/21/2021	**220**		**1.7**		**1.2**		*1*	*U*
MW-03RB	FD03-GW062521	6/25/2021	**150**		**1.7**		**1.3**		*1*	*U*
MW-03RB	MW03RB-GW062521	6/25/2021	**150**		**1.5**		**1.1**		*1*	*U*
MW-03RB	FD01-GW061122	6/11/2022	**150**		**2**		**1.2**		*1*	*U*
MW-03RB	MW03RB-GW061122	6/11/2022	**150**		**2**		**1.2**		*1*	*U*
MW-03RB	MW03RB-GW111422	11/14/2022	**130**		**1.9**		**1.3**		*1*	*U*
MW-03RB	MW03RB-GW091124	9/11/2024	**170**		**1.7**		**1.1**		*1*	*U*
MW-03RC	OU2-MW03RC-GW-121718	12/17/2018	**6.5**		*1*	*U*	*1*	*U*	*1*	*U*
MW-03RC	OU2-MW03RC-GW-032719	3/27/2019	**6.3**		*1*	*U*	*1*	*U*	*1*	*U*
MW-03RC	OU2-MW03RC-GW120719	12/7/2019	**5.6**		*1*	*U*	*1*	*U*	*1*	*U*
MW-03RC	MW03RC-GW061820	6/18/2020	**6.4**		*1*	*U*	*1*	*U*	*1*	*U*
MW-03RC	MW03RC-GW092920	9/29/2020	**6.4**		*1*	*U*	*1*	*U*	*1*	*U*
MW-03RC	MW03RC-GW121120	12/11/2020	**5.7**		*1*	*U*	*1*	*U*	*1*	*U*
MW-03RC	MW03RC-GW032121	3/21/2021	**6.1**		*1*	*U*	*1*	*U*	*1*	*U*
MW-03RC	MW03RC-GW061122	6/11/2022	**4.8**		*1*	*U*	*1*	*U*	*1*	*U*
MW-03RC	MW03RC-GW111422	11/14/2022	**3.5**		*1*	*U*	*1*	*U*	*1*	*U*
MW-03RC	MW03RC-GW091124	9/11/2024	**6.2**		*1*	*U*	*1*	*U*	*1*	*U*
MW-03RD	OU2-MW03RD-GW-032719	3/27/2019	**0.18**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-03RD	OU2-MW03RD-GW120719	12/7/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-03RD	MW03RD-GW061820	6/18/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-03RD	MW03RD-GW092920	9/29/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-03RD	MW03RD-GW121120	12/11/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-03RD	MW03RD-GW032121	3/21/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-03RD	MW03RD-GW061122	6/11/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-03RD	MW03RD-GW111422	11/14/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-03RD	MW03RD-GW091124	9/11/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-04	NR - See UDEQ 2000	11/11/1998	**190**		**2**	**J**	**1**	**J**	NR	
MW-04	NR - See USGS 2005	2/24/2005	**119**		**1.1**		**0.6**		NR	
MW-04	NR - See UDEQ 2012	10/5/2005	**120**		NR		NR		NR	
MW-04	NR - See Sealy Env Svcs 2014	6/26/2014	**79**		**0.54**	**J**	*5*	*U*	NR	
MW-04	MW-04_04272016	4/27/2016	**56**		**0.44**	**J**	*0.5*	*U*	*0.5*	*U*
MW-04	A-GW-MW-04_07/13/2016	7/13/2016	**41**		**0.42**	**J**	*0.5*	*U*	*0.5*	*U*
MW-04	A-GW-MW-04-D_07/13/2016	7/13/2016	**46**		**0.37**	**J**	*0.5*	*U*	*0.5*	*U*
MW-04	A-GW-MW-04_09212016	9/21/2016	**59**		**0.35**	**J**	**0.17**	**J**	*0.5*	*U*
MW-04	A-GW-MW-04-D_09212016	9/21/2016	**62**		**0.35**	**J**	**0.18**	**J**	*0.5*	*U*
MW-04	OU2-MW23-GW-121818	12/18/2018	**68**		**0.33**	**J**	**0.17**	**J**	*1*	*U*
MW-04	OU2-MW04-GW-121818	12/18/2018	**67**		**0.33**	**J**	**0.17**	**J**	*1*	*U*
MW-04	OU2-MW23-GW-031919	3/19/2019	**66**		**0.29**	**J**	*1*	*U*	*1*	*U*
MW-04	OU2-MW04-GW-031919	3/19/2019	**67**		**0.28**	**J**	*1*	*U*	*1*	*U*
MW-04	OU2-MW04-GW120519	12/5/2019	**55**		**0.28**	**J**	**0.1**	**J**	*1*	*U*
MW-04	MW04-GW062120	6/21/2020	**53**		**0.27**	**J**	**0.11**	**J**	*1*	*U*
MW-04	MW04-GW092920	9/29/2020	**47**		**0.23**	**J**	*1*	*U*	*1*	*U*
MW-04	MW04-GW121020	12/10/2020	**40**		**0.24**	**J**	**0.15**	**J**	*1*	*U*
MW-04	FD02-GW121020	12/10/2020	**38**		**0.22**	**J**	**0.15**	**J**	*1*	*U*
MW-04	FD01-GW032221	3/22/2021	**42**		**0.2**	**J**	*1*	*U*	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
MW-04	MW04-GW032221	3/22/2021	**42**		**0.19**	**J**	*1*	*U*	*1*	*U*
MW-04	MW04-GW061522	6/15/2022	**45**		*1*	*U*	*1*	*U*	*1*	*U*
MW-04	MW04-GW111422	11/14/2022	**34**		**0.24**	**J**	*1*	*U*	*1*	*U*
MW-04	MW04-GW090524	9/5/2024	**65**		**0.22**	**J**	*1*	*U*	*1*	*U*
MW-05	NR - See UDEQ 2000	11/11/1998	*10*	*U*	*10*	*U*	*10*	*U*	NR	
MW-05	NR - See UDEQ 2012	2/23/2005	*0.1*	*U*	*0.1*	*U*	*0.1*	*U*	NR	
MW-05	NR - See UDEQ 2012	10/5/2005	*0.5*	*U*	NR		NR		NR	
MW-05	NR - See UDEQ 2012; MWH 2012	11/11/2011	*5*	*U*	NR		NR		NR	
MW-05	NR - See IHI Env 2012	11/16/2011	*5*	*U*	*5*	*U*	*5*	*U*	NR	
MW-05	NR - See Sealy Env Svcs 2014	6/26/2014	*5*	*U*	*5*	*U*	*5*	*U*	NR	
MW-05	MW-05_04252016	4/25/2016	*0.5*	*U*	**0.19**	**J**	*0.5*	*U*	*0.5*	*U*
MW-05R	OU2-MW05R-GW-121118	12/11/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-05R	OU2-MW23-GW-032019	3/20/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-05R	OU2-MW05R-GW-032019	3/20/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-05R	OU2-MW05R-GW120819	12/8/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-05R	MW05R-GW061920	6/19/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-05R	MW05R-GW102120	10/21/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-05R	MW05R-GW120820	12/8/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-05R	FD05-GW120820	12/8/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-05R	MW05R-GW090824	9/8/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-06	NR - See EPA 2000	1/6/2000	*10*	*U*	*10*	*U*	*10*	*U*	NR	
MW-06	NR- See USGS 2005	2/23/2005	**0.8**		*0.1*	*U*	*0.1*	*U*	NR	
MW-06	NR - See Sealy Env Svcs 2014	6/26/2014	*5*	*U*	*5*	*U*	*5*	*U*	NR	
MW-06	MW-06_04262016	4/26/2016	*0.5*	*U*	**0.15**	**J**	*0.5*	*U*	*0.5*	*U*
MW-06	A-GW-MW-06_07/13/2016	7/13/2016	**0.48**	**J**	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
MW-06	A-GW-MW-06_09212016	9/21/2016	**0.39**	**J**	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
MW-06	OU2-MW06-GW-121718	12/17/2018	**0.29**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-06	OU2-MW06-GW-031919	3/19/2019	**0.36**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-06	OU2-MW06-GW120619	12/6/2019	**0.29**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-06	MW06-GW062120	6/21/2020	**0.23**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-06	MW06-GW092420	9/24/2020	**0.23**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-06	MW06-GW121020	12/10/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-06	MW06-GW032221	3/22/2021	**0.18**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-06	MW06-GW090524	9/5/2024	**0.34**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-08	MW-08-GWH-1-67	11/16/2018	**4.8**		*1*	*U*	*1*	*U*		
MW-08	MW08-GWE-31-67	11/16/2018	**5.1**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08	MW08-GWE-1-67	11/16/2018	**5.7**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08	MW08-GWH-2-97	11/17/2018	**52.2**		*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-3-117	11/17/2018	**29.3**		*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-4-137	11/18/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-5-157	11/18/2018	**2.1**		*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-6-177	11/19/2018	**2.6**		*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-7-197	11/19/2018	**1.8**		*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-8-217	11/20/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-9-237	11/27/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-08	MW08-GWE-5-237	11/27/2018	**0.22**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-08	MW-08-GWH-10-257	11/28/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-11-277	11/29/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-12-297	11/29/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-13-317	11/30/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-14-377	12/2/2018	*1*	*U*	*1*	*U*	*1*	*U*		
MW-08	MW-08-GWH-15-417	12/3/2018	*1*	*U*	*1*	*U*	*1*	*U*		

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
MW-08A	OU2-MW08A-GW-122718	12/27/2018	**68**	**J**	**0.48**	**J**	**0.24**	**J**	*1*	*U*
MW-08A	OU2-MW08A-GW-032119	3/21/2019	**67**		**0.46**	**J**	*1*	*U*	*1*	*U*
MW-08A	OU2-MW08A-GW120819	12/8/2019	**56**		**0.39**	**J**	**0.17**	**J**	*1*	*U*
MW-08A	MW08A-GW062120	6/21/2020	**55**		**0.4**	**J**	**0.17**	**J**	*1*	*U*
MW-08A	MW08A-GW092720	9/27/2020	**59**		**0.44**	**J**	**0.19**	**J**	*1*	*U*
MW-08A	FD03-GW120920	12/9/2020	**53**		**0.42**	**J**	**0.26**	**J**	*1*	*U*
MW-08A	MW08A-GW120920	12/9/2020	**52**		**0.42**	**J**	**0.23**	**J**	*1*	*U*
MW-08A	FD02-GW031721	3/17/2021	**56**		**0.38**	**J**	**0.18**	**J**	*1*	*U*
MW-08A	MW08A-GW031721	3/17/2021	**58**		**0.37**	**J**	**0.19**	**J**	*1*	*U*
MW-08A	MW08A-GW111622	11/16/2022	**71**		**0.46**	**J**	**0.19**	**J**	*1*	*U*
MW-08A	MW08A-GW091024	9/10/2024	**51**		**0.36**	**J**	*1*	*U*	*1*	*U*
MW-08B	OU2-MW23-GW-122718	12/27/2018	**5.3**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08B	OU2-MW08B-GW-122718	12/27/2018	**5.5**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08B	OU2-MW08B-GW-032119	3/21/2019	**5**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08B	OU2-MW08B-GW120819	12/8/2019	**4.7**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08B	OU2-FD02-GW120819	12/8/2019	**4.5**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08B	MW08B-GW062220	6/22/2020	**4.4**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08B	FD02-GW062220	6/22/2020	**4.7**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08B	MW08B-GW092720	9/27/2020	**5.1**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08B	MW08B-GW120920	12/9/2020	**3.9**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08B	MW08B-GW031721	3/17/2021	**4.3**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08B	MW08B-GW111622	11/16/2022	**5.8**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08B	MW08B-GW090624	9/6/2024	**6.2**		*1*	*U*	*1*	*U*	*1*	*U*
MW-08C	OU2-MW08C-GW-032019	3/20/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-08C	OU2-MW08C-GW120819	12/8/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-08C	MW08C-GW062220	6/22/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-08C	MW08C-GW092720	9/27/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-08C	MW08C-GW120920	12/9/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-08C	MW08C-GW031721	3/17/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-08C	MW08C-GW091324	9/13/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	OU2-MW23D-GW-092418	9/24/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	OU2-MW12D-GW-092418	9/24/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	OU2-MW12D-GW-120618	12/6/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	OU2-MW12D-GW-031319	3/13/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	OU2-MW12D-GW120619	12/6/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	MW12D-GW061920	6/19/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	MW12D-GW092220	9/22/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	MW12D-GW120920	12/9/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	MW12D-GW031721	3/17/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	MW12D-GW061022	6/10/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	MW12D-GW111022	11/10/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-12D	MW12D-GW090524	9/5/2024	**1.1**		*1*	*U*	**0.11**	**J**	*1*	*U*
MW-12S	OU2-MW12S-GW-092418	9/24/2018	**0.86**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-12S	OU2-MW12S-GW-121018	12/10/2018	**1.1**		*1*	*U*	*1*	*U*	*1*	*U*
MW-12S	OU2-MW12S-GW-031319	3/13/2019	**1.3**		*1*	*U*	*1*	*U*	*1*	*U*
MW-12S	OU2-MW12S-GW120619	12/6/2019	**1.4**		**0.13**	**J**	*1*	*U*	*1*	*U*
MW-12S	MW12S-GW061920	6/19/2020	**2.2**		**0.24**	**J**	*1*	*U*	*1*	*U*
MW-13D	OU2-MW13D-GW-091718	9/17/2018	**69**		**0.5**	**J**	**0.39**	**J**	*1*	*U*
MW-13D	OU2-MW13D-GW-112918	11/29/2018	**67**		**0.53**	**J**	**0.42**	**J**	*1*	*U*
MW-13D	OU2-MW13D-GW-030719	3/7/2019	**60**		**0.48**	**J**	**0.36**	**J**	*1*	*U*
MW-13D	OU2-MW13D-GW120519	12/5/2019	**62**		**0.56**	**J**	**0.38**	**J**	*1*	*U*
MW-13D	MW13D-GW061820	6/18/2020	**62**		**0.53**	**J**	**0.36**	**J**	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
MW-13D	MW13D-GW092220	9/22/2020	**75**		**0.6**	**J**	**0.38**	**J**	*1*	*U*
MW-13D	MW13D-GW121120	12/11/2020	**51**		**0.47**	**J**	**0.27**	**J**	*1*	*U*
MW-13D	MW13D-GW032121	3/21/2021	**55**		**0.44**	**J**	**0.26**	**J**	*1*	*U*
MW-13D	FD03-GW032121	3/21/2021	**56**		**0.43**	**J**	**0.28**	**J**	*1*	*U*
MW-13D	MW13D-GW061222	6/12/2022	**50**		**0.5**	**J**	**0.25**	**J**	*1*	*U*
MW-13D	MW13D-GW111122	11/11/2022	**56**		**0.53**	**J**	**0.29**	**J**	*1*	*U*
MW-13D	MW13D-GW090724	9/7/2024	**50**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-13L	MW13L-GW121620	12/16/2020	**16**		**0.17**	**J**	**0.41**	**J**	*1*	*U*
MW-13L	MW13L-GW032221	3/22/2021	**51**		**0.29**	**J**	**0.5**	**J**	*1*	*U*
MW-13L	FD04-GW032221	3/22/2021	**51**		**0.29**	**J**	**0.51**	**J**	*1*	*U*
MW-13L	MW13L-GW062621	6/26/2021	**50**		**0.29**	**J**	**0.47**	**J**	*1*	*U*
MW-13L	MW13L-GW061222	6/12/2022	**56**		**0.43**	**J**	**0.48**	**J**	*1*	*U*
MW-13L	MW13L-GW111322	11/13/2022	**64**	**J**	**0.48**	**J**	**0.57**	**J**	*1*	*U*
MW-13L	FD02-GW111322	11/13/2022	**57**		**0.5**	**J**	**0.61**	**J**	*1*	*U*
MW-13L	FD03-GW090724	9/7/2024	**59**		*1*	*U*	*1*	*U*	*1*	*U*
MW-13L	MW13L-GW090724	9/7/2024	**63**		*1*	*U*	*1*	*U*	*1*	*U*
MW-13S	OU2-MW13S-GW-091918	9/19/2018	**31**		**0.45**	**J**	**0.15**	**J**	*1*	*U*
MW-13S	OU2-MW13S-GW-112918	11/29/2018	**22**		**0.73**	**J**	**0.15**	**J**	*1*	*U*
MW-13S	OU2-MW13S-GW-030619	3/6/2019	**18**		**0.51**	**J**	*1*	*U*	*1*	*U*
MW-13S	OU2-MW13S-GW120519	12/5/2019	**14**		**0.31**	**J**	*1*	*U*	*1*	*U*
MW-13S	MW13S-GW061820	6/18/2020	**23**		**0.88**	**J**	**0.18**	**J**	*1*	*U*
MW-13S	MW13S-GW092320	9/23/2020	**24**		**1.1**		**0.18**	**J**	*1*	*U*
MW-13S	MW13S-GW121120	12/11/2020	**27**		**1.3**		**0.2**	**J**	*1*	*U*
MW-13S	MW13S-GW032221	3/22/2021	**25**		**1.1**		**0.19**	**J**	*1*	*U*
MW-13S	MW13S-GW061222	6/12/2022	**34**		**0.93**	**J**	**0.21**	**J**	*1*	*U*
MW-13S	MW13S-GW111022	11/10/2022	**42**		**1.2**		**0.32**	**J**	*1*	*U*
MW-13S	MW13S-GW090724	9/7/2024	**25**		*1*	*U*	*1*	*U*	*1*	*U*
MW-14D	OU2-MW14D-GW-091918	9/19/2018	**37**		**0.27**	**J**	**0.35**	**J**	*1*	*U*
MW-14D	OU2-MW14D-GW-120418	12/4/2018	**30**		**0.23**	**J**	**0.32**	**J**	*1*	*U*
MW-14D	OU2-MW14D-GW-030719	3/7/2019	**36**		**0.28**	**J**	**0.34**	**J**	*1*	*U*
MW-14D	OU2-MW14D-GW120719	12/7/2019	**22**		**0.19**	**J**	**0.26**	**J**	*1*	*U*
MW-14D	MW14D-GW062320	6/23/2020	**26**		**0.21**	**J**	**0.25**	**J**	*1*	*U*
MW-14D	MW14D-GW092520	9/25/2020	**34**		**0.32**	**J**	**0.33**	**J**	*1*	*U*
MW-14D	MW14D-GW121420	12/14/2020	**30**		**0.27**	**J**	**0.26**	**J**	*1*	*U*
MW-14D	MW14D-GW031821	3/18/2021	**33**		**0.25**	**J**	**0.29**	**J**	*1*	*U*
MW-14D	MW14D-GW061422	6/14/2022	**37**		*1*	*U*	**0.27**	**J**	*1*	*U*
MW-14D	MW14D-GW110922	11/9/2022	**44**		**0.34**	**J**	**0.26**	**J**	*1*	*U*
MW-14D	MW14D-GW091024	9/10/2024	**36**		**0.27**	**J**	**0.12**	**J**	*1*	*U*
MW-14S	OU2-MW14S-GW-091918	9/19/2018	**10**		**3.7**		**0.8**	**J**	*1*	*U*
MW-14S	OU2-MW14S-GW-120518	12/5/2018	**3**		**4.3**		**1.1**		*1*	*U*
MW-14S	OU2-MW14S-GW-031119	3/11/2019	**0.16**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-14S	OU2-MW14S-GW120719	12/7/2019	**3.8**		**6**		**1.7**		*1*	*U*
MW-14S	MW14S-GW062320	6/23/2020	**7.8**		**4.8**		**0.89**	**J**	*1*	*U*
MW-14S	MW14S-GW092520	9/25/2020	**3.9**		**12**		**3.2**		*1*	*U*
MW-14S	MW14S-GW121420	12/14/2020	**4.8**		**6.7**		**1.9**		*1*	*U*
MW-14S	MW14S-GW031821	3/18/2021	**6**		**4.8**		**1.2**		*1*	*U*
MW-14S	MW14S-GW061422	6/14/2022	**13**		**3.5**		**0.94**	**J**	*1*	*U*
MW-14S	MW14S-GW110922	11/9/2022	**6.6**		**5.9**		**2.9**		*1*	*U*
MW-14S	MW14S-GW091024	9/10/2024	**7.8**		**3.6**		**2.3**		*1*	*U*
MW-15D	OU2-MW15D-GW-092518	9/25/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-15D	OU2-MW15D-GW-120418	12/4/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-15D	OU2-MW15D-GW-031119	3/11/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			5		5		70		2	
MW-15D	OU2-MW15D-GW120719	12/7/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-15D	OU2-FD03-GW120719	12/7/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-15D	MW15D-GW061920	6/19/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-15D	FD03-GW061920	6/19/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-15D	MW15D-GW092820	9/28/2020	**0.15**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-15D	MW15D-GW120920	12/9/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-15D	MW15D-GW031621	3/16/2021	**0.16**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-15D	MW15D-GW090824	9/8/2024	**0.23**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-15S	OU2-MW15S-GW-092518	9/25/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-15S	OU2-MW15S-GW-120418	12/4/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-15S	OU2-MW15S-GW-031119	3/11/2019	**3.3**		**4.2**		**0.68**	**J**	*1*	*U*
MW-15S	OU2-MW15S-GW120719	12/7/2019	**0.26**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-15S	MW15S-GW061920	6/19/2020	**0.36**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-15S	MW15S-GW092820	9/28/2020	**0.39**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-15S	MW15S-GW120920	12/9/2020	**0.39**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-15S	MW15S-GW031621	3/16/2021	**0.34**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-15S	MW15S-GW111622	11/16/2022	**0.58**	**J**	**0.16**	**J**	*1*	*U*	*1*	*U*
MW-15S	MW15S-GW090824	9/8/2024	**0.41**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-16D	OU2-MW16D-GW-092018	9/20/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-16D	OU2-MW16D-GW-120618	12/6/2018	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-16D	OU2-MW16D-GW-031419	3/14/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-16D	OU2-MW16D-GW120619	12/6/2019	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-16D	MW16D-GW062120	6/21/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-16D	MW16D-GW092520	9/25/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-16D	MW16D-GW121020	12/10/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-16D	MW16D-GW031721	3/17/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-16D	MW16D-GW061222	6/12/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-16D	MW16D-GW090824	9/8/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-16S	OU2-MW16S-GW-092018	9/20/2018	**23**		**0.16**	**J**	*1*	*U*	*1*	*U*
MW-16S	OU2-MW16S-GW-120518	12/5/2018	**20**		**0.15**	**J**	*1*	*U*	*1*	*U*
MW-16S	OU2-MW16S-GW-031419	3/14/2019	**27**		**0.19**	**J**	**0.1**	**J**	*1*	*U*
MW-16S	OU2-MW16S-GW120619	12/6/2019	**24**		**0.2**	**J**	*1*	*U*	*1*	*U*
MW-16S	MW16S-GW062120	6/21/2020	**25**		**0.18**	**J**	*1*	*U*	*1*	*U*
MW-16S	MW16S-GW092520	9/25/2020	**28**		**0.24**	**J**	**0.12**	**J**	*1*	*U*
MW-16S	MW16S-GW121020	12/10/2020	**24**		**0.21**	**J**	**0.15**	**J**	*1*	*U*
MW-16S	MW16S-GW031721	3/17/2021	**23**		**0.16**	**J**	*1*	*U*	*1*	*U*
MW-16S	MW16S-GW061222	6/12/2022	**23**		**0.2**	**J**	*1*	*U*	*1*	*U*
MW-16S	MW16S-GW090824	9/8/2024	**21**		*1*	*U*	*1*	*U*	*1*	*U*
MW-16S	FD04-GW090824	9/8/2024	**21**		*1*	*U*	*1*	*U*	*1*	*U*
MW-17D	OU2-MW17D-GW-092418	9/24/2018	**2.1**		*1*	*U*	*1*	*U*	*1*	*U*
MW-17D	OU2-MW23-GW-121018	12/10/2018	**2.1**		*1*	*U*	*1*	*U*	*1*	*U*
MW-17D	OU2-MW17D-GW-121018	12/10/2018	**2**		*1*	*U*	*1*	*U*	*1*	*U*
MW-17D	OU2-MW23-GW-031219	3/12/2019	**2.7**		*1*	*U*	*1*	*U*	*1*	*U*
MW-17D	OU2-MW17D-GW-031219	3/12/2019	**2.7**		*1*	*U*	*1*	*U*	*1*	*U*
MW-17D	OU2-MW17D-GW120819	12/8/2019	**1.8**		*1*	*U*	*1*	*U*	*1*	*U*
MW-17D	MW17D-GW062120	6/21/2020	**2.5**		*1*	*U*	*1*	*U*	*1*	*U*
MW-17D	MW17D-GW093020	9/30/2020	**2.4**		*1*	*U*	*1*	*U*	*1*	*U*
MW-17D	MW17D-GW121320	12/13/2020	**2.3**		*1*	*U*	*1*	*U*	*1*	*U*
MW-17D	MW17D-GW031921	3/19/2021	**2.8**		**0.1**	**J**	*1*	*U*	*1*	*U*
MW-17D	MW17D-GW061022	6/10/2022	**2.5**		**0.1**	**J**	*1*	*U*	*1*	*U*
MW-17D	MW17D-GW111122	11/11/2022	**2.8**		**0.1**	**J**	*1*	*U*	*1*	*U*
MW-17D	MW17D-GW090524	9/5/2024	**3.2**		**0.15**	**J**	*1*	*U*	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
MW-17S	OU2-MW17S-GW-092418	9/24/2018	**0.44**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-17S	OU2-MW17S-GW-120318	12/3/2018	**0.38**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-17S	OU2-MW17S-GW-031219	3/12/2019	**0.58**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-17S	OU2-MW17S-GW120819	12/8/2019	**0.65**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-17S	MW17S-GW062120	6/21/2020	**0.91**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-17S	MW17S-GW093020	9/30/2020	**0.9**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-17S	MW17S-GW121120	12/11/2020	**0.7**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-17S	MW17S-GW031921	3/19/2021	**0.88**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-17S	MW17S-GW061022	6/10/2022	**0.98**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-17S	MW17S-GW111122	11/11/2022	**1.1**		*1*	*U*	*1*	*U*	*1*	*U*
MW-17S	MW17S-GW090524	9/5/2024	**1.5**		*1*	*U*	*1*	*U*	*1*	*U*
MW-18	OU2-MW18-GW-091818	9/18/2018	**96**		**0.65**	**J**	**0.27**	**J**	*1*	*U*
MW-18	OU2-MW18-GW-112718	11/27/2018	**82**		**0.48**	**J**	**0.24**	**J**	*1*	*U*
MW-18	OU2-MW18-GW-030419	3/4/2019	**83**		**0.55**	**J**	**0.25**	**J**	*1*	*U*
MW-18	OU2-MW18-GW120519	12/5/2019	**74**		**0.5**	**J**	**0.27**	**J**	*1*	*U*
MW-18	MW18-GW061620	6/16/2020	**70**		**0.48**	**J**	**0.25**	**J**	*1*	*U*
MW-18	MW18-GW092320	9/23/2020	**59**		**0.43**	**J**	**0.15**	**J**	*1*	*U*
MW-18	MW18-GW121420	12/14/2020	**53**		**0.44**	**J**	**0.23**	**J**	*1*	*U*
MW-18	FD06-GW121420	12/14/2020	**56**		**0.43**	**J**	**0.21**	**J**	*1*	*U*
MW-18	MW18-GW032121	3/21/2021	**64**		**0.42**	**J**	**0.17**	**J**	*1*	*U*
MW-18	FD02-GW061122	6/11/2022	**75**		**0.6**	**J**	**0.22**	**J**	*1*	*U*
MW-18	MW18-GW061122	6/11/2022	**66**		**0.51**	**J**	**0.18**	**J**	*1*	*U*
MW-18	MW18-GW111322	11/13/2022	**68**		**0.51**	**J**	**0.2**	**J**	*1*	*U*
MW-18	FD03-GW111322	11/13/2022	**67**		**0.51**	**J**	**0.2**	**J**	*1*	*U*
MW-18	MW18-GW090724	9/7/2024	**56**		*1*	*U*	*1*	*U*	*1*	*U*
MW-18	FD05-GW090724	9/7/2024	**59**		*1*	*U*	*1*	*U*	*1*	*U*
MW-19	OU2-MW19-GW-091818	9/18/2018	**89**		**0.68**	**J**	**0.31**	**J**	*1*	*U*
MW-19	OU2-MW19-GW-112718	11/27/2018	**72**		**0.51**	**J**	**0.27**	**J**	*1*	*U*
MW-19	OU2-MW19-GW-030419	3/4/2019	**66**		**0.58**	**J**	**0.27**	**J**	*1*	*U*
MW-19	OU2-MW19-GW120519	12/5/2019	**64**		**0.52**	**J**	**0.27**	**J**	*1*	*U*
MW-19	MW19-GW061620	6/16/2020	**64**		**0.5**	**J**	**0.29**	**J**	*1*	*U*
MW-19	MW19-GW092320	9/23/2020	**56**		**0.45**	**J**	**0.19**	**J**	*1*	*U*
MW-19	FD02-GW092320	9/23/2020	**62**		**0.47**	**J**	**0.2**	**J**	*1*	*U*
MW-19	MW19-GW121420	12/14/2020	**49**		**0.5**	**J**	**0.28**	**J**	*1*	*U*
MW-19	MW19-GW032121	3/21/2021	**56**		**0.43**	**J**	**0.19**	**J**	*1*	*U*
MW-19	FD03-GW061122	6/11/2022	**65**		**0.61**	**J**	**0.23**	**J**	*1*	*U*
MW-19	MW19-GW061122	6/11/2022	**54**		**0.49**	**J**	**0.2**	**J**	*1*	*U*
MW-19	MW19-GW111322	11/13/2022	**57**		**0.52**	**J**	**0.21**	**J**	*1*	*U*
MW-19	FD04-GW111322	11/13/2022	**56**		**0.52**	**J**	**0.21**	**J**	*1*	*U*
MW-19	MW19-GW090724	9/7/2024	**46**		*1*	*U*	*1*	*U*	*1*	*U*
MW-19	FD06-GW090724	9/7/2024	**44**		*1*	*U*	*1*	*U*	*1*	*U*
MW-20D	OU2-MW20D-GW-091918	9/19/2018	**12**		**0.29**	**J**	**0.15**	**J**	*1*	*U*
MW-20D	OU2-MW23-GW-112618	11/26/2018	**11**		**0.25**	**J**	**0.12**	**J**	*1*	*U*
MW-20D	OU2-MW20D-GW-112618	11/26/2018	**11**		**0.26**	**J**	**0.14**	**J**	*1*	*U*
MW-20D	OU2-MW23-GW-030519	3/5/2019	**13**		**0.29**	**J**	**0.15**	**J**	*1*	*U*
MW-20D	OU2-MW20D-GW-030519	3/5/2019	**12**		**0.29**	**J**	**0.15**	**J**	*1*	*U*
MW-20D	OU2-MW20D-GW120519	12/5/2019	**9.8**		**0.25**	**J**	**0.12**	**J**	*1*	*U*
MW-20D	OU2-FD01-GW120519	12/5/2019	**11**		**0.28**	**J**	**0.12**	**J**	*1*	*U*
MW-20D	MW20D-GW061720	6/17/2020	**9.9**		**0.23**	**J**	**0.12**	**J**	*1*	*U*
MW-20D	FD04-GW061720	6/17/2020	**11**		**0.23**	**J**	**0.13**	**J**	*1*	*U*
MW-20D	MW20D-GW092420	9/24/2020	**10**		**0.22**	**J**	*1*	*U*	*1*	*U*
MW-20D	FD03-GW092420	9/24/2020	**10**		**0.24**	**J**	**0.1**	**J**	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
MW-20D	MW20D-GW121520	12/15/2020	**9.1**		**0.26**	**J**	**0.15**	**J**	*1*	*U*
MW-20D	MW20D-GW031921	3/19/2021	**11**		**0.26**	**J**	**0.12**	**J**	*1*	*U*
MW-20D	MW20D-GW090724	9/7/2024	**9.2**		**0.2**	**J**	*1*	*U*	*1*	*U*
MW-20S	OU2-MW20S-GW-091818	9/18/2018	**5.2**		**0.13**	**J**	*1*	*U*	*1*	*U*
MW-20S	OU2-MW20S-GW-112818	11/28/2018	**4.4**		**0.15**	**J**	**0.13**	**J**	*1*	*U*
MW-20S	OU2-MW20S-GW-030419	3/4/2019	**4.5**		**0.12**	**J**	*1*	*U*	*1*	*U*
MW-20S	OU2-MW20S-GW120419	12/4/2019	**3.7**		**0.1**	**J**	*1*	*U*	*1*	*U*
MW-20S	MW20S-GW061720	6/17/2020	**3.9**		*1*	*U*	*1*	*U*	*1*	*U*
MW-20S	MW20S-GW092420	9/24/2020	**4.9**		*1*	*U*	*1*	*U*	*1*	*U*
MW-20S	MW20S-GW121420	12/14/2020	**4.3**		**0.13**	**J**	*1*	*U*	*1*	*U*
MW-20S	MW20S-GW031921	3/19/2021	**5.4**		**0.12**	**J**	*1*	*U*	*1*	*U*
MW-20S	MW20S-GW061122	6/11/2022	**4.6**		**0.13**	**J**	*1*	*U*	*1*	*U*
MW-20S	MW20S-GW111322	11/13/2022	**3.9**		*1*	*U*	*1*	*U*	*1*	*U*
MW-20S	MW20S-GW090724	9/7/2024	**3.6**		*1*	*U*	*1*	*U*	*1*	*U*
MW-21	OU2-MW21-GW-092018	9/20/2018	**1.9**		*1*	*U*	*1*	*U*	*1*	*U*
MW-21	OU2-MW21-GW-112818	11/28/2018	**1.8**		*1*	*U*	*1*	*U*	*1*	*U*
MW-21	OU2-MW21-GW-030619	3/6/2019	**2**		*1*	*U*	*1*	*U*	*1*	*U*
MW-21	MW21-GW061820	6/18/2020	**2**		*1*	*U*	*1*	*U*	*1*	*U*
MW-21	MW21-GW092320	9/23/2020	**1.5**		*1*	*U*	*1*	*U*	*1*	*U*
MW-21	MW21-GW121420	12/14/2020	**1.1**		*1*	*U*	*1*	*U*	*1*	*U*
MW-21	MW21-GW031621	3/16/2021	**1.3**		*1*	*U*	*1*	*U*	*1*	*U*
MW-21	MW21-GW090824	9/8/2024	**1.2**		*1*	*U*	*1*	*U*	*1*	*U*
MW-22	OU2-MW23-GW-092018	9/20/2018	**3**		*1*	*U*	*1*	*U*	*1*	*U*
MW-22	OU2-MW22-GW-092018	9/20/2018	**3**		**0.11**	**J**	*1*	*U*	*1*	*U*
MW-22	OU2-MW22-GW-112818	11/28/2018	**3**		**0.12**	**J**	*1*	*U*	*1*	*U*
MW-22	OU2-MW22-GW-030619	3/6/2019	**3.5**		**0.13**	**J**	*1*	*U*	*1*	*U*
MW-22	MW22-GW061720	6/17/2020	**2.9**		*1*	*U*	*1*	*U*	*1*	*U*
MW-22	MW22-GW092320	9/23/2020	**2.7**		*1*	*U*	*1*	*U*	*1*	*U*
MW-22	MW22-GW121420	12/14/2020	**2.5**		*1*	*U*	*1*	*U*	*1*	*U*
MW-22	MW22-GW032121	3/21/2021	**3**		**0.11**	**J**	*1*	*U*	*1*	*U*
MW-22	MW22-GW090824	9/8/2024	**1.7**		*1*	*U*	*1*	*U*	*1*	*U*
MW-23	MW23-GW040820-150	4/8/2020	**6**		*1*	*U*	*1*	*U*	*1*	*U*
MW-23	MW23-GW040920-220	4/9/2020	**0.2**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-23	MW23-GW041020-240	4/10/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23	MW23-GW041020-260	4/10/2020	**0.22**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-23	FD08-GW041320	4/13/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23	MW23-GW041320-310	4/13/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23	MW23-GW041420-340	4/14/2020	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
MW-23A	MW23A-GW101920	10/19/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23A	MW23A-GW120920	12/9/2020	*1*	*U*	**0.11**	**J**	*1*	*U*	*1*	*U*
MW-23A	MW23A-GW031621	3/16/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23A	MW23A-GW062321	6/23/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23A	MW23A-GW091224	9/12/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23B	MW23B-GW102020	10/20/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23B	MW23B-GW121020	12/10/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23B	MW23B-GW031621	3/16/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23B	MW23B-GW091224	9/12/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23C	MW23C-GW062320	6/23/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23C	MW23C-GW101920	10/19/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23C	MW23C-GW120920	12/9/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23C	MW23C-GW031621	3/16/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-23C	MW23C-GW062321	6/23/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
MW-23C	MW23C-GW091224	9/12/2024	*1*	*U*	*1*	*U*	*1*	*UJ*	*1*	*U*
MW-24	MW24-GW051320-160	5/13/2020	**1.2**		*1*	*U*	*1*	*U*	*1*	*U*
MW-24	MW24-GW051420-220	5/14/2020	**0.23**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-24	MW24-GW08182020-211	8/18/2020	**0.84**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-24	MW24-GW08182020-217	8/18/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-24	MW24-GW08182020-231	8/18/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-24	MW24-GW08182020-237.5	8/18/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-24	FD04-GW102020	10/20/2020	**0.25**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-24	MW24-GW102020	10/20/2020	**0.25**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-24	MW24-GW120820	12/8/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-24	MW24-GW032121	3/21/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-24	MW24-GW062321	6/23/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-24	MW24-GW111422	11/14/2022	**2.2**		*1*	*U*	*1*	*U*	*1*	*U*
MW-24	FD05-GW111422	11/14/2022	**2.2**		*1*	*U*	*1*	*U*	*1*	*U*
MW-24	MW24-GW090824	9/8/2024	**0.23**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-25	MW25-GW050120-164	5/1/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-25	FD12-GW050120	5/1/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-25	MW25-GW050320-212	5/3/2020	**0.83**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-25	MW25-GW050320-232	5/3/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-25	MW25-GW050320-252	5/3/2020	**0.18**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-25	MW25-GW050420-272	5/4/2020	**0.22**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-25	MW25-GW050520-292	5/5/2020	**0.56**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-25	MW25-GW050620-320	5/6/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-25A	MW25A-GW093020	9/30/2020	**1.6**		*1*	*U*	*1*	*U*	*1*	*U*
MW-25A	MW25A-GW120920	12/9/2020	**1.3**		*1*	*U*	*1*	*U*	*1*	*U*
MW-25A	MW25A-GW032121	3/21/2021	**1.6**		*1*	*U*	*1*	*U*	*1*	*U*
MW-25A	MW25A-GW062421	6/24/2021	**1.2**		*1*	*U*	*1*	*U*	*1*	*U*
MW-25A	MW25A-GW111322	11/13/2022	**1.7**		*1*	*U*	*1*	*U*	*1*	*U*
MW-25A	MW25A-GW090724	9/7/2024	**1.9**		*1*	*U*	*1*	*U*	*1*	*U*
MW-25B	MW25B-GW093020	9/30/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-25B	MW25B-GW121020	12/10/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-25B	MW25B-GW032121	3/21/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-25B	MW25B-GW062421	6/24/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-25B	MW25B-GW111322	11/13/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-25B	MW25B-GW090724	9/7/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-25C	MW25C-GW061920	6/19/2020	**0.97**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-25C	MW25C-GW093020	9/30/2020	**0.86**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-25C	MW25C-GW121020	12/10/2020	**0.76**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-25C	MW25C-GW032121	3/21/2021	**1.1**		*1*	*U*	*1*	*U*	*1*	*U*
MW-25C	MW25C-GW062421	6/24/2021	**0.89**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-25C	MW25C-GW111322	11/13/2022	**1.2**		*1*	*U*	*1*	*U*	*1*	*U*
MW-25C	MW25C-GW090724	9/7/2024	**0.86**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-26	MW26-GW050620-210	5/6/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26	MW26-GW050720-240	5/7/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26	MW26-GW050720-250	5/7/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26	MW26-GW050820-270	5/8/2020	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
MW-26	MW26-GW051120-320	5/11/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26	FD18-GW051220	5/12/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26	MW26-GW051220-360	5/12/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26A	MW26A-GW092520	9/25/2020	*1*	*U*	**0.21**	**J**	*1*	*U*	*1*	*U*
MW-26A	MW26A-GW121620	12/16/2020	*1*	*U*	**0.18**	**J**	*1*	*U*	*1*	*U*
MW-26A	MW26A-GW031721	3/17/2021	*1*	*U*	**0.14**	**J**	*1*	*U*	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
MW-26A	MW26A-GW062621	6/26/2021	*1*	*U*	**0.15**	**J**	*1*	*U*	*1*	*U*
MW-26A	MW26A-GW090824	9/8/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26B	MW26B-GW092520	9/25/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26B	MW26B-GW121620	12/16/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26B	MW26B-GW031721	3/17/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26B	MW26B-GW062621	6/26/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26B	MW26B-GW091324	9/13/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26C	MW26C-GW121720	12/17/2020	**0.4**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-26C	MW26C-GW031821	3/18/2021	**0.79**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-26C	MW26C-GW062521	6/25/2021	**0.87**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-26C	MW26C-GW090724	9/7/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26D	MW26D-GW092520	9/25/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26D	MW26D-GW031821	3/18/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26D	MW26D-GW062521	6/25/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-26D	MW26D-GW090824	9/8/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-27	MW27-GW032320-168	3/23/2020	**9.1**		*1*	*U*	**0.1**	**J**	*1*	*U*
MW-27	MW27-GW032420-210	3/24/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-27	MW27-GW032420-220	3/24/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-27	MW27-GW062420	6/24/2020	*1*	*U*	**0.13**	**J**	*1*	*U*	*1*	*U*
MW-27	MW27-GW092420	9/24/2020	*1*	*U*	**0.11**	**J**	*1*	*U*	*1*	*U*
MW-27	MW27-GW120820	12/8/2020	*1*	*U*	**0.15**	**J**	*1*	*U*	*1*	*U*
MW-27	MW27-GW031621	3/16/2021	*1*	*U*	**0.11**	**J**	*1*	*U*	*1*	*U*
MW-27	MW27-GW062321	6/23/2021	*1*	*U*	**0.12**	**J**	*1*	*U*	*1*	*U*
MW-27	MW27-GW091024	9/10/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-28	MW28-GW031820-211	3/18/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-28	MW28-GW062420	6/24/2020	*1*	*U*	**0.24**	**J**	*1*	*U*	*1*	*U*
MW-28	MW28-GW092420	9/24/2020	*1*	*U*	**0.17**	**J**	*1*	*U*	*1*	*U*
MW-28	MW28-GW120820	12/8/2020	*1*	*U*	**0.18**	**J**	*1*	*U*	*1*	*U*
MW-28	MW28-GW032121	3/21/2021	*1*	*U*	**0.18**	**J**	*1*	*U*	*1*	*U*
MW-28	MW28-GW062421	6/24/2021	*1*	*U*	**0.13**	**J**	*1*	*U*	*1*	*U*
MW-28	MW28-GW090724	9/7/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-29	MW29-GW052920-120	5/29/2020	**9.2**		**0.17**	**J**	*1*	*U*	*1*	*U*
MW-29	MW29-GW053120-191	5/31/2020	**6.1**		**0.11**	**J**	*1*	*U*	*1*	*U*
MW-29	MW29-GW060120-230	6/1/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-29	MW29-GW060220-260	6/2/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-29A	MW29A-GW092820	9/28/2020	**11**		**0.16**	**J**	*1*	*U*	*1*	*U*
MW-29A	MW29A-GW121320	12/13/2020	**9.6**		**0.18**	**J**	*1*	*U*	*1*	*U*
MW-29A	MW29A-GW031921	3/19/2021	**11**		**0.17**	**J**	*1*	*U*	*1*	*U*
MW-29A	MW29A-GW062421	6/24/2021	**7.6**		**0.13**	**J**	*1*	*U*	*1*	*U*
MW-29A	MW29A-GW061022	6/10/2022	**6.7**		**0.15**	**J**	*1*	*U*	*1*	*U*
MW-29A	MW29A-GW111122	11/11/2022	**9.4**		**0.23**	**J**	*1*	*U*	*1*	*U*
MW-29A	MW29A-GW091024	9/10/2024	**8.3**		**0.17**	**J**	*1*	*U*	*1*	*U*
MW-29A	FD07-GW091024	9/10/2024	**8.5**		**0.15**	**J**	*1*	*U*	*1*	*U*
MW-29B	MW29B-GW092820	9/28/2020	**0.56**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-29B	FD05-GW092820	9/28/2020	**0.53**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-29B	MW29B-GW121120	12/11/2020	**0.47**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-29B	MW29B-GW031921	3/19/2021	**0.55**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-29B	MW29B-GW062421	6/24/2021	**0.28**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-29B	MW29B-GW091024	9/10/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-29C	MW29C-GW092820	9/28/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-29C	MW29C-GW121120	12/11/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-29C	MW29C-GW031921	3/19/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			5		5		70		2	
MW-29C	MW29C-GW062421	6/24/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-29C	MW29C-GW061022	6/10/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-29C	MW29C-GW091024	9/10/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-30	MW30-GW060420-237	6/4/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-30	MW30-GW060520-280	6/5/2020	*1*	*U*	**0.13**	**J**	*1*	*U*	*1*	*U*
MW-30	MW30-GW060520-298	6/5/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-30	MW30-GW060720-320	6/7/2020	**0.2**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-30	MW30-GW060720-340	6/7/2020	**0.16**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-30C	MW30C-GW092120	9/21/2020	**0.35**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-30C	MW30C-GW120920	12/9/2020	**0.4**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-30C	MW30C-GW031621	3/16/2021	**0.35**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-30C	MW30C-GW062621	6/26/2021	**0.31**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-30C	MW30C-GW061122	6/11/2022	**0.36**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-30C	MW30C-GW111022	11/10/2022	**0.28**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-30RA	MW30RA-GW120820	12/8/2020	**0.18**	**J**	**0.34**	**J**	*1*	*U*	*1*	*U*
MW-30RA	FD05-GW031621	3/16/2021	**0.18**	**J**	**0.29**	**J**	*1*	*U*	*1*	*U*
MW-30RA	MW30RA-GW031621	3/16/2021	**0.18**	**J**	**0.29**	**J**	*1*	*U*	*1*	*U*
MW-30RA	MW30RA-GW062621	6/26/2021	**0.17**	**J**	**0.32**	**J**	*1*	*U*	*1*	*U*
MW-30RA	MW30RA-GW060922	6/9/2022	**0.17**	**J**	**0.37**	**J**	*1*	*U*	*1*	*U*
MW-30RA	MW30RA-GW111522	11/15/2022	**0.22**	**J**	**0.49**	**J**	*1*	*U*	*1*	*U*
MW-30RA	MW30RA-GW090824	9/8/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-30RB	MW30RB-GW120820	12/8/2020	*1*	*U*	**0.19**	**J**	*1*	*U*	*1*	*U*
MW-30RB	MW30RB-GW031621	3/16/2021	*1*	*U*	**0.18**	**J**	*1*	*U*	*1*	*U*
MW-30RB	MW30RB-GW062621	6/26/2021	*1*	*U*	**0.18**	**J**	*1*	*U*	*1*	*U*
MW-30RB	MW30RB-GW060922	6/9/2022	*1*	*U*	**0.2**	**J**	*1*	*U*	*1*	*U*
MW-30RB	MW30RB-GW111522	11/15/2022	**0.21**	**J**	**0.25**	**J**	*1*	*U*	*1*	*U*
MW-30RB	MW30RB-GW090824	9/8/2024	**0.16**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-31	MW31-GW061020-138	6/10/2020	**0.59**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-31	MW31-GW061120-190	6/11/2020	**0.2**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-31	FD26-GW061120	6/11/2020	**0.19**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-31	MW31-GW061120-230	6/11/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-31A	MW31A-GW092320	9/23/2020	**0.73**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-31A	MW31A-GW121120	12/11/2020	**0.54**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-31A	MW31A-GW031821	3/18/2021	**0.55**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-31A	MW31A-GW062521	6/25/2021	**0.42**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-31A	MW31A-GW111522	11/15/2022	**0.58**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-31A	MW31A-GW091024	9/10/2024	**0.57**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-31B	MW31B-GW092320	9/23/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-31B	MW31B-GW121120	12/11/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-31B	MW31B-GW031821	3/18/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-31B	MW31B-GW062521	6/25/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-31B	MW31B-GW091024	9/10/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-31C	MW31C-GW092320	9/23/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-31C	MW31C-GW121120	12/11/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-31C	MW31C-GW031821	3/18/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-31C	MW31C-GW062521	6/25/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-31C	MW31C-GW091024	9/10/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-32	MW32-GW062320-100	6/23/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-32	MW32-GW062420-120	6/24/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-32	MW32-GW062520-175	6/25/2020	**0.2**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32	MW32-GW062620-210	6/26/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-32	MW32-GW062820-270	6/28/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			5		5		70		2	
MW-32A	MW32A-GW092220	9/22/2020	**0.64**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32A	FD06-GW092220	9/22/2020	**0.69**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32A	MW32A-GW121020	12/10/2020	**0.46**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32A	FD06-GW031721	3/17/2021	**0.39**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32A	MW32A-GW031721	3/17/2021	**0.44**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32A	MW32A-GW062721	6/27/2021	**0.48**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32A	MW32A-GW061022	6/10/2022	**0.54**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32A	MW32A-GW090824	9/8/2024	**0.43**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32B	MW32B-GW092220	9/22/2020	**0.44**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32B	MW32B-GW121020	12/10/2020	**0.34**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32B	MW32B-GW031721	3/17/2021	**0.32**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32B	MW32B-GW062721	6/27/2021	**0.34**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32B	MW32B-GW061022	6/10/2022	**0.34**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32B	MW32B-GW111022	11/10/2022	**0.46**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32B	MW32B-GW091224	9/12/2024	**0.58**	**J**	*1*	*UJ*	*1*	*UJ*	*1*	*UJ*
MW-32C	MW32C-GW092220	9/22/2020	**0.26**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-32C	MW32C-GW121020	12/10/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-32C	MW32C-GW031721	3/17/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-32C	MW32C-GW062721	6/27/2021	**0.17**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-34	MW34-GW070820-150	7/8/2020	**6.7**		**0.12**	**J**	*1*	*U*	*1*	*U*
MW-34	MW34-GW070820-180	7/8/2020	**14**		**0.36**	**J**	**0.25**	**J**	*1*	*U*
MW-34	MW34-GW070920-210	7/9/2020	**1.5**		*1*	*U*	*1*	*U*	*1*	*U*
MW-34	MW34-GW070920-230	7/9/2020	**1.6**		*1*	*U*	*1*	*U*	*1*	*U*
MW-34	FD30-GW070920	7/9/2020	**1.7**		*1*	*U*	*1*	*U*	*1*	*U*
MW-34	MW34-GW070920-260	7/9/2020	**0.66**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-34	MW34-GW071020-300	7/10/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-34	MW34-GW071220-320	7/12/2020	**0.43**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-34A	MW34A-GW100120	10/1/2020	**3.7**		**0.17**	**J**	*1*	*U*	*1*	*U*
MW-34A	MW34A-GW121520	12/15/2020	**30**		**0.66**	**J**	**0.3**	**J**	*1*	*U*
MW-34A	MW34A-GW031921	3/19/2021	**36**		**0.62**	**J**	**0.25**	**J**	*1*	*U*
MW-34A	MW34A-GW062721	6/27/2021	**23**		**0.4**	**J**	**0.17**	**J**	*1*	*U*
MW-34A	MW34A-GW061222	6/12/2022	**26**		**0.53**	**J**	**0.19**	**J**	*1*	*U*
MW-34A	MW34A-GW111322	11/13/2022	**27**		**0.55**	**J**	**0.19**	**J**	*1*	*U*
MW-34A	MW34A-GW090624	9/6/2024	**25**		**0.43**	**J**	*1*	*U*	*1*	*U*
MW-34B	MW34B-GW092720	9/27/2020	**14**		**0.41**	**J**	**0.36**	**J**	*1*	*U*
MW-34B	MW34B-GW121720	12/17/2020	**5.8**		**0.39**	**J**	**0.5**	**J**	*1*	*U*
MW-34B	MW34B-GW031921	3/19/2021	**16**		**0.49**	**J**	**0.49**	**J**	*1*	*U*
MW-34B	MW34B-GW062721	6/27/2021	**15**		**0.47**	**J**	**0.47**	**J**	*1*	*U*
MW-34B	MW34B-GW061222	6/12/2022	**14**		**0.48**	**J**	**0.41**	**J**	*1*	*U*
MW-34B	MW34B-GW111322	11/13/2022	**17**		**0.53**	**J**	**0.46**	**J**	*1*	*U*
MW-34B	MW34B-GW090524	9/5/2024	**20**		**0.55**	**J**	**0.51**	**J**	*1*	*U*
MW-34C	MW34C-GW092720	9/27/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-34C	MW34C-GW121720	12/17/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-34C	MW34C-GW031921	3/19/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-34C	MW34C-GW062721	6/27/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-34C	MW34C-GW061222	6/12/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-34C	MW34C-GW090524	9/5/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-34D	MW34D-GW092720	9/27/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-34D	MW34D-GW121320	12/13/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-34D	MW34D-GW031921	3/19/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-34D	MW34D-GW062721	6/27/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-34D	MW34D-GW061222	6/12/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
MW-34D	MW34D-GW090624	9/6/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-36	FD07-GW121420	12/14/2020	**0.28**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-36	MW36-GW121420	12/14/2020	**0.28**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-36	MW36-GW031621	3/16/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-36	FD07-GW031621	3/16/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-36	FD04-GW062421	6/24/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-36	MW36-GW062421	6/24/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-36	MW36-GW060922	6/9/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-36	MW36-GW111022	11/10/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-36	MW36-GW090624	9/6/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37	MW37-GW111220-30	11/12/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37	MW37-GW111320-70	11/13/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37D	MW37D-GW121420	12/14/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37D	MW37D-GW031721	3/17/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37D	MW37D-GW062421	6/24/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37D	MW37D-GW061122	6/11/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37D	MW37D-GW111022	11/10/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37D	MW37D-GW090624	9/6/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37S	FD04-GW121420	12/14/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37S	MW37S-GW121420	12/14/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37S	MW37S-GW031721	3/17/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37S	MW37S-GW062421	6/24/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37S	MW37S-GW061122	6/11/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37S	MW37S-GW111022	11/10/2022	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-37S	MW37S-GW090624	9/6/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-38D	MW38D-GW121620	12/16/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-38D	MW38D-GW031821	3/18/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-38D	MW38D-GW062521	6/25/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-38D	MW38D-GW090624	9/6/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-38S	MW38S-GW121620	12/16/2020	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-38S	MW38S-GW031721	3/17/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-38S	MW38S-GW062521	6/25/2021	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-38S	MW38S-GW090624	9/6/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-39D	MW39D-GW100324	10/3/2024	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
MW-39S	MW39S-GW100324	10/3/2024	**21**		**0.34**	**J**	**0.24**	**J**	*1*	*U*
MW-40D	MW40D-GW093024	9/30/2024	**14**		*1*	*U*	**0.17**	**J**	*1*	*U*
MW-40S	MW40S-GW093024	9/30/2024	**1.3**		**0.11**	**J**	*1*	*U*	*1*	*U*
MW-41D	MW41D-GW100224	10/2/2024	**33**		**0.21**	**J**	**0.22**	**J**	*1*	*U*
MW-41S	MW41S-GW100224	10/2/2024	**72**		**0.29**	**J**	**0.13**	**J**	*1*	*U*
MW-42D	FD10-GW100224	10/2/2024	**93**		**0.67**	**J**	**0.62**	**J**	*1*	*U*
MW-42D	MW42D-GW100224	10/2/2024	**87**		**0.67**	**J**	**0.59**	**J**	*1*	*U*
MW-42S	MW42S-GW091224	9/12/2024	**12**	**J**	**0.1**	**J**	**0.1**	**J**	*1*	*UJ*
MW-43D	MW43D-GW100124	10/1/2024	**130**		**1.4**		**1.3**		*1*	*U*
MW-43S	MW43S-GW100124	10/1/2024	**0.52**	**J**	**0.2**	**J**	*1*	*U*	*1*	*U*
MW-44D	MW44D-GW100124	10/1/2024	**0.32**	**J**	*1*	*U*	*1*	*U*	*1*	*U*
MW-44S	MW44S-GW100124	10/1/2024	**58**		**0.36**	**J**	**0.14**	**J**	*1*	*U*
MW-45	MW45-GW090724	9/7/2024	**10**		*1*	*U*	*1*	*U*	*1*	*U*
RG-11	RG11-GW041621	4/16/2021	**6.5**		*1*	*U*	*1*	*U*	*1*	*U*
RG-11	FD05-GW061422	6/14/2022	**11**		*1*	*U*	*1*	*U*	*1*	*U*
RG-11	RG11-GW061422	6/14/2022	**12**		*1*	*U*	*1*	*U*	*1*	*U*
RG-11	RG11-GW-120722	12/7/2022	**11**		**0.13**	**J**	*1*	*U*	*1*	*U*
RG-11	RG11-GW100324	10/3/2024	**12**		**0.11**	**J**	*1*	*U*	*1*	*U*

Appendix C
Summary of VOCs in Groundwater

Location	Sample Identification	Sample Date	PCE		TCE		CIS-1,2-DCE		VC	
			µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q
EPA Maximum Contaminant Level (MCL) (µg/L)[1]			**5**		**5**		**70**		**2**	
SLC-18	SLC-18_04282016	4/28/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
UU-1	UU-1_04282016	4/28/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
UU-1	A-GW-UU1_07/12/2016	7/12/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*
UU-1	A-GW-UU1_09202016	9/20/2016	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*	*0.5*	*U*

Notes:

[1] EPA Tap Water RSL based on target cancer risk 1 × 10-6 and hazard quotient = 1

Highlight indicates values greater than screening level

Bold indicates detected values

Italics indicates nondetected values

µg/L = micrograms per liter
cis-1,2-DCE = cis-1,2-dichloroethene
EPA = U.S. Environmental Protection Agency
MCL = maximum contaminant level
MWH = MWH Americas, Inc.
NA = not applicable
NR = not reported
NS = not sampled
PCE = tetrachloroethene
RSL = regional screening level
TCE = trichloroethene
UDEQ = Utah Department of Environmental Quality
USGS = U.S. Geological Survey
VC = vinyl chloride

Qualifiers:
Q = qualifier
J = Result is estimated
U = Analyte was not detected at the associated value, which is the reporting limit
UJ = Analyte was not detected at the associated value, which is the reporting limit, and a QA/QC requirement has not been met
D = Sample was diluted to bring analyte concentration(s) into the instrument calibration range
E = Estimated - reported concentration was above the instrument calibration range

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Appendix D
Transducer Hydrographs

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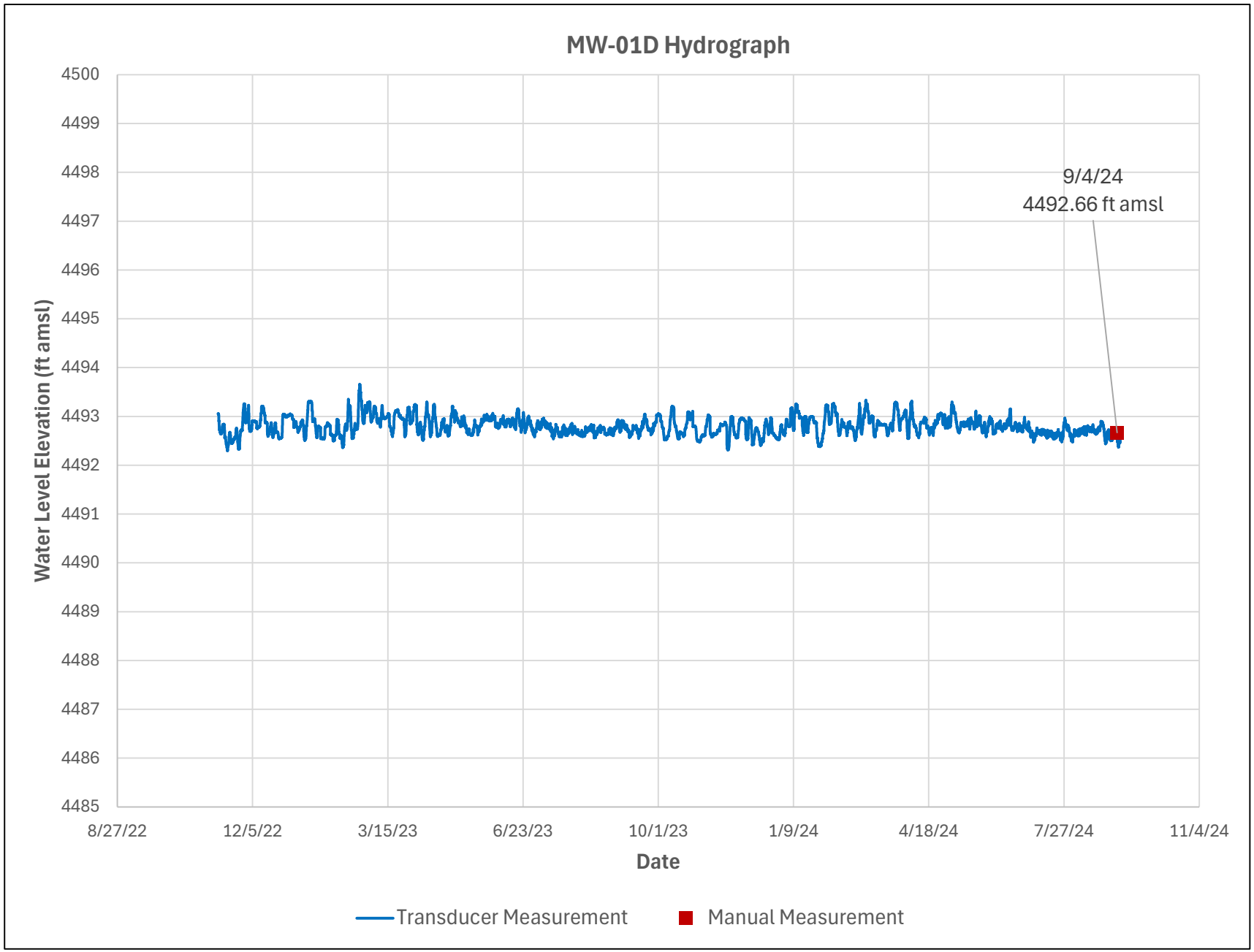
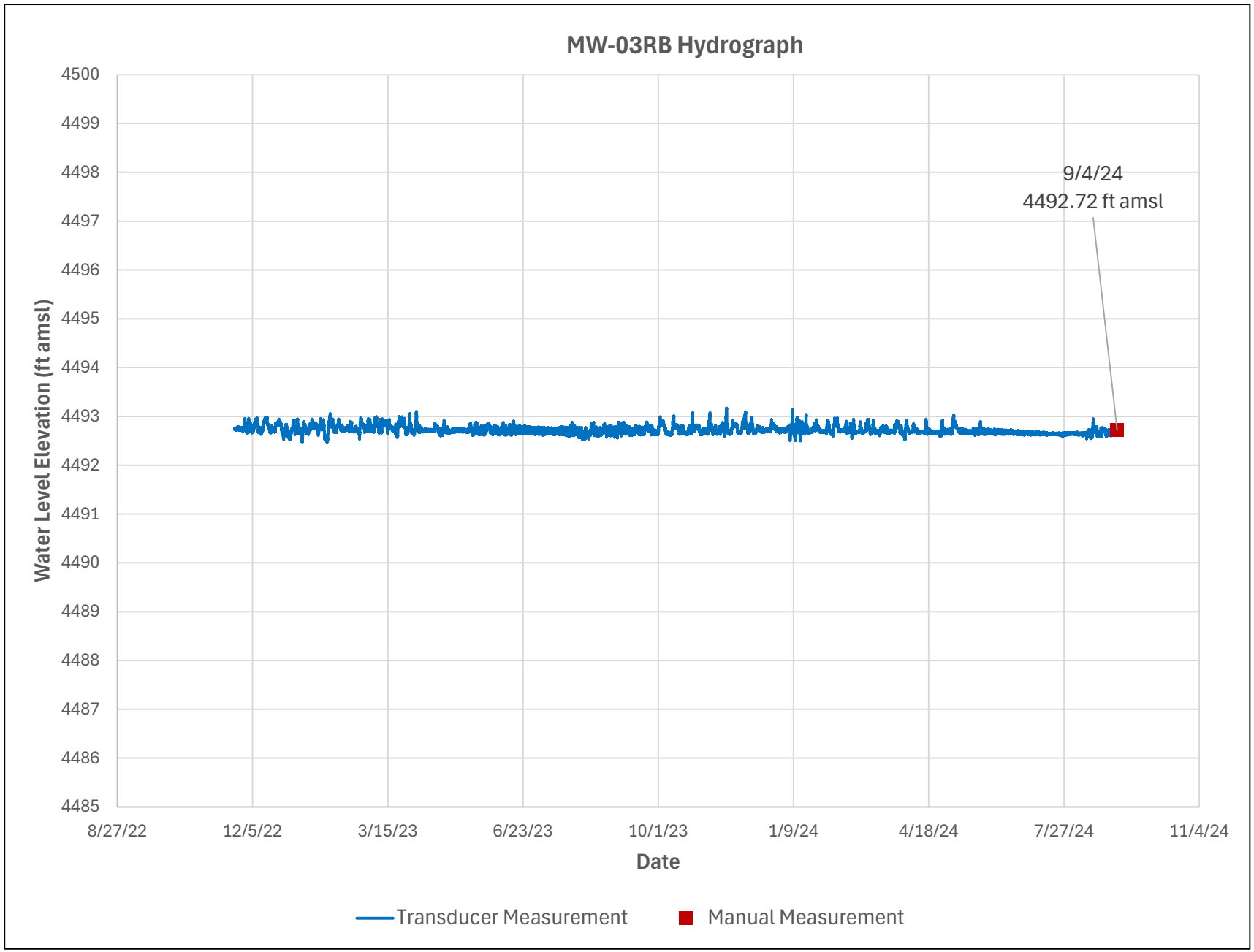
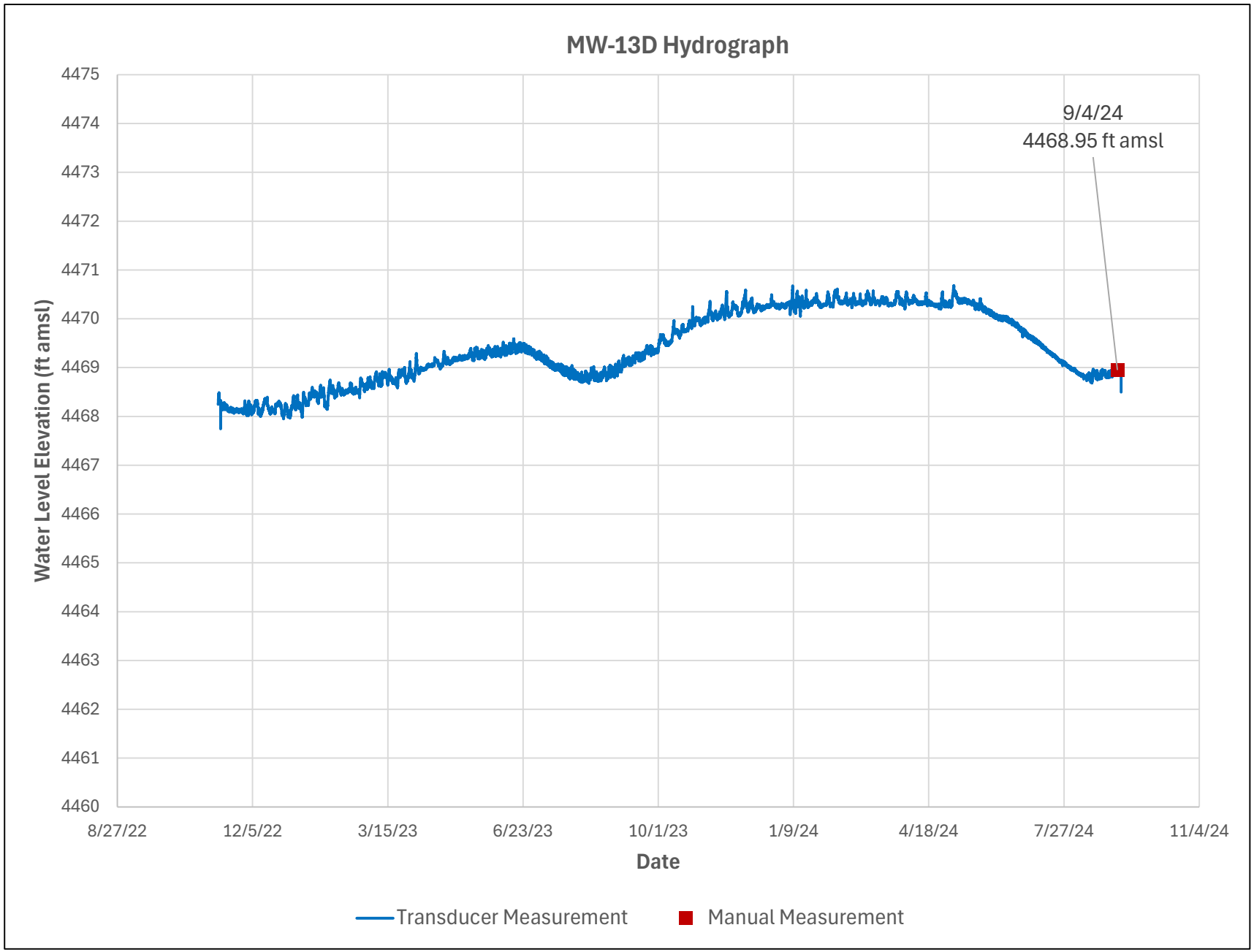
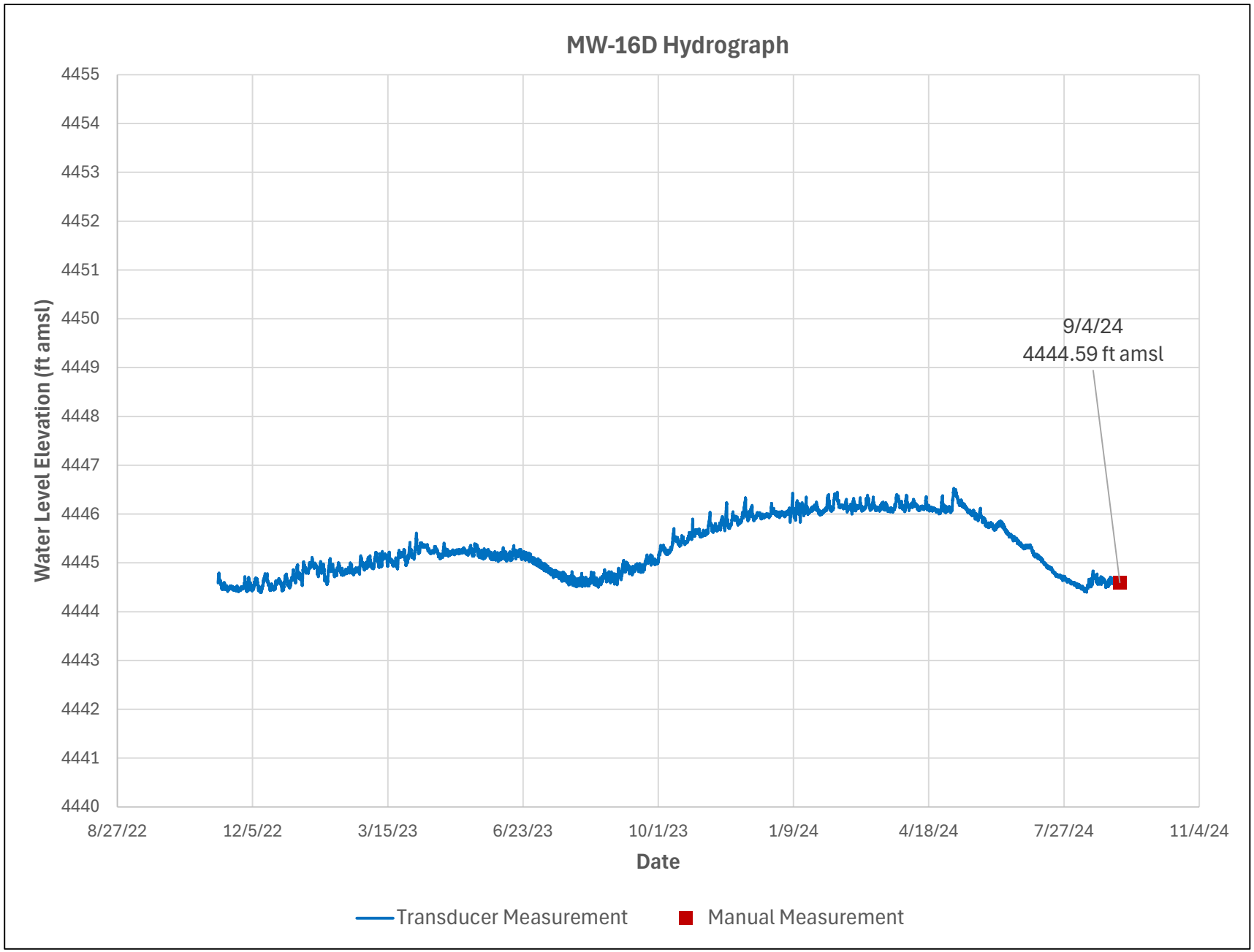
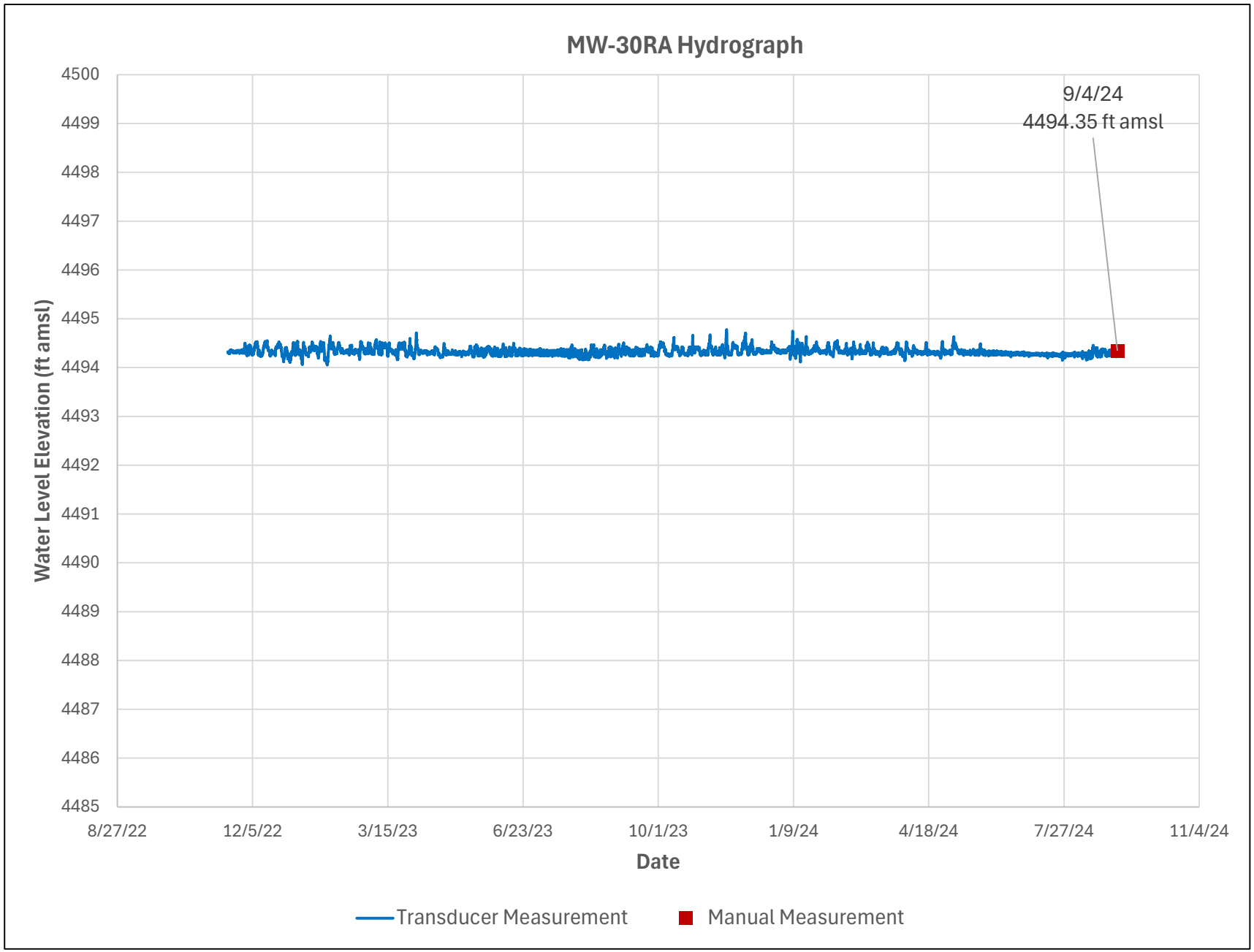
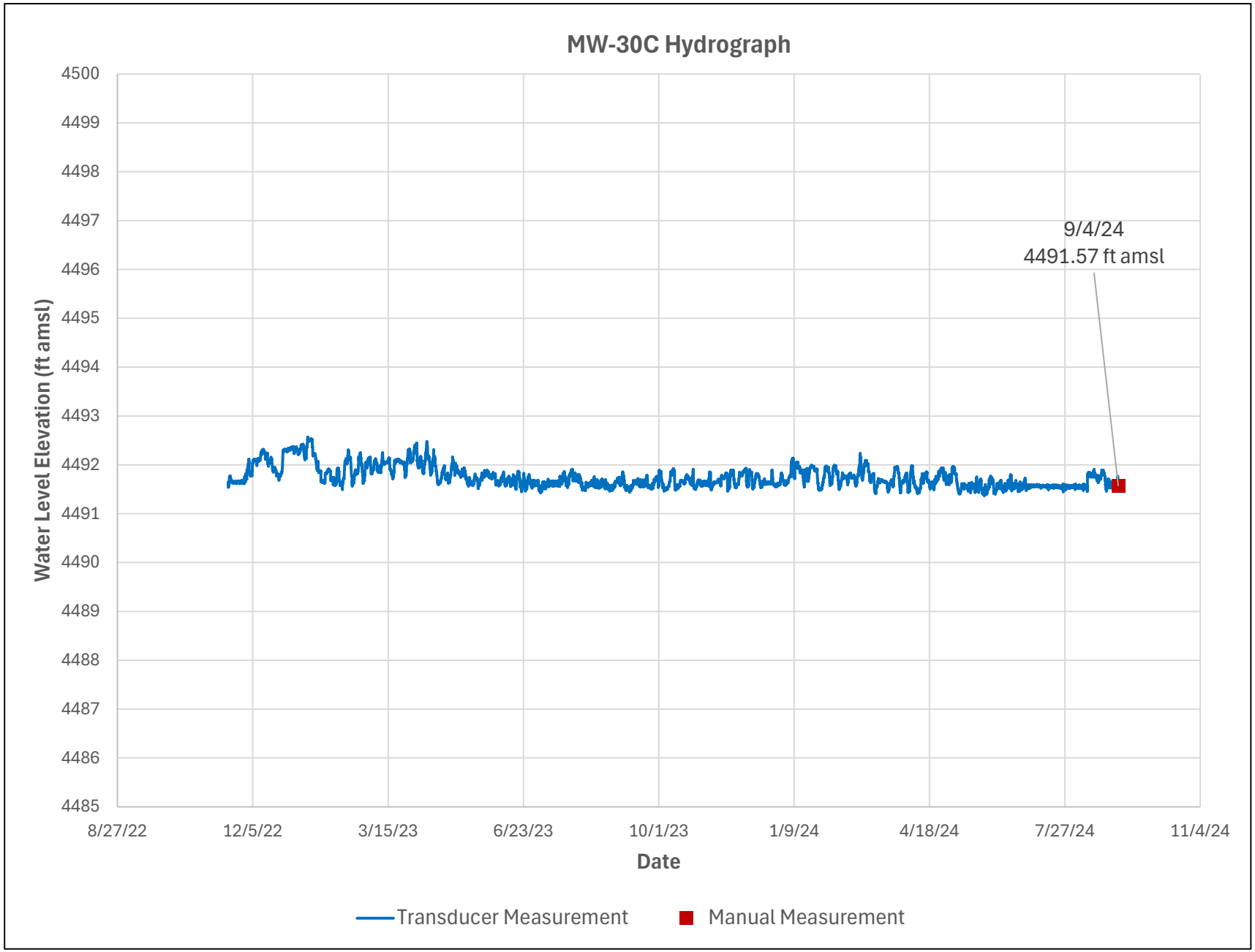

MW-01D Hydrograph
Water Level Elevation (ft amsl)
4500
4499
4498
4497
4496
4495
4494
4493
4492
4491
4490
4489
4488
4487
4486
4485
9/4/24
4492.66 ft amsl
8/27/22
12/5/22
3/15/23
6/23/23
10/1/23
1/9/24
4/18/24
7/27/24
11/4/24
Date
Transducer Measurement
Manual Measurement

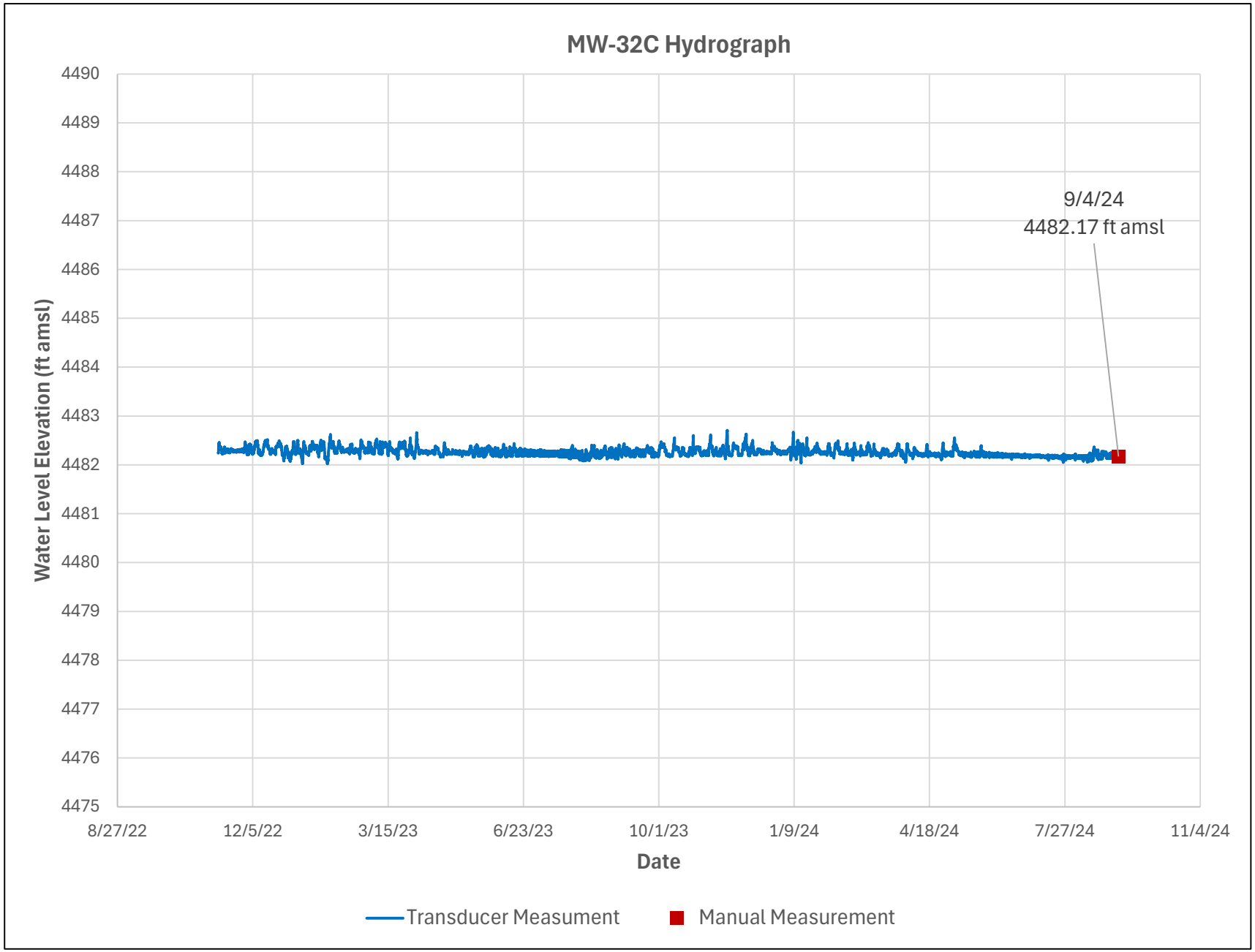

MW-03RB Hydrograph
Water Level Elevation (ft amsl)
4500
4499
4498
4497
4496
4495
4494
4493
4492
4491
4490
4489
4488
4487
4486
4485
9/4/24
4492.72 ft amsl
8/27/22
12/5/22
3/15/23
6/23/23
10/1/23
1/9/24
4/18/24
7/27/24
11/4/24
Date
Transducer Measurement
Manual Measurement

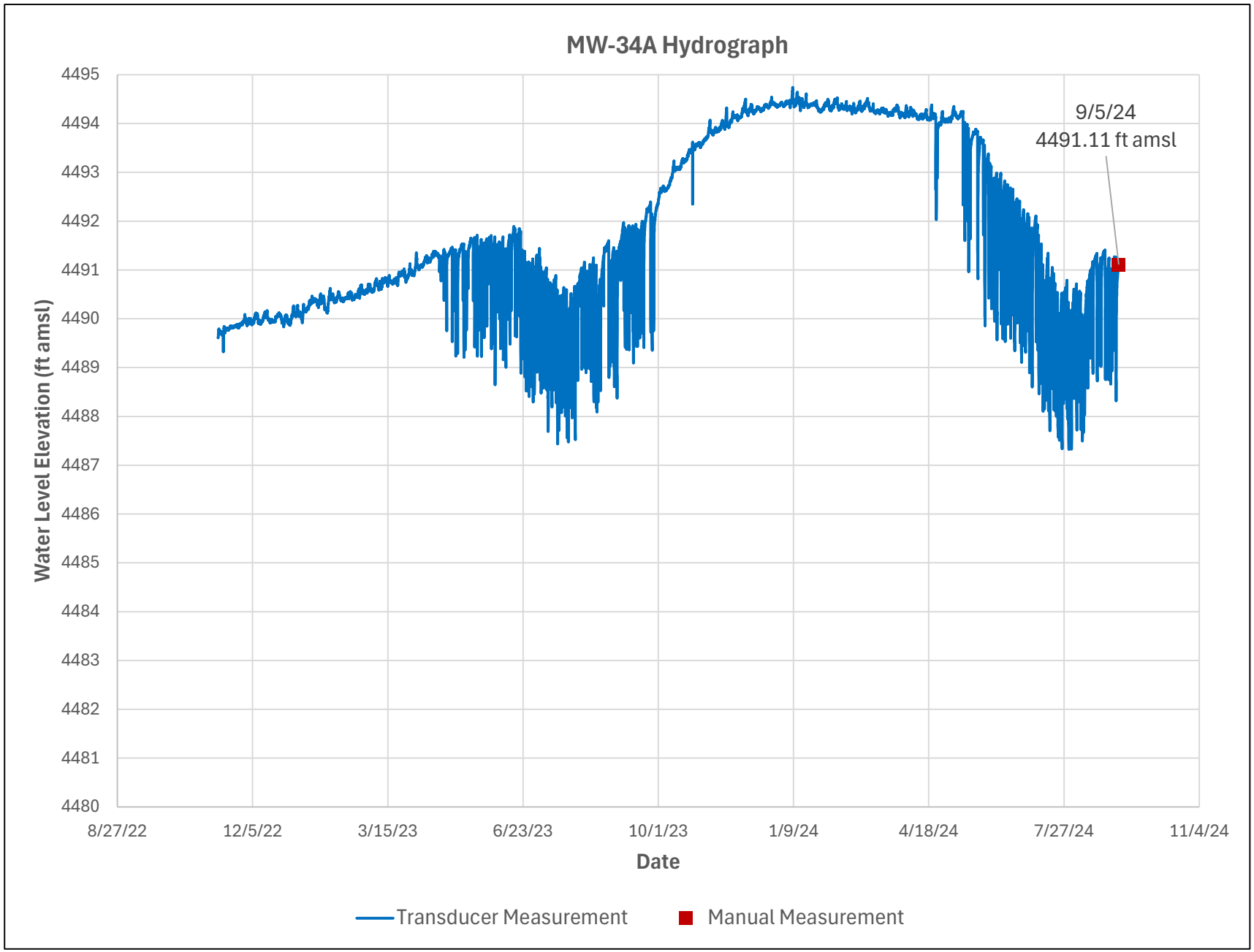

MW-13D Hydrograph
9/4/24
4468.95 ft amsl
Water Level Elevation (ft amsl)
4475
4474
4473
4472
4471
4470
4469
4468
4467
4466
4465
4464
4463
4462
4461
4460
8/27/22
12/5/22
3/15/23
6/23/23
10/1/23
1/9/24
4/18/24
7/27/24
11/4/24
Date
Transducer Measurement
Manual Measurement

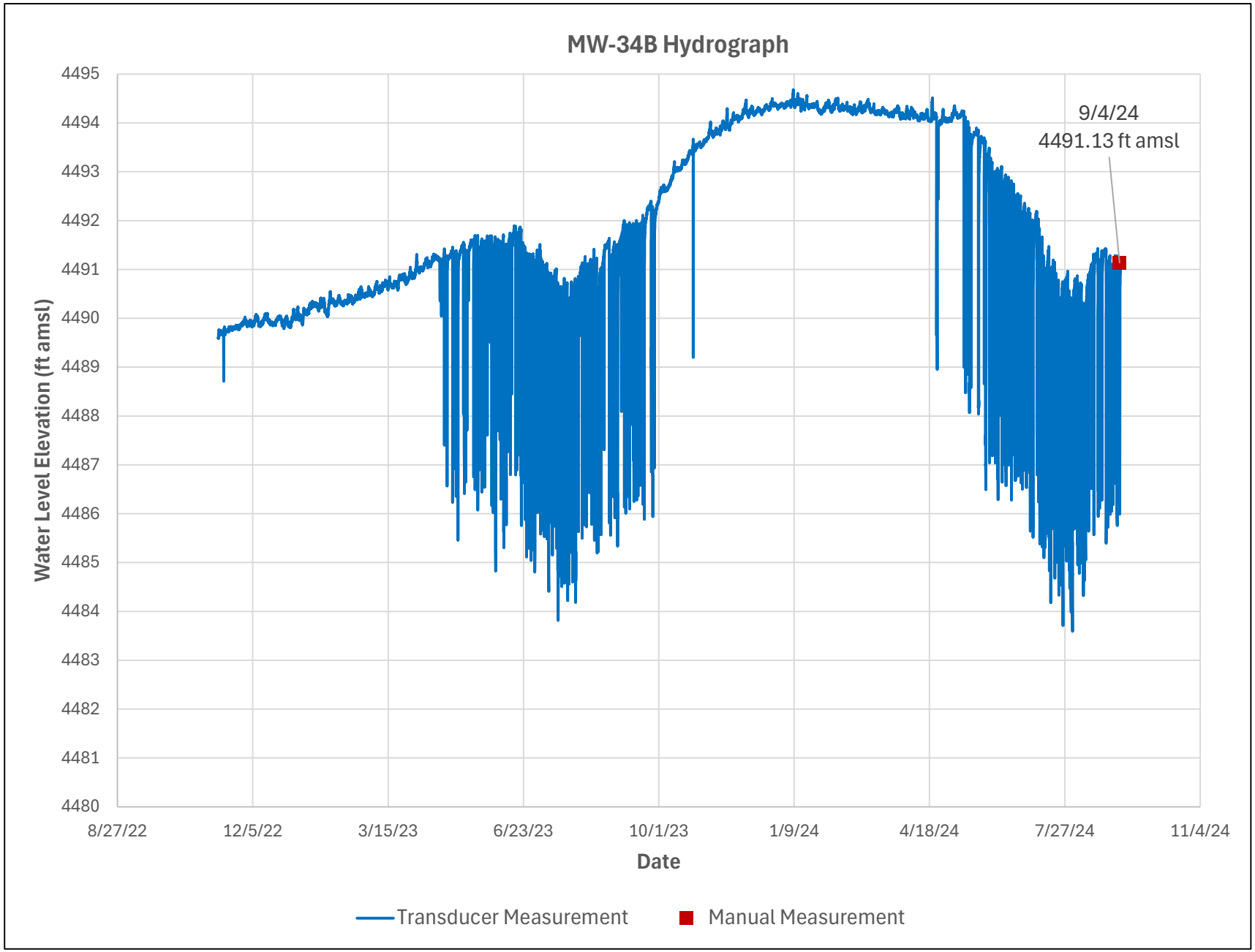

MW-16D Hydrograph
Water Level Elevation (ft amsl)
4455
4454
4453
4452
4451
4450
4449
4448
4447
4446
4445
4444
4443
4442
4441
4440
8/27/22
12/5/22
3/15/23
6/23/23
10/1/23
1/9/24
4/18/24
7/27/24
11/4/24
Date
9/4/24
4444.59 ft amsl
Transducer Measurement
Manual Measurement

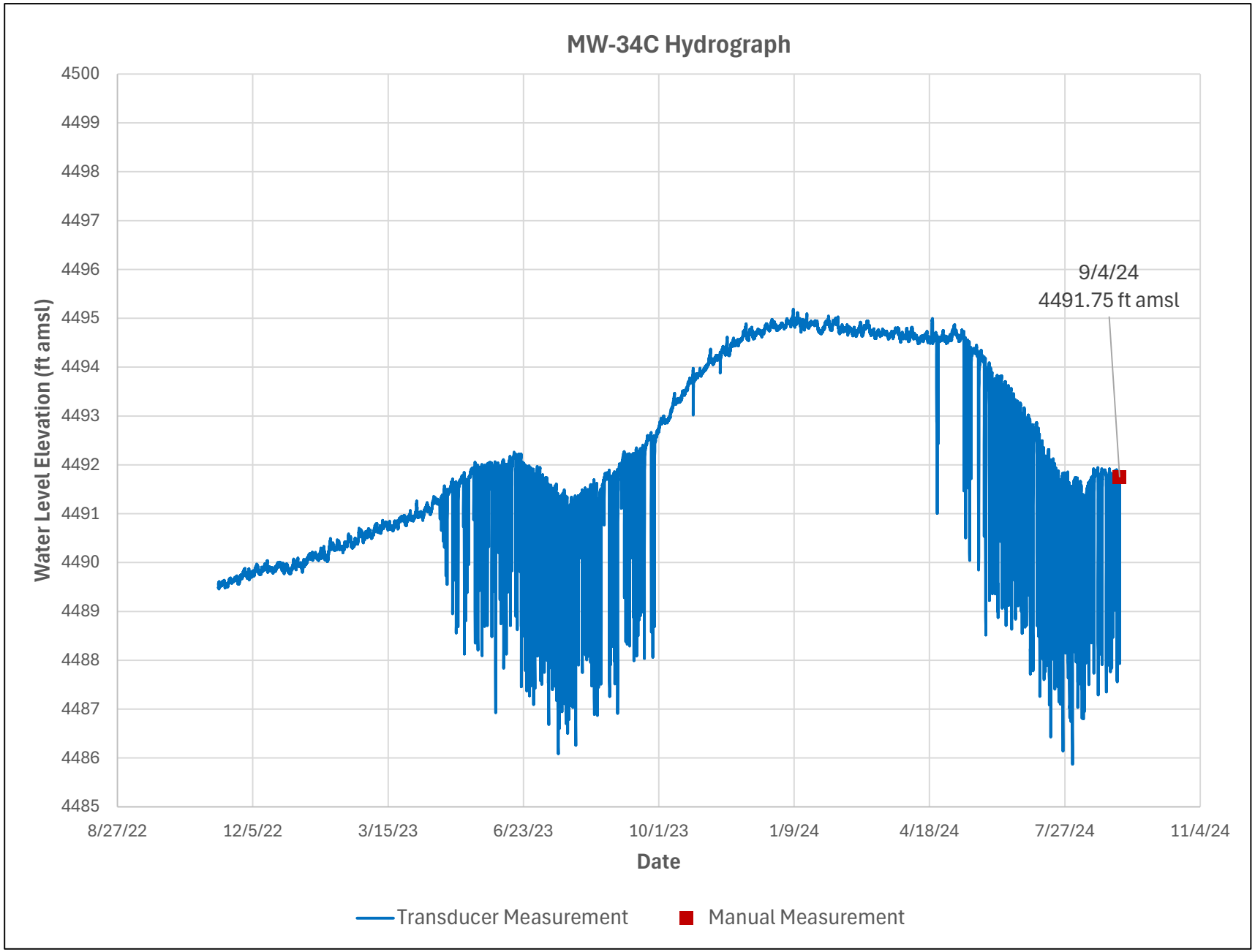

MW-30RA Hydrograph
9/4/24
4494.35 ft amsl
Water Level Elevation (ft amsl)
4500
4499
4498
4497
4496
4495
4494
4493
4492
4491
4490
4489
4488
4487
4486
4485
8/27/22
12/5/22
3/15/23
6/23/23
10/1/23
1/9/24
4/18/24
7/27/24
11/4/24
Date
Transducer Measurement
Manual Measurement

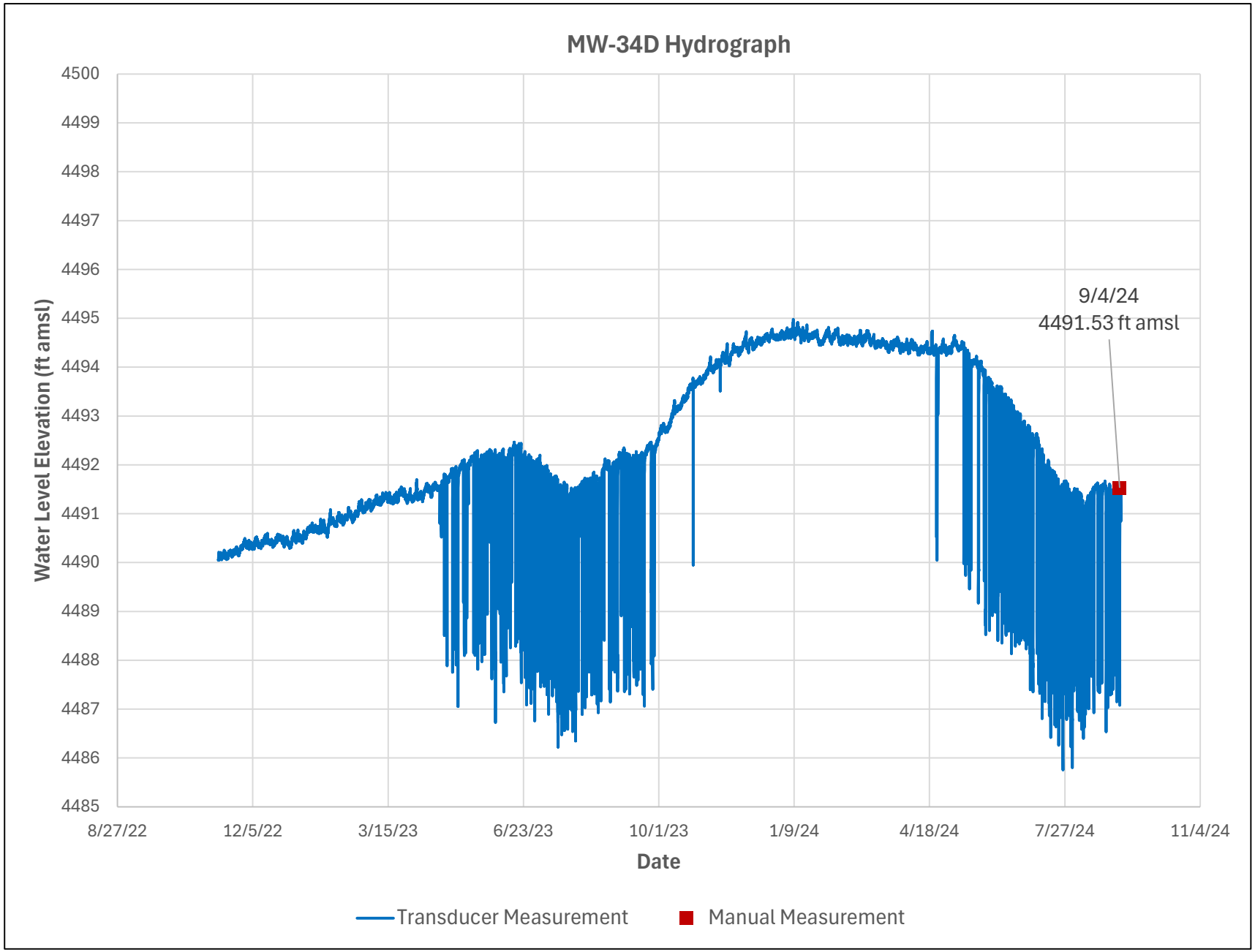

MW-30C Hydrograph
Water Level Elevation (ft amsl)
4500
4499
4498
4497
4496
4495
4494
4493
4492
4491
4490
4489
4488
4487
4486
4485
9/4/24
4491.57 ft amsl
8/27/22
12/5/22
3/15/23
6/23/23
10/1/23
1/9/24
4/18/24
7/27/24
11/4/24
Date
Transducer Measurement
Manual Measurement


MW-32C Hydrograph
Water Level Elevation (ft amsl)
4490
4489
4488
4487
4486
4485
4484
4483
4482
4481
4480
4479
4478
4477
4476
4475
9/4/24
4482.17 ft amsl
8/27/22
12/5/22
3/15/23
6/23/23
10/1/23
1/9/24
4/18/24
7/27/24
11/4/24
Date
Transducer Measument
Manual Measurement


MW-34A Hydrograph
Water Level Elevation (ft amsl)
4495
4494
4493
4492
4491
4490
4489
4488
4487
4486
4485
4484
4483
4482
4481
4480
9/5/24
4491.11 ft amsl
8/27/22
12/5/22
3/15/23
6/23/23
10/1/23
1/9/24
4/18/24
7/27/24
11/4/24
Date
Transducer Measurement
Manual Measurement


MW-34B Hydrograph
Water Level Elevation (ft amsl)
4495
4494
4493
4492
4491
4490
4489
4488
4487
4486
4485
4484
4483
4482
4481
4480
9/4/24
4491.13 ft amsl
8/27/22
12/5/22
3/15/23
6/23/23
10/1/23
1/9/24
4/18/24
7/27/24
11/4/24
Date
Transducer Measurement
Manual Measurement


MW-34C Hydrograph
Water Level Elevation (ft amsl)
4500
4499
4498
4497
4496
4495
4494
4493
4492
4491
4490
4489
4488
4487
4486
4485
9/4/24
4491.75 ft amsl
8/27/22
12/5/22
3/15/23
6/23/23
10/1/23
1/9/24
4/18/24
7/27/24
11/4/24
Date
Transducer Measurement
Manual Measurement


MW-34D Hydrograph
Water Level Elevation (ft amsl)
4500
4499
4498
4497
4496
4495
4494
4493
4492
4491
4490
4489
4488
4487
4486
4485
8/27/22
12/5/22
3/15/23
6/23/23
10/1/23
1/9/24
4/18/24
7/27/24
11/4/24
Date
9/4/24
4491.53 ft amsl
Transducer Measurement
Manual Measurement

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Appendix E
Contaminant Persistence Supporting Information

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Appendix E
Contaminant Persistence Supporting Information

Well ID	Analyte	2024 Data Trend[1]	2022 Data Trend[1]	Dataset start	Dataset end	Results in Data-set (Total)	ND %	Max Concen-tration (µg/L)[2]	Dataset Mean (µg/L)[2]	COV	TS Slope	TS Inter-cept	p-value	Confidence Level %	M-K Test Value (S)	sd(S)
EW-01	PCE	NC	NA	09/11/24	09/11/24	1	0	67	67	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	09/11/24	09/11/24	1	0	1	1	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	09/11/24	09/11/24	1	0	0.93	0.93	NC	NC	NC	NC	NC	NC	NC
IW-01	PCE	NC	NA	09/11/24	09/11/24	1	0	60	60	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	09/11/24	09/11/24	1	0	0.43	0.43	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	09/11/24	09/11/24	1	0	0.32	0.32	NC	NC	NC	NC	NC	NC	NC
MW-01D	PCE	No Trend	No Trend	06/30/98	09/06/24	19	47.4	12	2.57	1.25	0	1	0.135	86.5	-30	26.3
	TCE	NC	No Trend, >50% ND	06/30/98	09/06/24	17	94.1	0.16	1.84	1.38	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	No Trend, >50% ND	06/30/98	09/06/24	17	100	NA	1.86	1.36	NC	NC	NC	NC	NC	NC
MW-01S	PCE	Decreasing	Decreasing	06/30/98	06/13/22	17	0	420	201	0.438	-0.0215	556	0.002	99.8	-71	24.2
	TCE	Decreasing	Decreasing	06/30/98	06/13/22	17	0	4	1.68	0.58	-0.000232	5.35	4E-05	100	-96	24.1
	CIS-1,2-DCE	Decreasing	Decreasing	06/30/98	06/13/22	17	0	5	1.31	1.08	-0.000205	4.29	3E-06	100	-111	24.2
MW-02	PCE	No trend	Stable	11/11/98	09/05/24	18	0	296	184	0.32	0.00575	84.5	0.297	70.3	15	26.3
	TCE	Decreasing	Probably Decreasing	11/11/98	09/05/24	17	11.8	2	0.727	3.27	-0.0000455	1.42	0.044	95.6	-42	24.1
	CIS-1,2-DCE	Decreasing	Decreasing	11/11/98	09/05/24	17	5.9	1.1	0.48	3.54	-0.0000556	1.39	0.021	97.9	-50	24.2
MW-03RA	PCE	Stable	Stable	12/13/18	09/11/24	10	0	32	25.9	0.345	-0.00129	52.4	0.428	57.2	-3	11.1
	TCE	No Trend	Stable	12/13/18	09/11/24	10	10	0.19	0.167	1.06	-0.0000194	0.541	0.207	79.3	-10	11
	CIS-1,2-DCE	NC	Stable, >50% ND	12/13/18	09/11/24	10	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-03RB	PCE	Decreasing	Decreasing	12/27/18	09/11/24	11	0	230	189	0.191	-0.0555	1210	0.014	98.6	-29	12.7
	TCE	Probably Decreasing	Stable	12/27/18	09/11/24	11	0	2.1	1.85	0.0918	-0.000146	4.61	0.056	94.4	-21	12.6
	CIS-1,2-DCE	Decreasing	Decreasing	12/27/18	09/11/24	11	0	1.5	1.28	0.109	-0.000238	5.74	0.002	99.8	-37	12.5
MW-03RC	PCE	Decreasing	Decreasing	12/17/18	09/11/24	10	0	6.5	5.75	0.164	-0.00096	23.6	0.044	95.6	-20	11.1
	TCE	NC	Stable, >50% ND	12/17/18	09/11/24	10	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	12/17/18	09/11/24	10	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-03RD	PCE	NC	Stable, >50% ND	03/27/19	09/11/24	9	88.9	0.18	0.909	0.301	NC	NC	NC	NC	NC	NC
	TCE	NC	Stable, >50% ND	03/27/19	09/11/24	9	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	03/27/19	09/11/24	9	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-04	PCE	Decreasing	Decreasing	11/11/98	09/05/24	17	0	190	69.4	0.573	-0.0124	280	5E-04	100	-81	24.2
	TCE	Decreasing	Decreasing	11/11/98	09/05/24	16	6.2	2	0.465	0.944	-0.000123	2.53	4E-05	100	-88	22.2
	CIS-1,2-DCE	NC	No Trend, >50% ND	11/11/98	09/05/24	16	56.2	1	0.251	1.3	NC	NC	NC	NC	NC	NC
MW-05R	PCE	NC	Stable, >50% ND	12/11/18	09/08/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Stable, >50% ND	12/11/18	09/08/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	12/11/18	09/08/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-06	PCE	Decreasing	Decreasing	01/06/00	09/05/24	14	35.7	0.48	0.31	1.92	-0.000163	3.25	0.001	99.9	-57	18.2
	TCE	NC	No Trend, >50% ND	01/06/00	09/05/24	14	92.9	0.15	1.73	1.53	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	No Trend, >50% ND	01/06/00	09/05/24	14	100	NA	1.76	1.5	NC	NC	NC	NC	NC	NC
MW-08A	PCE	Stable	Stable	12/27/18	09/10/24	9	0	71	59.7	0.122	-0.00569	165	0.126	87.4	-12	9.59
	TCE	Probably Decreasing	Stable	12/27/18	09/10/24	9	0	0.48	0.42	0.102	-0.0000469	1.3	0.071	92.9	-15	9.54
	CIS-1,2-DCE	No trend	Stable	12/27/18	09/10/24	9	22.2	0.24	0.197	0.945	0	0.19	0.415	58.5	3	9.29
MW-08B	PCE	No trend	Stable	12/27/18	09/06/24	9	0	6.2	4.99	0.15	0.000196	1.48	0.458	54.2	2	9.59
	TCE	NC	Stable, >50% ND	12/27/18	09/06/24	9	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	12/27/18	09/06/24	9	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-08C	PCE	NC	Stable, >50% ND	03/20/19	09/13/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Stable, >50% ND	03/20/19	09/13/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	03/20/19	09/13/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-12D	PCE	NC	Stable, >50% ND	09/24/18	09/05/24	11	90.9	1.1	1.01	0.0299	NC	NC	NC	NC	NC	NC
	TCE	NC	Stable, >50% ND	09/24/18	09/05/24	11	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	09/24/18	09/05/24	11	90.9	0.11	0.919	0.292	NC	NC	NC	NC	NC	NC
MW-12S	PCE	NC	Insufficient Data	09/24/18	06/19/20	5	0	2.2	1.37	0.369	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/24/18	06/19/20	5	60	0.24	0.185	0.665	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/24/18	06/19/20	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-13D	PCE	Decreasing	Probably Decreasing	09/17/18	09/07/24	11	0	75	59.7	0.138	-0.00871	222	0.009	99.1	-31	12.8
	TCE	No trend	Stable	09/17/18	09/07/24	11	9.1	0.6	0.514	0.274	0.0000198	0.148	0.318	68.2	7	12.6
	CIS-1,2-DCE	Probably Decreasing	Decreasing	09/17/18	09/07/24	11	9.1	0.42	0.336	0.526	-0.0000799	1.83	0.079	92.1	-19	12.8
MW-13L	PCE	Increasing	Insufficient Data	12/16/20	09/07/24	6	0	64	50	0.353	0.0216	-358	0.03	97	11	5.32
	TCE	Increasing	Insufficient Data	12/16/20	09/07/24	6	16.7	0.48	0.332	0.664	0.000479	-8.73	0.006	99.4	14	5.22
	CIS-1,2-DCE	Increasing	Insufficient Data	12/16/20	09/07/24	6	16.7	0.57	0.486	0.378	0.000312	-5.41	0.03	97	11	5.32
MW-13S	PCE	Increasing	Increasing	09/19/18	09/07/24	11	0	42	25.9	0.295	0.00722	-110	0.036	96.4	24	12.8
	TCE	Increasing	Increasing	09/19/18	09/07/24	11	9.1	1.3	0.831	0.376	0.000357	-5.7	0.018	98.2	28	12.8
	CIS-1,2-DCE	Increasing	Stable	09/19/18	09/07/24	11	27.3	0.32	0.198	0.907	0.000047	-0.687	0.034	96.6	24	12.6
MW-14D	PCE	No trend	Stable	09/19/18	09/10/24	11	0	44	33.2	0.181	0.00439	-48.5	0.154	84.6	14	12.7
	TCE	No trend	Stable	09/19/18	09/10/24	11	9.1	0.34	0.263	0.686	0.000046	-0.586	0.119	88.1	16	12.7
	CIS-1,2-DCE	Decreasing	Stable	09/19/18	09/10/24	11	0	0.35	0.277	0.229	-0.0000596	1.4	0.017	98.3	-28	12.7

Appendix E
Contaminant Persistence Supporting Information

Well ID	Analyte	2024 Data Trend[1]	2022 Data Trend[1]	Dataset start	Dataset end	Results in Data-set (Total)	ND %	Max Concen-tration (µg/L)[2]	Dataset Mean (µg/L)[2]	COV	TS Slope	TS Inter-cept	p-value	Confidence Level %	M-K Test Value (S)	sd(S)
MW-14S	PCE	Probably Increasing	Stable	09/19/18	09/10/24	11	0	13	6.08	0.583	0.00243	-40.5	0.051	95	22	12.8
	TCE	No trend	Stable	09/19/18	09/10/24	11	9.1	12	5.12	0.539	0.0006	-6.41	0.407	59.3	4	12.8
	CIS-1,2-DCE	Probably Increasing	Stable	09/19/18	09/10/24	11	9.1	3.2	1.62	0.52	0.000647	-10.6	0.06	94	21	12.8
MW-15D	PCE	NC	Stable, >50% ND	09/25/18	09/08/24	9	66.7	0.23	0.18	0.565	NC	NC	NC	NC	NC	NC
	TCE	NC	Stable, >50% ND	09/25/18	09/08/24	9	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	09/25/18	09/08/24	9	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-15S	PCE	No Trend	No Trend	09/25/18	09/08/24	10	20	3.3	0.681	1.14	-0.000271	5.63	0.294	70.6	-7	11.1
	TCE	NC	No Trend, >50% ND	09/25/18	09/08/24	10	80	4.2	0.564	0.869	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	09/25/18	09/08/24	10	90	0.68	0.968	0.105	NC	NC	NC	NC	NC	NC
MW-16D	PCE	NC	Stable, >50% ND	09/20/18	09/08/24	10	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Stable, >50% ND	09/20/18	09/08/24	10	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	09/20/18	09/08/24	10	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-16S	PCE	Stable	Stable	09/20/18	09/08/24	10	0	28	23.8	0.103	-0.00109	43.8	0.292	70.8	-7	11
	TCE	Increasing	Stable	09/20/18	09/08/24	10	10	0.24	0.188	0.96	0.0000532	-0.783	0.036	96.4	21	11.1
	CIS-1,2-DCE	NC	Stable, >50% ND	09/20/18	09/08/24	10	70	0.15	0.123	0.575	NC	NC	NC	NC	NC	NC
MW-17D	PCE	Increasing	Stable	09/24/18	09/05/24	11	0	3.2	2.46	0.165	0.000464	-6.16	0.014	98.6	29	12.8
	TCE	NC	Decreasing, >50% ND	09/24/18	09/05/24	11	63.6	0.15	0.112	0.661	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	09/24/18	09/05/24	11	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-17S	PCE	Increasing	Increasing	09/24/18	09/05/24	11	0	1.5	0.82	0.39	0.000467	-7.87	5E-04	99.9	43	12.8
	TCE	NC	Stable, >50% ND	09/24/18	09/05/24	11	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	09/24/18	09/05/24	11	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-18	PCE	Decreasing	Decreasing	09/18/18	09/07/24	11	0	96	70.1	0.184	-0.0183	410	0.006	99.4	-33	12.8
	TCE	Stable	Stable	09/18/18	09/07/24	11	9.1	0.65	0.497	0.303	-0.0000296	1.04	0.438	56.2	-3	12.8
	CIS-1,2-DCE	Stable	Probably Decreasing	09/18/18	09/07/24	11	9.1	0.27	0.221	0.817	-0.000037	0.915	0.217	78.3	-11	12.8
MW-19	PCE	Decreasing	Decreasing	09/18/18	09/07/24	11	0	89	61.2	0.196	-0.0138	318	9E-04	99.9	-41	12.8
	TCE	Stable	Probably Decreasing	09/18/18	09/07/24	11	9.1	0.68	0.518	0.284	-0.0000184	0.842	0.217	78.3	-11	12.8
	CIS-1,2-DCE	Stable	Stable	09/18/18	09/07/24	11	9.1	0.31	0.248	0.73	-0.0000367	0.929	0.318	68.2	-7	12.6
MW-20D	PCE	Probably Decreasing	Stable	09/19/18	09/07/24	9	0	12	10.4	0.106	-0.00137	35.4	0.057	94.3	-16	9.49
	TCE	Decreasing	Stable	09/19/18	09/07/24	9	0	0.29	0.251	0.12	-0.0000385	0.968	0.034	96.6	-18	9.34
	CIS-1,2-DCE	No trend	Stable	09/19/18	09/07/24	9	22.2	0.15	0.136	1.16	0	0.15	0.413	58.7	3	9.15
MW-20S	PCE	Stable	Stable	09/18/18	09/07/24	11	0	5.4	4.4	0.136	-0.000379	11.3	0.195	80.5	-12	12.8
	TCE	No trend	Stable	09/18/18	09/07/24	11	36.4	0.15	0.126	0.995	0.0000154	-0.143	0.165	83.5	13	12.3
	CIS-1,2-DCE	NC	Stable, >50% ND	09/18/18	09/07/24	11	90.9	0.13	0.921	0.285	NC	NC	NC	NC	NC	NC
MW-21	PCE	Decreasing	Stable	09/20/18	09/08/24	8	0	2	1.6	0.231	-0.000532	11.4	0.041	96	-15	8.02
	TCE	NC	Stable, >50% ND	09/20/18	09/08/24	8	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	09/20/18	09/08/24	8	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-22	PCE	Decreasing	Stable	09/20/18	09/08/24	8	0	3.5	2.79	0.188	-0.000605	13.8	0.037	96.3	-15	7.85
	TCE	Probably Increasing	Stable	09/20/18	09/08/24	8	50	0.13	0.118	0.844	0.000132	-1.94	0.09	91	11	7.46
	CIS-1,2-DCE	NC	Stable, >50% ND	09/20/18	09/08/24	8	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-23A	PCE	NC	Insufficient Data	10/19/20	09/12/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	10/19/20	09/12/24	5	80	0.11	0.822	0.484	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	10/19/20	09/12/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-23B	PCE	NC	Insufficient Data	10/20/20	09/12/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	10/20/20	09/12/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	10/20/20	09/12/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-23C	PCE	NC	Insufficient Data	06/23/20	09/12/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	06/23/20	09/12/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	06/23/20	09/12/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-24	PCE	No trend	Insufficient Data	05/13/20	09/08/24	9	33.3	2.2	0.679	0.708	0.0000629	-0.182	0.374	62.6	4	9.34
	TCE	NC	Insufficient Data	05/13/20	09/08/24	9	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	05/13/20	09/08/24	9	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-25A	PCE	No trend	Insufficient Data	09/30/20	09/07/24	6	0	1.9	1.55	0.167	0.000209	-2.32	0.169	83.1	6	5.22
	TCE	NC	Insufficient Data	09/30/20	09/07/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/30/20	09/07/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-25B	PCE	NC	Insufficient Data	09/30/20	09/07/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/30/20	09/07/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/30/20	09/07/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-25C	PCE	No trend	Stable	06/19/20	09/07/24	7	0	1.2	0.949	0.162	0.0000732	-0.485	0.44	56	2	6.58
	TCE	NC	Stable, >50% ND	06/19/20	09/07/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	06/19/20	09/07/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-26A	PCE	NC	Insufficient Data	09/25/20	09/08/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/25/20	09/08/24	5	20	0.21	0.17	1.11	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/25/20	09/08/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC

Appendix E
Contaminant Persistence Supporting Information

Well ID	Analyte	2024 Data Trend[1]	2022 Data Trend[1]	Dataset start	Dataset end	Results in Data-set (Total)	ND %	Max Concen-tration (µg/L)[2]	Dataset Mean (µg/L)[2]	COV	TS Slope	TS Inter-cept	p-value	Confidence Level %	M-K Test Value (S)	sd(S)
MW-26B	PCE	NC	Insufficient Data	09/25/20	09/13/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/25/20	09/13/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/25/20	09/13/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-26C	PCE	NC	Insufficient Data	12/17/20	09/07/24	4	25	0.87	0.687	0.338	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	12/17/20	09/07/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	12/17/20	09/07/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-26D	PCE	NC	Insufficient Data	09/25/20	09/08/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/25/20	09/08/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/25/20	09/08/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-27	PCE	NC	Insufficient Data	03/23/20	09/10/24	8	87.5	9.1	2.01	1.42	NC	NC	NC	NC	NC	NC
	TCE	No Trend	Insufficient Data	03/23/20	09/10/24	8	37.5	0.15	0.124	1	-0.0000515	1.1	0.26	74	-6	7.79
	CIS-1,2-DCE	NC	Insufficient Data	03/23/20	09/10/24	8	87.5	0.1	0.888	0.359	NC	NC	NC	NC	NC	NC
MW-28	PCE	NC	Insufficient Data	03/18/20	09/07/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	Stable	Insufficient Data	03/18/20	09/07/24	7	28.6	0.24	0.18	0.969	-0.000222	4.34	0.269	73.1	-5	6.5
	CIS-1,2-DCE	NC	Insufficient Data	03/18/20	09/07/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-29A	PCE	Probably Decreasing	Stable	09/28/20	09/10/24	7	0	11	9.09	0.181	-0.00207	49.3	0.086	91.4	-10	6.58
	TCE	No trend	Stable	09/28/20	09/10/24	7	0	0.23	0.17	0.183	0.00000693	0.032	0.44	56	2	6.58
	CIS-1,2-DCE	NC	Stable, >50% ND	09/28/20	09/10/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-29B	PCE	NC	Insufficient Data	09/28/20	09/10/24	5	20	0.56	0.465	0.462	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/28/20	09/10/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/28/20	09/10/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-29C	PCE	NC	Insufficient Data	09/28/20	09/10/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/28/20	09/10/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/28/20	09/10/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-30C	PCE	Stable	Stable	09/21/20	11/10/22	6	0	0.4	0.342	0.122	-0.0000897	2.02	0.169	83.1	-6	5.22
	TCE	NC	Stable, >50% ND	09/21/20	11/10/22	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	09/21/20	11/10/22	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-30RA	PCE	No trend	Insufficient Data	12/08/20	09/08/24	6	16.7	0.22	0.184	1.04	0.0000657	-1.05	0.218	78.2	5	5.13
	TCE	Increasing	Insufficient Data	12/08/20	09/08/24	6	16.7	0.49	0.362	0.575	0.000328	-5.85	0.03	97	11	5.32
	CIS-1,2-DCE	NC	Insufficient Data	12/08/20	09/08/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-30RB	PCE	NC	Insufficient Data	12/08/20	09/08/24	6	66.7	0.21	0.185	0.578	NC	NC	NC	NC	NC	NC
	TCE	Increasing	Insufficient Data	12/08/20	09/08/24	6	16.7	0.25	0.2	0.983	0.000115	-1.97	0.043	95.7	10	5.22
	CIS-1,2-DCE	NC	Insufficient Data	12/08/20	09/08/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-31A	PCE	Stable	Insufficient Data	09/23/20	09/10/24	6	0	0.73	0.565	0.176	-0.000015	0.851	0.5	50	-1	5.32
	TCE	NC	Insufficient Data	09/23/20	09/10/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/23/20	09/10/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-31B	PCE	NC	Insufficient Data	09/23/20	09/10/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/23/20	09/10/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/23/20	09/10/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-31C	PCE	NC	Insufficient Data	09/23/20	09/10/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/23/20	09/10/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/23/20	09/10/24	5	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-32A	PCE	Stable	Insufficient Data	09/22/20	09/08/24	6	0	0.64	0.498	0.16	-0.0000428	1.28	0.226	77.4	-5	5.32
	TCE	NC	Insufficient Data	09/22/20	09/08/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/22/20	09/08/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-32B	PCE	No trend	Stable	09/22/20	09/12/24	7	14.3	0.46	0.373	0.525	0.000171	-2.85	0.136	86.4	8	6.38
	TCE	NC	Stable, >50% ND	09/22/20	09/12/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Stable, >50% ND	09/22/20	09/12/24	7	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-32C	PCE	NC	Insufficient Data	09/22/20	06/27/21	4	50	0.26	0.215	0.748	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/22/20	06/27/21	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/22/20	06/27/21	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-34A	PCE	No trend	Stable	10/01/20	09/06/24	7	0	36	24.4	0.412	0.00171	-6.83	0.5	50	1	6.66
	TCE	Stable	Stable	10/01/20	09/06/24	7	0	0.66	0.48	0.345	-0.000116	2.75	0.5	50	-1	6.66
	CIS-1,2-DCE	Stable	Probably Decreasing	10/01/20	09/06/24	7	28.6	0.3	0.22	0.865	-0.000133	2.76	0.269	73.1	-5	6.5
MW-34B	PCE	Increasing	Stable	09/27/20	09/05/24	7	0	20	14.5	0.301	0.00417	-63.4	0.047	95.3	12	6.58
	TCE	Increasing	Stable	09/27/20	09/05/24	7	0	0.55	0.474	0.123	0.000112	-1.67	0.018	98.2	15	6.66
	CIS-1,2-DCE	No trend	Stable	09/27/20	09/05/24	7	0	0.51	0.457	0.118	0.0000158	0.173	0.382	61.8	3	6.66
MW-34C	PCE	NC	Insufficient Data	09/27/20	09/05/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/27/20	09/05/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/27/20	09/05/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-34D	PCE	NC	Insufficient Data	09/27/20	09/06/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	09/27/20	09/06/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	09/27/20	09/06/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-36	PCE	NC	Insufficient Data	12/14/20	09/06/24	6	83.3	0.28	0.88	0.334	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	12/14/20	09/06/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	12/14/20	09/06/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC

Appendix E
Contaminant Persistence Supporting Information

Well ID	Analyte	2024 Data Trend[1]	2022 Data Trend[1]	Dataset start	Dataset end	Results in Data-set (Total)	ND %	Max Concen-tration (µg/L)[2]	Dataset Mean (µg/L)[2]	COV	TS Slope	TS Inter-cept	p-value	Confidence Level %	M-K Test Value (S)	sd(S)
MW-37D	PCE	NC	Insufficient Data	12/14/20	09/06/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	12/14/20	09/06/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	12/14/20	09/06/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-37S	PCE	NC	Insufficient Data	12/14/20	09/06/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	12/14/20	09/06/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	12/14/20	09/06/24	6	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-38D	PCE	NC	Insufficient Data	12/16/20	09/06/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	12/16/20	09/06/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	12/16/20	09/06/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-38S	PCE	NC	Insufficient Data	12/16/20	09/06/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
	TCE	NC	Insufficient Data	12/16/20	09/06/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	Insufficient Data	12/16/20	09/06/24	4	100	NA	1	0	NC	NC	NC	NC	NC	NC
MW-39D	PCE	NC	NA	10/03/24	10/03/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	10/03/24	10/03/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	10/03/24	10/03/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
MW-39S	PCE	NC	NA	10/03/24	10/03/24	1	0	21	21	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	10/03/24	10/03/24	1	0	0.34	0.34	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	10/03/24	10/03/24	1	0	0.24	0.24	NC	NC	NC	NC	NC	NC	NC
MW-40D	PCE	NC	NA	09/30/24	09/30/24	1	0	14	14	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	09/30/24	09/30/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	09/30/24	09/30/24	1	0	0.17	0.17	NC	NC	NC	NC	NC	NC	NC
MW-40S	PCE	NC	NA	09/30/24	09/30/24	1	0	1.3	1.3	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	09/30/24	09/30/24	1	0	0.11	0.11	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	09/30/24	09/30/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
MW-41D	PCE	NC	NA	10/02/24	10/02/24	1	0	33	33	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	10/02/24	10/02/24	1	0	0.21	0.21	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	10/02/24	10/02/24	1	0	0.22	0.22	NC	NC	NC	NC	NC	NC	NC
MW-41S	PCE	NC	NA	10/02/24	10/02/24	1	0	72	72	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	10/02/24	10/02/24	1	0	0.29	0.29	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	10/02/24	10/02/24	1	0	0.13	0.13	NC	NC	NC	NC	NC	NC	NC
MW-42D	PCE	NC	NA	10/02/24	10/02/24	1	0	87	87	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	10/02/24	10/02/24	1	0	0.67	0.67	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	10/02/24	10/02/24	1	0	0.59	0.59	NC	NC	NC	NC	NC	NC	NC
MW-42S	PCE	NC	NA	09/12/24	09/12/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	09/12/24	09/12/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	09/12/24	09/12/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
MW-43D	PCE	NC	NA	10/01/24	10/01/24	1	0	130	130	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	10/01/24	10/01/24	1	0	1.4	1.4	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	10/01/24	10/01/24	1	0	1.3	1.3	NC	NC	NC	NC	NC	NC	NC
MW-43S	PCE	NC	NA	10/01/24	10/01/24	1	0	0.52	0.52	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	10/01/24	10/01/24	1	0	0.2	0.2	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	10/01/24	10/01/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
MW-44D	PCE	NC	NA	10/01/24	10/01/24	1	0	0.32	0.32	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	10/01/24	10/01/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	10/01/24	10/01/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
MW-44S	PCE	NC	NA	10/01/24	10/01/24	1	0	58	58	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	10/01/24	10/01/24	1	0	0.36	0.36	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	10/01/24	10/01/24	1	0	0.14	0.14	NC	NC	NC	NC	NC	NC	NC
MW-45	PCE	NC	NA	09/07/24	09/07/24	1	0	10	10	NC	NC	NC	NC	NC	NC	NC
	TCE	NC	NA	09/07/24	09/07/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC
	CIS-1,2-DCE	NC	NA	09/07/24	09/07/24	1	100	NA	1	NC	NC	NC	NC	NC	NC	NC

Acronyms and Abbreviations

% - percent
µg/L - micrograms per liter
CIS-1,2-DCE - Cis-1,2-dichloroethene
COV = Covariance (Standard deviation / mean) of (up to) the last 40 observations
J - estimated result
NA - not applicable
NC - not calculated
ND - dataset nondetect count
p-value - probability that S would occur without a statistically significant trend
PCE - Tetrachloroethene
S - Mann Kendall S statistic, the number that represents all samples and direction of trend in the Mann-Kendall analysis
sd(S) - Standard deviation of Kendall's S
TCE - Trichloroethene
TS - Theil-Sen

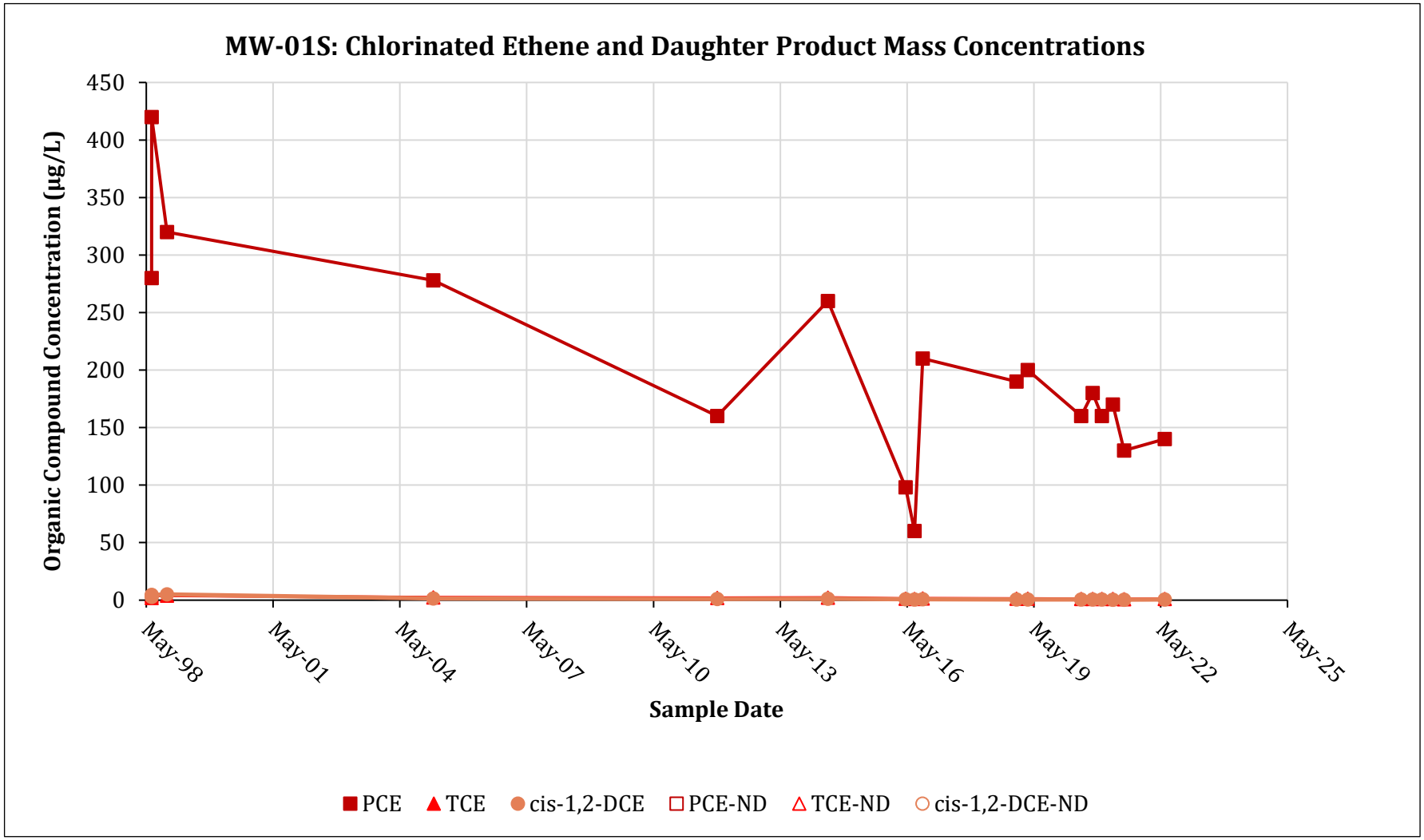
Notes

[1]Trend was interpreted using the GSI Toolkit approach (Aziz et al. 2003, Connor et al. 2012) for datasets with more than 50% detected results, at least 6 results, and no more than 40 results. The trend result is based on the Mann-Kendall S, CF, and COV as follows:

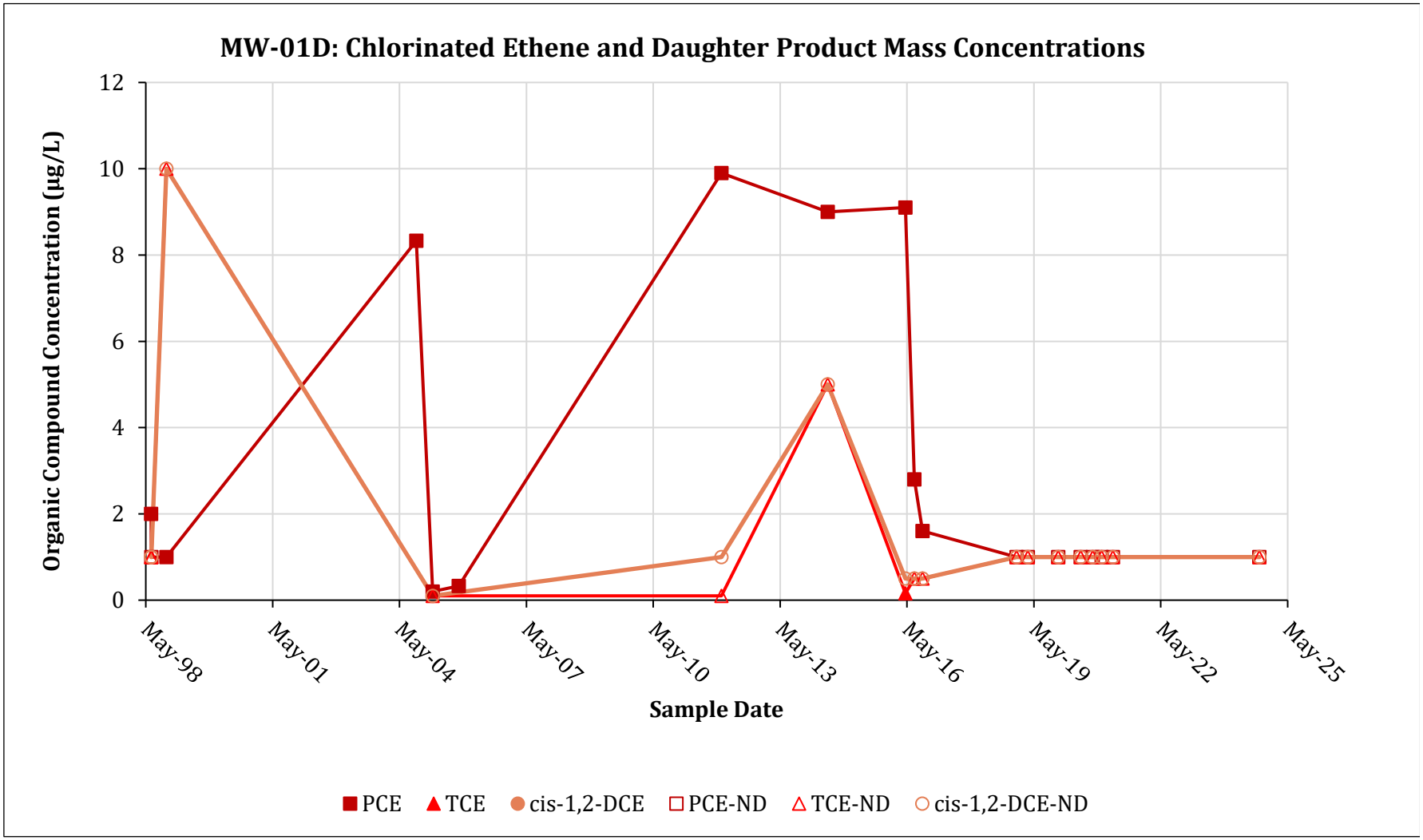
- *Increasing (S > 0, CF > 95%)*
- Probably *Increasing (S > 0, 95% >= CF >= 90%)*
- No Trend *(S > 0, CF < 90%)*
- No Trend *(S <= 0, CF < 90% and COV >= 1)*
- Stable *(S <= 0, CF < 90% and COV < 1)*
- Probably De*creasing (S < 0, 95% >= CF >= 90%)*
- De*creasing (S < 0, CF > 95%)*

[2]Statistical analysis trend results are reported in units of µg/L

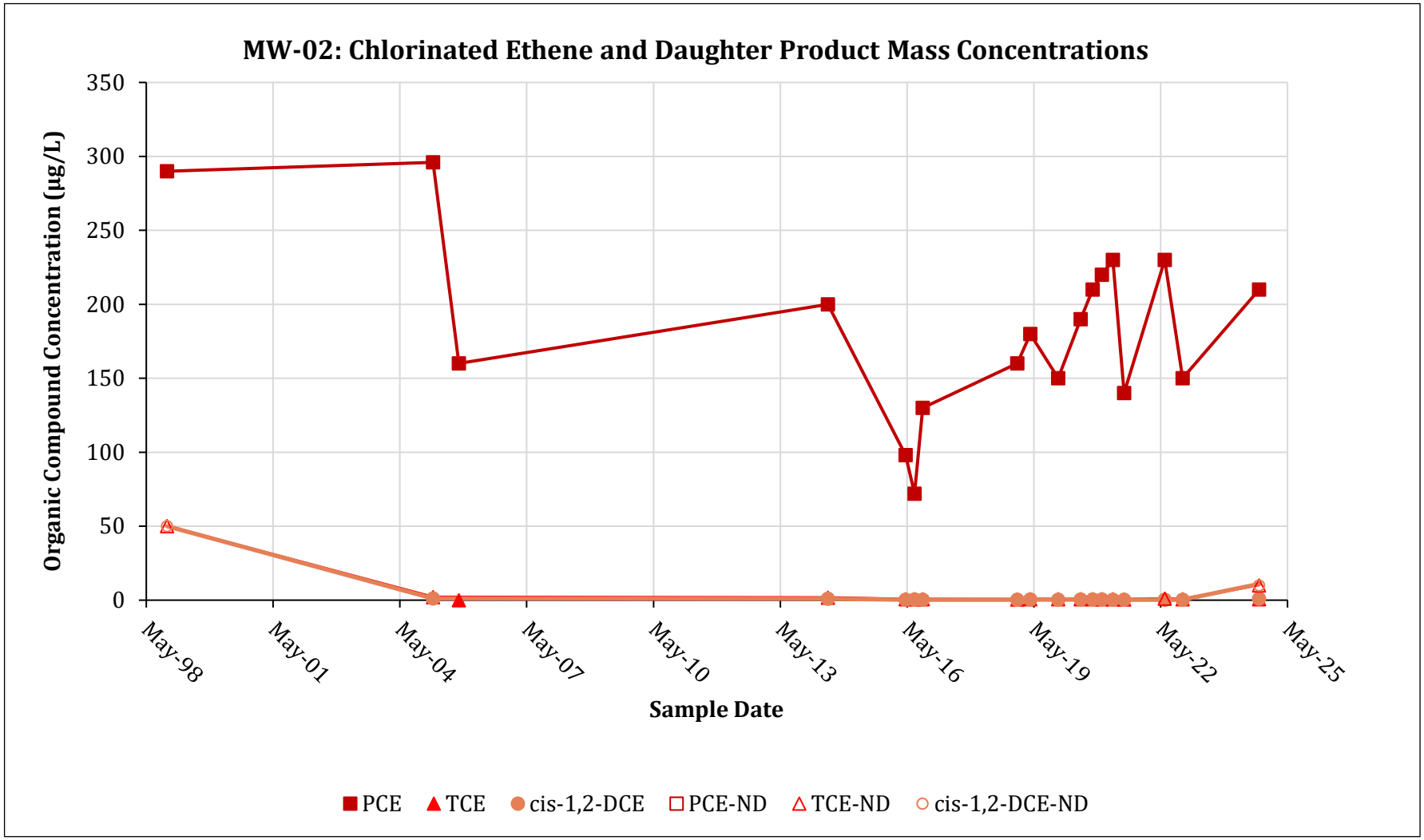
Appendix E
Contaminant Persistence Supporting Information
MW-01S Chart (Not Sampled in 2024)



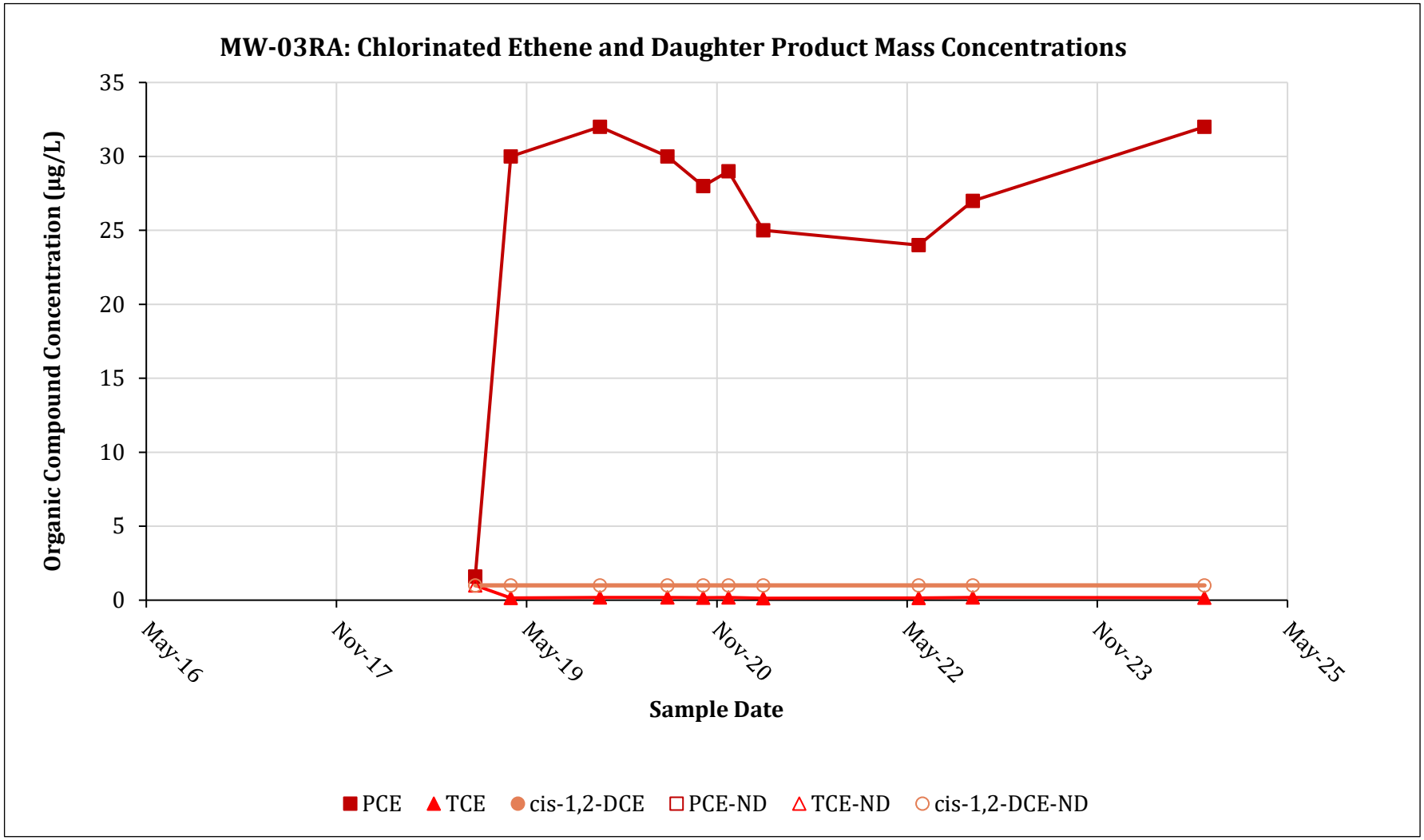
Appendix E
Contaminant Persistence Supporting Information
MW-01D Chart



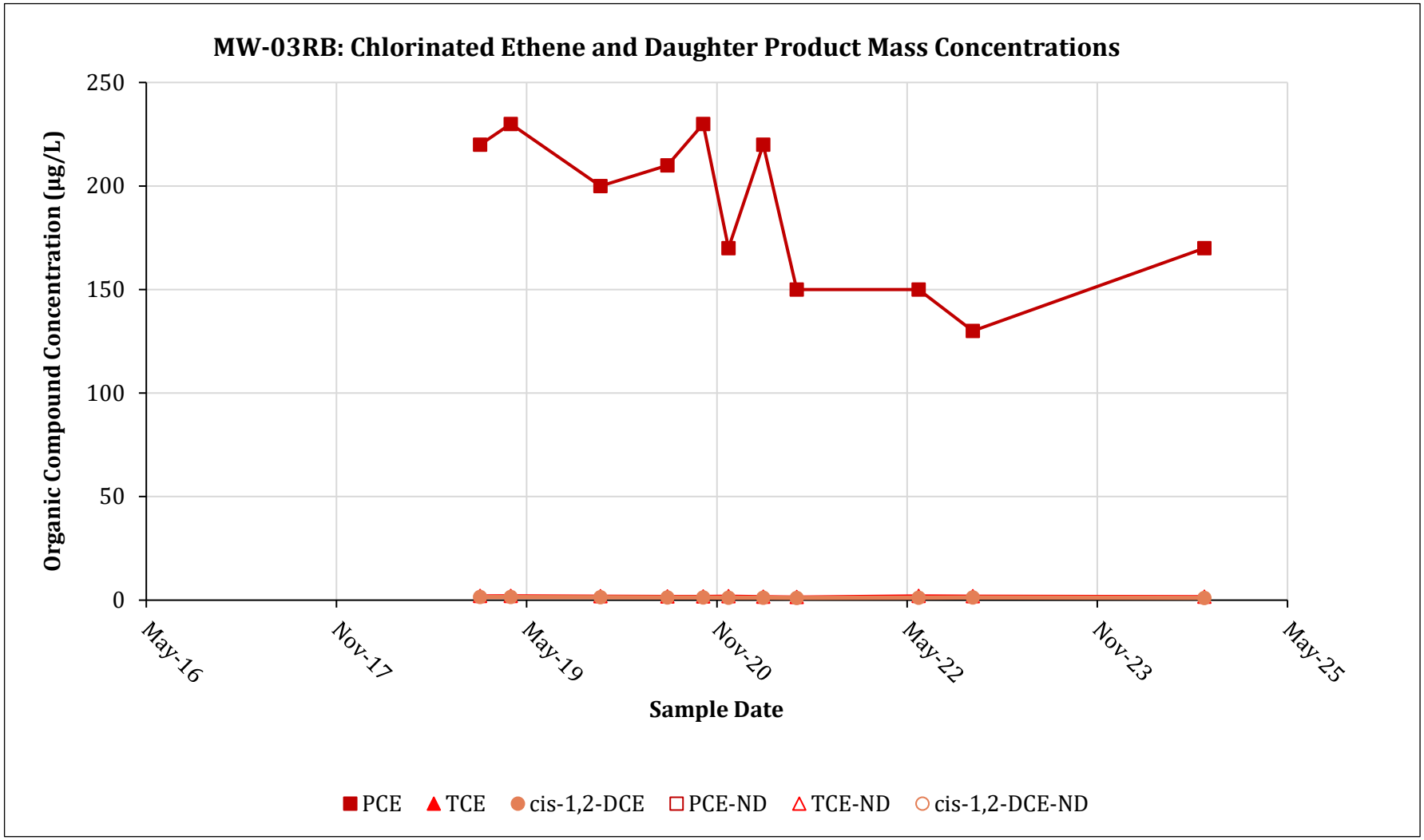
Appendix E
Contaminant Persistence Supporting Information
MW-02 Chart



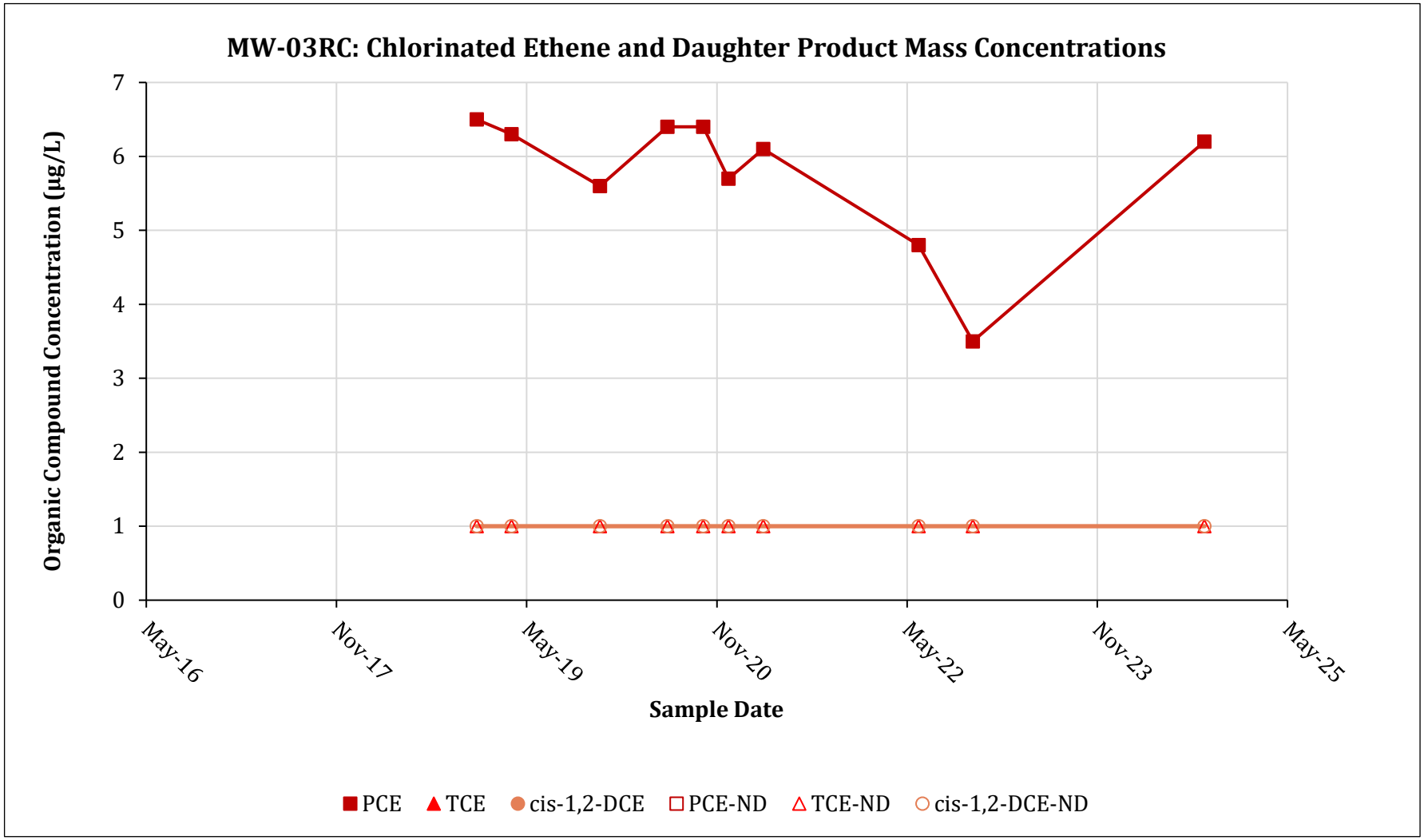
Appendix E
Contaminant Persistence Supporting Information
MW-03RA Chart



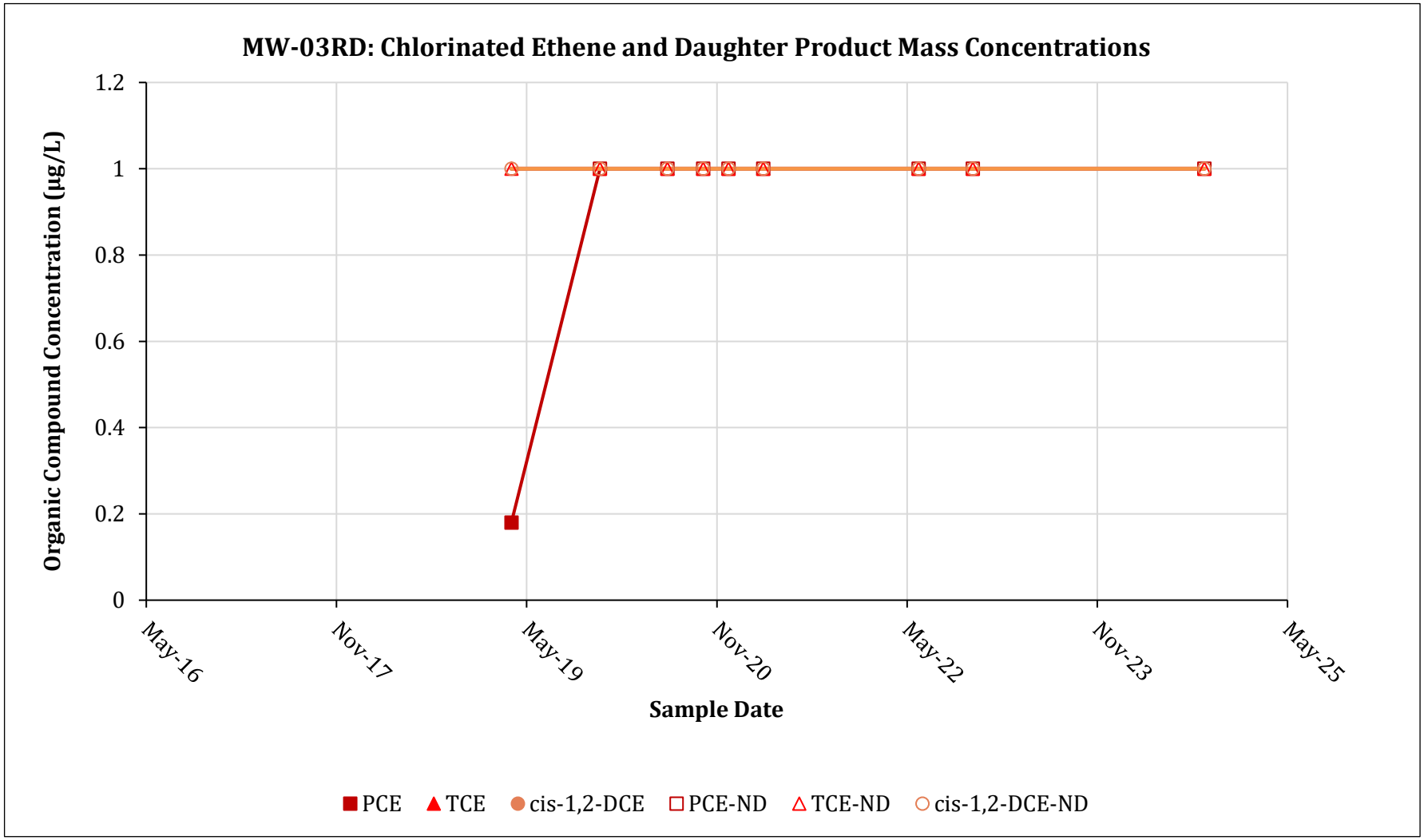
Appendix E
Contaminant Persistence Supporting Information
MW-03RB Chart



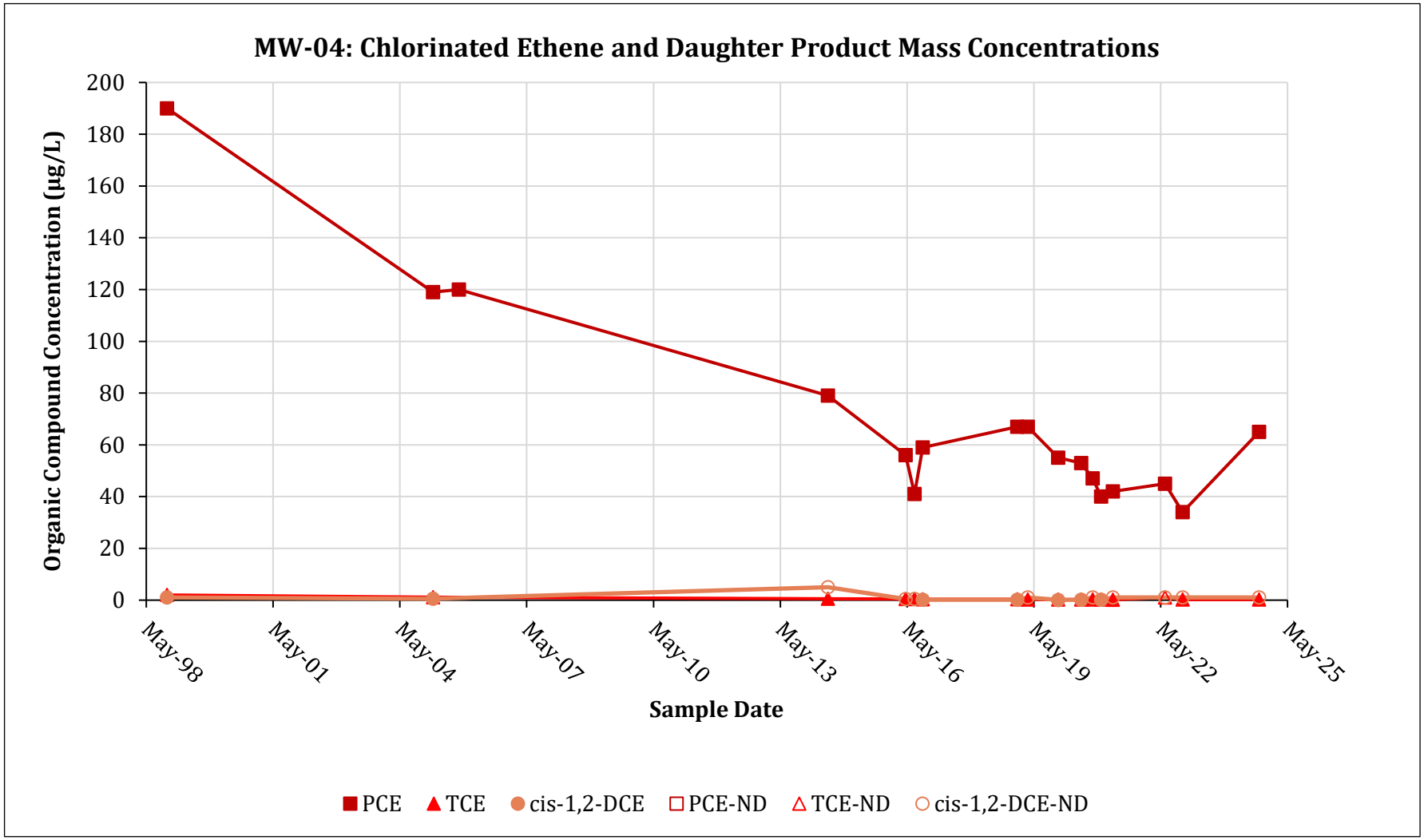
Appendix E
Contaminant Persistence Supporting Information
MW-03RC Chart



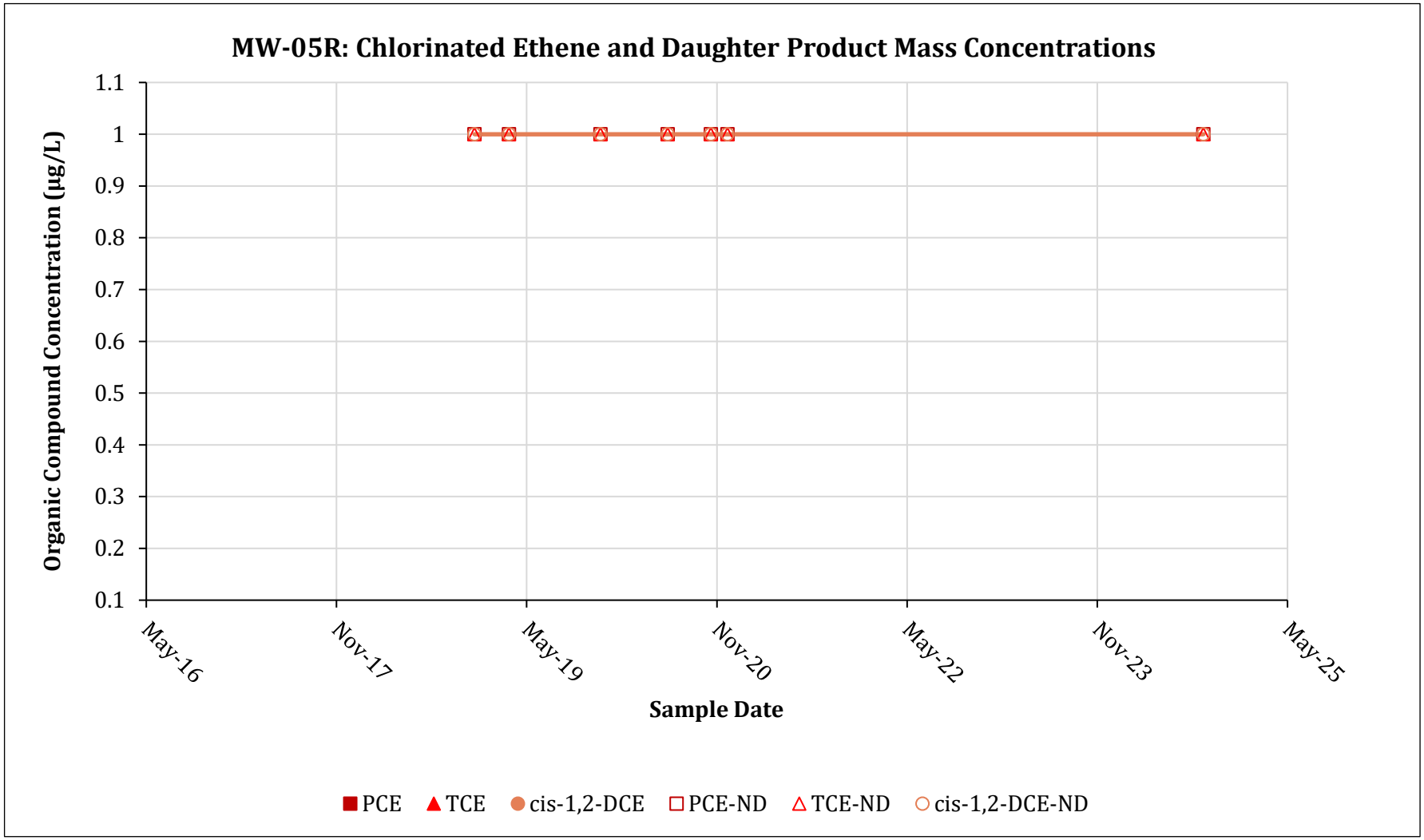
Appendix E
Contaminant Persistence Supporting Information
MW-03RD Chart



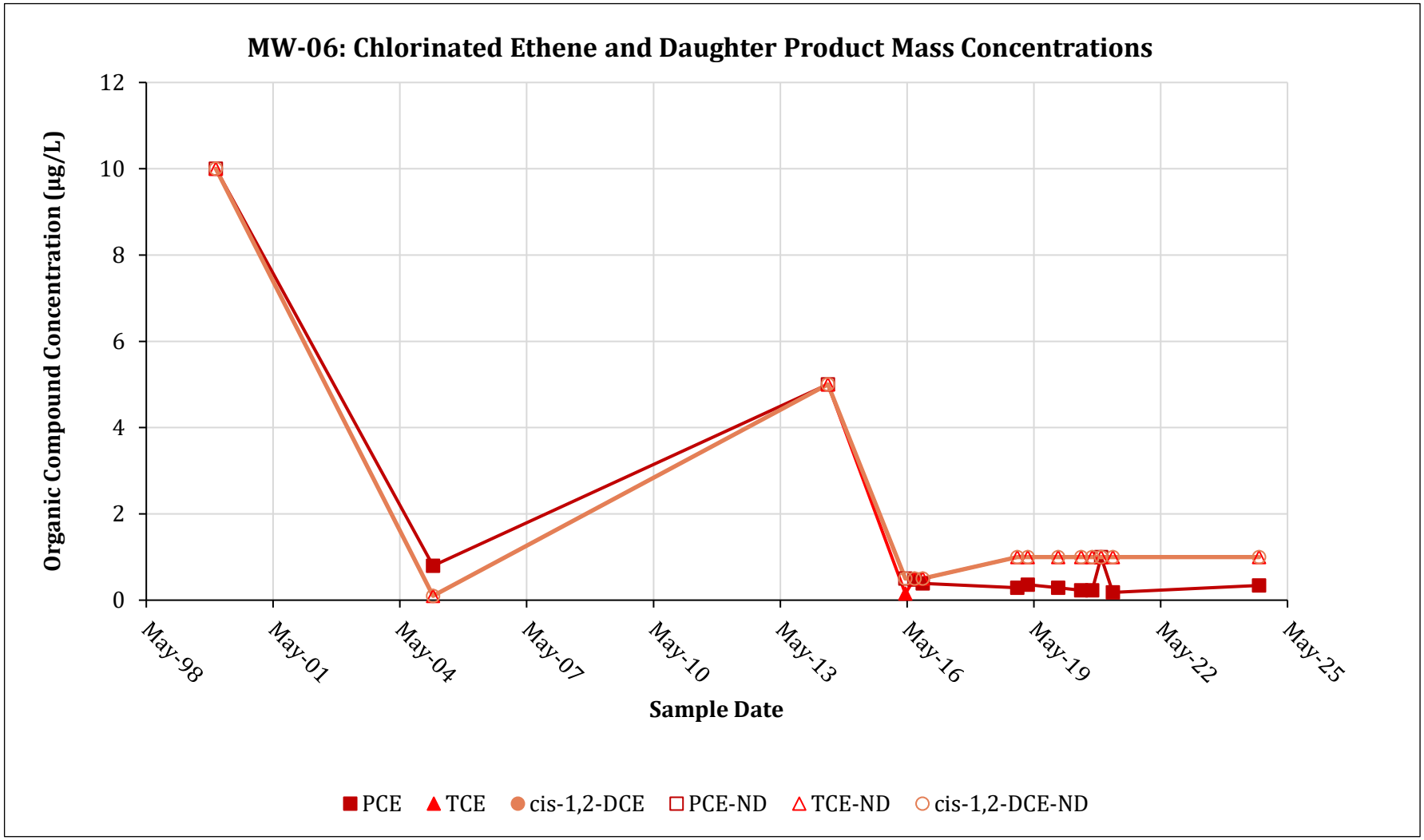
Appendix E
Contaminant Persistence Supporting Information
MW-04 Chart



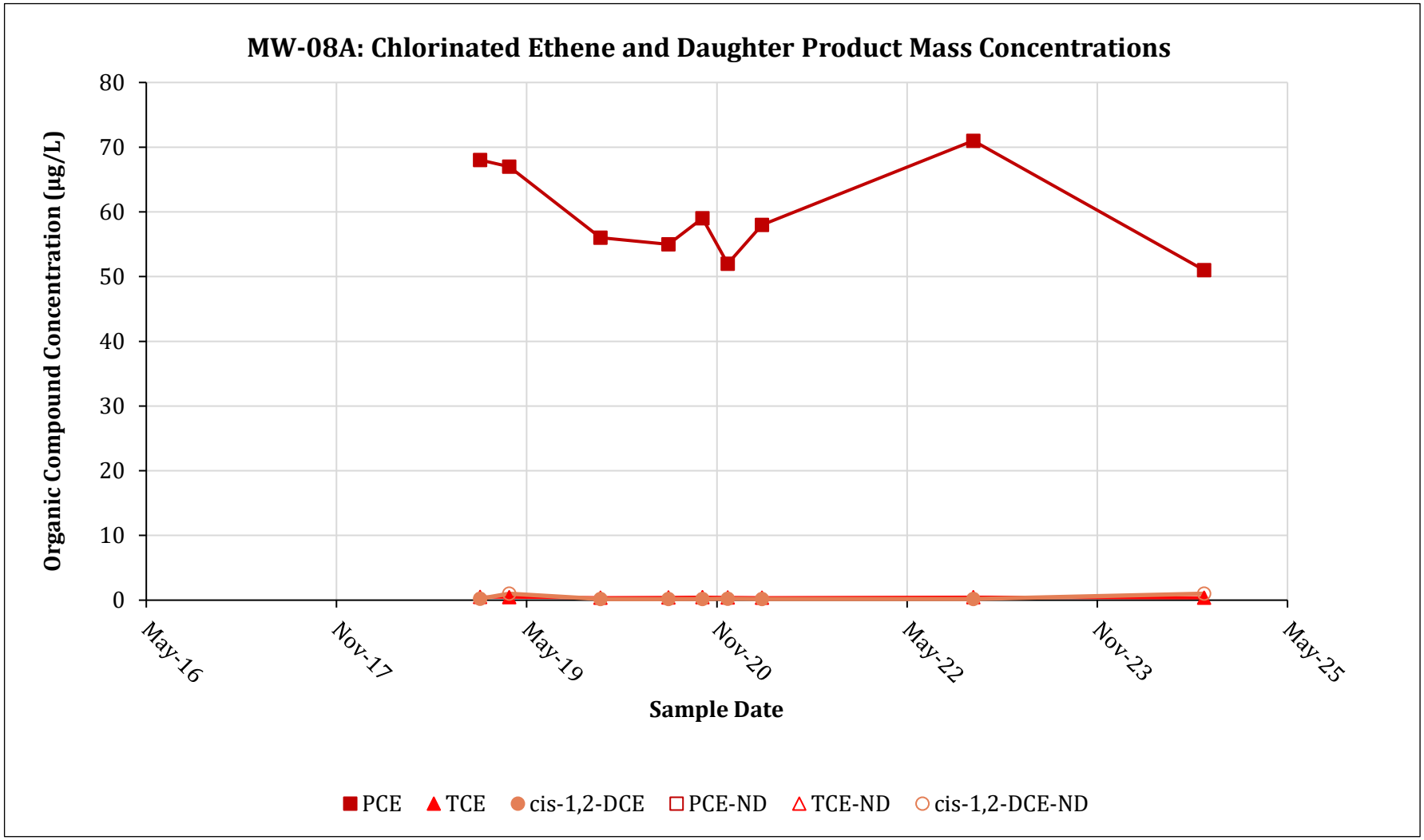
Appendix E
Contaminant Persistence Supporting Information
MW-05R Chart



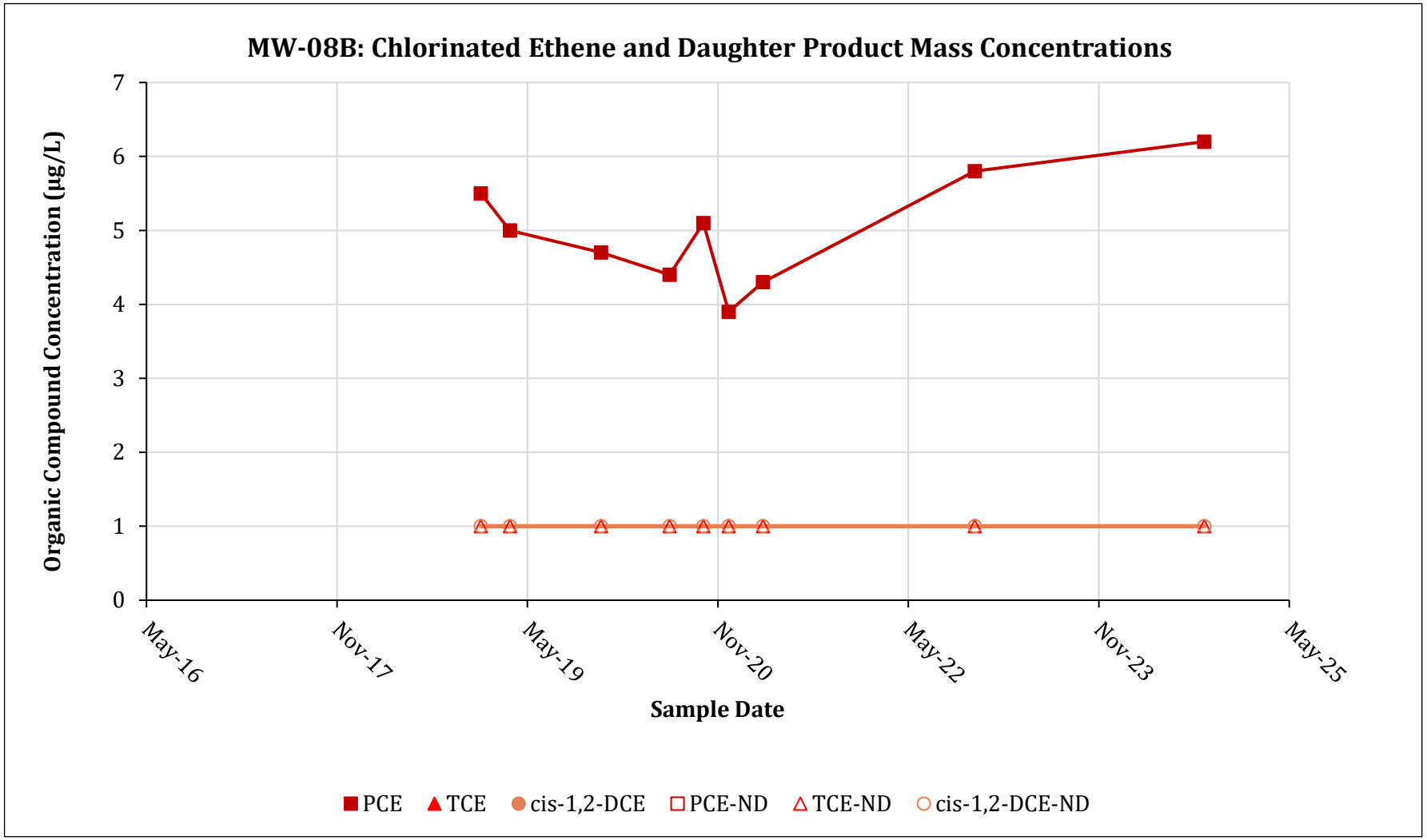
Appendix E
Contaminant Persistence Supporting Information
MW-06 Chart



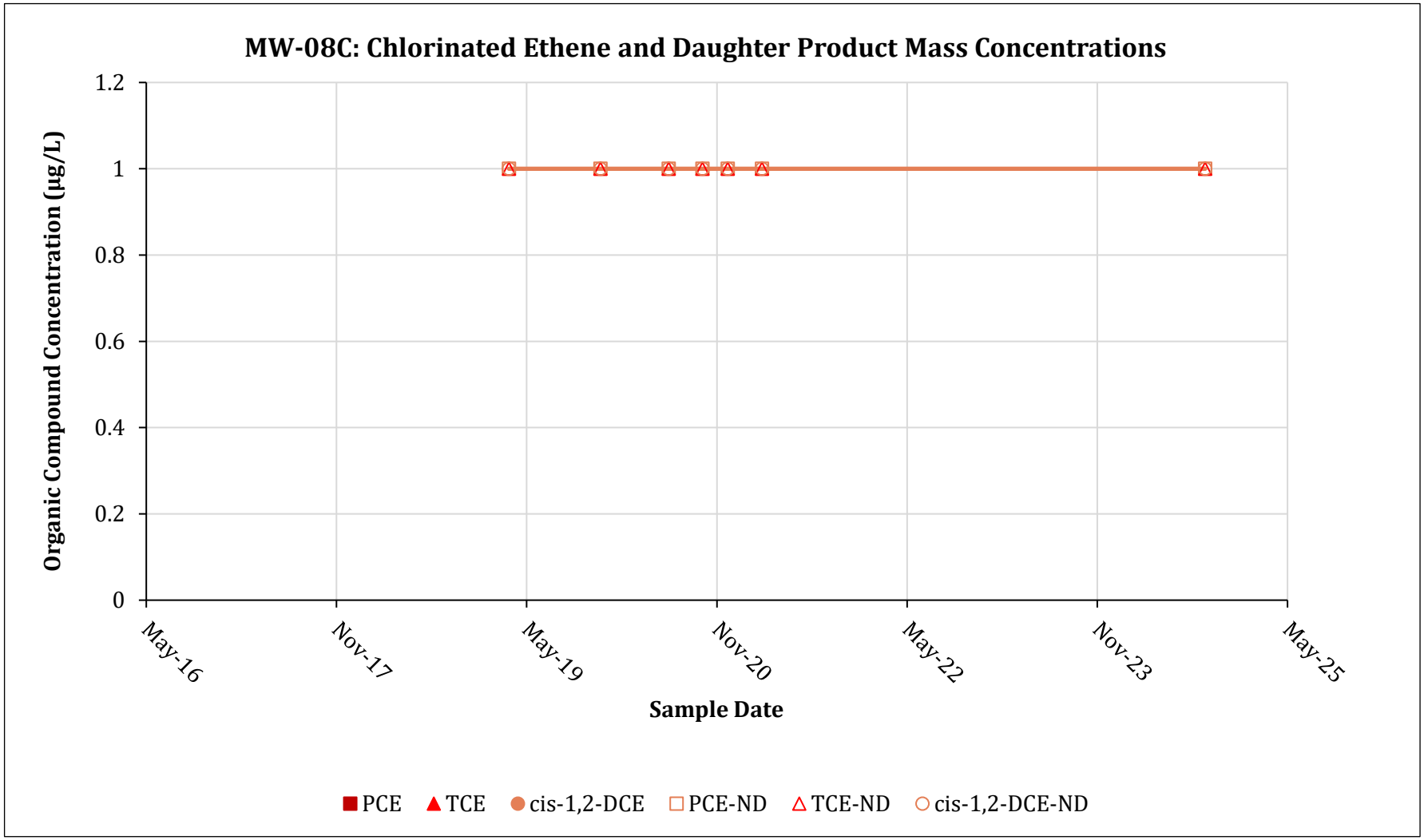
Appendix E
Contaminant Persistence Supporting Information
MW-08A Chart



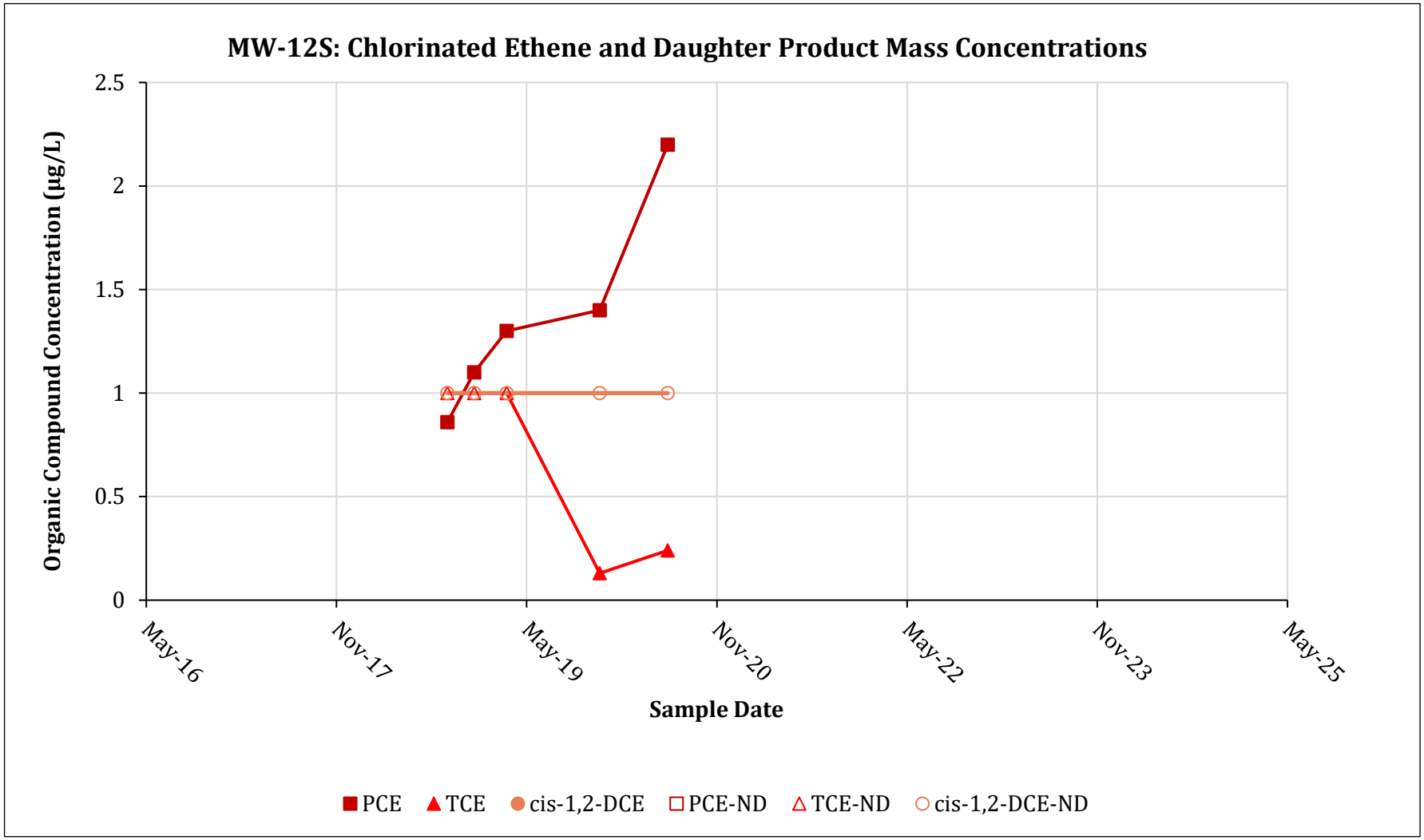
Appendix E
Contaminant Persistence Supporting Information
MW-08B Chart



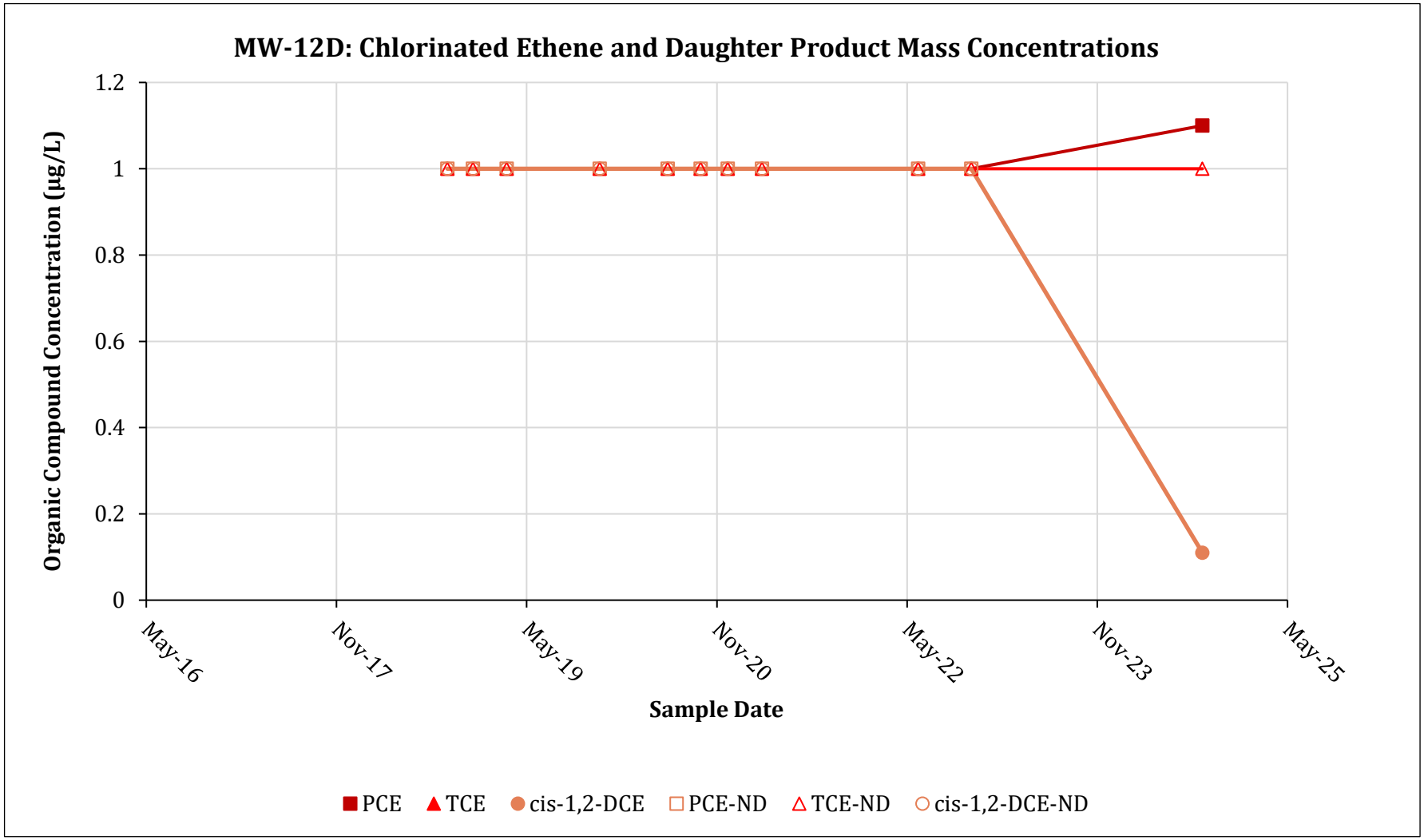
Appendix E
Contaminant Persistence Supporting Information
MW-08C Chart



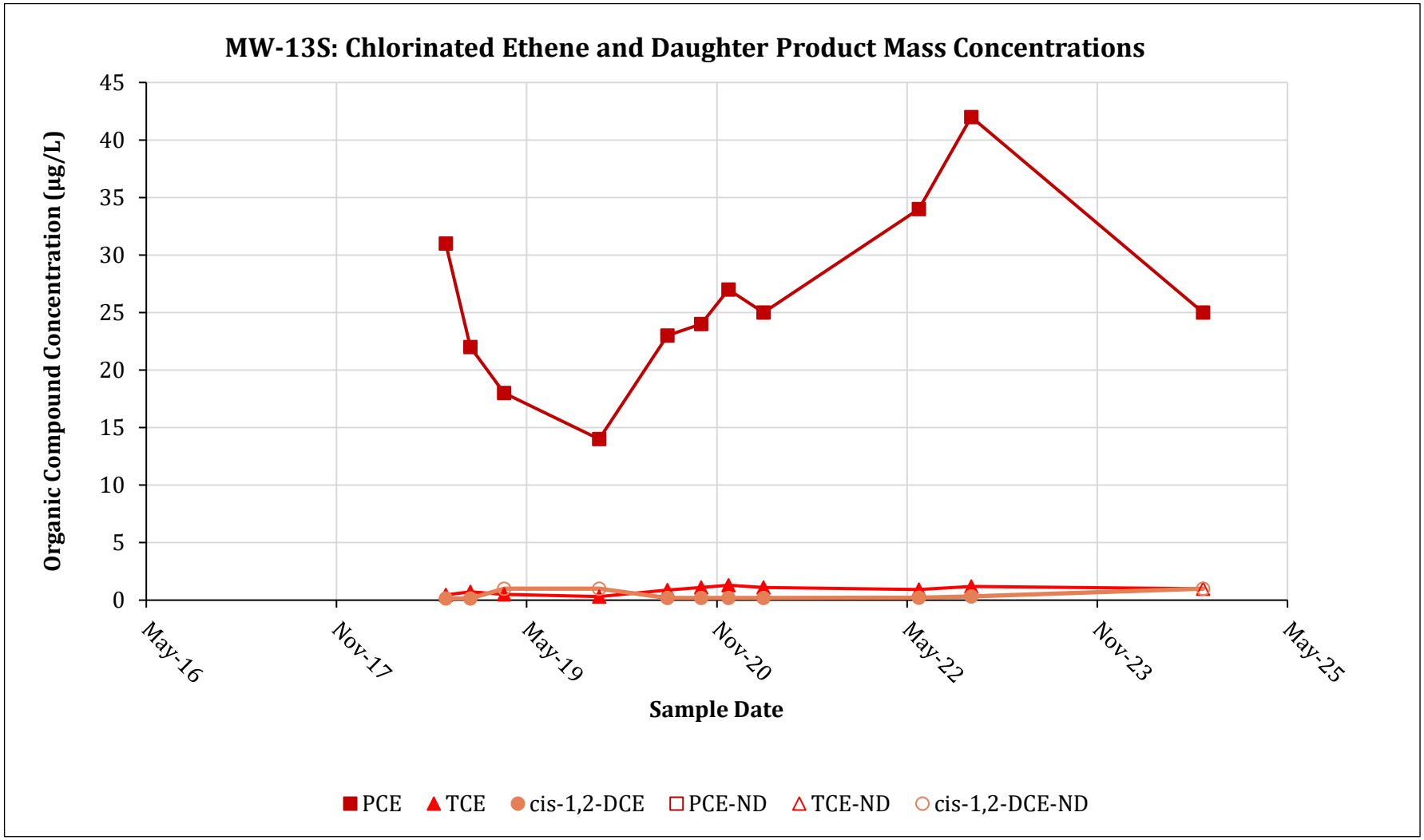
Appendix E
Contaminant Persistence Supporting Information
MW-12S Chart (Not Sampled in 2024)



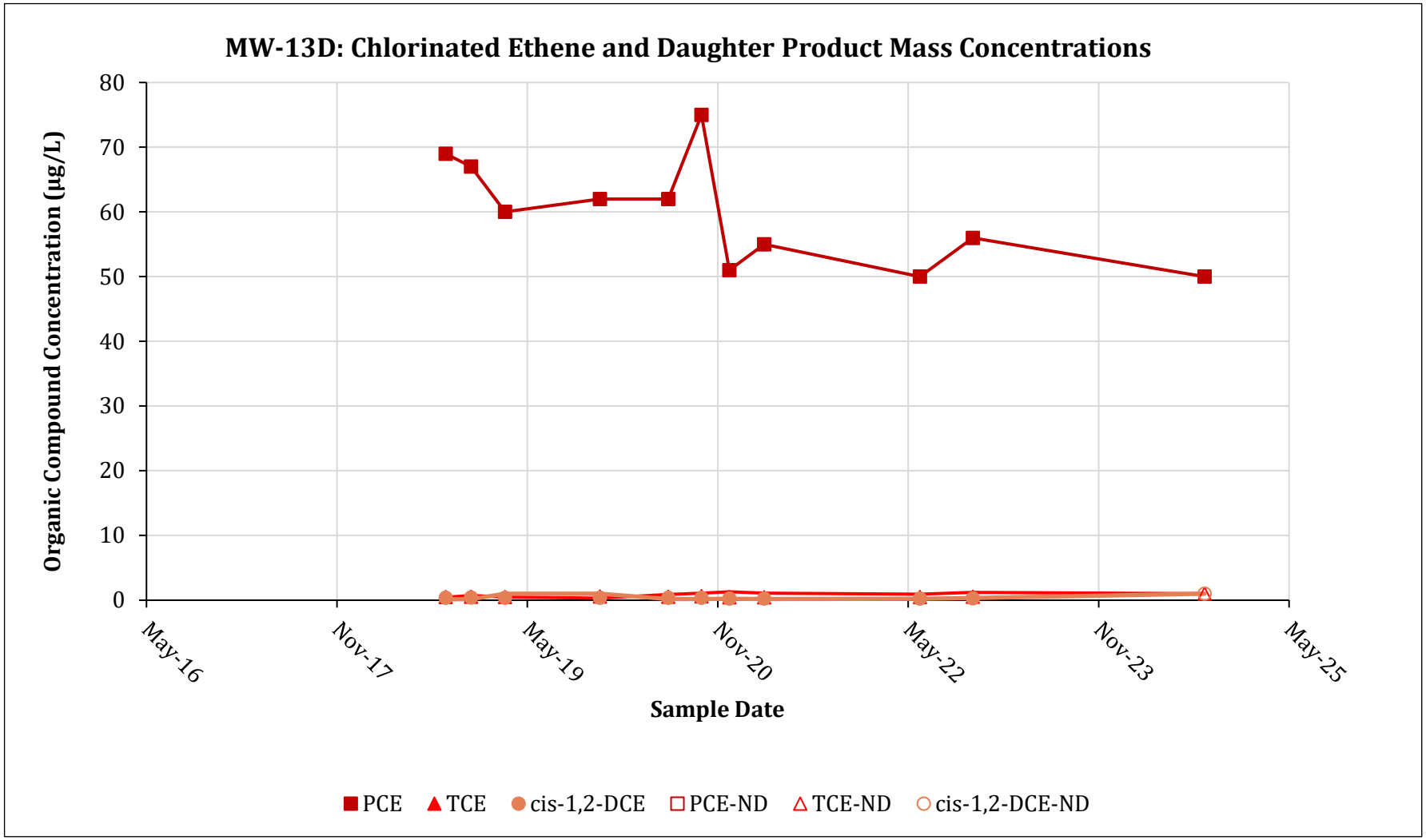
Appendix E
Contaminant Persistence Supporting Information
MW-12D Chart



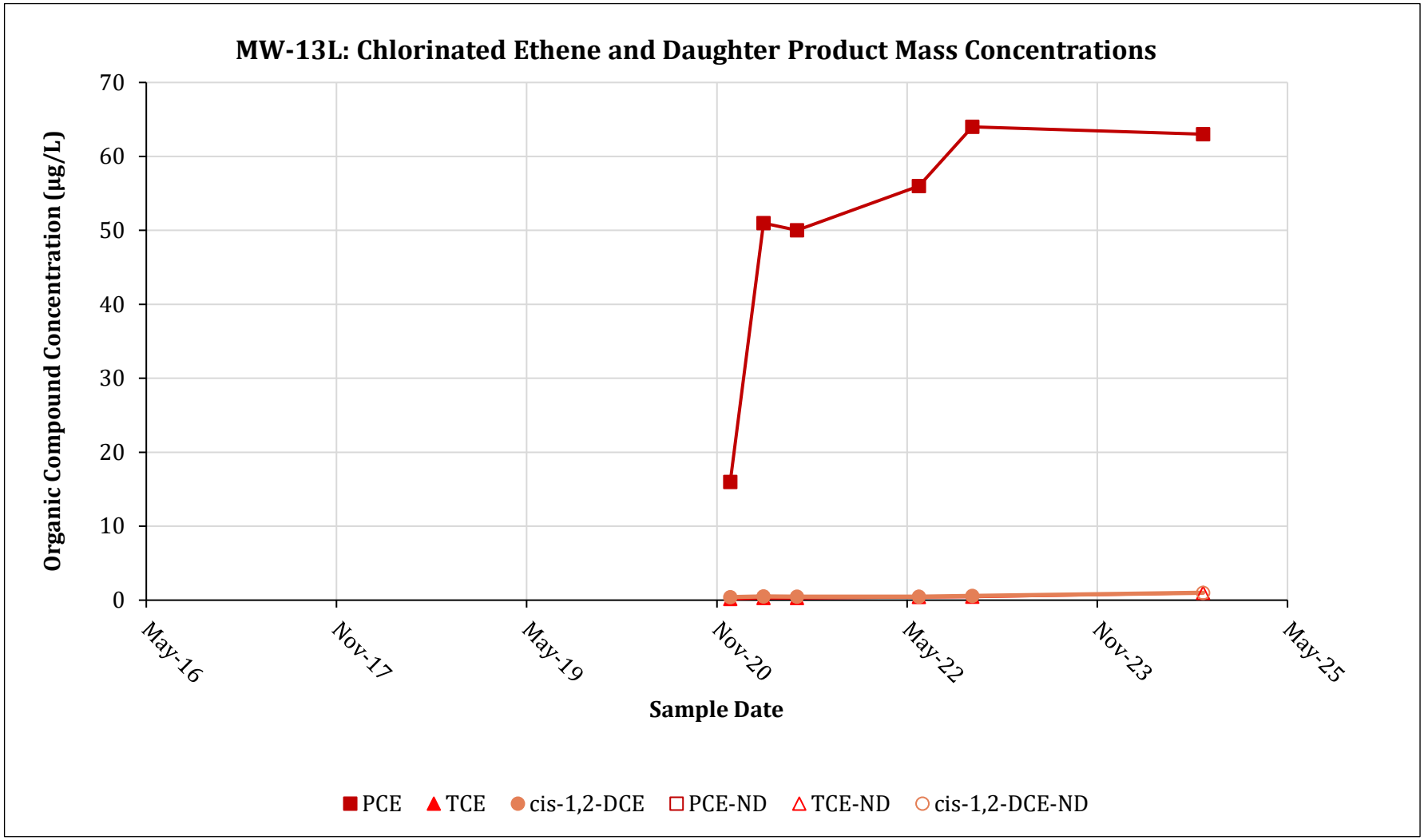
Appendix E
Contaminant Persistence Supporting Information
MW-13S Chart



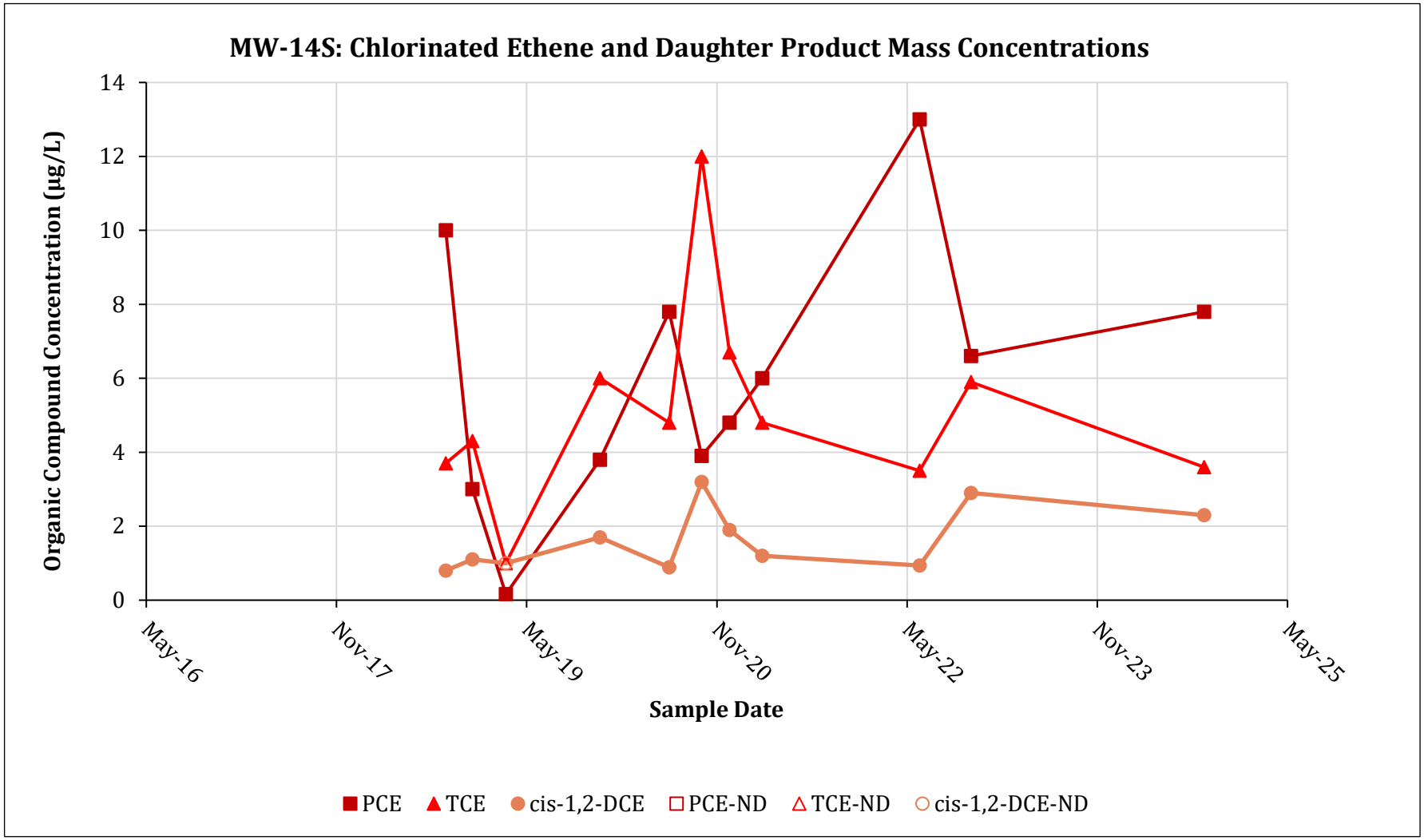
Appendix E
Contaminant Persistence Supporting Information
MW-13D Chart



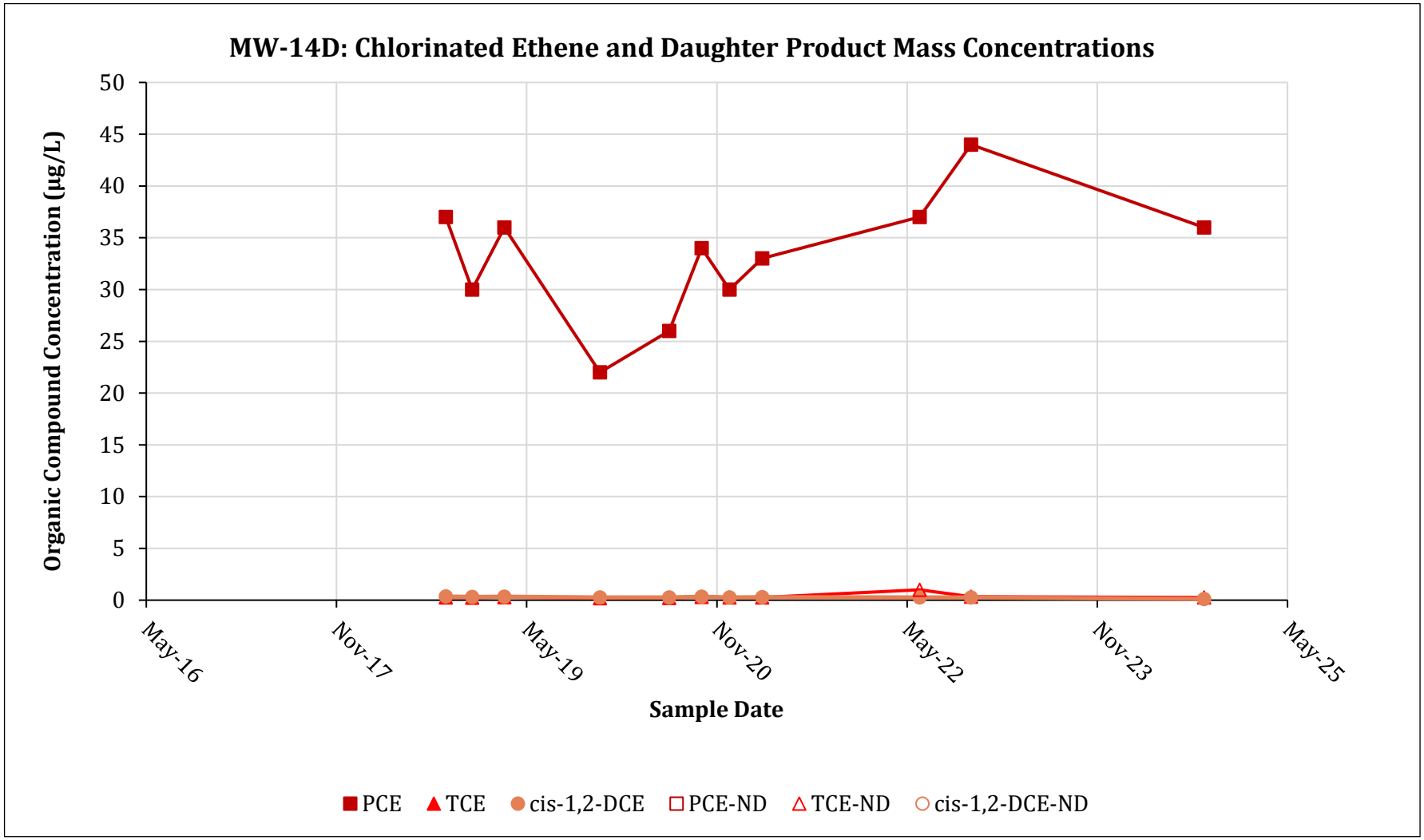
Appendix E
Contaminant Persistence Supporting Information
MW-13L Chart



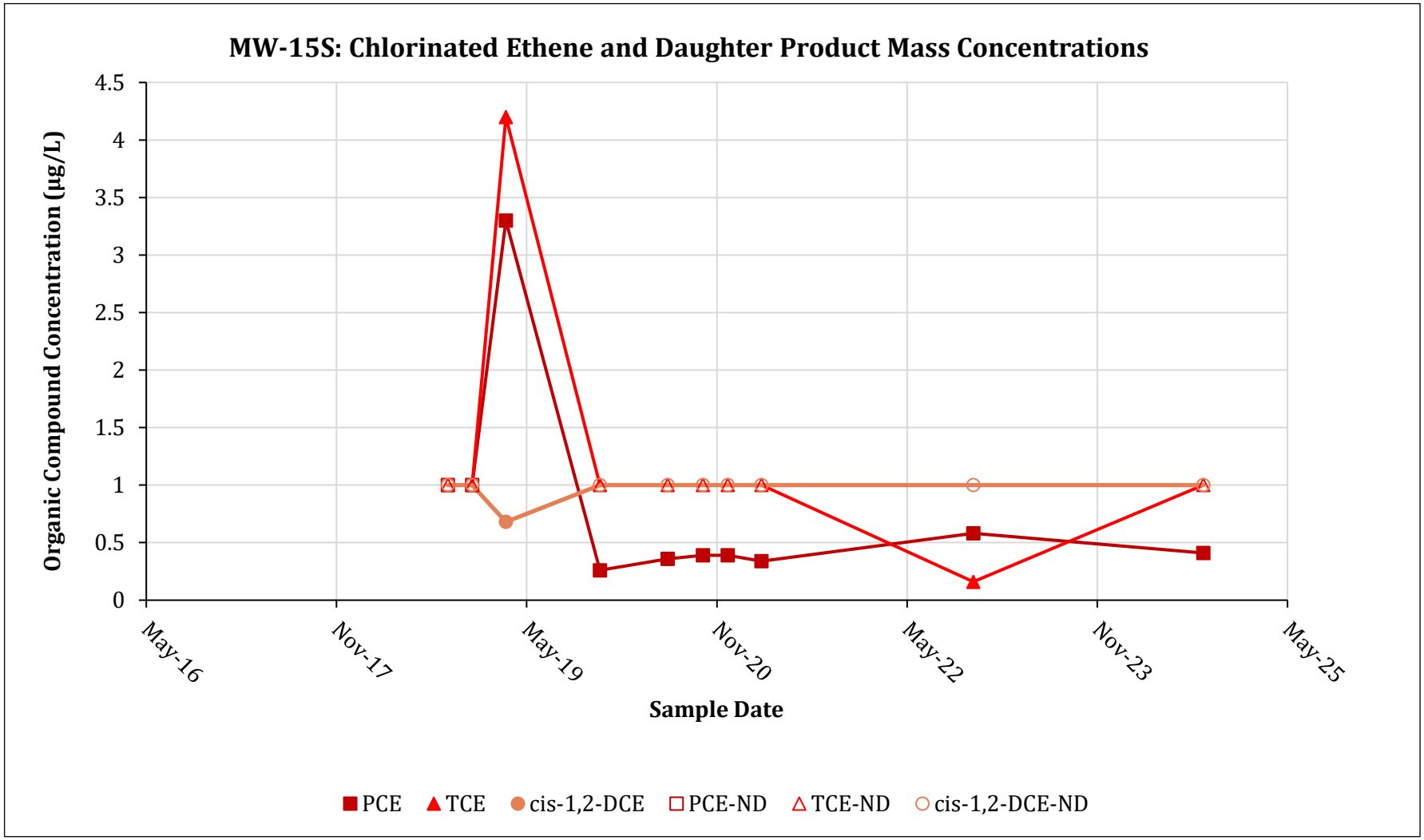
Appendix E
Contaminant Persistence Supporting Information
MW-14S Chart



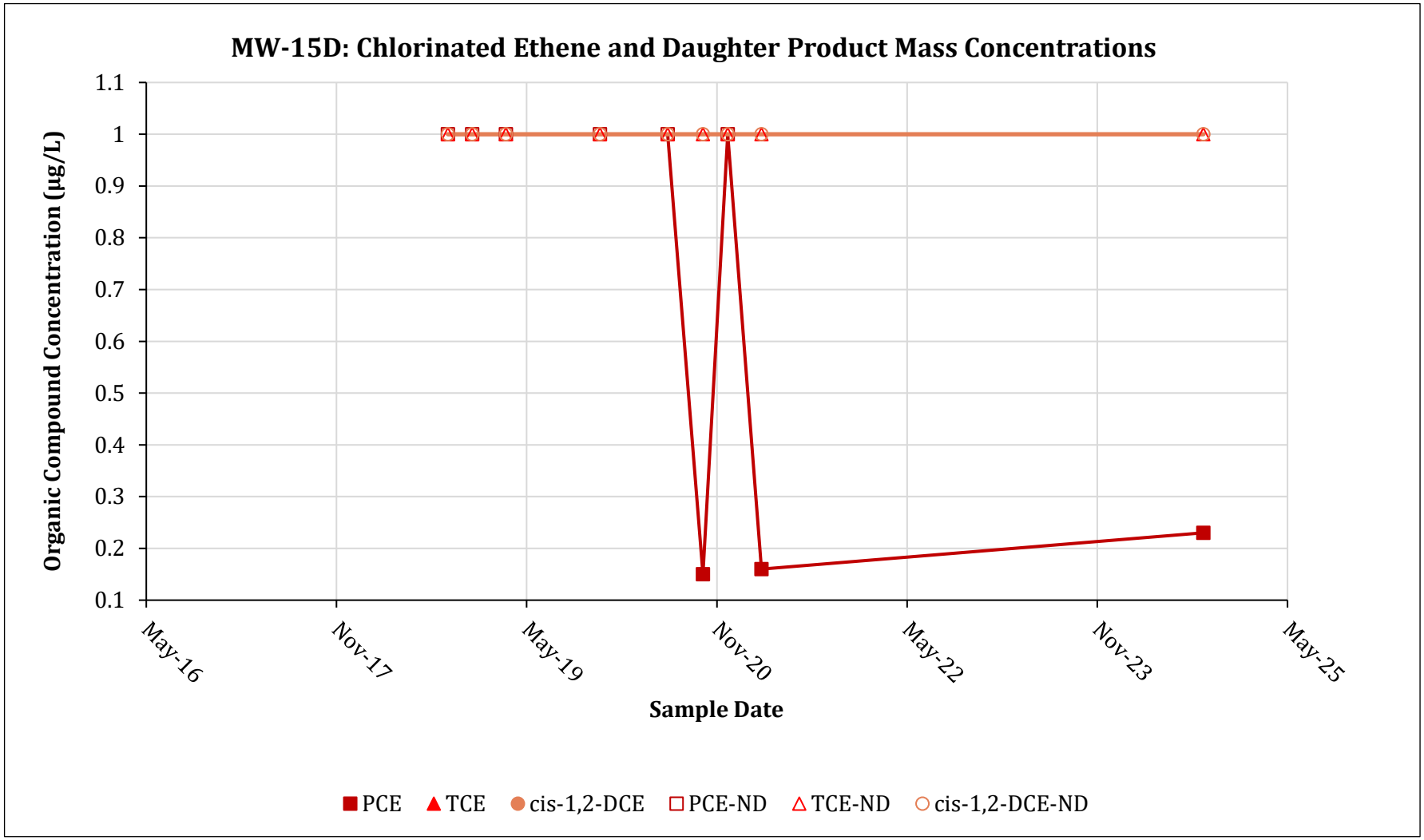
Appendix E
Contaminant Persistence Supporting Information
MW-14D Chart



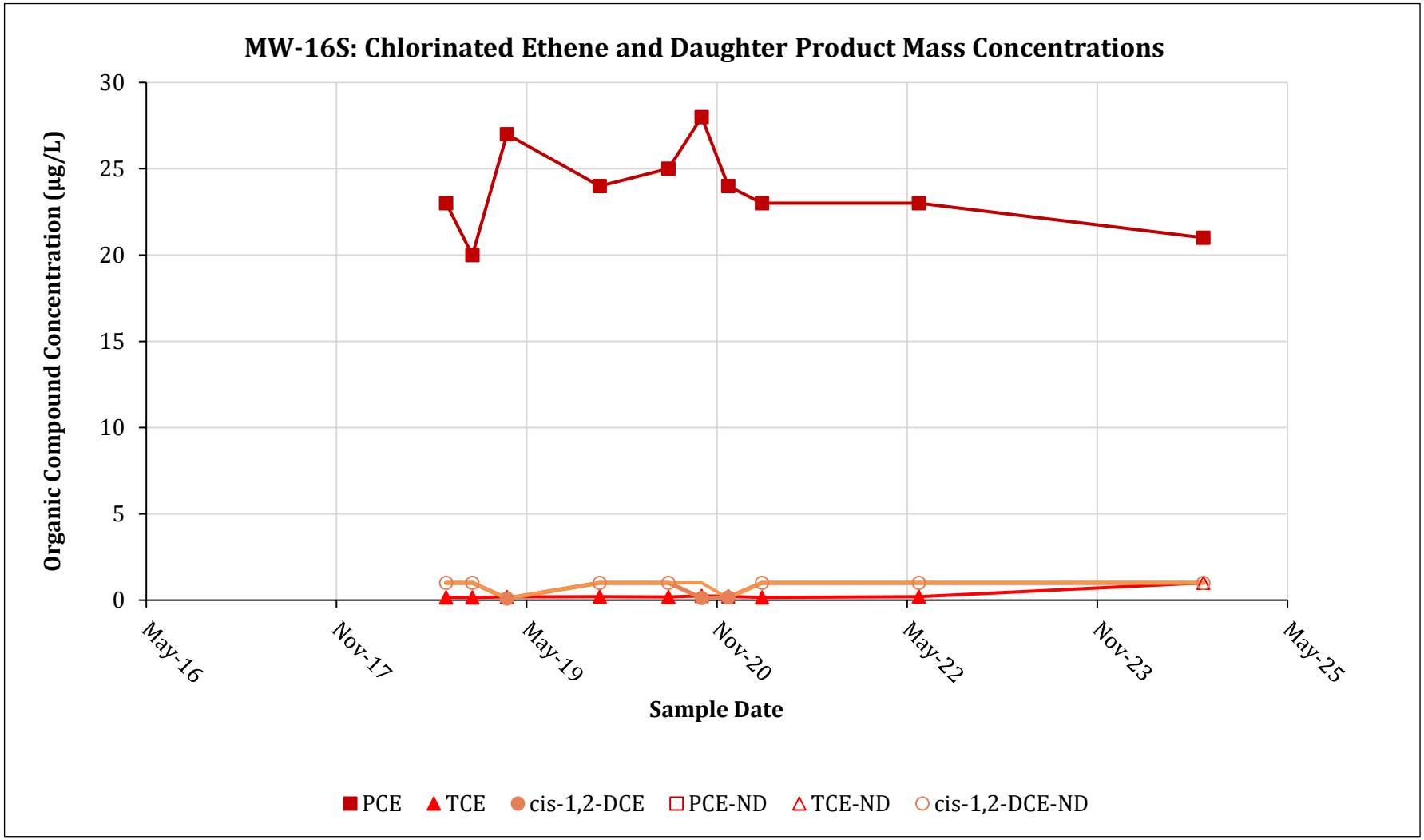
Appendix E
Contaminant Persistence Supporting Information
MW-15S Chart



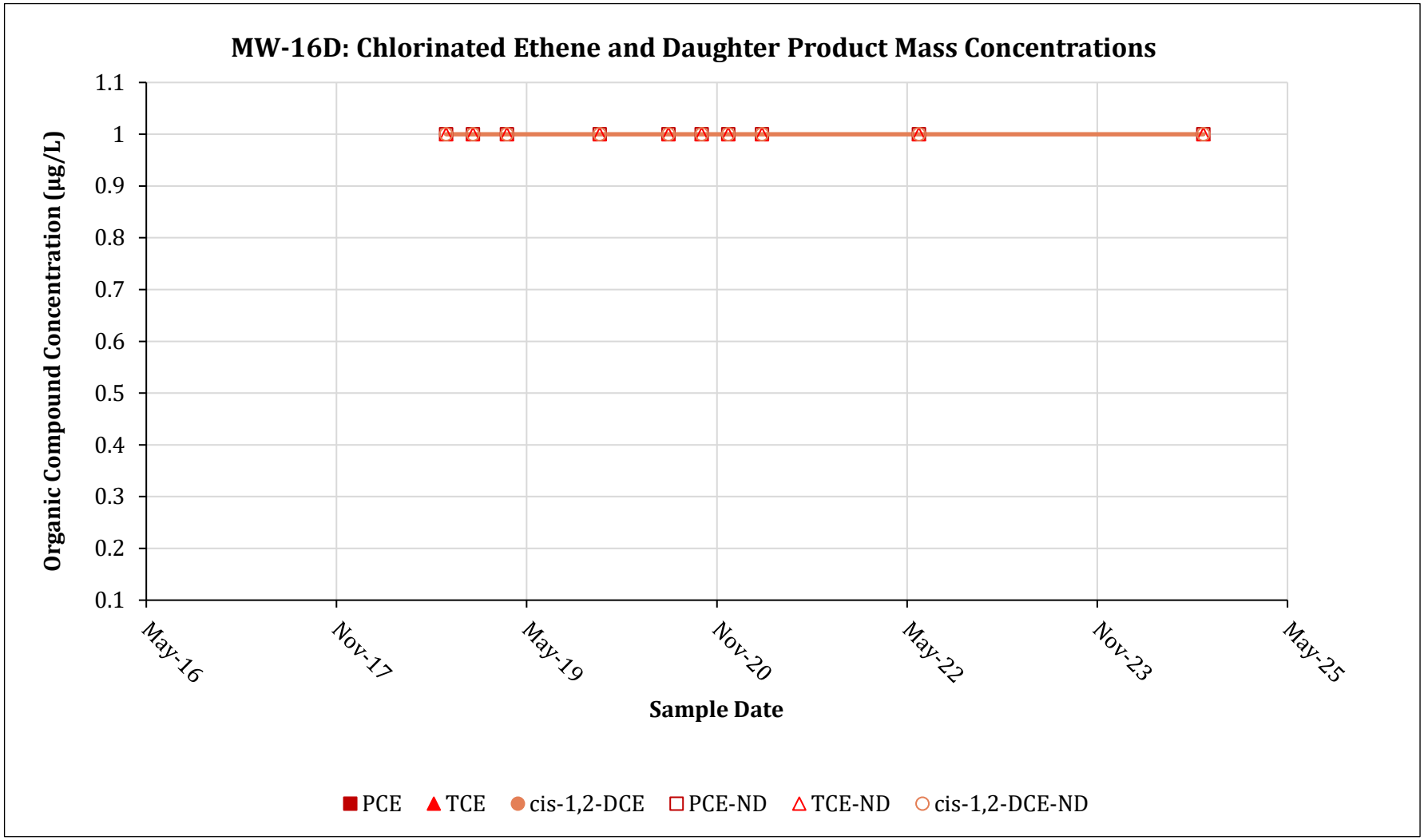
Appendix E
Contaminant Persistence Supporting Information
MW-15D Chart



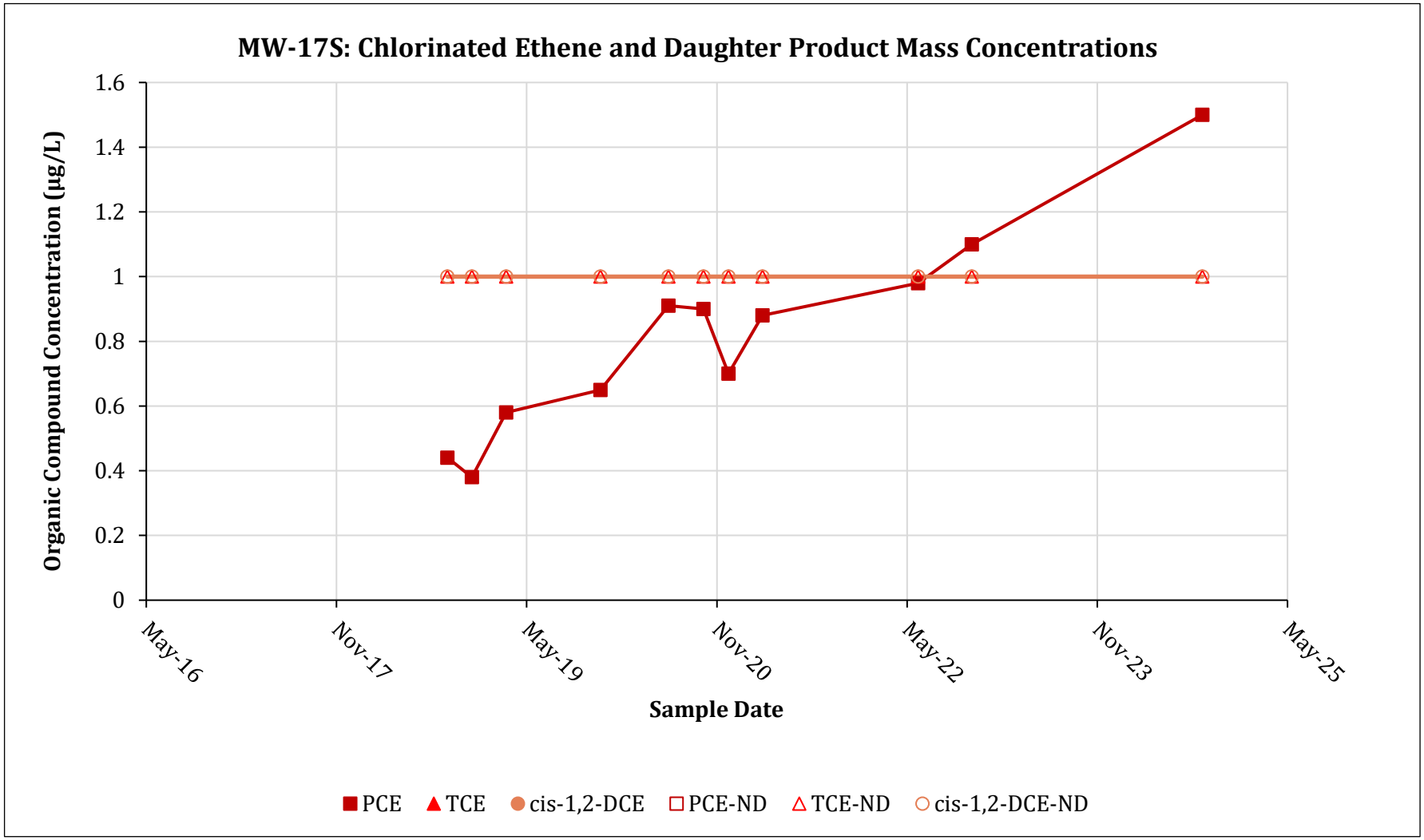
Appendix E
Contaminant Persistence Supporting Information
MW-16S Chart



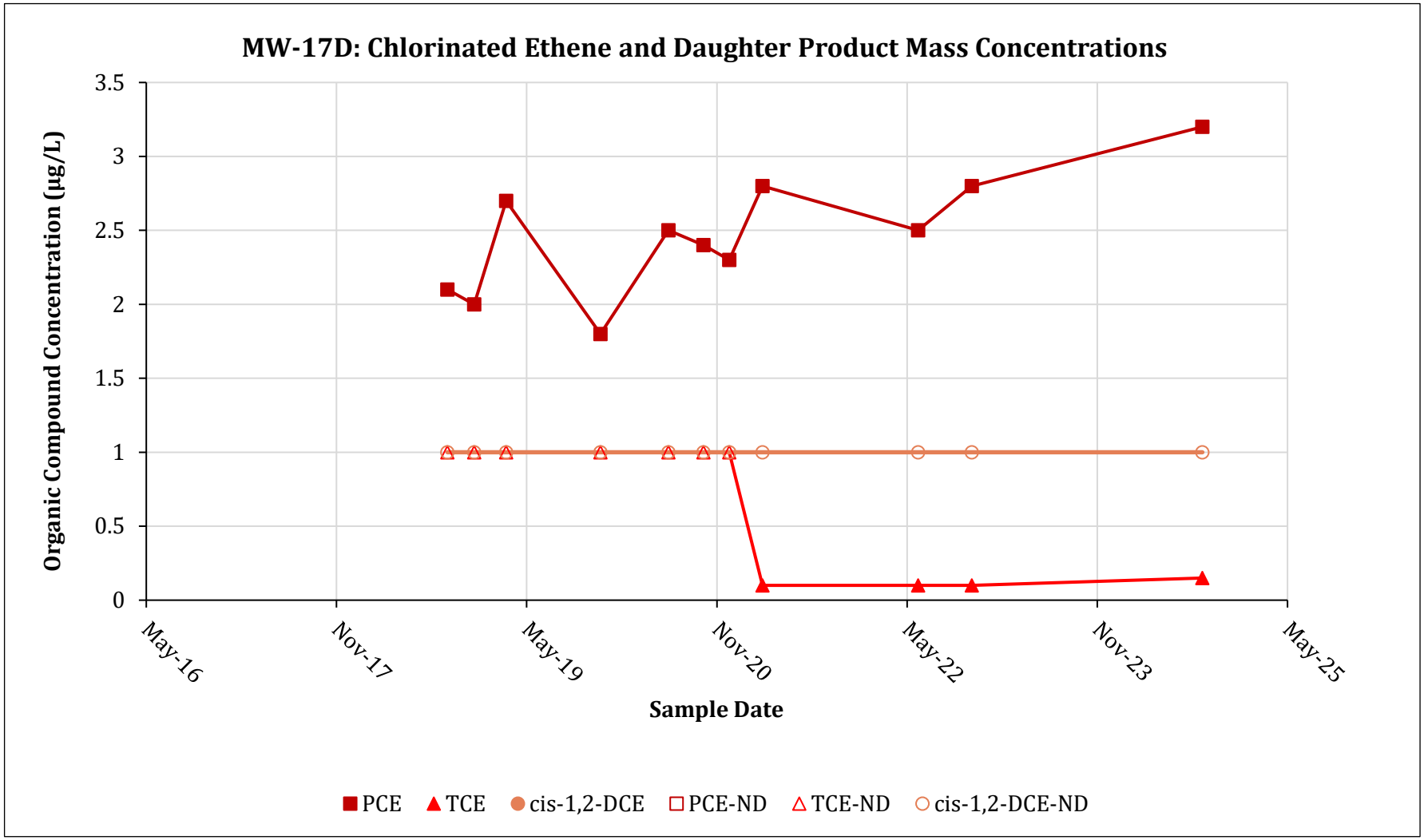
Appendix E
Contaminant Persistence Supporting Information
MW-16D Chart



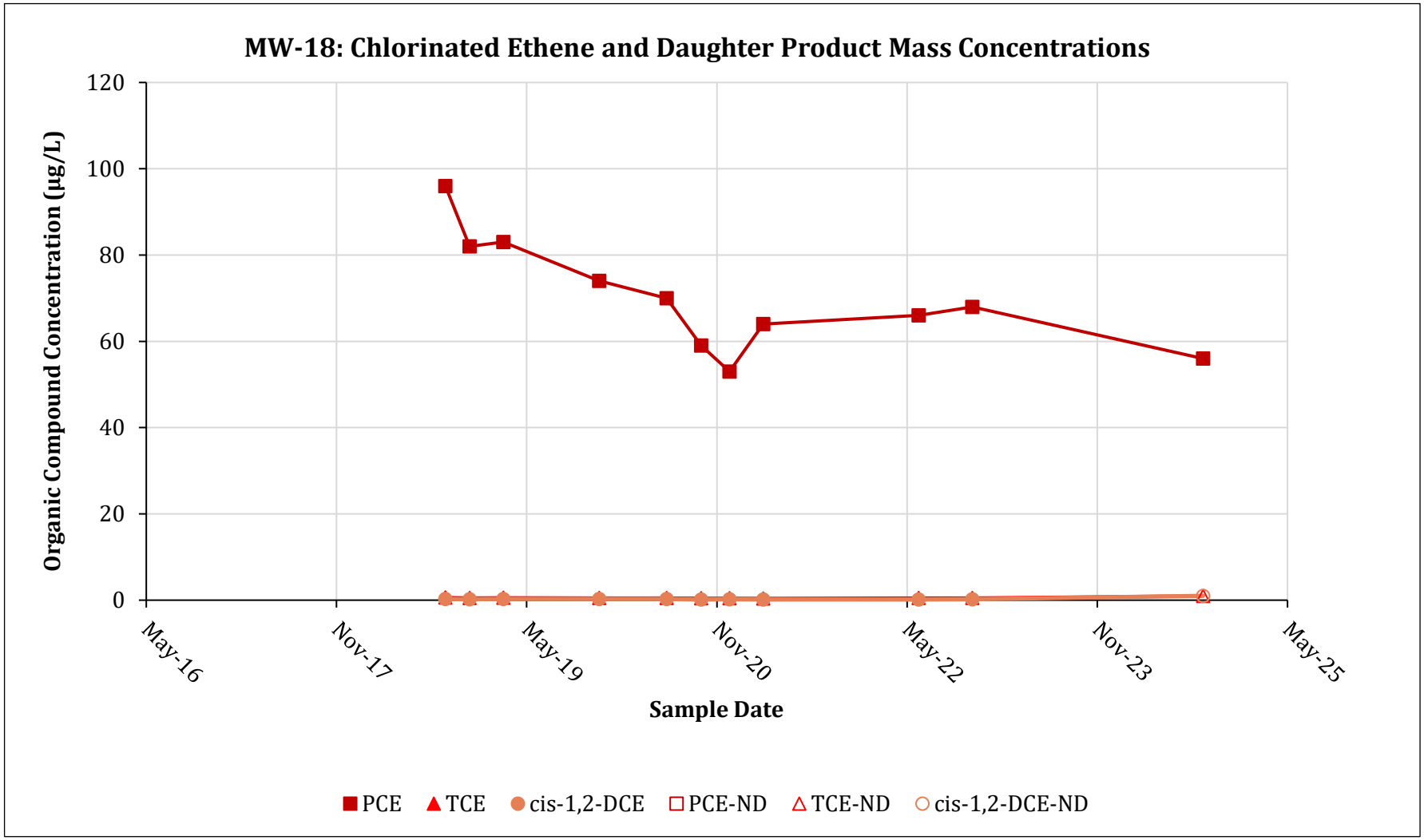
Appendix E
Contaminant Persistence Supporting Information
MW-17S Chart



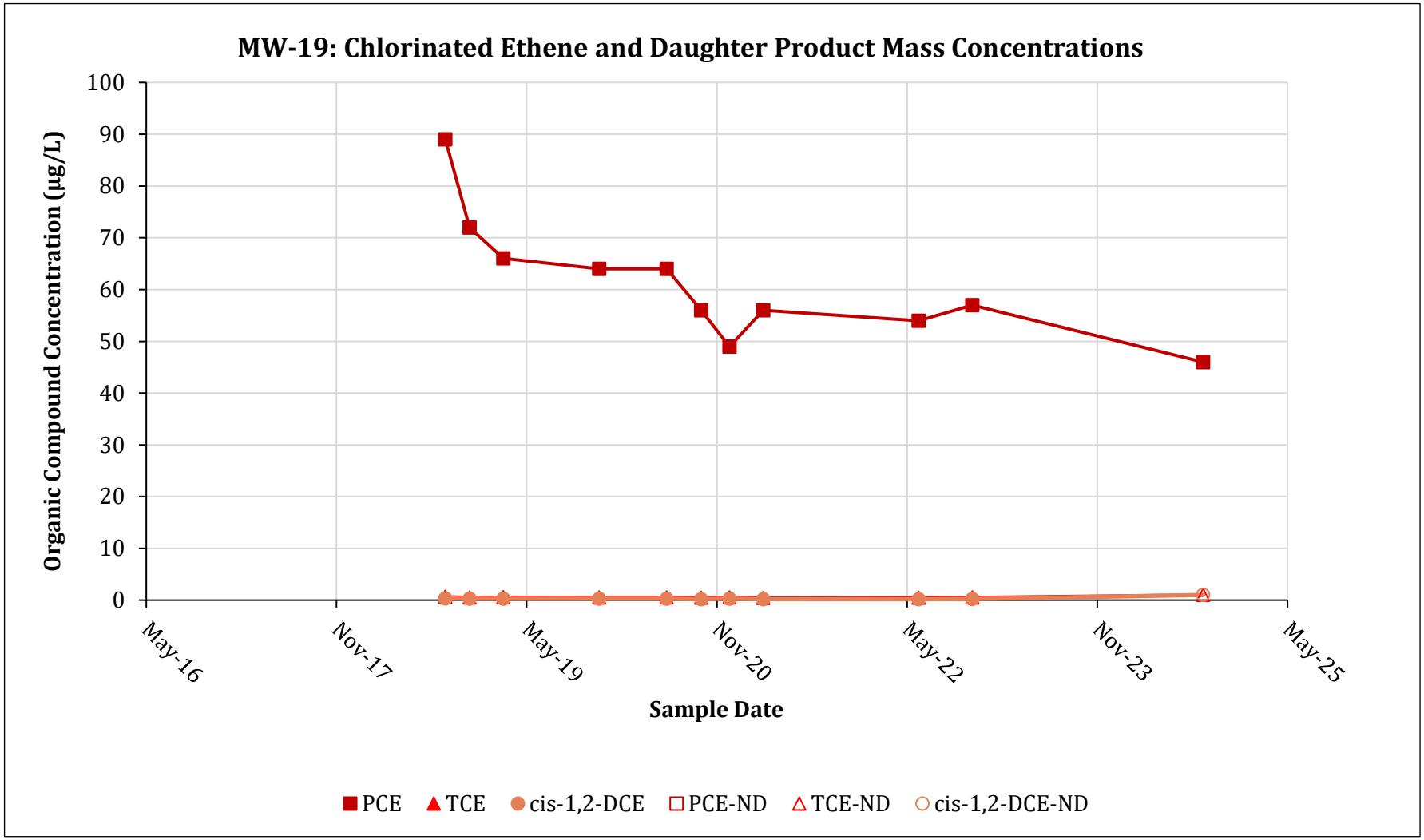
Appendix E
Contaminant Persistence Supporting Information
MW-17D Chart



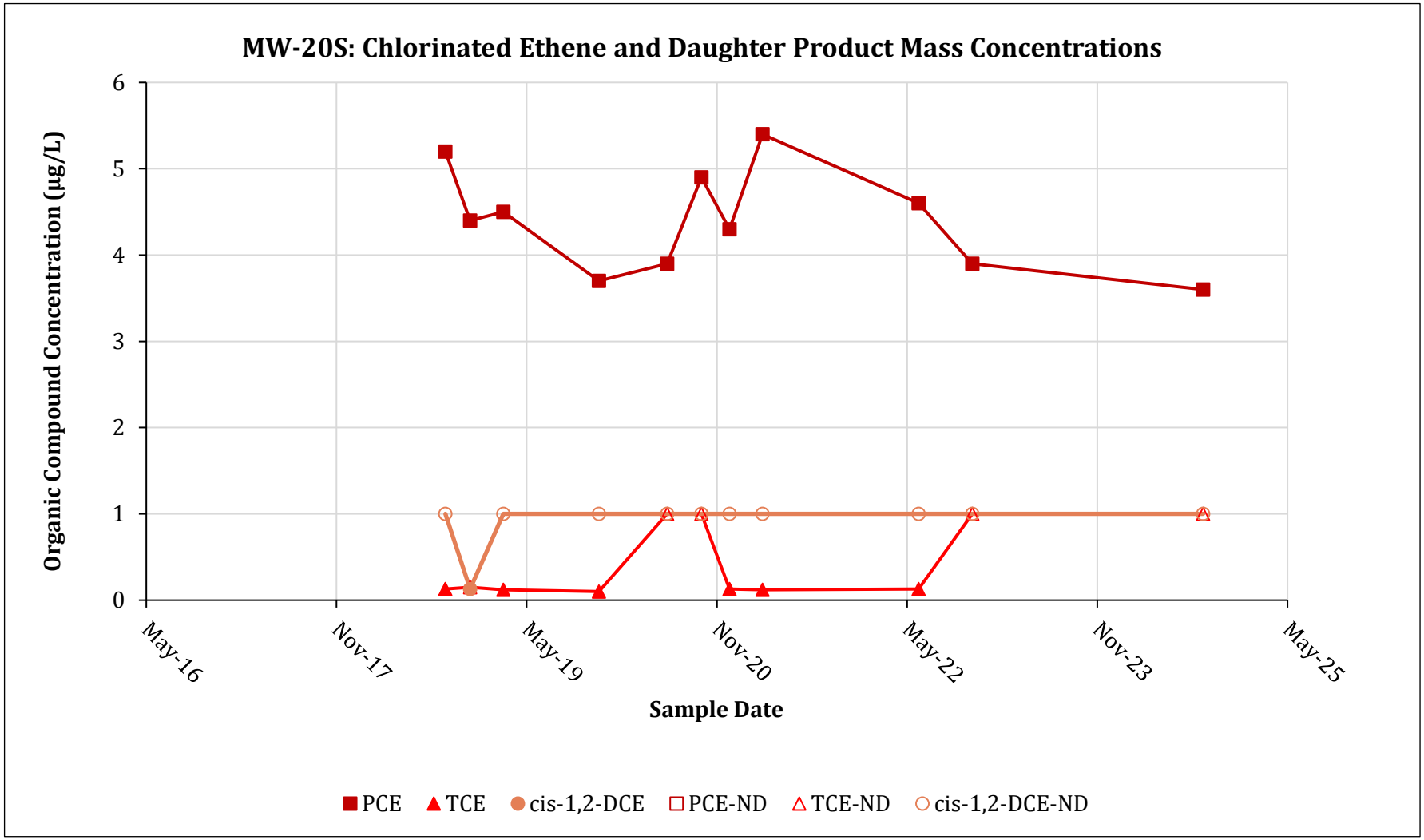
Appendix E
Contaminant Persistence Supporting Information
MW-18 Chart



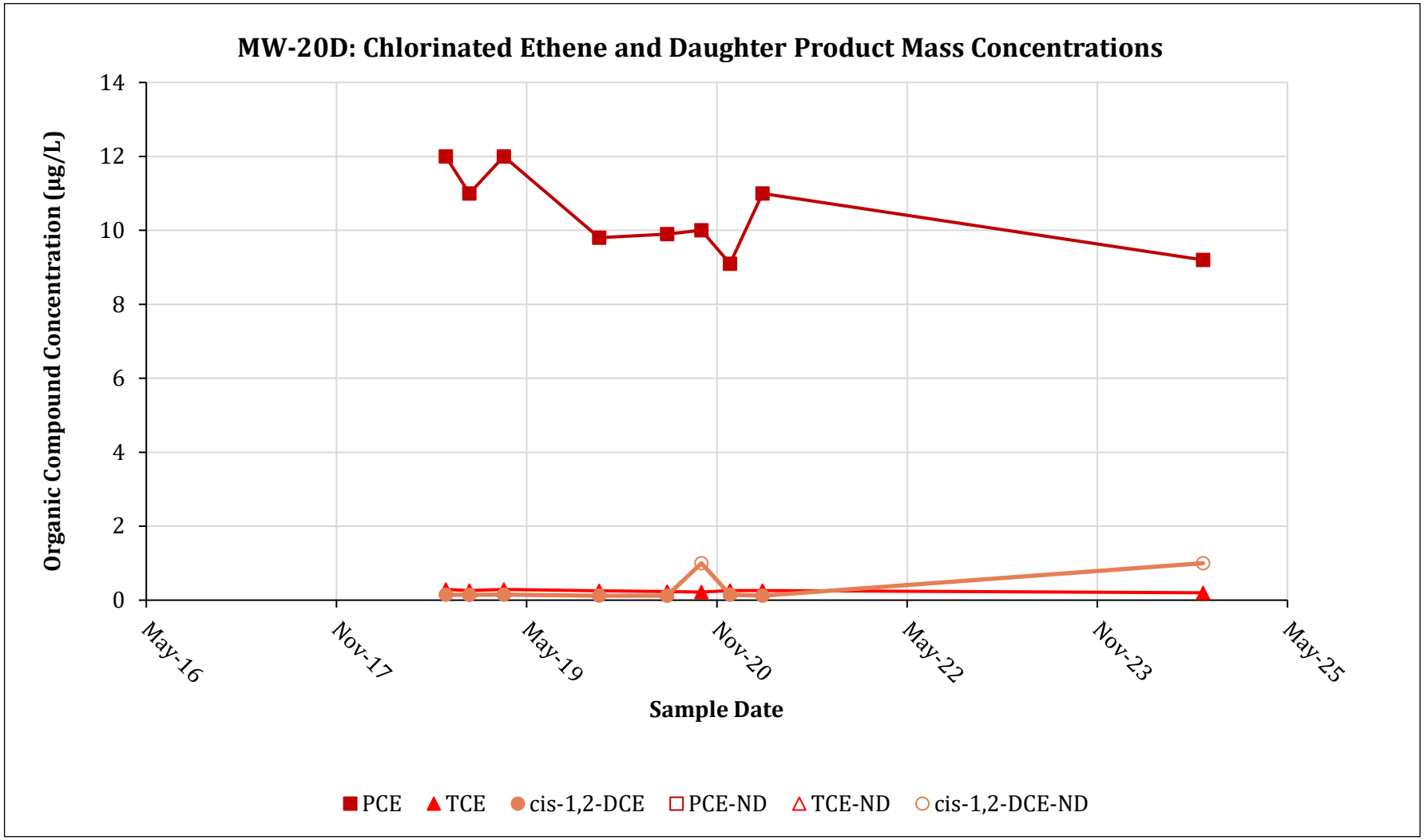
Appendix E
Contaminant Persistence Supporting Information
MW-19 Chart



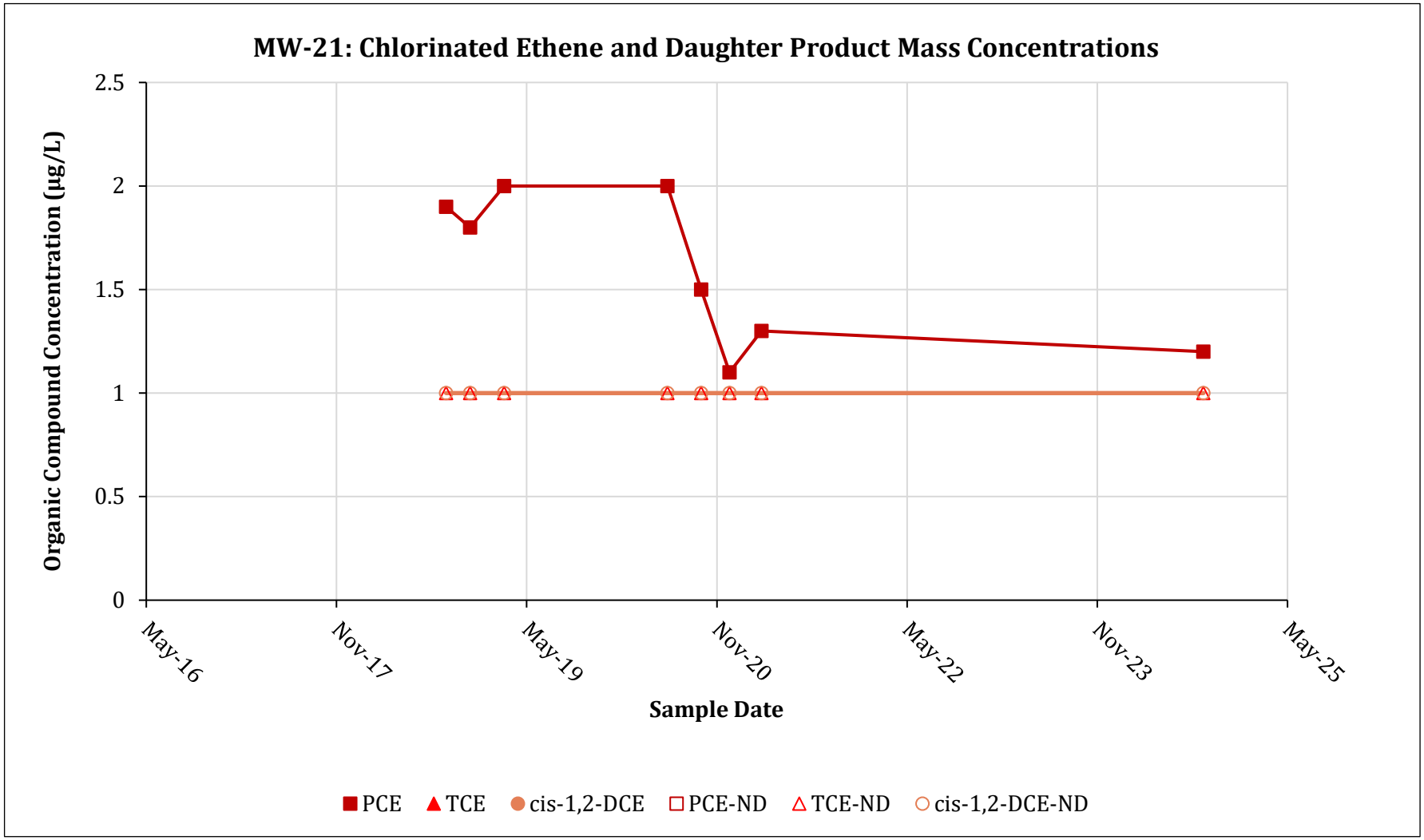
Appendix E
Contaminant Persistence Supporting Information
MW-20S Chart



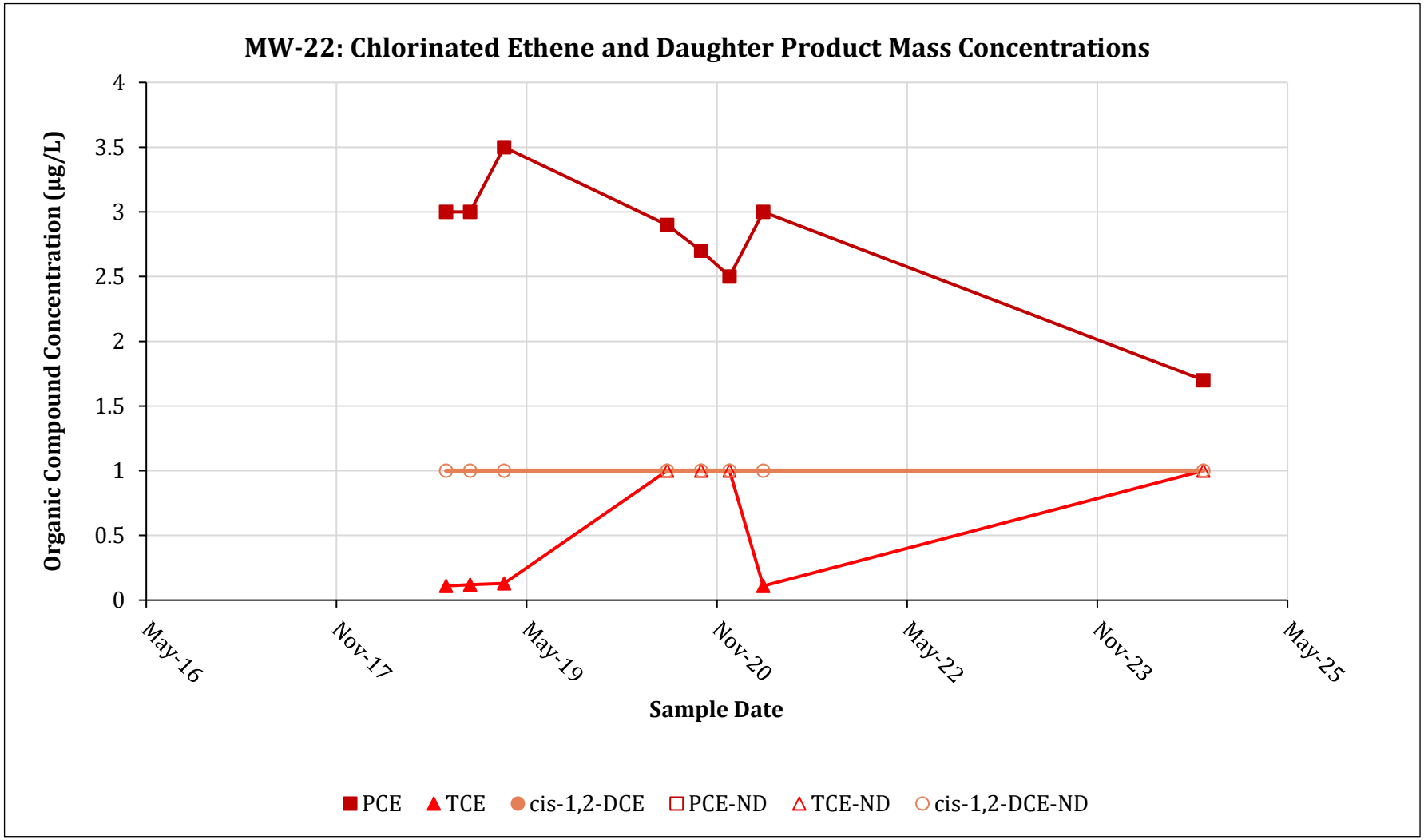
Appendix E
Contaminant Persistence Supporting Information
MW-20D Chart



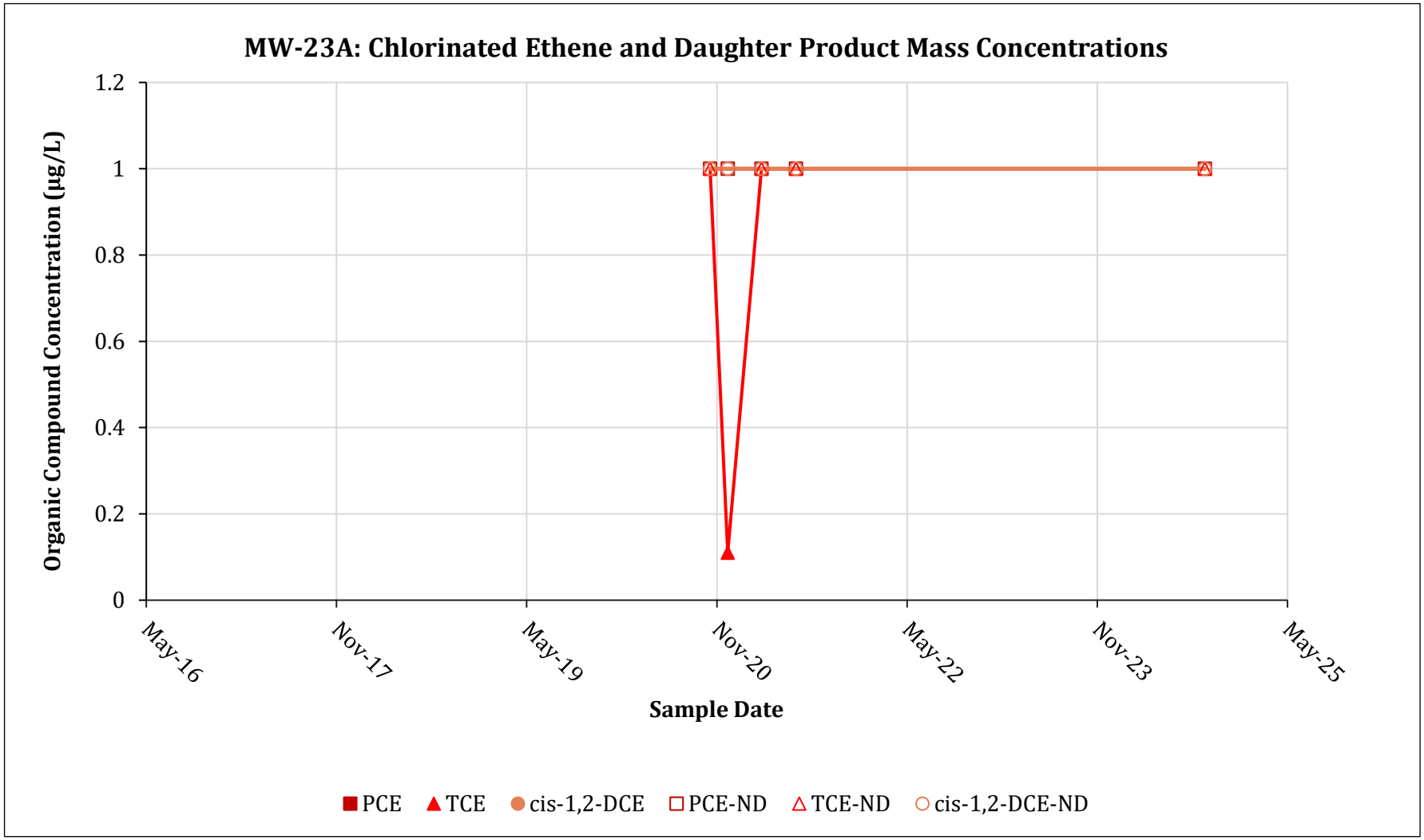
Appendix E
Contaminant Persistence Supporting Information
MW-21 Chart

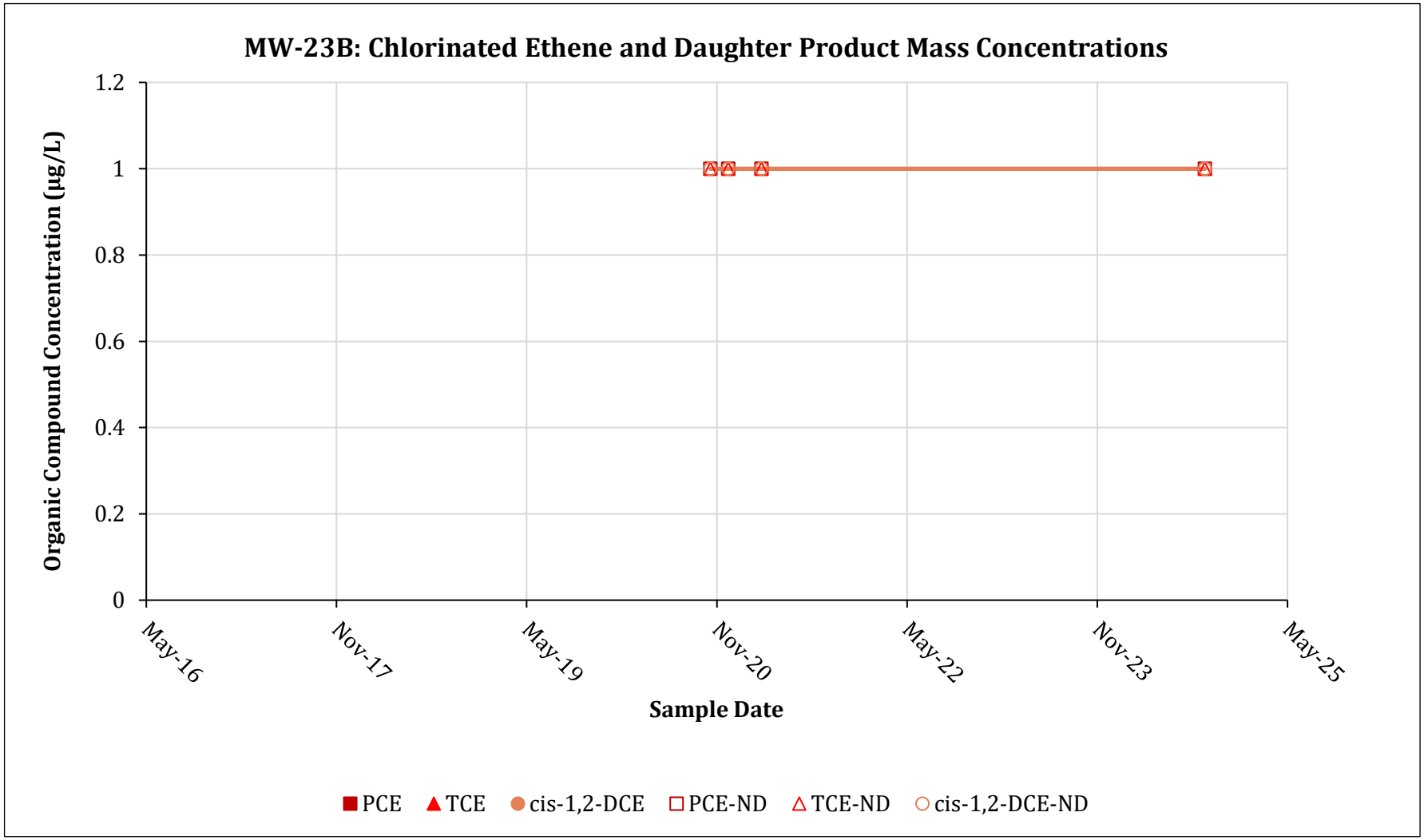


Appendix E
Contaminant Persistence Supporting Information
MW-22 Chart

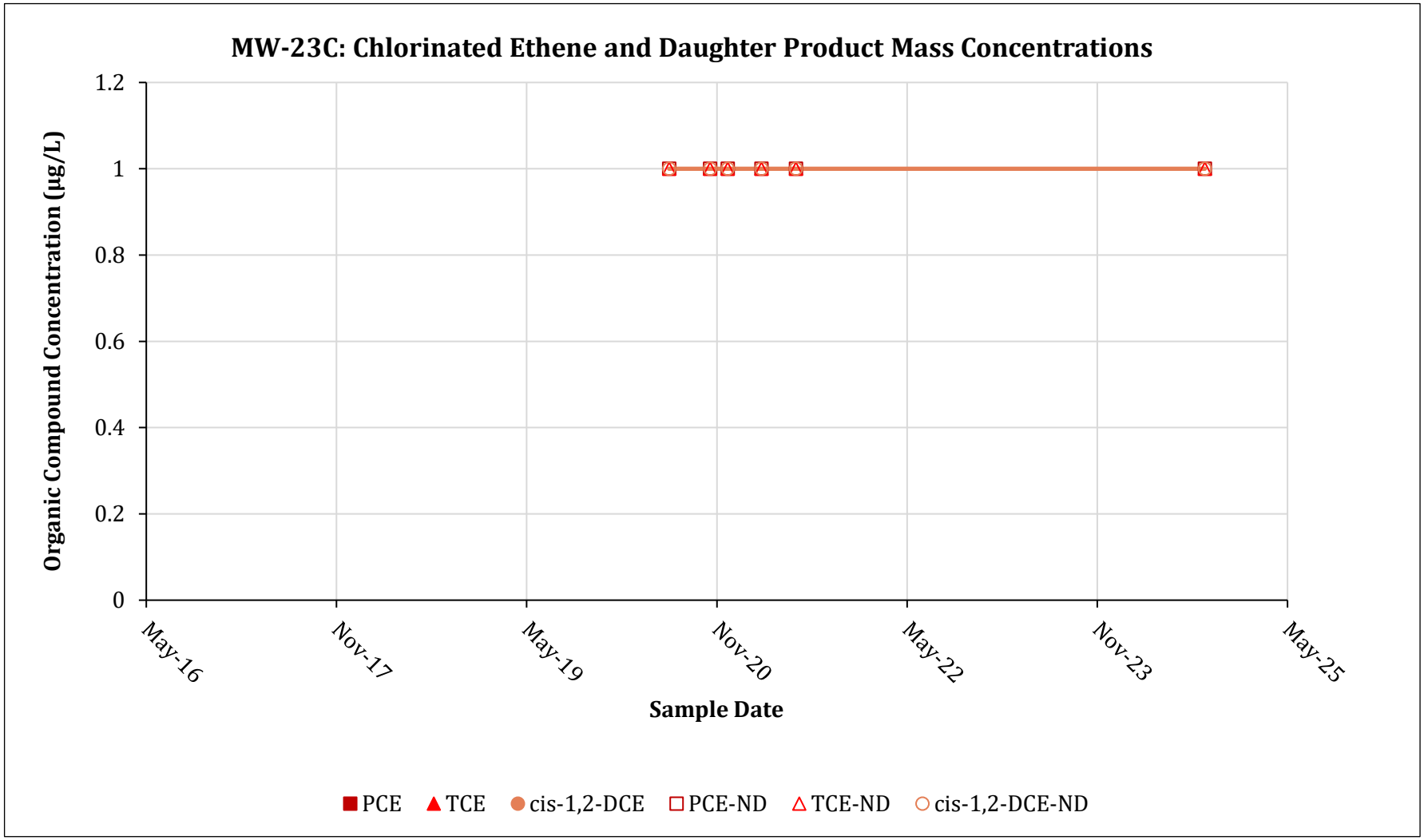


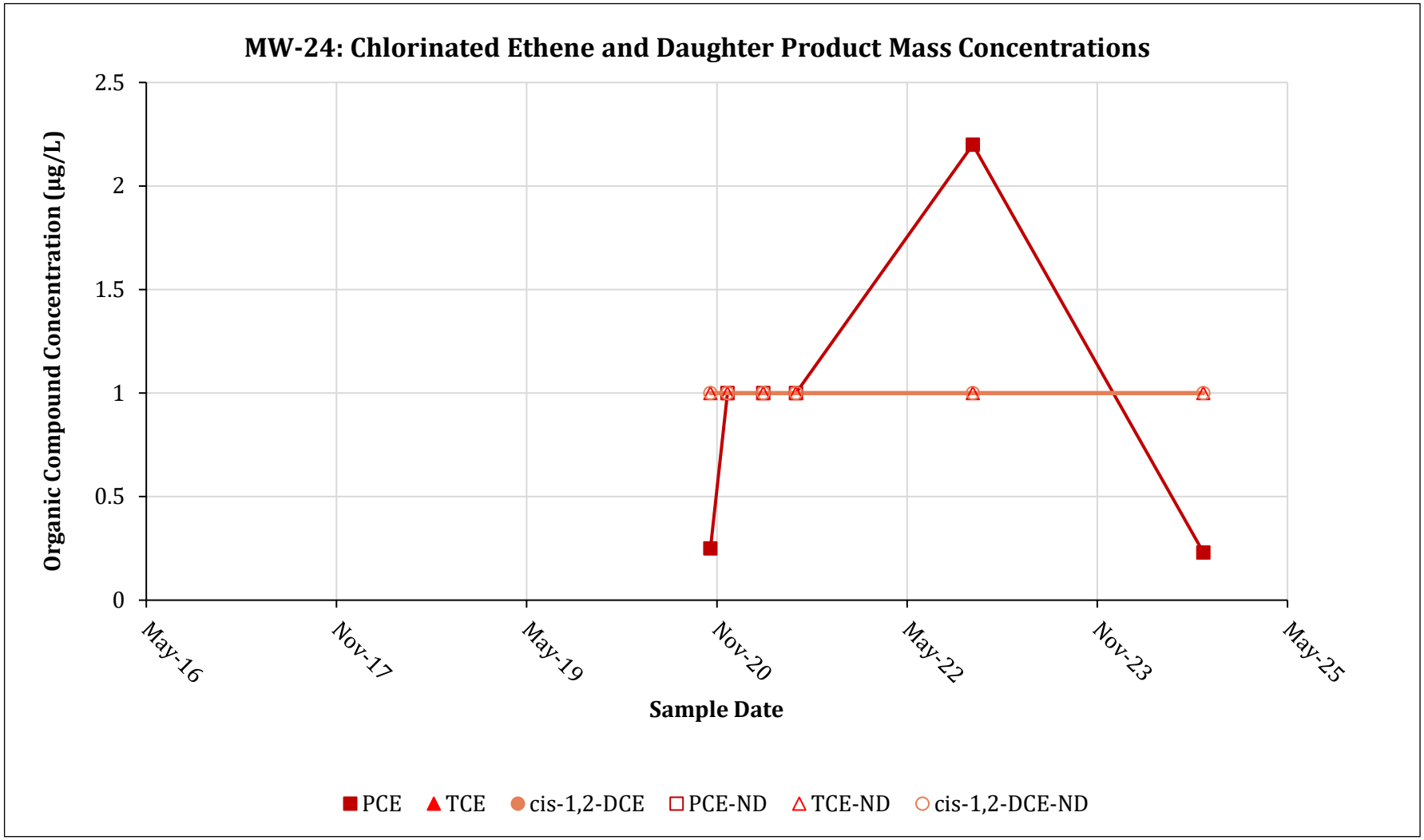
Appendix E
Contaminant Persistence Supporting Information
MW-23A Chart

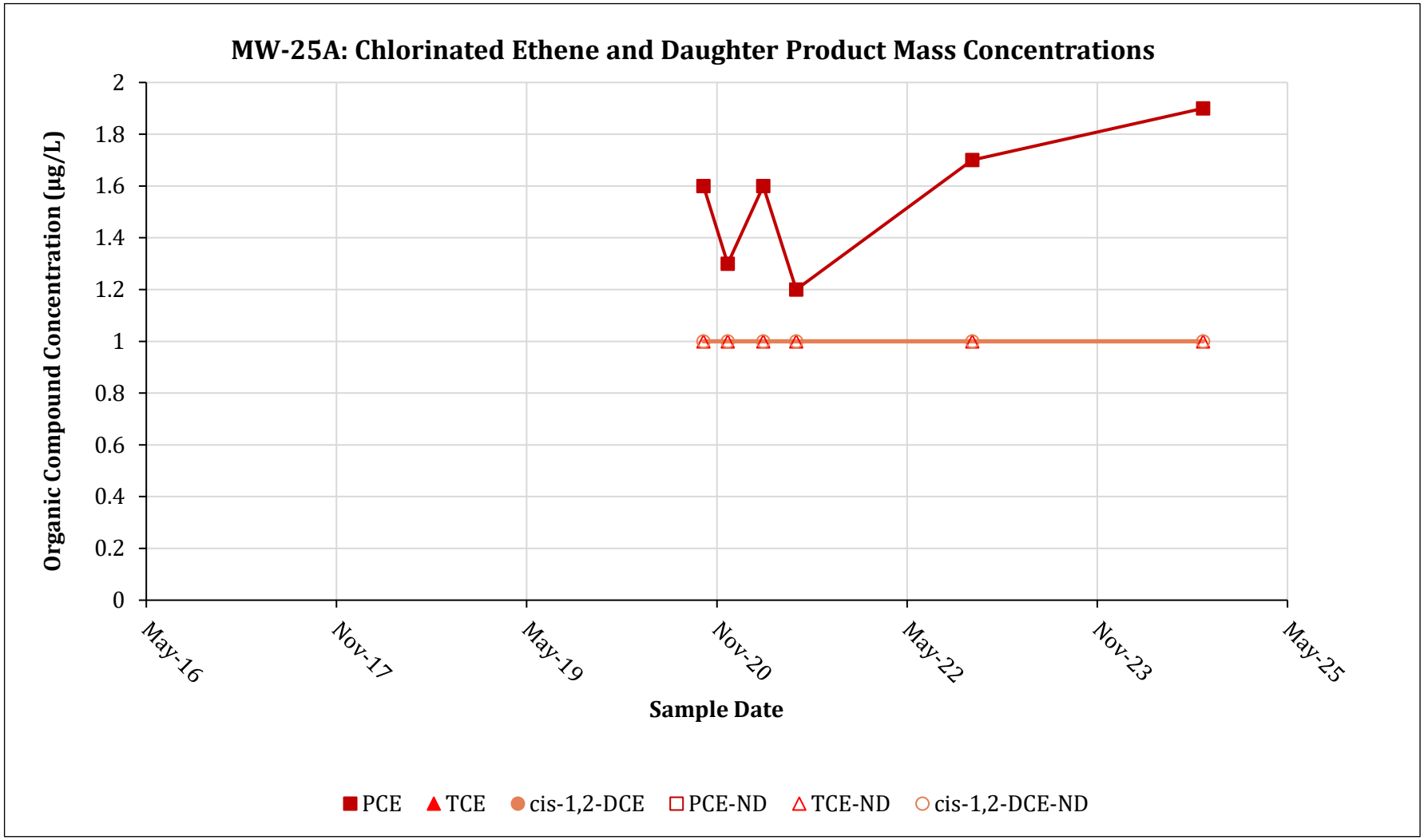



MW-23B: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

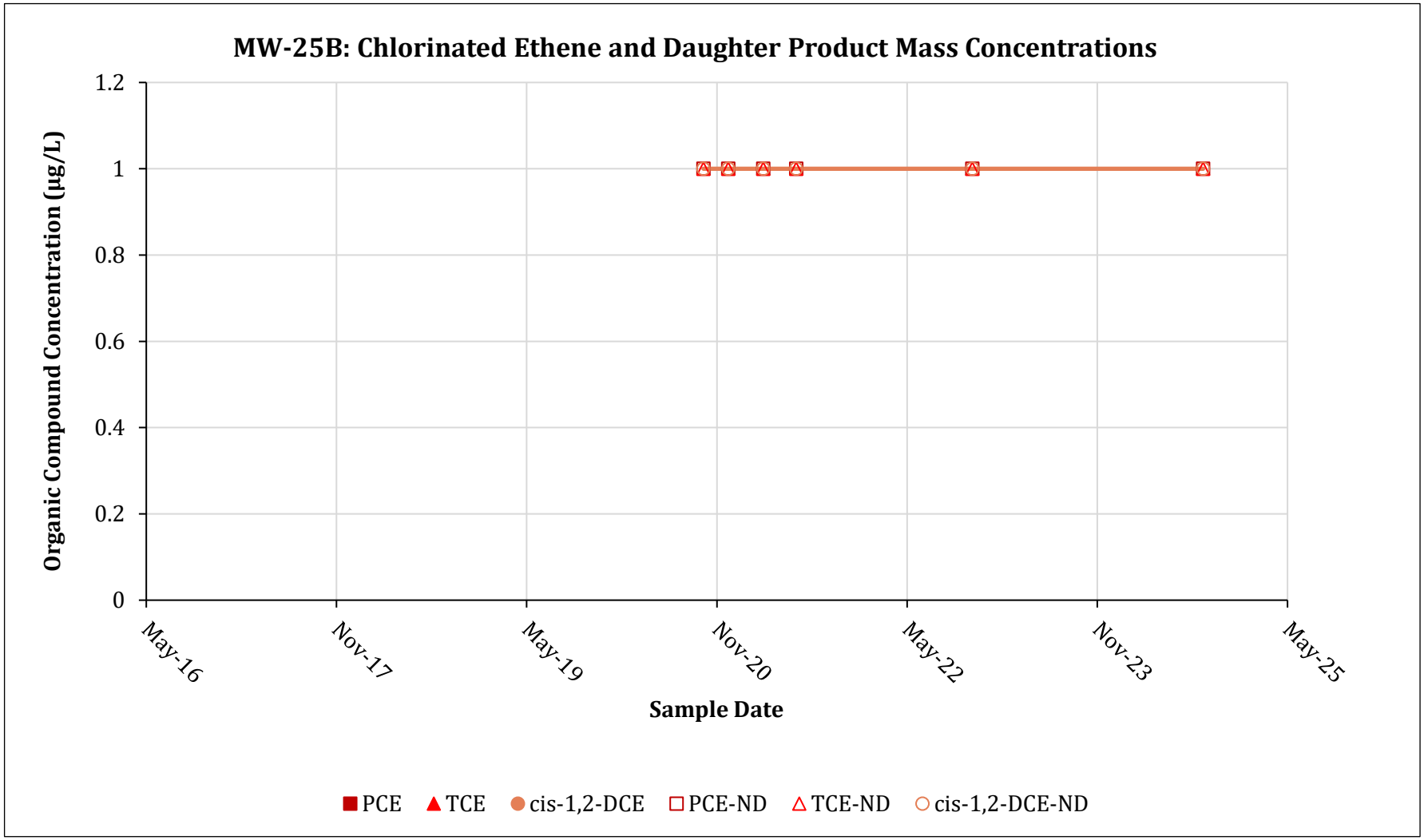
Appendix E
Contaminant Persistence Supporting Information
MW-23C Chart



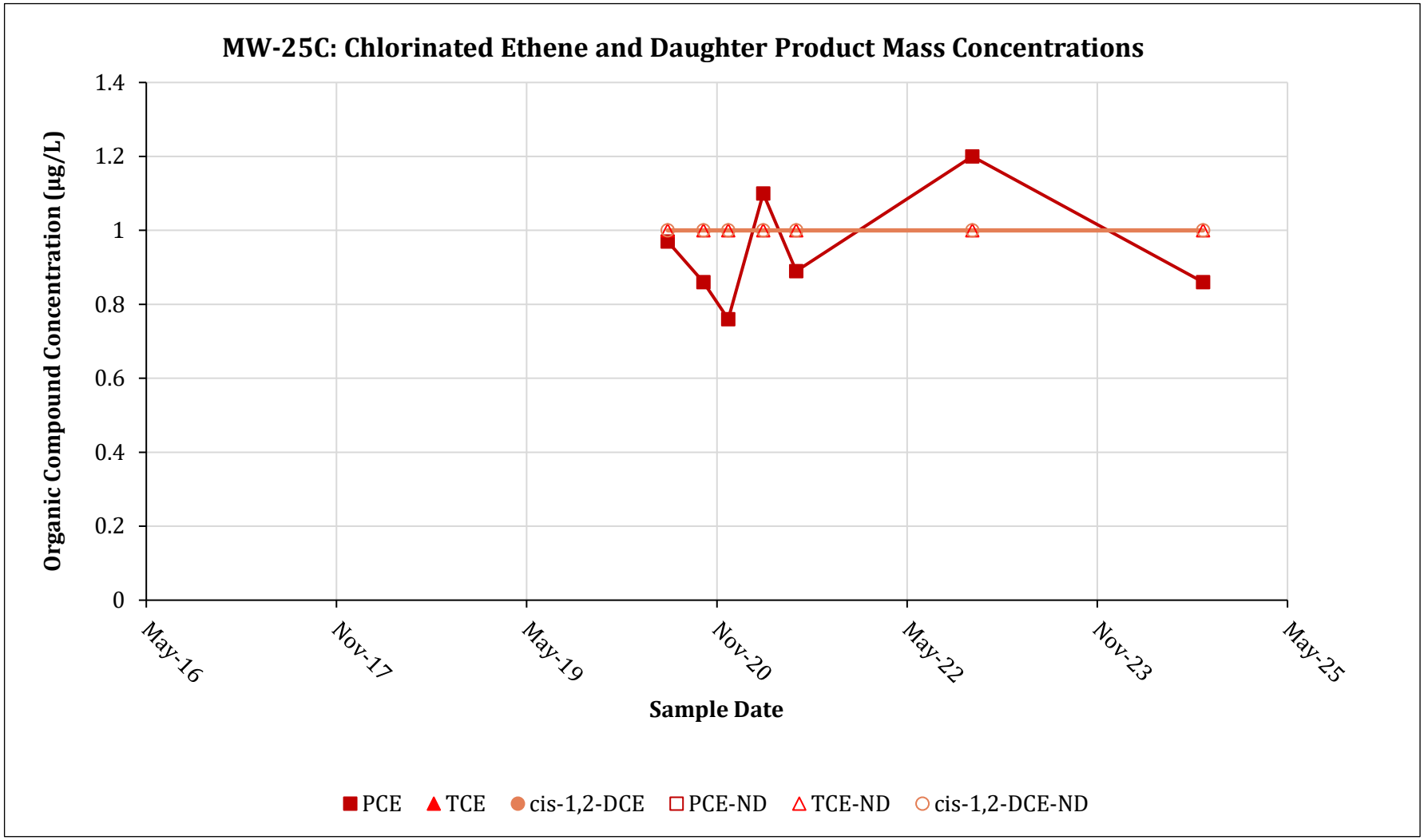

MW-24: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
2.5
2
1.5
1
0.5
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

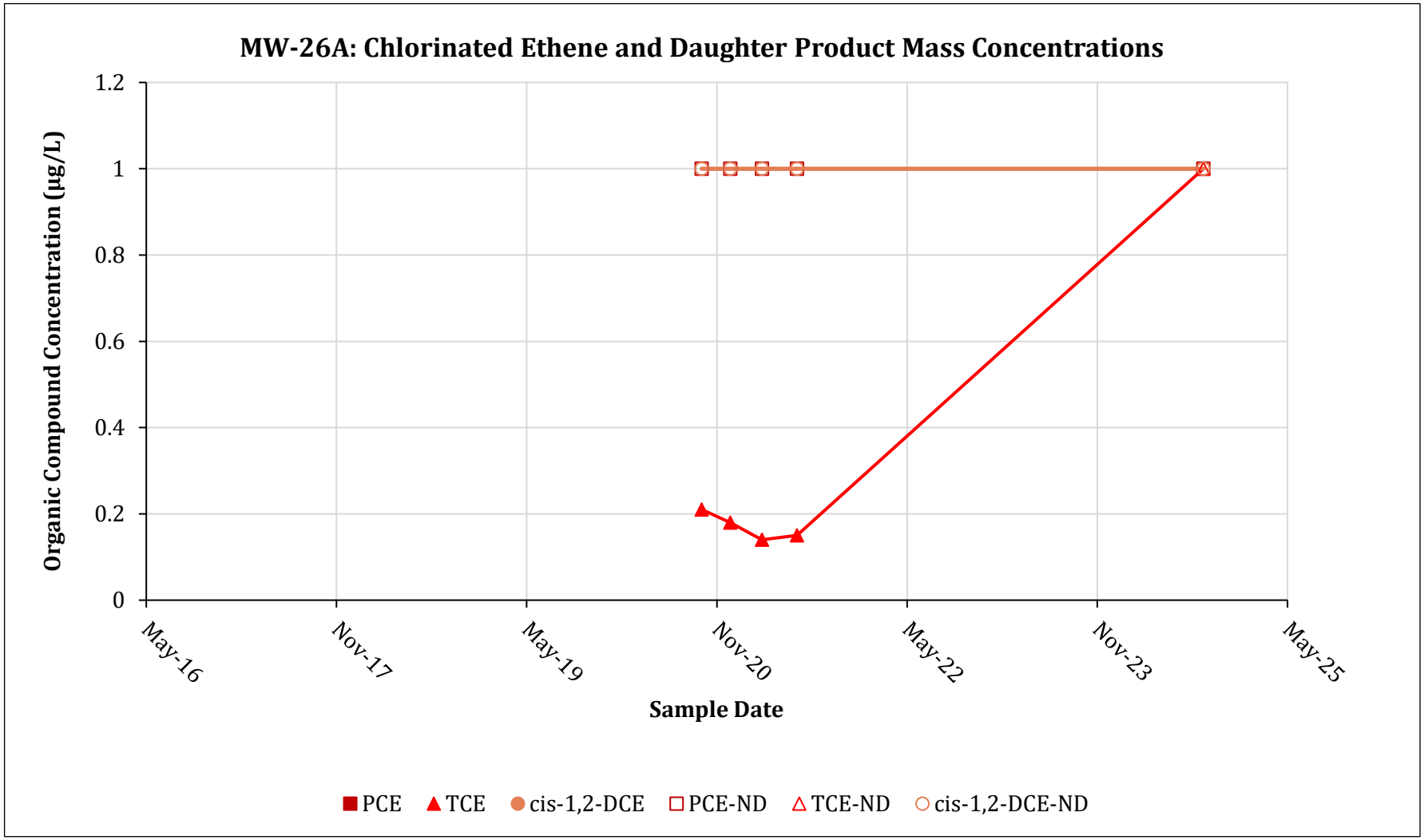

MW-25A: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

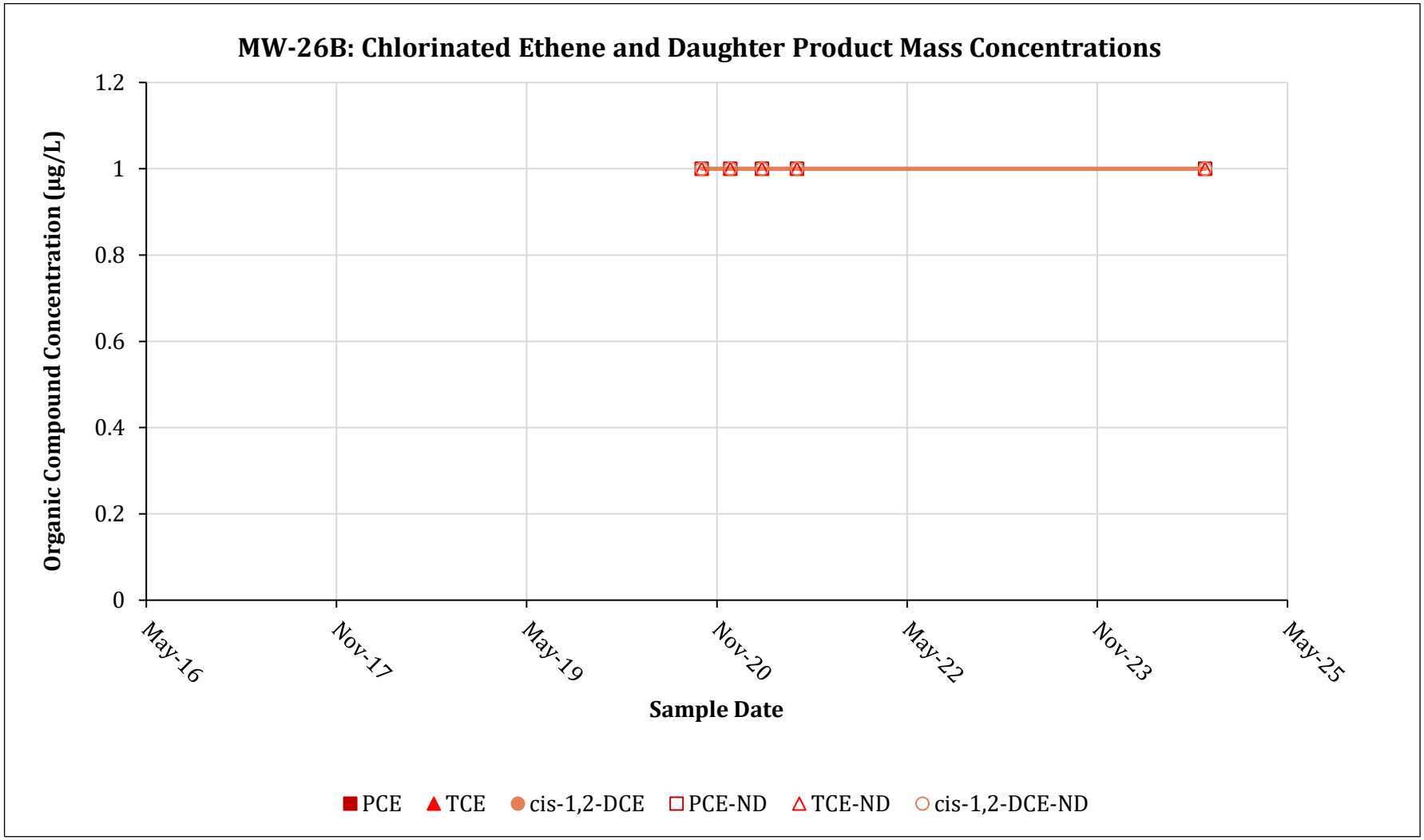
Appendix E
Contaminant Persistence Supporting Information
MW-25B Chart



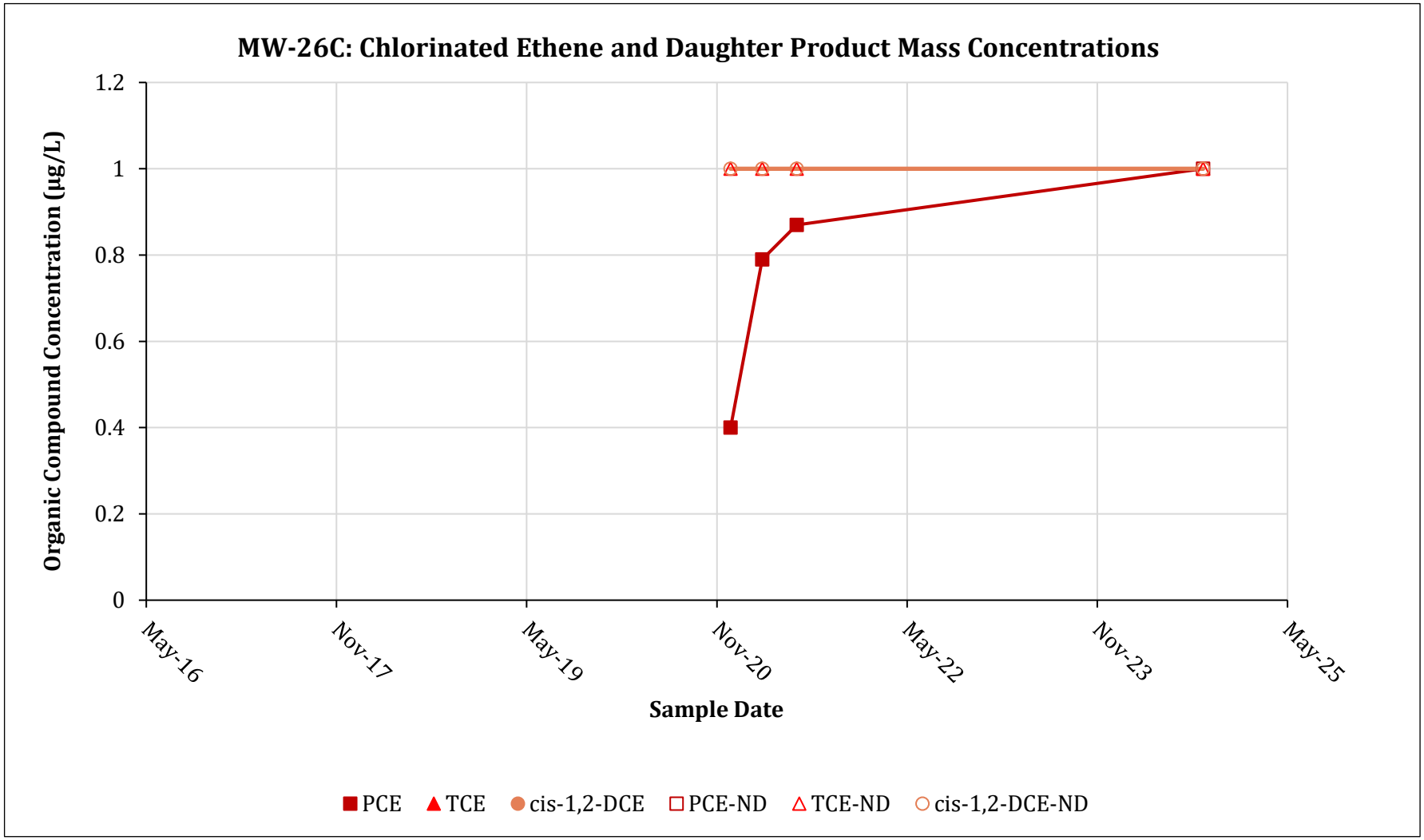
Appendix E
Contaminant Persistence Supporting Information
MW-25C Chart



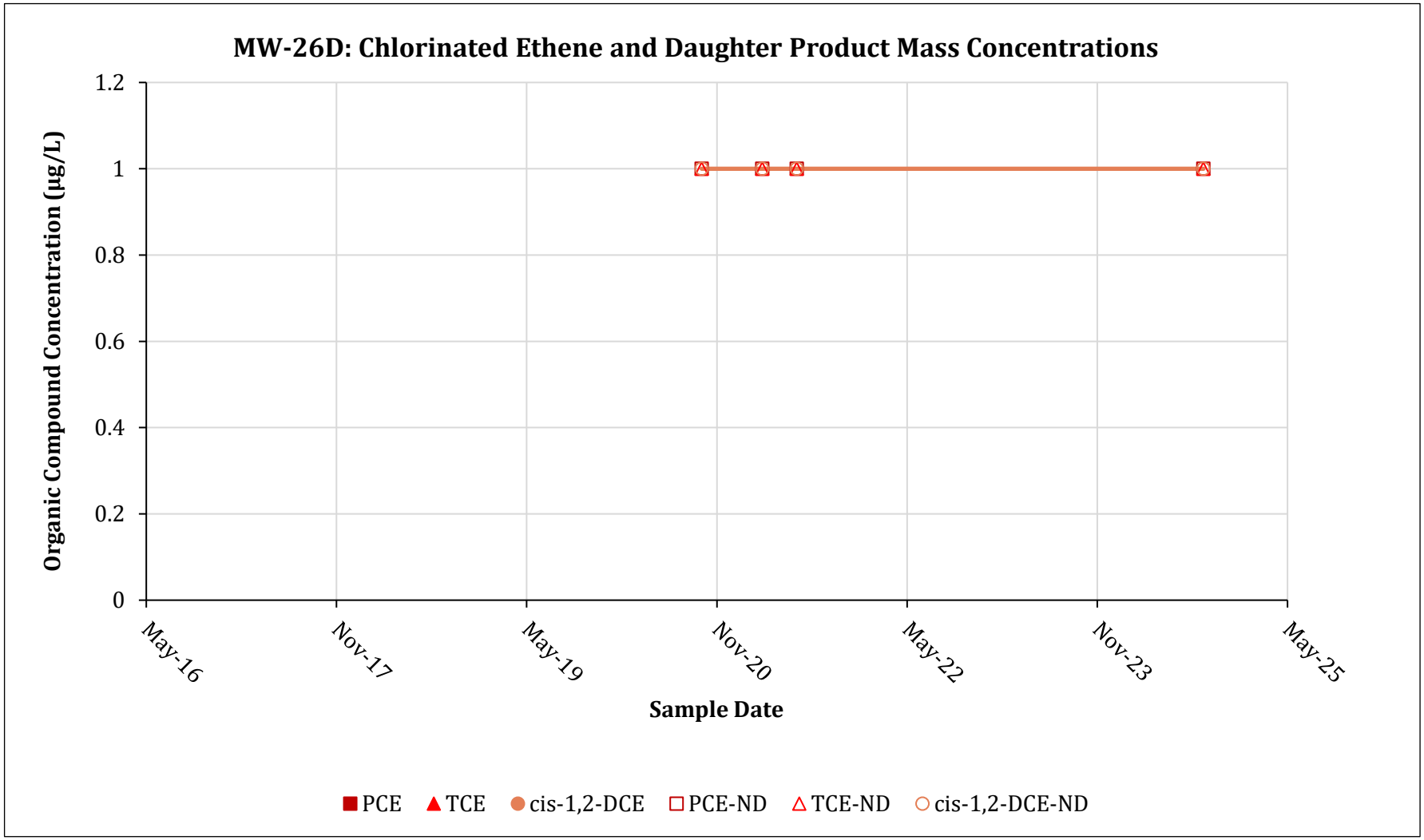

MW-26A: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

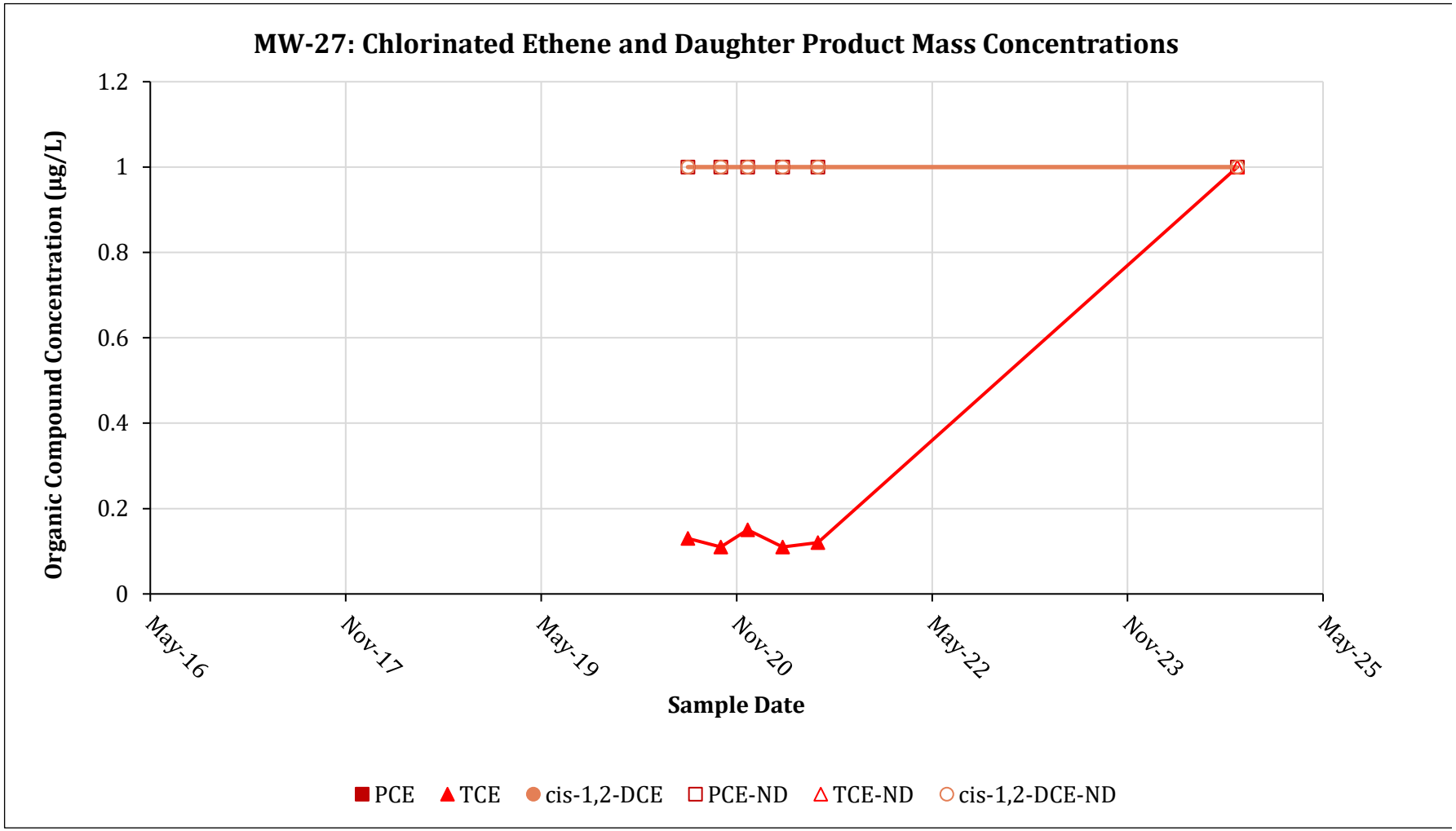

MW-26B: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

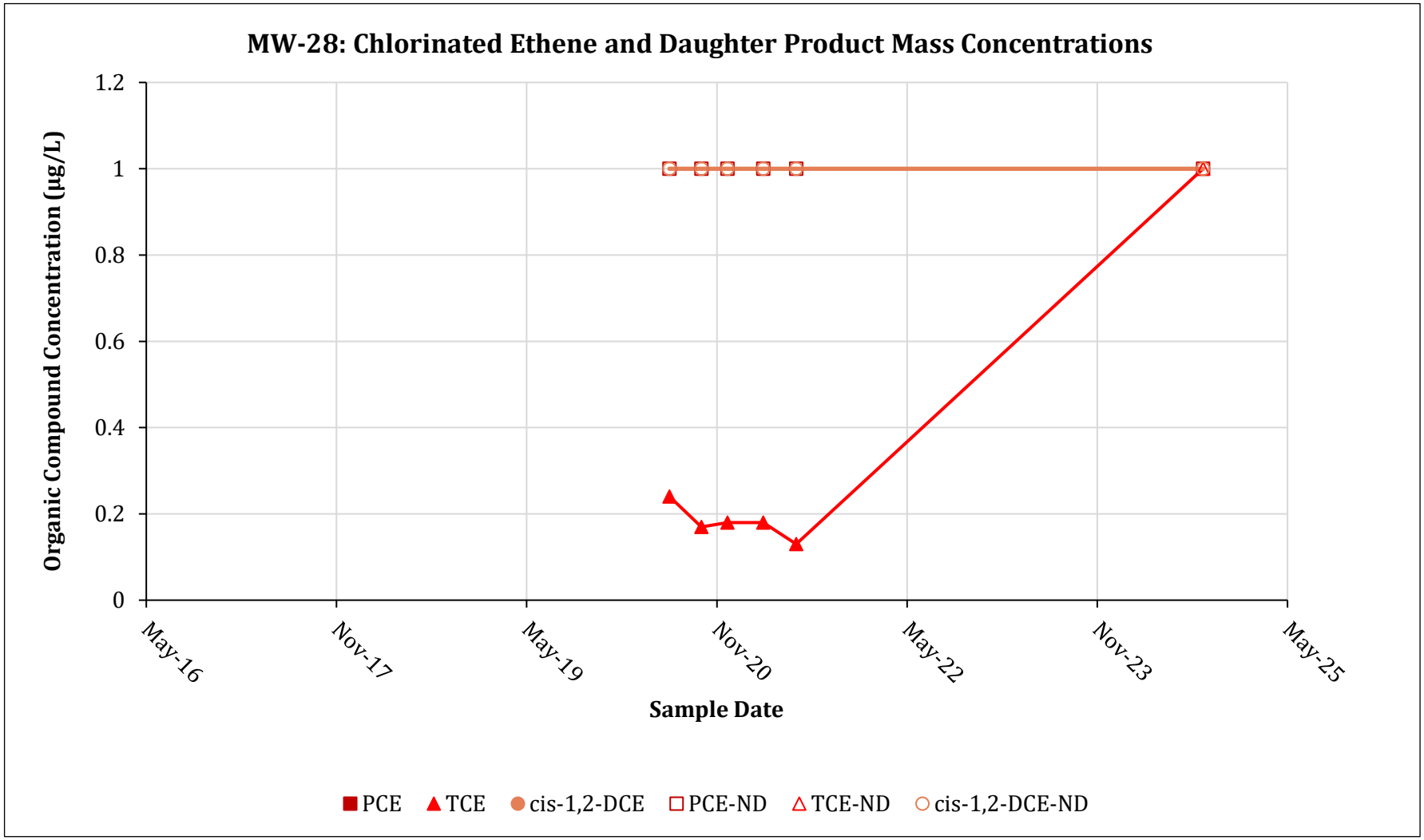
Appendix E
Contaminant Persistence Supporting Information
MW-26C Chart



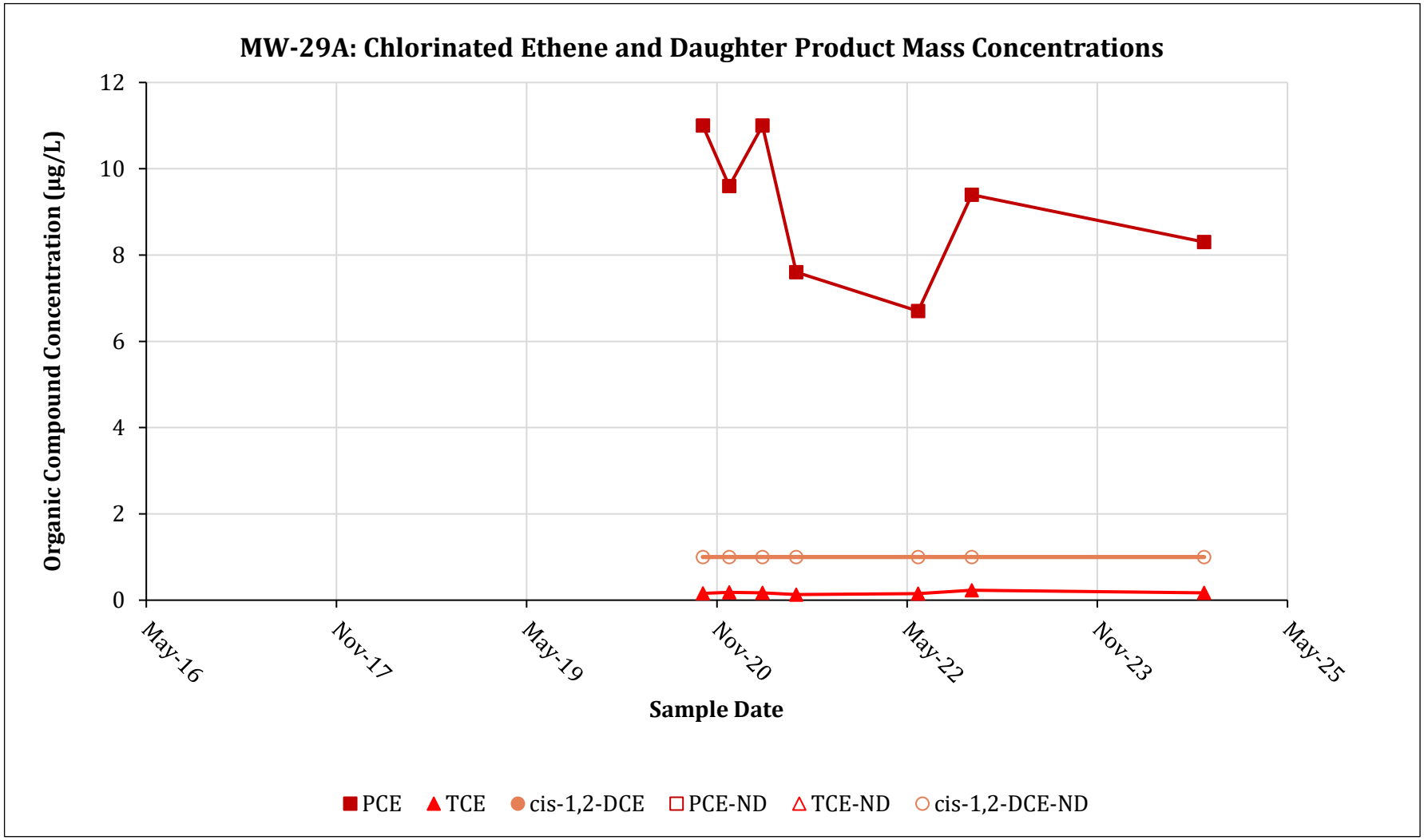
Appendix E
Contaminant Persistence Supporting Information
MW-26D Chart

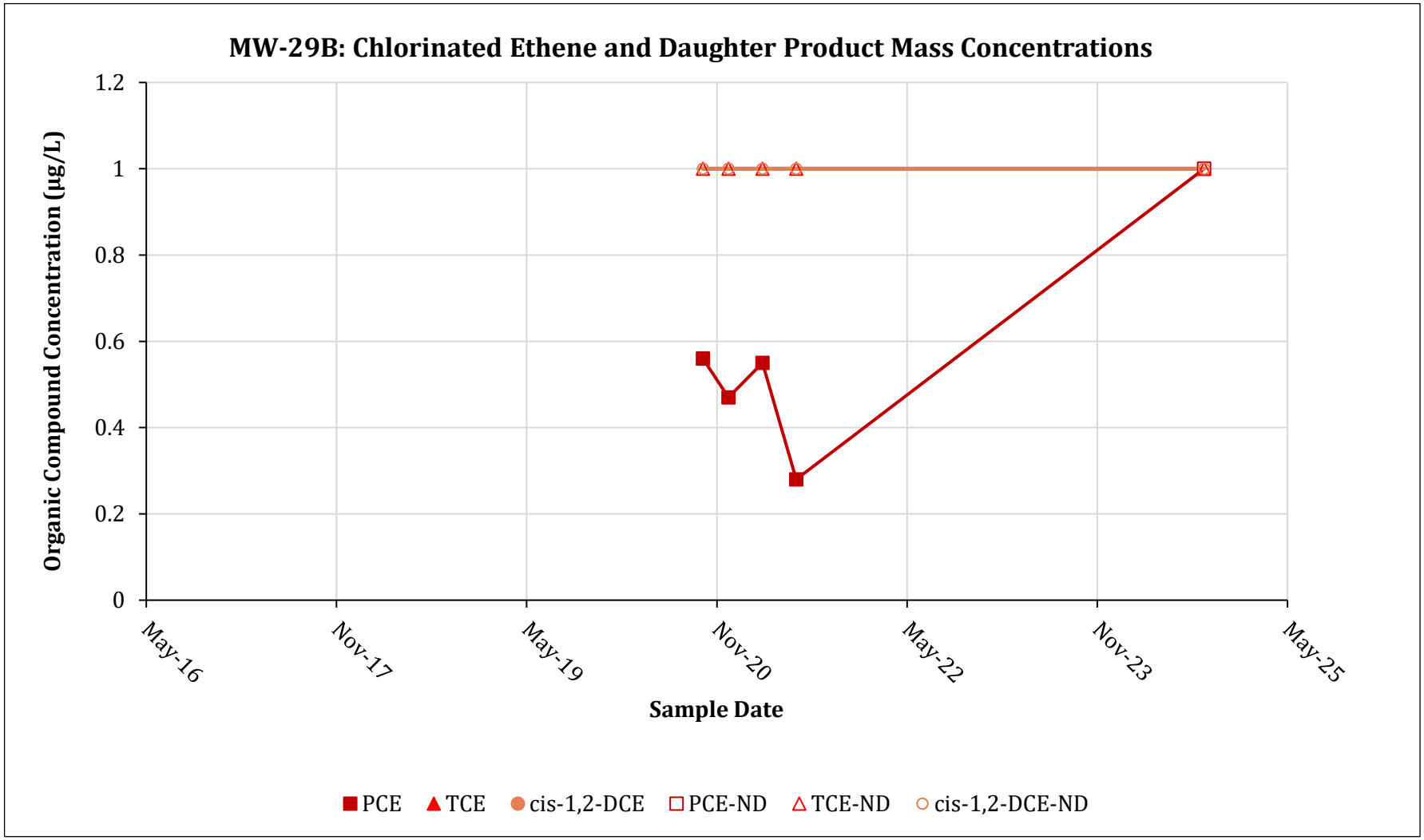



MW-27: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

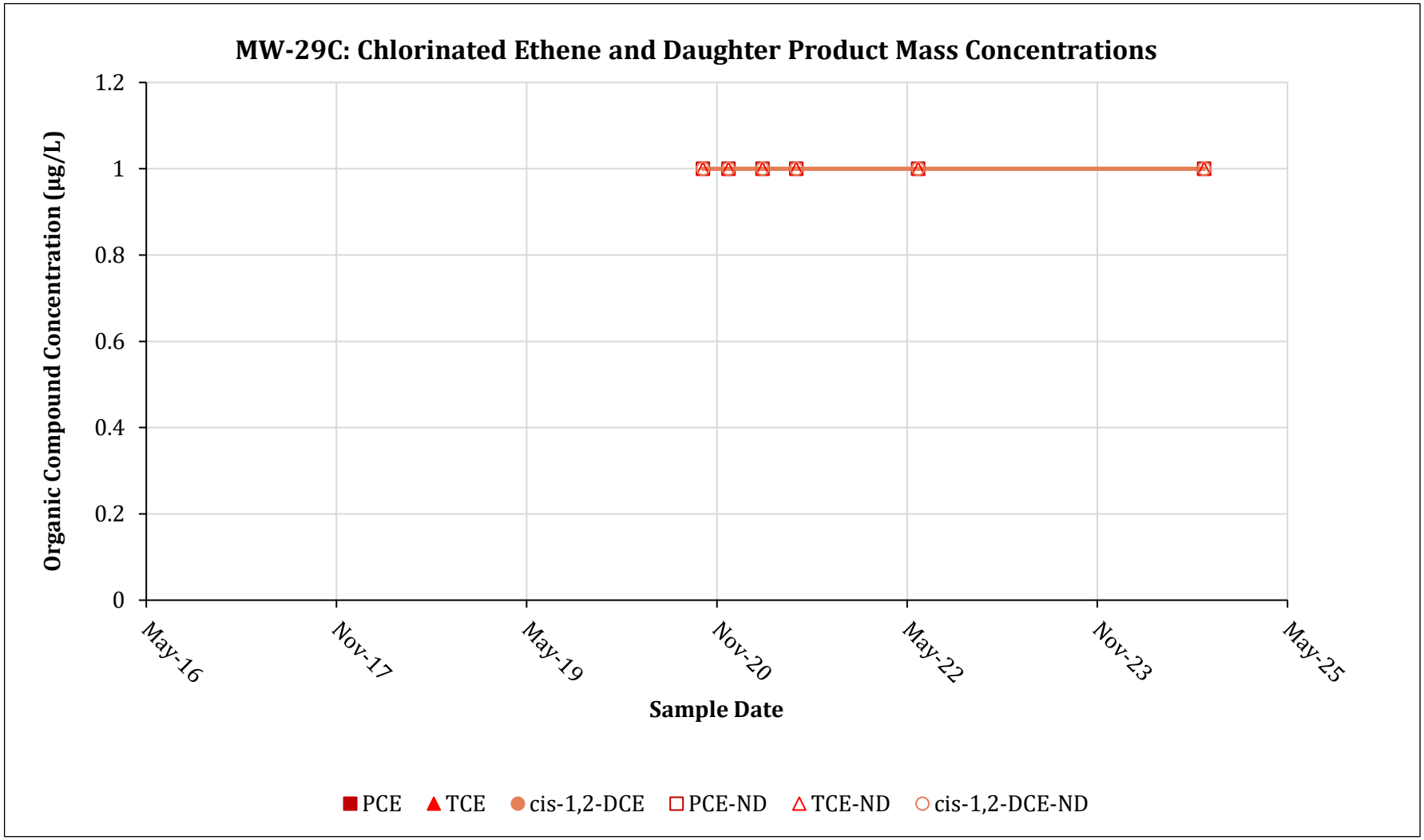

MW-28: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

Appendix E
Contaminant Persistence Supporting Information
MW-29A Chart

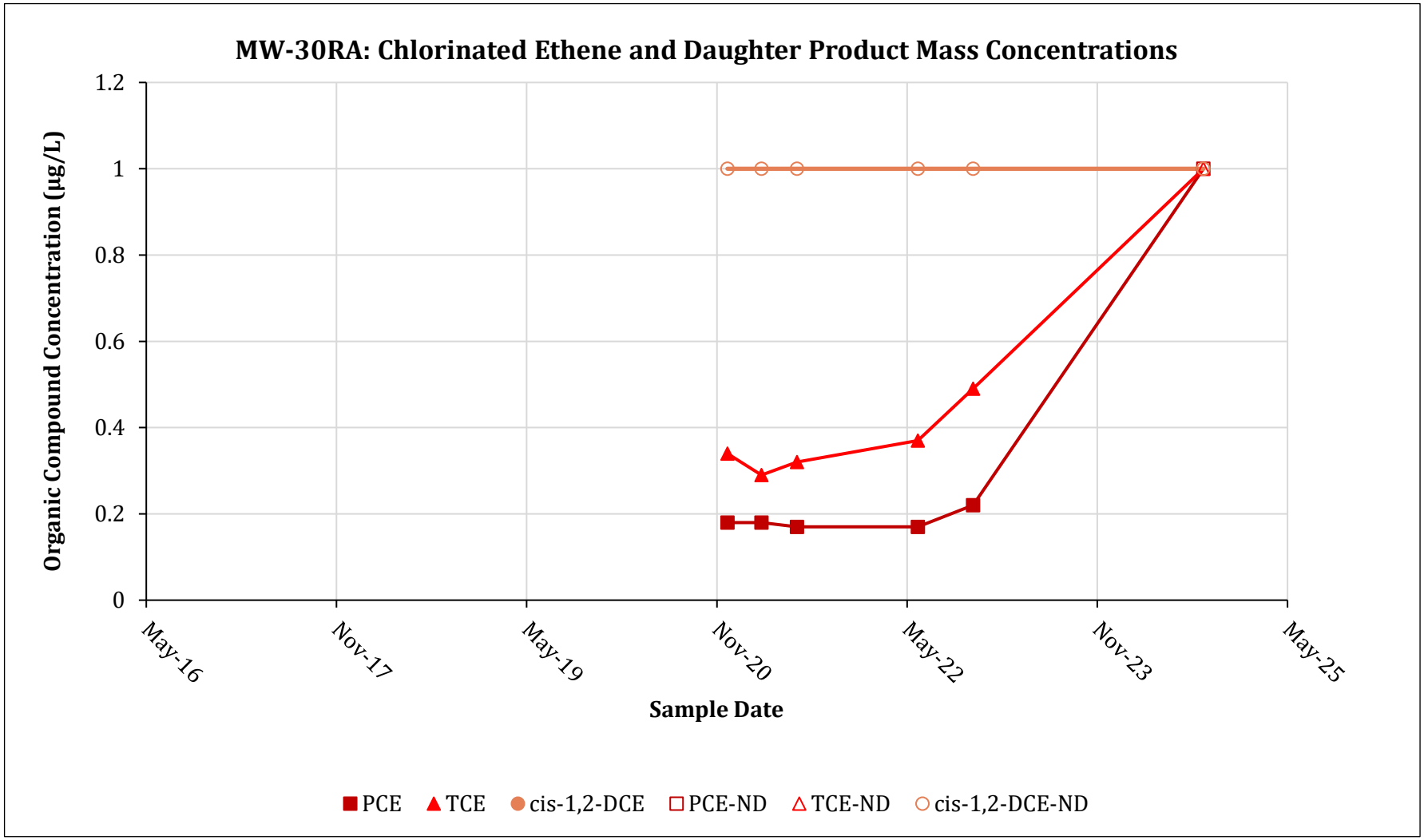



MW-29B: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

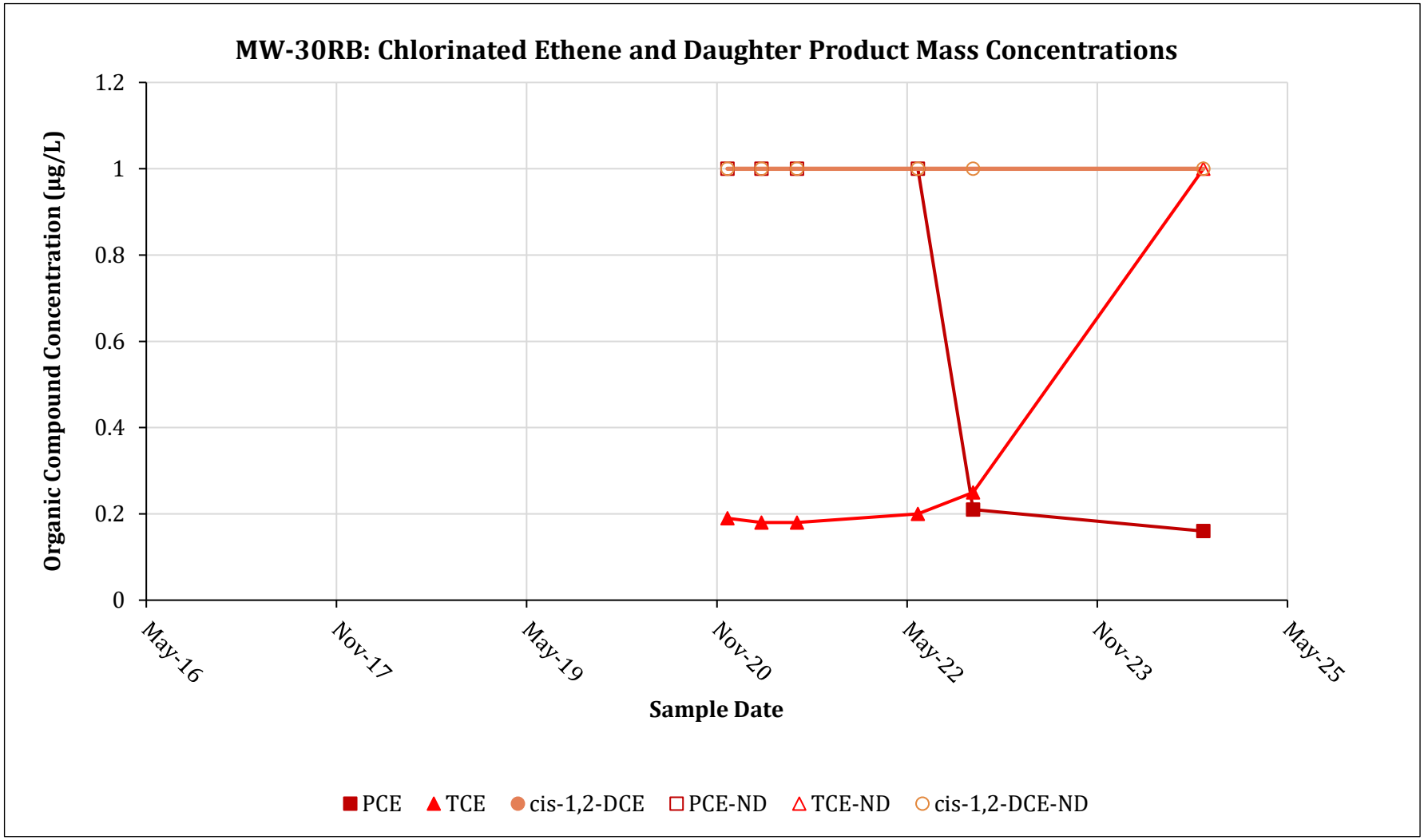
Appendix E
Contaminant Persistence Supporting Information
MW-29C Chart



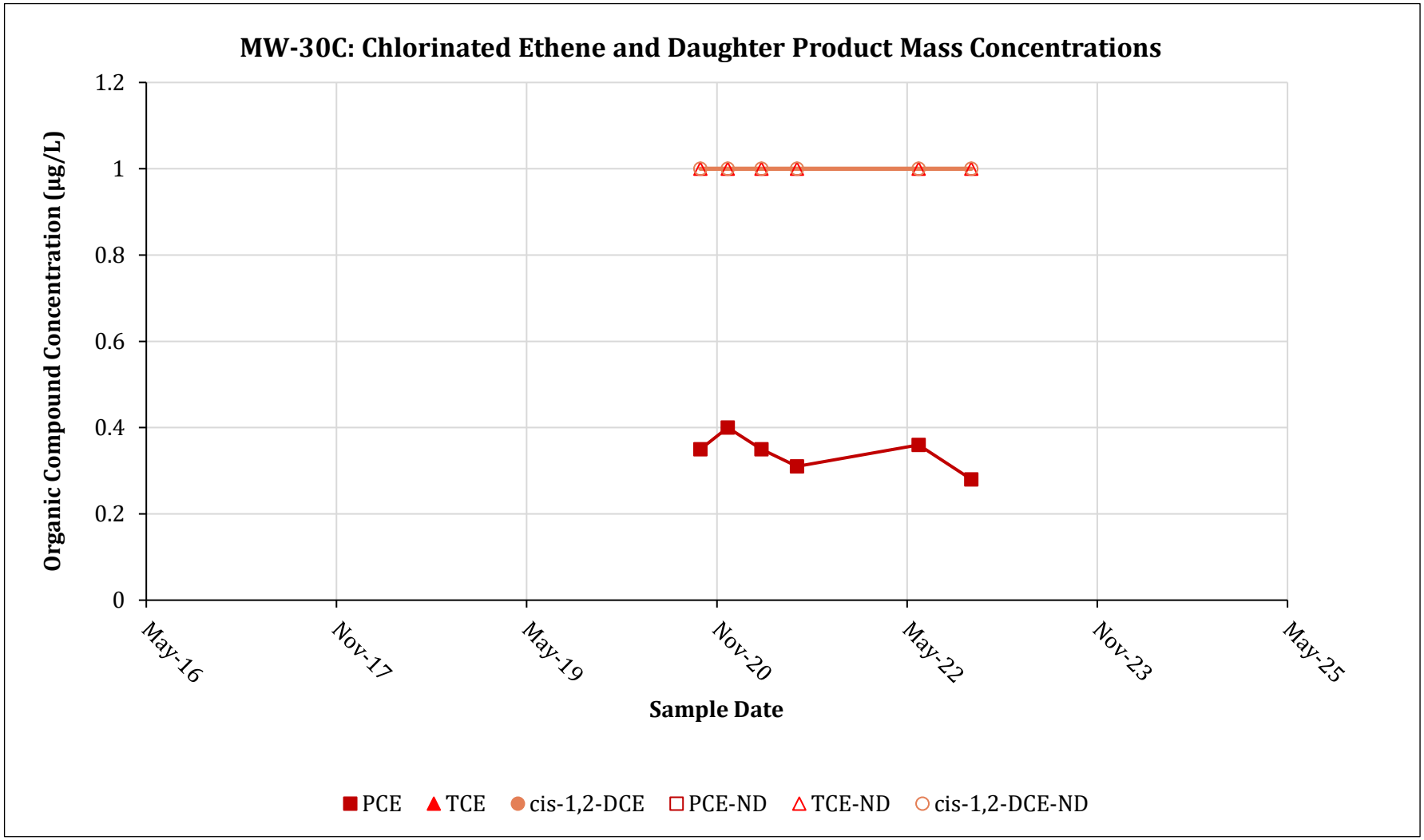
Appendix E
Contaminant Persistence Supporting Information
MW-30RA Chart

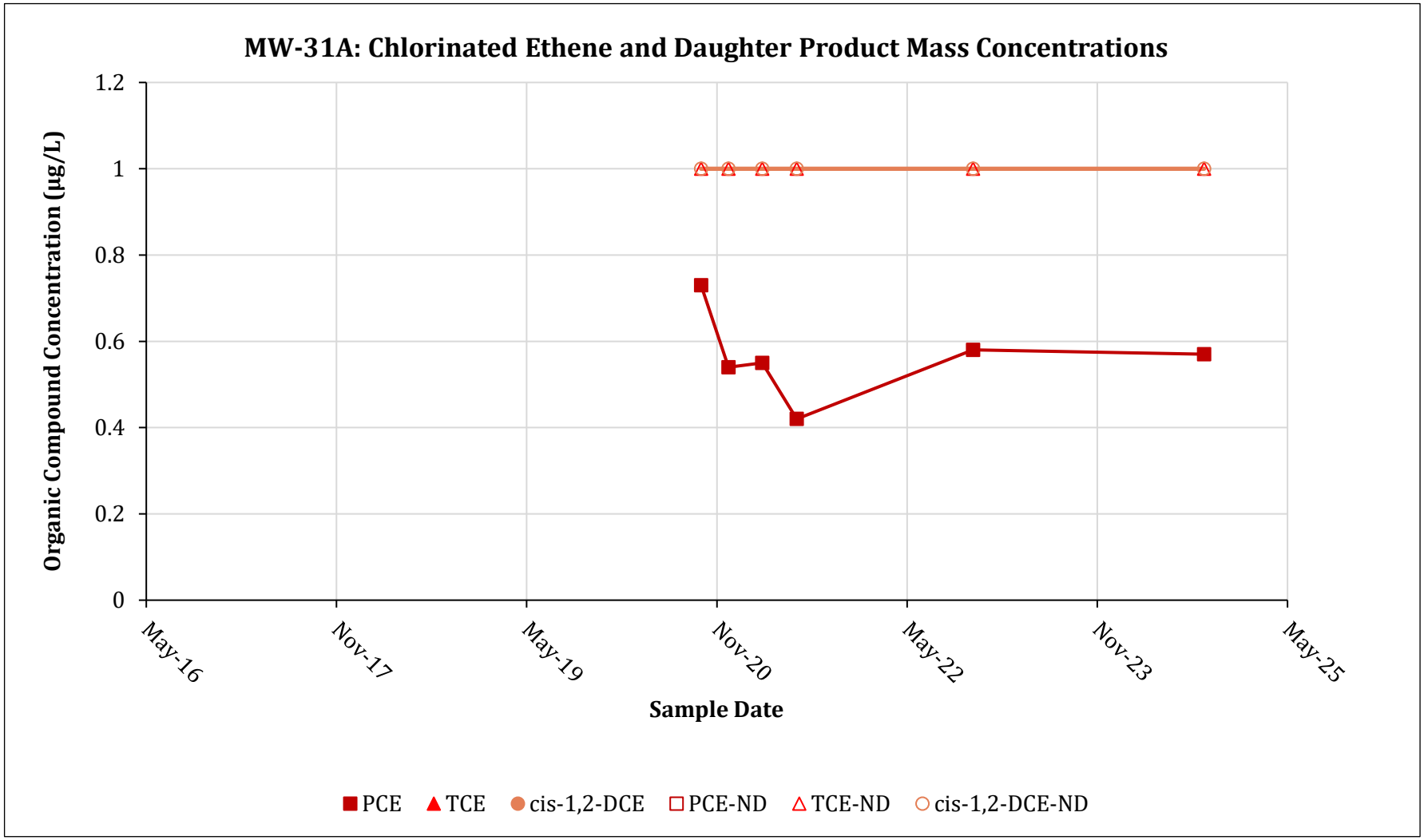


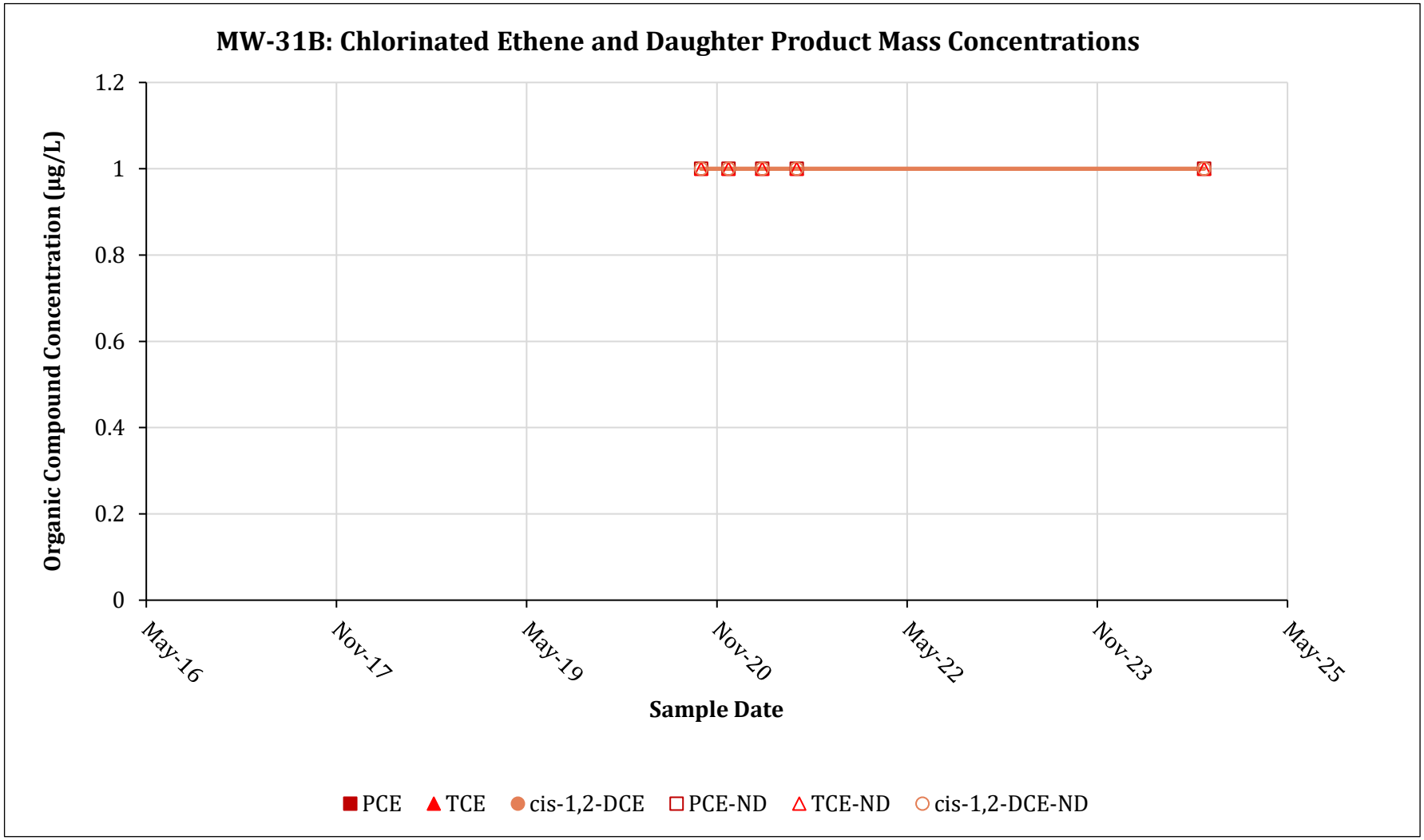
Appendix E
Contaminant Persistence Supporting Information
MW-30RB Chart

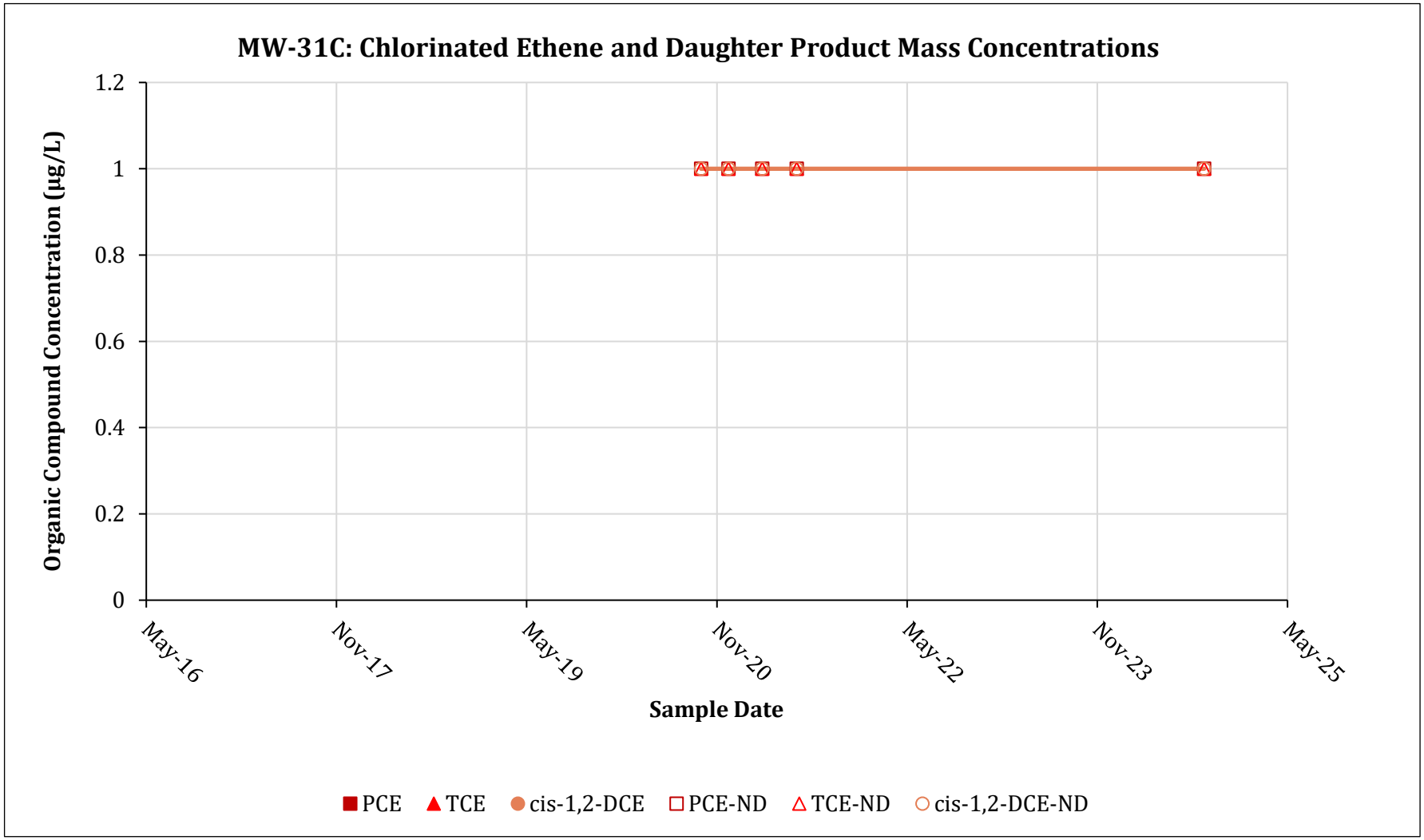


Appendix E
Contaminant Persistence Supporting Information
MW-30C Chart (Not Sampled in 2024)

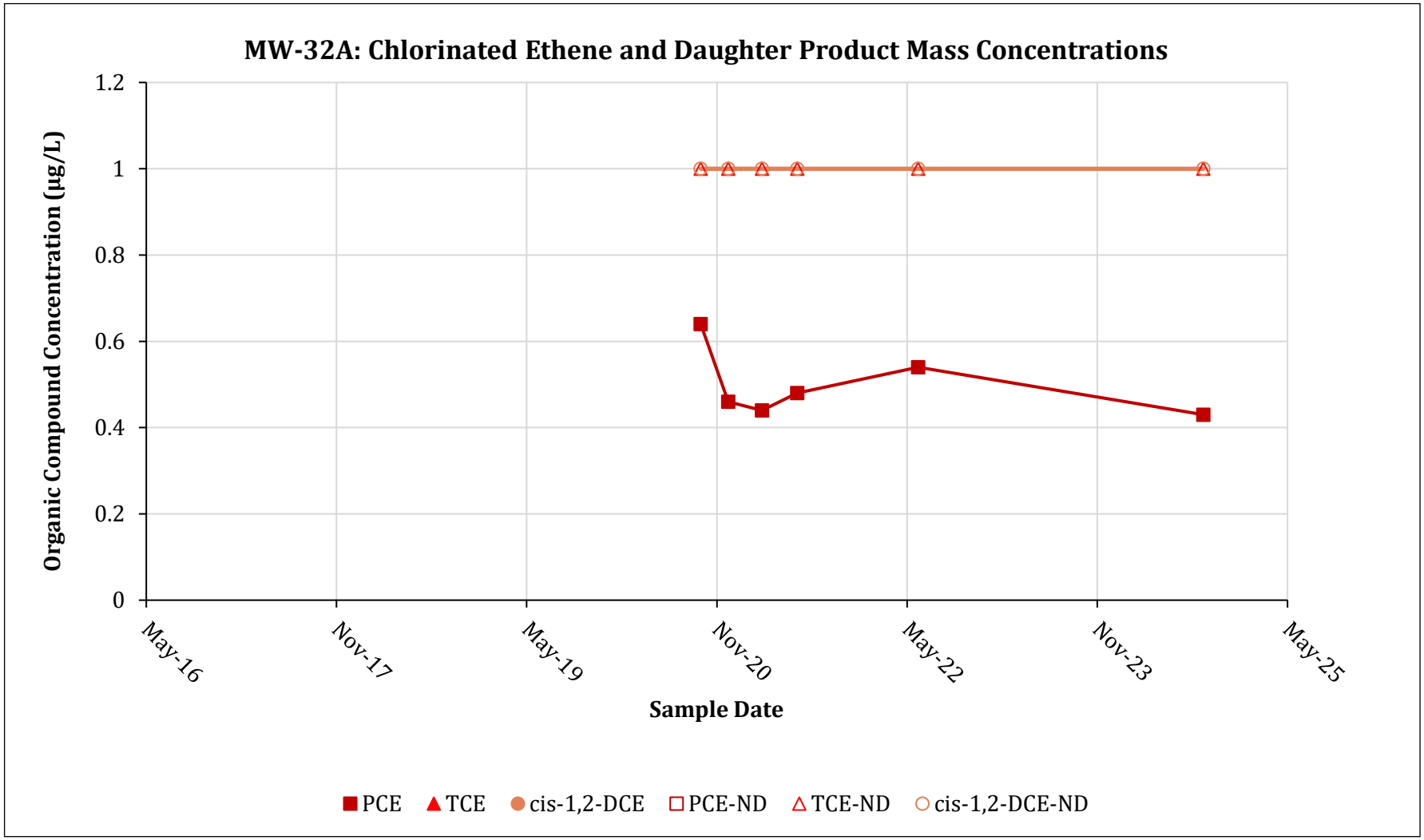


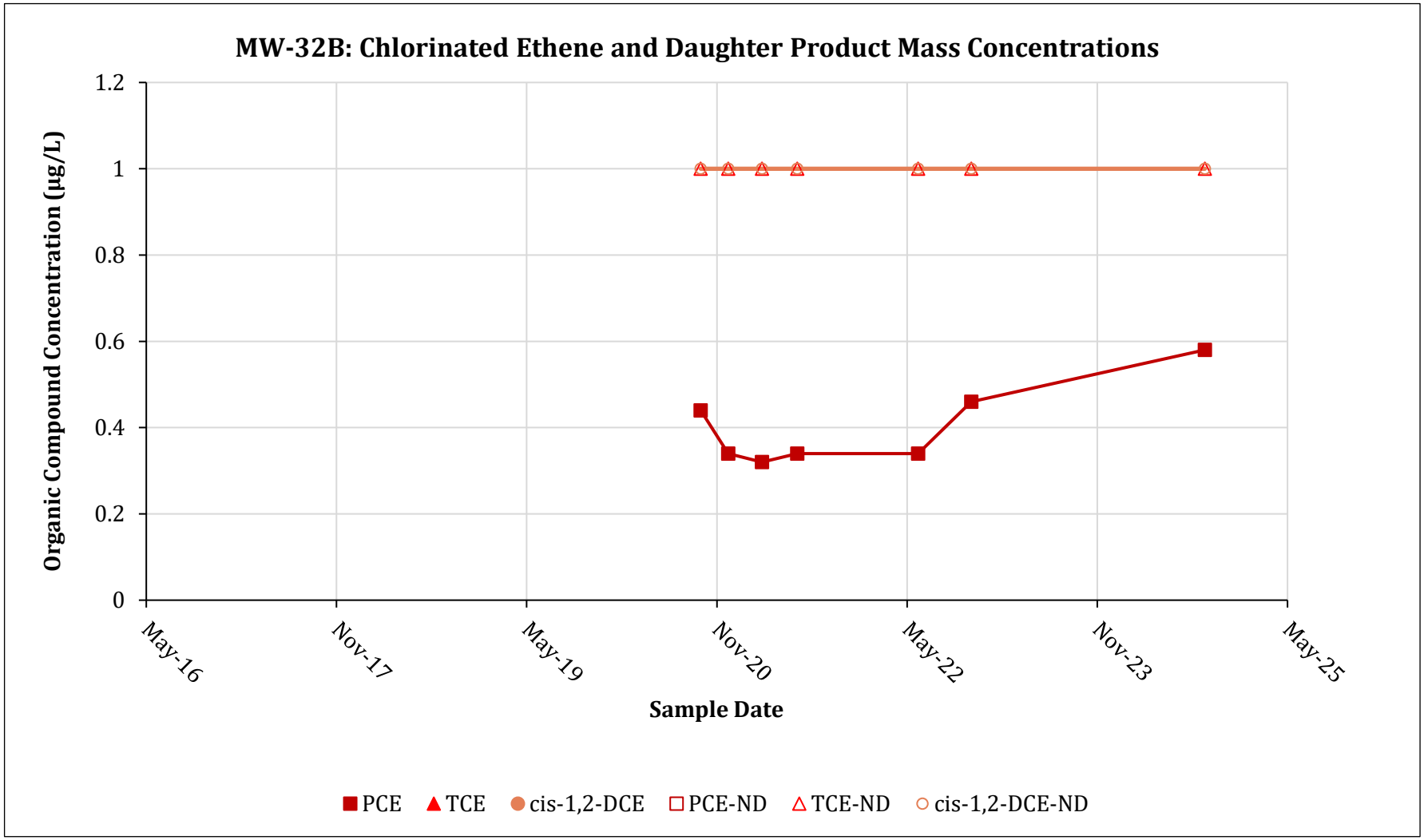

MW-31A: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

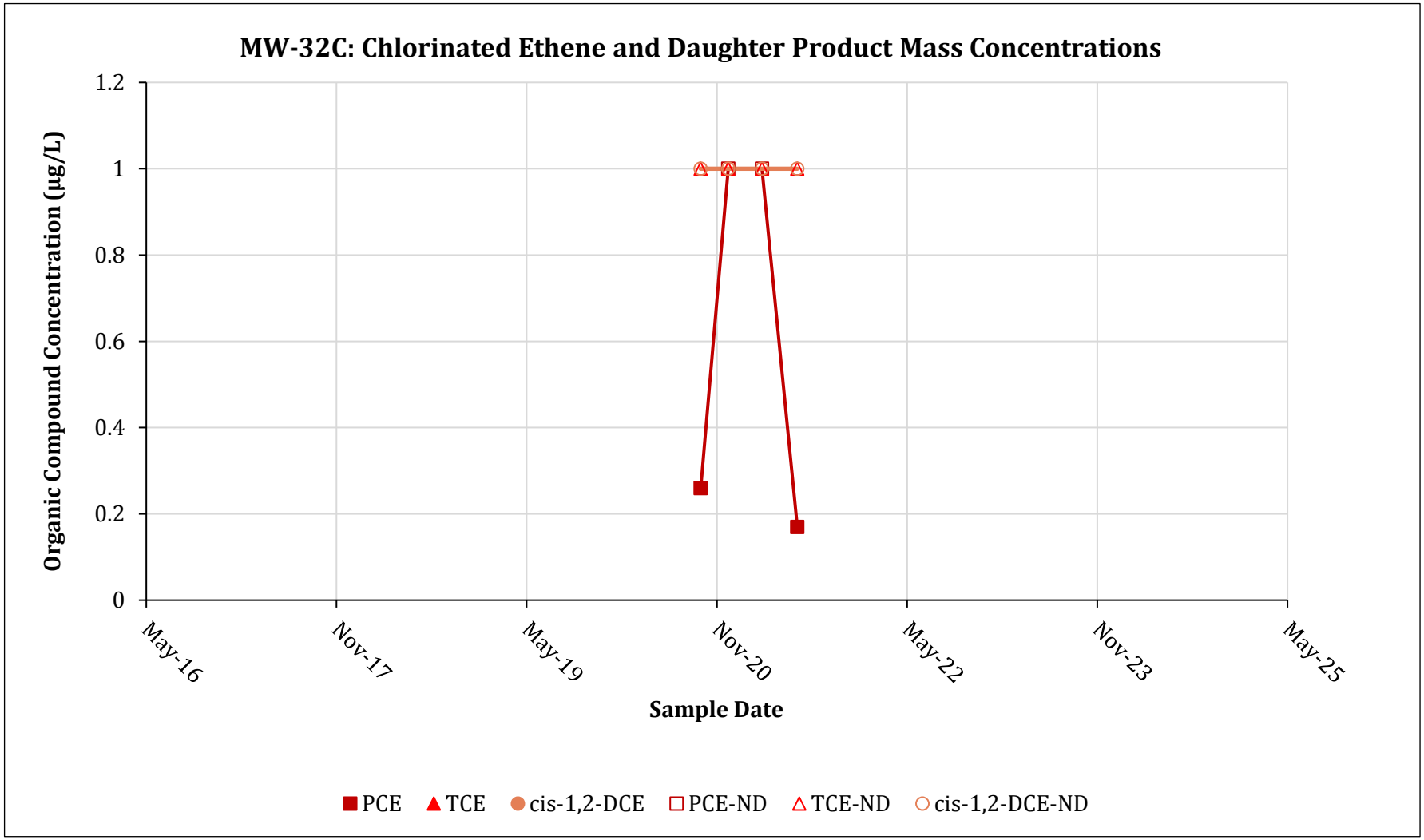

MW-31B: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND


MW-31C: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

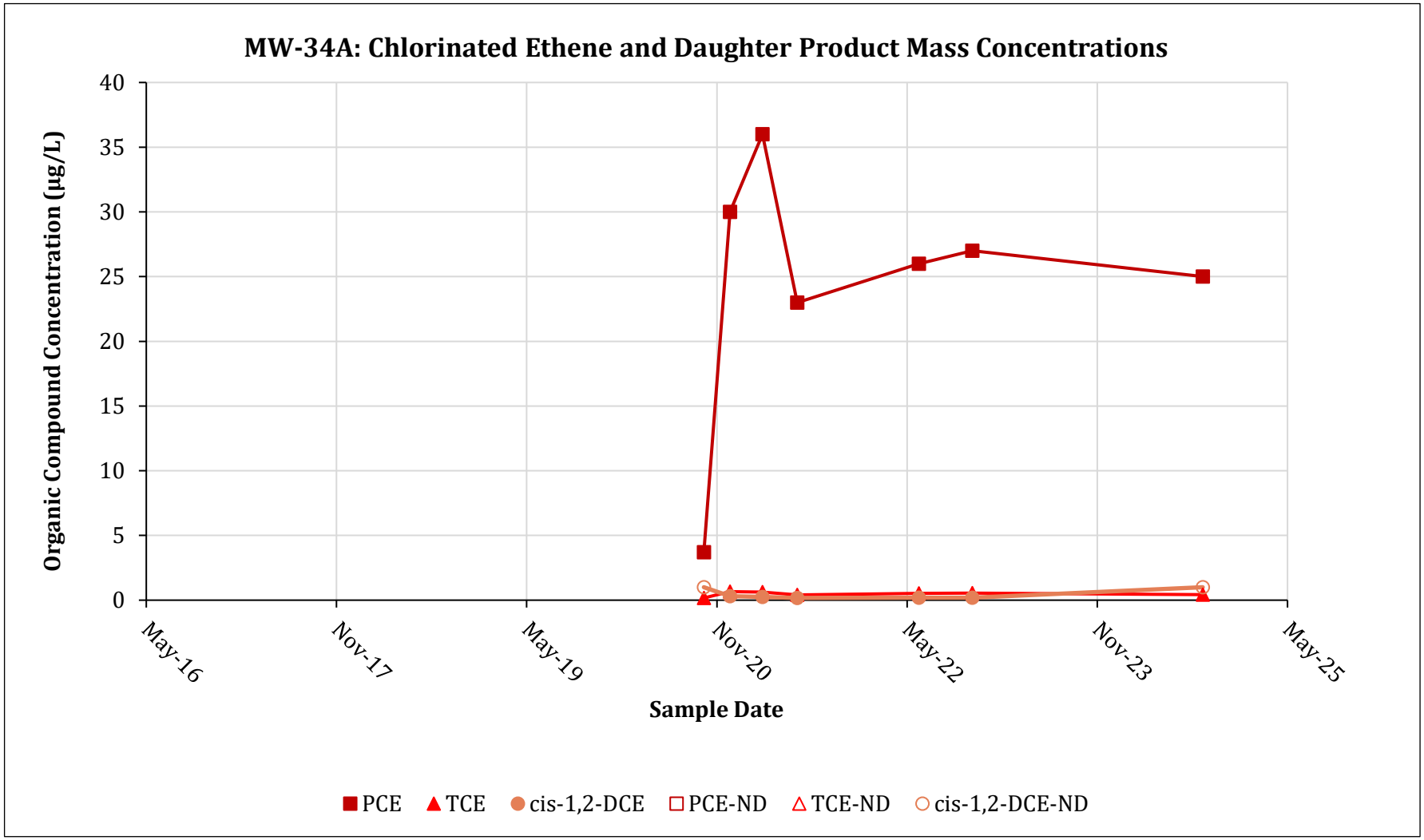
Appendix E
Contaminant Persistence Supporting Information
MW-32A Chart



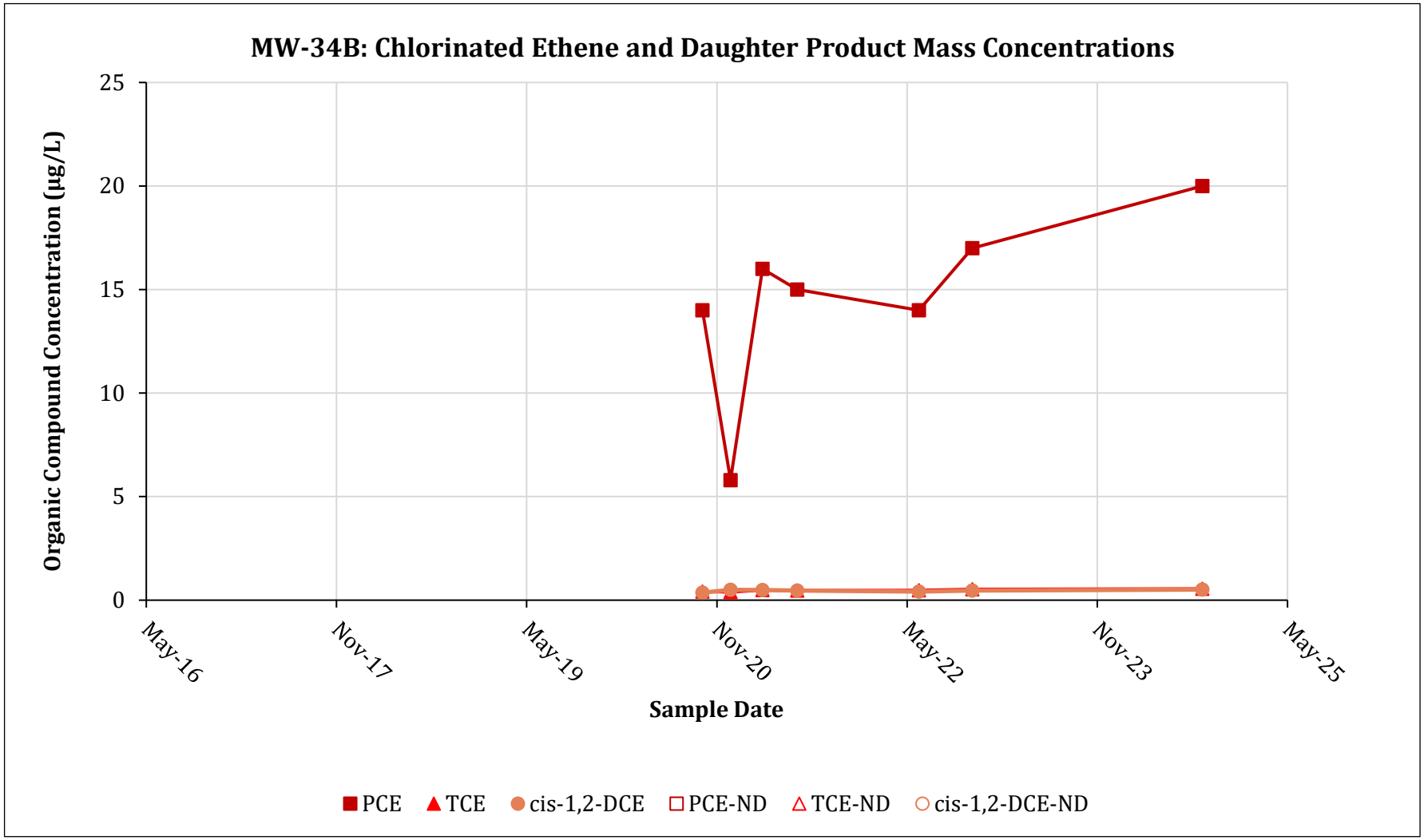

MW-32B: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND


MW-32C: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

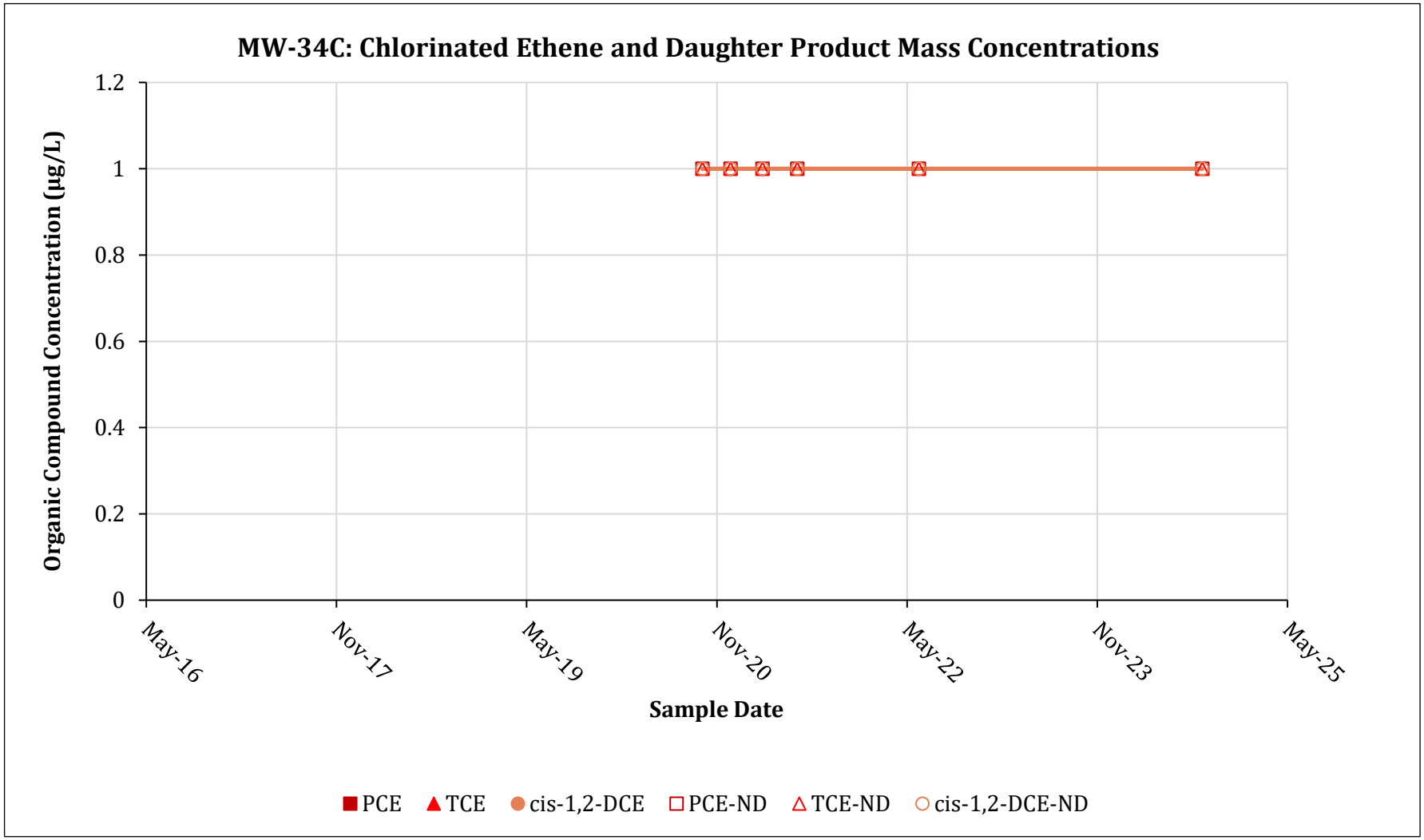
Appendix E
Contaminant Persistence Supporting Information
MW-34A Chart



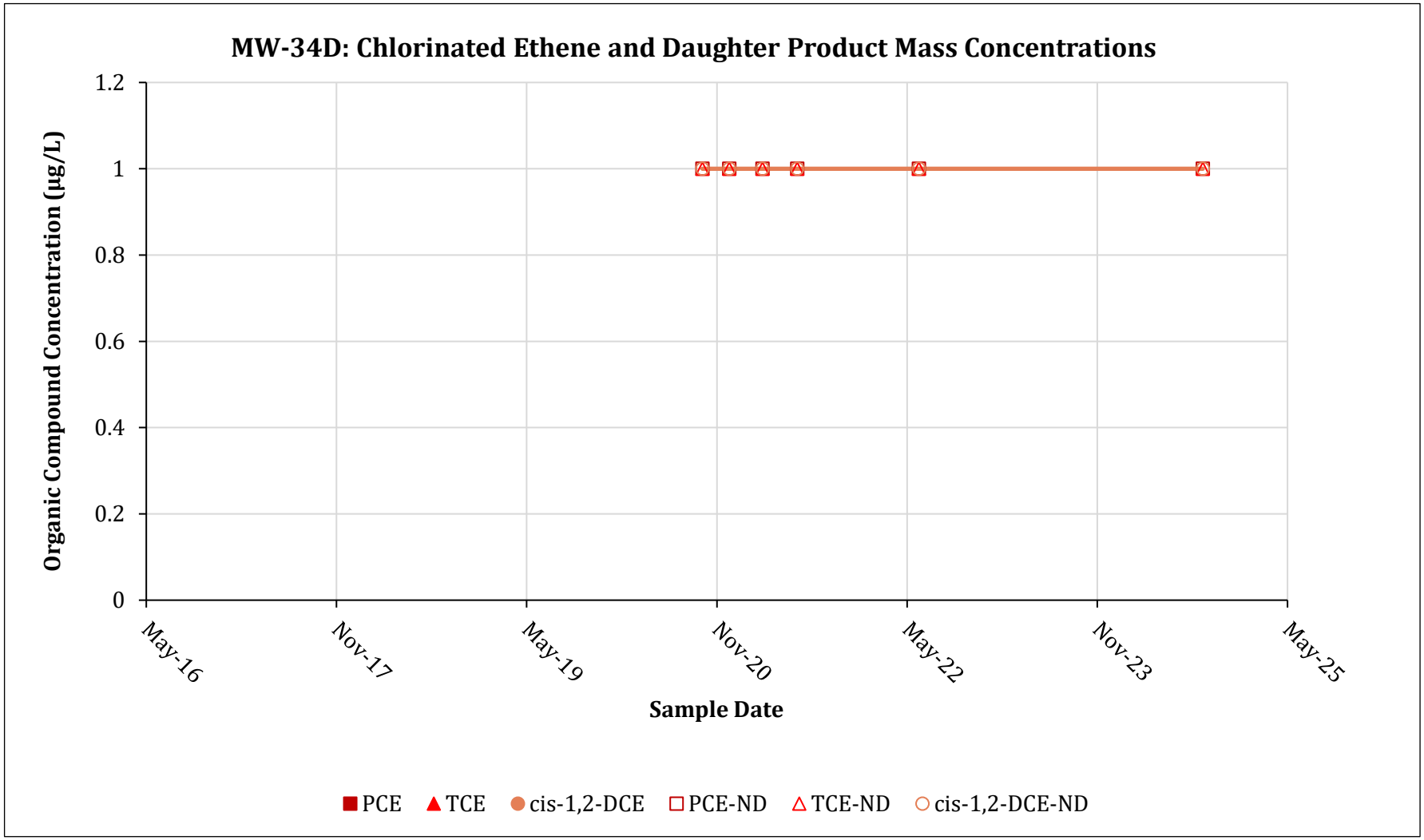
Appendix E
Contaminant Persistence Supporting Information
MW-34B Chart



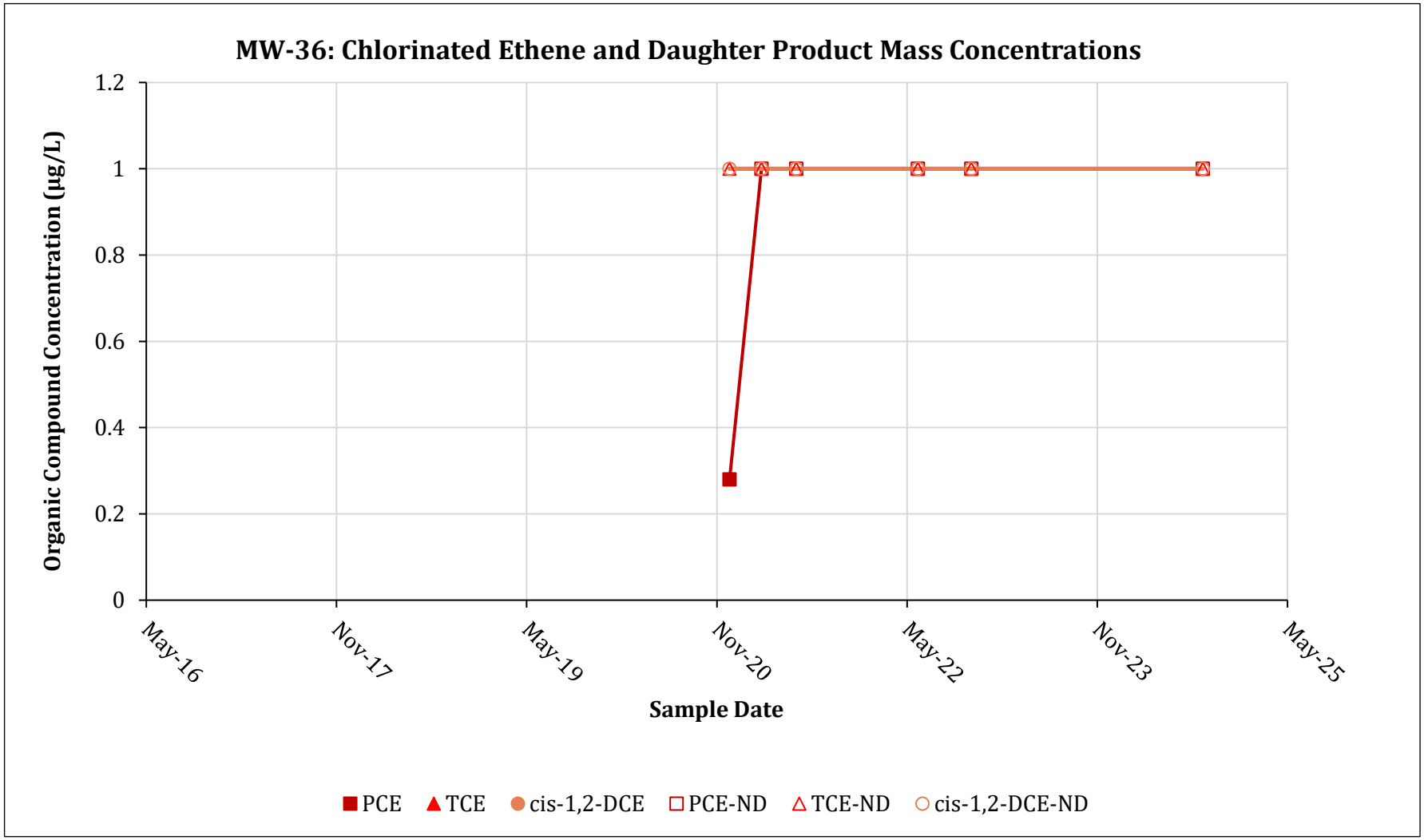
Appendix E
Contaminant Persistence Supporting Information
MW-34C Chart



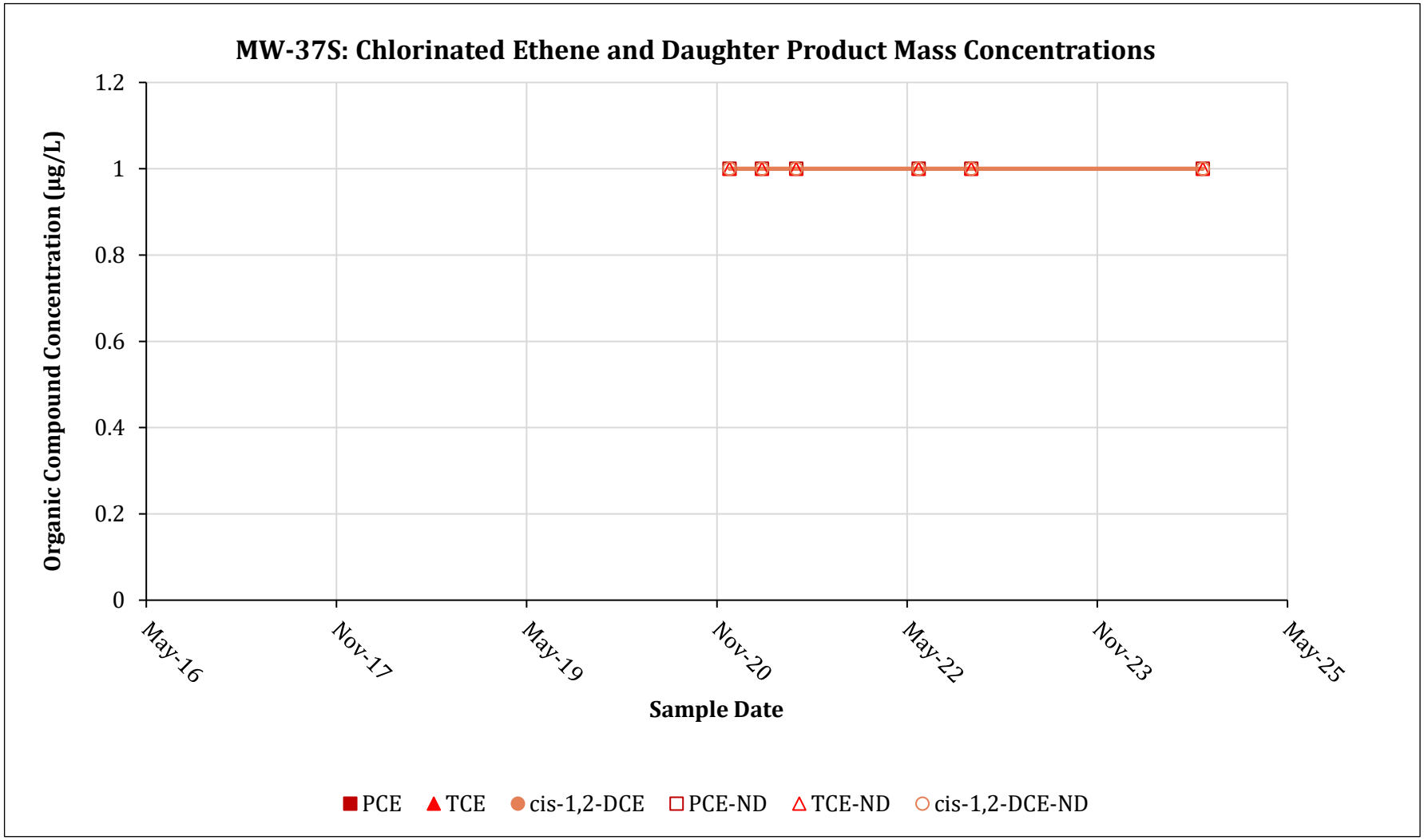
Appendix E
Contaminant Persistence Supporting Information
MW-34D Chart



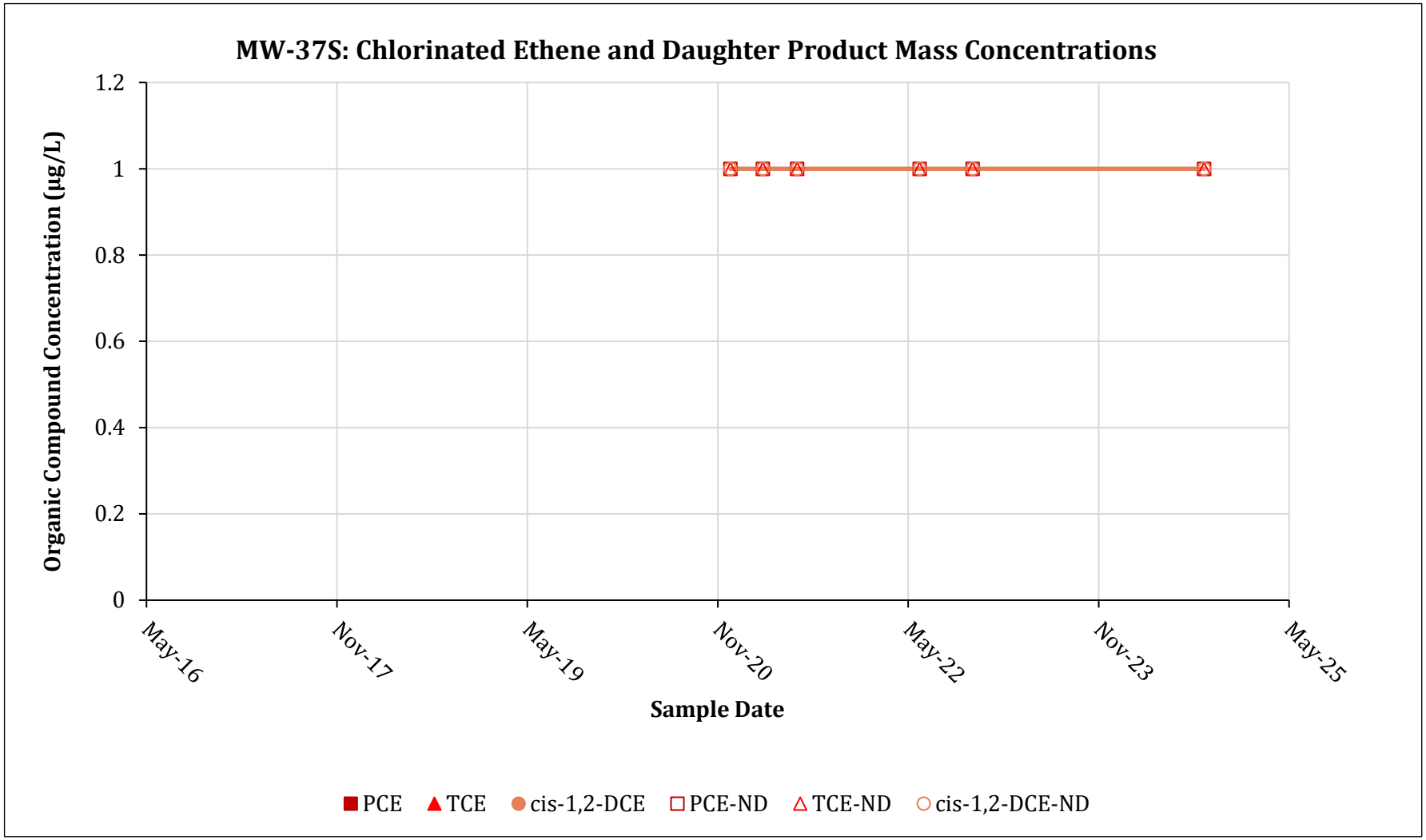
Appendix E
Contaminant Persistence Supporting Information
MW-36 Chart

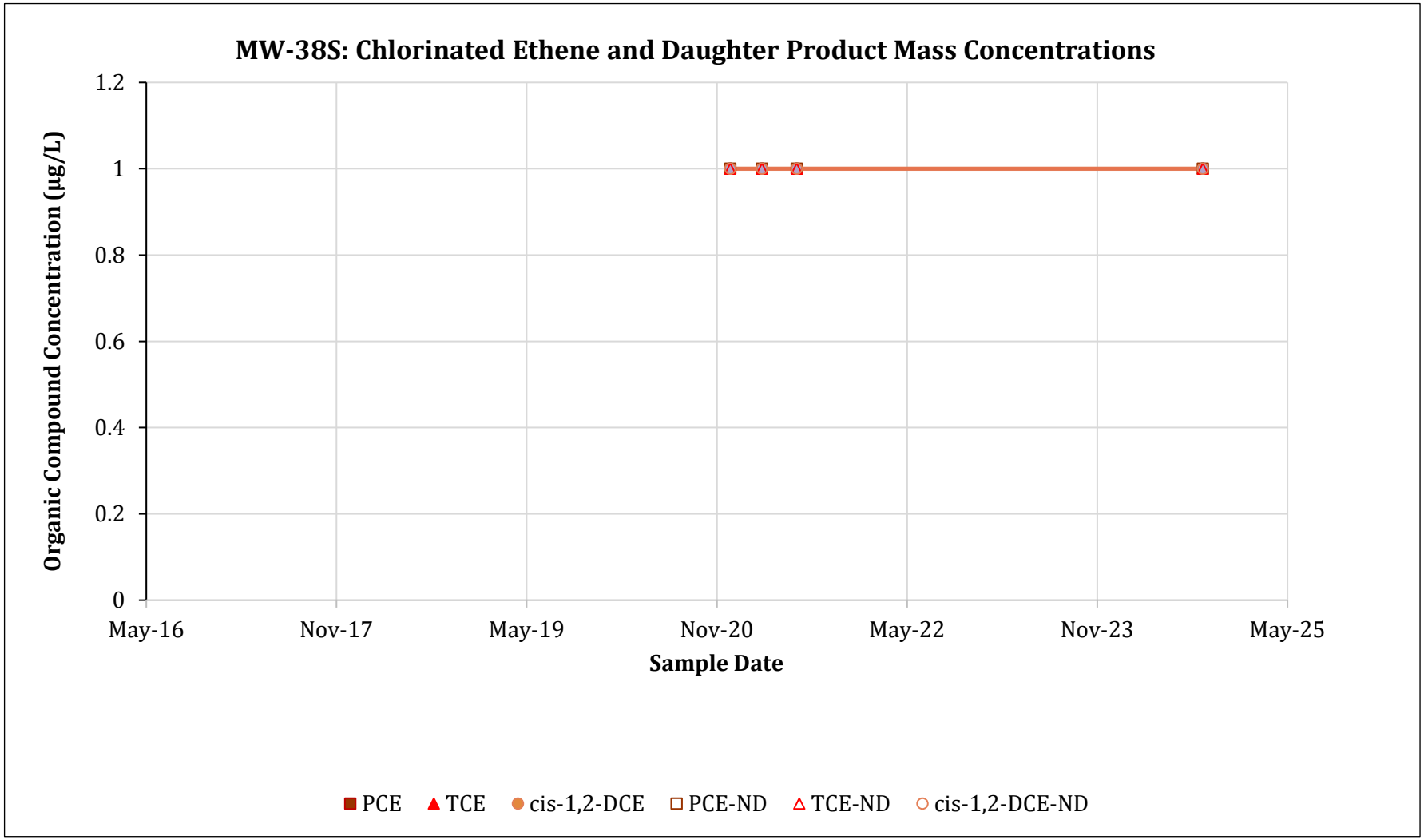


Appendix E
Contaminant Persistence Supporting Information
MW-37S Chart



Appendix E
Contaminant Persistence Supporting Information
MW-37D Chart




MW-38S: Chlorinated Ethene and Daughter Product Mass Concentrations
Organic Compound Concentration (µg/L)
1.2
1
0.8
0.6
0.4
0.2
0
May-16
Nov-17
May-19
Nov-20
May-22
Nov-23
May-25
Sample Date
PCE
TCE
cis-1,2-DCE
PCE-ND
TCE-ND
cis-1,2-DCE-ND

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